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Chapter 1: Welcome to Band-in-a-Box!

Congratulations on your purchase of Band-in-a-Box, the favorite of musicians, students, and songwriters everywhere. Get ready to have fun!

What is Band-in-a-Box?

Band-in-a-Box is an intelligent automatic accompaniment program for your multimedia computer.

You can hear and play along to many song ideas and go from “nothing” to “something” in a very short period of time with Band-in-a-Box as your “on demand” backup band.

Band-in-a-Box is so easy to use!

Just type in the chords for any song using standard chord symbols (like C, Fm7, or C13b9), choose the style you’d like, and Band-in-a-Box does the rest, automatically generating a complete professional-quality arrangement of piano, bass, drums, guitar, and strings or horns in a wide variety of popular styles plus optional live audio tracks with RealDrums and RealTracks.

And that’s not all...

Band-in-a-Box is a powerful and creative music composition tool for exploring and developing musical ideas with near-instantaneous feedback. Over the years many features have been added to Band-in-a-Box – Notation and Lyrics, Piano Roll, 16-channel MIDI Multitracks, Harmonization, the StyleMaker and StylePicker, a live performance Conductor window, Medley Maker, and 24 –substyle Multistyles. The Soloist and the Melodist are popular “intelligent” features that generate professional solos or even create whole new songs from scratch. RealDrums adds the human element of a live drummer while RealTracks add even more live session musicians, bringing the entire Band-in-a-Box arrangement to life. The Audio Chord Wizard has the amazing ability to analyze, extract, and show the chords from audio recordings on-screen and then write them to the Band-in-a-Box chordsheet.

The inclusion of digital audio features makes Band-in-a-Box the perfect tool for creating, playing, and recording your music with MIDI, vocals, and acoustic instruments. Band-in-a-Box for Windows® can also record an acoustic instrument or voice to add to the composition, with processing through its own DirectX audio effects. Its built-in TC Helicon audio harmonies will turn your audio track into multiple harmony parts or adjust its pitch, with vibrato and scooping effects for realistic vocal styles and up to sixteen choral parts.

You can print out your finished creation with lyrics, chords, repeats and endings, DC markings and codas, or save it as a graphics file for web publication or to e-mail to a friend. And when you’re ready to let others hear your composition, you can burn it directly to an audio CD. Or save your composition as a Windows Media File (or in any other compressed formats you have) for a file that’s “Internet ready.” You’ll have even more fun making automatic medleys, playing your favorite song lists in the Band-in-a-Box Jukebox, and singing along to your Karaoke files with CDG graphics.

Let’s get started!

This is a comprehensive guide to the program, including information not included the printed manual. We’ll begin with the easy installation and setup procedure.
Installing Band-in-a-Box for Windows®

Minimum System Requirements
- 256 MB of available RAM.
- Digital audio features require a Pentium-class system.
- Minimum 400 MB available hard drive space. More space is required for RealDrums, about 1 GB per set.
- RealTracks (included with Band-in-a-Box) requires 2.5 GB of free hard disk space.
- Band-in-a-Box is fully functional with or without RealTracks and RealDrums.
- A MIDI sound source is required. This could be a sound card, a MIDI keyboard, MIDI sound module, or software synthesizer. Band-in-a-Box comes with both the DXi and VST versions of the high quality Roland VSC (Virtual Sound Canvas) software synthesizer.

Installing the Program

Use any of the following three methods to install the program files into the Band-in-a-Box directory. By default this directory is C:\bb; you may choose another location.

Method 1 – Auto Run.
1. Insert the program CD-ROM into the CD drive.
2. In a few seconds, a browser window will open with a list of the CD contents.
3. Double click on SETUP.EXE to run the installation program.

Method 2 – My Computer.
1. Insert the program CD-ROM into the CD drive.
3. Then, double-click on the CD-ROM drive icon and double-click again on the SETUP.EXE program found in the root or main folder of the CD-ROM.

Method 3 – Start Menu.
1. Insert the program CD-ROM into the CD drive.
2. From the Windows [Start] button select Run.
3. Type D:\SETUP in the “Open:” command line box. If your CD-ROM drive uses another drive letter type the appropriate letter, for example E:\SETUP.
4. If you don’t know the drive letter for your CD-ROM you can use the [Browse…] button to find it.
SETUP.EXE will copy all of the program files to your Band-in-a-Box subdirectory (usually C:\bb) and install icons to a Band-in-a-Box program group. Click on the Band-in-a-Box icon or launch bbw.exe to open the program and configure the setup.

Band-in-a-Box External Hard Drives
Larger versions of Band-in-a-Box ship on portable USB hard drives. They include the entire Band-in-a-Box and RealBand programs plus all RealTracks and RealDrums sets.

Hard Drive Setup
You can run Band-in-a-Box and RealBand directly from the hard drive by using the program shortcuts in the PG Music folder. Before you use the programs, you should double-click on UltraPAK Setup.exe. This will set up any files that need to be installed/registered on your computer. You only need to do this once.

Alternatively, you could copy the entire PG Music folder to another hard disk, and run Band-in-a-Box from there. This is useful if you don't want to run the program directly from this hard disk, or if you want to make a backup.

Installing From the External Drive
You can also find the Band-in-a-Box installer in the Installers folder, however most people wouldn't use this file. We have included it in case you would like to install Band-in-a-Box on your computer's hard drive the “traditional” way. It is also useful if you want to upgrade a previous version of Band-in-a-Box that you already have installed. We haven't included the large installer files for RealTracks and RealDrums. These files are all in the bb folder and can be copied over manually if need be. Please see the “readme” files on the hard drive for more detailed information.

Note: Before unplugging the hard drive from your computer, make sure it is not in use, then click the ‘Safely Remove Hardware’ icon in your taskbar. When you plug the drive in, Windows may prompt you to select an appropriate action - if so, select ‘Open folder to view files’.
MIDI Setup

Band-in-a-Box uses the multimedia drivers for your MIDI interface and/or sound card that are supported by the Windows operating system. To get sound playback you need to have a MIDI (and audio - for songs with digital audio, RealDrums, and RealTracks) driver installed.

To start using the program you will need to make sure that your MIDI interface, audio driver, and Windows sound source is installed and configured.

Run the program by double-clicking the program icon. The first dialog you should encounter is a MIDI Output Driver message similar to this one:

The program sets your initial MIDI output driver automatically. Note which driver has been selected and press [OK] to continue.

The next dialog you encounter is the MIDI/Audio Drivers Setup.

If the driver that was selected is not the best choice, simply make an alternate selection from the MIDI Driver Setup dialog. Select a MIDI Output Driver to use for MIDI sound playback and optionally a MIDI Input Driver if you are using an external MIDI controller keyboard or guitar. If the setup is panned to mono, the program offers to change it to stereo.

Perhaps the easiest way to configure Band-in-a-Box is to press the [Run Driver Wizard..] button in the Opt. | MIDI driver setup window.
The **MIDI Output Driver Wizard** dialog will take you step-by-step through the process of auditioning and selecting an appropriate driver. This assumes that the appropriate Windows sound drivers are installed and correctly configured.

**Output to Software Synthesizers (DXi and VSTi)**

Software synthesizers allow Band-in-a-Box to play high quality sounds directly through your computer sound card, without requiring any external MIDI hardware. Most new software synthesizers are released as “plug-ins,” so they will work in a standard way with many programs. Connecting Band-in-a-Box to the software synth as a plug-in provides several advantages over the previous method of connecting as a MIDI driver. The plug-in allows Band-in-a-Box to merge/synch in any existing audio file (vocals etc.) with the synth output. You can also directly render your performance to a .WAV file using the plug-in. Sampler-based synths allow you to assemble a huge, customized library of instrument samples to use with Band-in-a-Box.

The current DXi or VSTi synth name is displayed in the button that launches the VST/DXi settings.

**DirectX Instrument Synthesizer (DXi plug-in) Support**

To use DXi with Band-in-a-Box, you should think of the DXi as a type of “MIDI Out Driver.” As such, you visit either the Opt. | MIDI driver setup or click on [Pref] [MIDI Driver] and select the “Use DXi Synth” checkbox. When you do this, you can select the type of DXi to use (from a list of installed DXi, if any), and also will see a panel display of the DXi that allows you to make settings directly for your DXi synth.

The DXi will convert the MIDI information to audio, which Band-in-a-Box will playback through your sound card to audio speakers.

You can select DirectX DXi Software Synthesizers as the MIDI destination, and also apply DirectX Audio plug-ins to the Band-in-a-Box audio track.

Check the **Use DXi Synth** checkbox to enable DXi playback. While using DXi or VSTi, all playback information is routed to the DXi/VSTi, including the option to route the THRU part from your MIDI keyboard to the DXi/VSTi synth.

**Note:** To use this option, you must have a polyphonic DXi synthesizer installed on your computer, such as the Roland/Edirol VSC DXi. It will also be most convenient if your DXi synthesizer can use General MIDI or GM2 patches.

To select the DXi synthesizer, click the [DXi Synth Settings] button, which will open the **DirectX Plugins** window.
The **Synth Track** tab edits Synthesizer settings, and the **Audio Track** tab edits Band-in-a-Box audio track DirectX plug-ins. Select your desired DXi synth in the top plug-in Insert Slot 1. To apply DirectX audio plug-ins to the synth, insert DX audio plug-ins to Insert Slots 2, 3, or 4. This can be useful to add EQ, Reverb, Compression, or Peak Limiting plug-ins, if the “raw sound” of the synthesizer needs sweetening.

**VSTi Instrument Synthesizer (VST plug-in)**

To add VSTi synthesizer plug-ins, please make sure the Synth Track tab is selected, and use the plug-in menu on the top synthesizer slot.

VST plug-ins appear at the bottom of the plug-in list below the DirectX plug-ins. VST plug-ins and synthesizers have the text “<VST>” prefixed to the name of the plug-in or synthesizer.

To select a VST plug-in for the first time, select the “Add VST plug-in...” item at the bottom of the plug-in Menu. Select a VST plug-in .dll file in the following Select a VST plug-in dialog, and it is added to the plug-in list. After you add each VST, the plug-in is permanently added to the list. You only have to add each plug-in one time.

**Note:** Some VST host programs scan for all available plug-ins every time they start up. We decided not to use that method, because the scanning can take a long time if there are many plug-ins on your system. Additionally, a badly-written or corrupt plug-in could cause program malfunctions. Therefore, we feel the method of selecting only the plug-ins you wish to use is both safer and faster.

**VST/VSTi Additional Panel Controls**

VST is necessarily different from DirectX/DXi, and some extra controls are available for VST plug-ins. DirectX/DXi plug-ins save their presets to the Windows Registry and only one setting is “alive” at a time.

VST/VSTi plug-ins save their presets to disk files. VST/VSTi plug-ins contain a bank of presets in memory. You can switch between presets while editing, and each edited preset is remembered in the current bank. If you save the bank, it will save all the presets you have edited. You can save individual presets, or you can build a custom bank by loading individual preset files into different preset slots, and then save the new bank file.
Select Preset Menu
Select a preset. You can also use the small Right/Left arrow buttons to step forward/backwards through the presets one at a time, to audition each preset.

Note: Some very nice plug-ins, including some advanced synthesizer plug-ins, may only have one preset, but that single preset can be a doozy containing many settings. Even with single-preset plug-ins, you can Save/Load Presets or Banks.

Rename Pst: Rename the currently selected Preset (in the plug-in's memory).
Save Preset: Save the currently selected Preset. VST/VSTi preset files use the “.fxp” extension.
Load Preset: A Select Preset To Replace dialog appears where you should pick which preset in memory to replace. Then select the desired Preset file in the following File dialog.
Save Bank: Save a Bank file of all the current presets in the plug-in. VST/VSTi bank files use the “.fxb” extension.
Load Bank: Load an entire bank of presets. Different plug-ins have different bank sizes. One plug-in might contain 10 presets in a bank, but another plug-in might have 128 presets in a bank.

VST Generic User Interface
VST/VSTi plug-ins are not required to have a fancy graphic control panel. There are many “faceless” VST plug-ins which have many adjustable parameters, but no fancy control panel. When you open such a plug-in, the control panel will look like this example. Band-in-a-Box presents one “generic” slider for each adjustable parameter in the plug-in.

Parameter Name: Simply the name of each adjustable parameter.
Value Slider: Move the slider to adjust the parameter value
Value Indication Text: Displays the value of the slider, as interpreted by the plug-in. In the above example, Parameter 0: Bright is interpreted as an ON/OFF switch, but Parameter 1: Volume is interpreted as a value from 0 to 10.

Options: Remove VST Plug-In (from list)

This feature allows the removal of unwanted plug-ins from the Band-in-a-Box VST/VSTi plug-in lists.
Driver Latency

Software synthesizers have some inherent latency, which is the delay between the time a note is played and it is processed by the computer. Older softsynths had noticeable latency, whereas a DXi synth using ASIO drivers has very little. This setting is used to synchronize the visual display (notation, chords, virtual piano etc.) with the sound you hear. Band-in-a-Box automatically sets the latency for DXi and some other softsynths.

The [Latency Adjust...] button opens the SoftSynth Latency Adjust dialog where you can manually adjust the latency.

Alternate Patch Maps

You can choose the patch map (instrument list) that matches your synthesizer keyboard or sound module. Original equipment sound cards or integrated sound chips are General MIDI (GM) compatible.

We have made preset drum/patch files for many synthesizers and sound cards including the Roland VSC and VSC DXi.

If your synth is not listed you should use the General MIDI Instrument Misc. patch kit (default).

You can probably omit this step unless you're using an old synth that is not General MIDI compatible. If your non-GM synthesizer or sound card is not listed you can easily make your own patch map with the [Patch Map] button in Opt. | Preferences.

General MIDI 2 (GM2) Support

General MIDI 2 patches are supported for 128 additional instruments. The type of GM2 support is set in this dialog.
The choices are:

- **General MIDI 2 support:** If you're using the Roland VSC3, or a newer Sound Canvas (i.e. newer than 1999, or newer than the Roland SC88), then choose this GM2 support.

- **Roland GS (older Modules):** “Older” Sound Canvases (SC55/SC88) support GS, but not GM2. The good news is that they have the same patches available, just at different locations. So if you choose this option, Band-in-a-Box will find the patches at the “GS” locations instead of the “GM2” locations. If you have a newer GS module like the SC8820, it supports both GM2 and GS - you should likely choose GM2.

- **No GM2 support:** Some sound cards don't have GM2 support but they do support the original 128 General MIDI sounds. Band-in-a-Box will use the closest instrument in these cases.

### Audio Setup

The [Audio Settings] button in the MIDI/Audio Drivers Setup displays the current audio driver and status, MME/ASIO/ASIO Always On. Band-in-a-Box performs the audio setup automatically using the installed system audio components.

To restore or modify this set up click on the Preferences button and then select the [Audio] button to launch the Audio Settings dialog.

To reset the default MME driver settings click on [Get from soundcard…] and Band-in-a-Box will analyze the sound card and enter the correct audio settings.

If your computer has ASIO capability you can use these drivers instead of the default MME drivers.

**ASIO Audio/Software Synth Drivers**

By using an ASIO audio driver, software synths like the Roland VSC (DXi or VSC) will play with almost no latency (delay is only 5-10ms). So you'll hear the sounds instantly, and be able to play along using MIDI Thru with the same ultra-low latency.
On the Preferences [Audio] tab, you’ll see the following options for “Audio Driver Type,” MME or ASIO.

**MME** is the default Windows audio driver type. MME is good, but there is latency (delay) associated with MME drivers.

For this reason, Steinberg developed a faster type of audio driver system, called **ASIO**. It allows for much lower latency than ordinary MME drivers do.

**Note:** Many OEM or value sound cards do not include an ASIO driver, so you may not have an ASIO driver yet. In this case, you’ll need to get an ASIO driver from the Internet.

This **ASIO Audio Drivers** dialog lets you choose an ASIO driver. You can arrive at this dialog in 3 different ways:

1. If you haven’t used ASIO drivers, but Band-in-a-Box detected them, and you answered “Yes” when Band-in-a-Box asked if you want to use an ASIO driver.
2. If, within the Audio Settings, you change the “Audio Driver Type” from MME to ASIO.
3. If the ‘Audio Driver Type’ is already set to ASIO, but you later press the [Audio Drivers…] button in the Audio Settings.

The **Select one ASIO Driver** list box lets you select an ASIO driver to use. You can only select one ASIO driver at a time.

Once you have selected an ASIO driver, you will see the Input Port and Output Port list boxes filled with your driver’s input and output ports. By default, the first of each will be selected. You are allowed to select different ports (but only one input and one output port at a time can be selected). The ports you selected will be available for...
output within Band-in-a-Box. If you do not hear input or output, then you may need to try different ports than the
defaults. You may need to read your sound card’s instructions to determine the correct ports to use.

Tip: The ASIO4All driver sometimes cannot connect if the Microsoft GS Wavetable synth is being used as a driver. So if
this happens, you will get a message that ASIO will be silent, and the solution is to de-select the ASIO4All driver.

The ASIO Driver’s Control Panel button launches the Control Panel for your driver. This usually lets you adjust the
latency by letting you choose different buffer sizes in milliseconds. Some drivers might let you choose the buffer
size in samples, which is less convenient than milliseconds. The smaller the buffer size, the lower the latency, and the
faster the response. Smaller buffers require more CPU power and if you hear dropouts or artifacts, you may
need to increase the buffer size. See the Understanding Latency section that follows.

Since many ASIO drivers do not support multiple sample rates, Band-in-a-Box has a built-in resampler which lets
you play and record songs that have a different sampling rate than the rate(s) directly supported by your ASIO
driver. For example, if the driver does not support 44.1K sampling rate, but supports 48K, then Band-in-a-Box will
use the resampler to convert to 48K when playing back, and to convert FROM 48K when recording. The
Resampler Quality combo lets you choose Fast, Good, Better, or Best. Fast is the quickest, but is the lowest of the
four levels of quality. Best is the slowest (uses more CPU time), but the most transparent and accurate quality.
The ASIO Driver’s Control Panel button launches a settings dialog specifically provided by your driver
manufacturer. This usually lets you adjust the latency, and usually you will have a choice between buffer sizes in
milliseconds. See the following section on Understanding Latency.

Show Warning for Untested Soundcard Formats is an optional setting that shows a warning if your ASIO driver
format has not been tested in Band-in-a-Box. This message does not necessarily mean your driver will not work,
and it can be disabled if you want.

The Driver Info field shows various characteristics of your driver.
The Name is the driver’s name.
The Version is the version number of your driver.

Input Channels is the total number of mono input channels that your sound card has. (Note: Band-in-a-Box groups
each into a stereo pair.)

Output Channels is the total number of mono output channels that your sound card has. (Note: Band-in-a-Box
groups each port into a stereo pair.)

The Allowed Sample Rates field shows the sample rates are allowed by your sound card’s ASIO driver. Band-in-a-
Box has a built-in resampler which lets you play and record files that aren’t directly supported by your ASIO
driver. The Buffer Sizes in Samples shows the range of allowed buffer sizes. The “Pref” is the preferred size, and this is
the size that Band-in-a-Box uses. Your driver may alter the preferred size if you’ve launched the ASIO Driver
Control Panel and have selected a new buffer size from within the driver’s Control Panel. If your driver changes the
preferred size, then Band-in-a-Box will be aware of the new preferred size.

Understanding Latency

Latency is based on the buffer sizes. The smaller the buffer sizes the lower the latency. Lower latency allows you
to hear mixer volume changes very quickly, as well as hear MIDI thru echoed out via a DXi soft synth practically in
real time. The latency, in MS is determined by the buffer size in samples, as well as the driver’s sampling rate.

Note: If your ASIO driver’s control panel lets you select the buffer size in MS, then you don’t have to pay much attention to
the part of discussion below about converting samples to MS.

Converting Samples to MS: For example, suppose the driver’s sample rate is 48K. A 48K sampling rate means
that it is playing at 48,000 samples per second. If the buffer size were 48000 samples, then the latency would be 1
second, or 1000ms (which is very large and slow, and usually not allowed in ASIO). If the buffer size were 4800
samples, which is 1/10 second, then the latency would be 100ms. If the buffer size were 2400 samples, which is
1/20 second, the latency would be 50 ms. If the buffer size were 240 samples, which is 1/200 second, the latency
would be a mere 5ms which is incredibly low and very fast.

Normally, you can change your driver’s latency by pressing the Launch ASIO Driver’s Control Panel button.
Normally, the driver specifies the buffer sizes in milliseconds which is equal to the latency.

Low latency is faster and more responsive, but uses more CPU power.
Depending on the speed of your computer, you may find that the playback has dropouts, clicks/pops, or other artifacts if you set the buffer sizes too small. This is because smaller buffers use more CPU power and if your computer can’t handle the low latency you will hear artifacts. If this happens, you would need to use larger buffer sizes. You may need to experiment to find what works well. You may be able to use smaller buffers with songs that don’t have a lot of tracks and effects, but may find that you need to use larger buffers with songs that have more tracks and use more effects. This is because more tracks and more effects use more CPU power, which leaves less CPU power available for the audio routines to keep up with lower latencies.

Now you’re ready to have fun with Band-in-a-Box!
Chapter 2: QuickStart

Creating music with Band-in-a-Box is as easy as 1-2-3! In this chapter, you’ll see how easy it is to get started with Band-in-a-Box.

Step 1 – Typing in the Chords

There are numerous ways of entering chords into Band-in-a-Box, we’ll discuss six of them:
1. Using the computer keyboard.
2. Playing directly on a MIDI controller keyboard.
3. Using the Chord Builder feature.
4. Importing chords from a MIDI file.
5. Importing chords from an audio file (WAV, MP3, WMA, WMV) with the Audio Chord Wizard.
6. Loading an Existing Band-in-a-Box format song.

On the main screen of the program, you’ll see an area called the chordsheet.

Each of the numbered cells on the chordsheet represents a bar. In this example, we see that there is an E chord in the first bar of this song, an A chord in bar 5, and later in the song, an E7 in bar 12. Notice the box in the first half of bar 1. This is the highlight cell, and it represents the bar you are currently working on. You can move the highlight cell around using the cursor keys, or click on any bar with the mouse.

Enter Chords Using the Computer Keyboard

To enter a specific chord, move the highlight cell to where you want to place the chord. For example, to add (or change) a chord in bar 10, you would highlight bar 10 on the chordsheet. Next, type in your chords. If you want an A chord at bar 10, type the A key on your keyboard, and press [Enter]. Notice that when you use the enter key, the highlight cell moves to the second half of the bar. You could then enter another chord at beat 3. Chords names are normally typed using standard chord symbols (like C or Fm7 or Bb7 or Bb13#9/E), but you can enter them in any of the supported chord symbol display formats like Roman Numerals, Nashville Notation, Solfeggio, and Fixed Do (popular in Italy and other parts of Europe).
Enter Chords Using a MIDI Controller Keyboard
If you have a MIDI controller keyboard, you can use it to enter chords into Band-in-a-Box. Play a chord on your MIDI keyboard, and then type Ctrl+Enter. The chord will be entered into the chordsheet at the current highlight cell position. Another method allows you to choose alternate chords. From the Window | MIDI Chord Detection menu item, you’ll see this window:

When you play chords, Band-in-a-Box shows you the chord name and suggests alternates that you can choose from. Typing Ctrl+Enter enters the first selection, and advances the highlight cell by ½ bar. To place an alternate chord in the chordsheet click on the [Enter] button beside the chord you want.

Enter Chords Using the Chord Builder
Press the Chord Builder button. This opens the Chord Builder dialog with a list of chord roots and their extensions.

To enter a chord at the current bar, select the chord root from the left pane, and then the extension on the right pane. Pressing [Enter Chord] or using the arrow keys will enter the chord and advance the highlight cell to the next half bar.

Import Chords from a MIDI File
You can have Band-in-a-Box import chords from an existing MIDI file. Choose Import Chords from MIDI File on the File menu.

When the dialog opens, press the [Open (Change)…] button to choose a MIDI file that you want Band-in-a-Box to interpret the chords from. To help Band-in-a-Box interpret the chords better, you should choose a genre (Preset) for the song. Choose from among such genres as Pop, Rock, or Jazz Standard.

Tip: It helps if you’ve previously listened to the MIDI file, in order that you can choose a genre most appropriate to the song.
Import Chords from the Audio Chord Wizard

The Audio Chord Wizard is the amazing feature that automatically figures out the chords from MP3 files (or other audio files like WAV, WMA, and audio CD etc.).
You can make adjustments for the start of bar 1 and individual bar lines and also mark sections of the song using part markers, and the sections will begin on a new line with a line space between so they are clearly seen. Chords can be edited with a right-mouse click on the chord symbol. Edited chords are colored blue.

**Loading an existing Band-in-a-Box format Song**

Press the [Song] button to launch the SongPicker, which lists up to 10,000 songs in any folder. Songs can be sorted and filtered by various criteria such as alphabetically, by title or by style.

The first time you use this button, Band-in-a-Box will offer to build a song list for you. We’ve included many demonstration songs; they are listed in the song list.

You could also load a pre-existing song by using the File | Open menu item, or by typing [F3], which will launch the BB File open dialog. Songs usually load a Style, which we’ll learn about in the next section.

**Step 2 – Choosing a Style**

Band-in-a-Box creates backing arrangements based on the chords you type in, playing them in a particular style.

**What’s a Style?**

A style is a set of rules that determine how Band-in-a-Box creates music using your chords. By adjusting the rules, we have created hundreds of styles for everything from Country to Bebop, such as Jazz Swing, Blues Shuffle, Hip Hop, Country 4/4, Pop Ballad, Waltz, and Medium Rock to name just a few. If you don’t find a pre-made style that suits your tastes, create one from scratch using the StyleMaker. There’s a “how-to” section on custom Styles in this manual.

**Four Fast Ways To Pick A Style**

**Method 1:**

The StylePicker window assists your selection with its categorized list, detailed descriptions, preview, search, and filter features. Select the [Style] button or type Ctrl+F9 on your computer.
Select a Set or genre from the left pane, and choose the specific style on the right pane. There are Memos and examples for each of the Styles.

In addition to the selection categories, styles can be filtered by “feel” and “tempo.” They can also be selected by the number of the styles set.

**Method 2:**
To make a quick selection, go to the *Styles* menu and choose from among the 24 “built-in” generic styles. This list provides a convenient way to choose from among the most popular music genres.

**Method 3:** Styles that you’ve used previously show up in the *Favorite Styles* dialog. Choose this with the [F] button next to the [Style] button in the song title window, from the Styles menu, or type **Shift+F9** on your computer keyboard.

You can choose to save a Favorites set for use later. You can also load a set of favorite styles in this manner.

**Method 4:**
To open a user style from disk, you can just type the **F9** key. You will be presented with an *Open File* dialog from which you can select a specific style. Alternately you can select the *Styles* menu item *Open a User Style from disk.*
Step 3 – Play your song!

You’ve entered chords on the chordsheet and chosen a style. Now it’s time to play the song! You’ll need to tell Band-in-a-Box how long your song is, how many times to play it through, in what key, and how fast.

Framing the Song

To tell Band-in-a-Box where to start and end the song, take a look at the middle of the main screen.

Locate the framing buttons. There are three of them, one each for Beginning of Chorus, End of Chorus, and Number of Choruses. In the example above, the chorus starts at bar 1, ends on bar 32, and is going to play 3 times.

Setting the Key

In the example above the key is set to C. However, you can set this to any key. In our first view of the chordsheet the Blues song was in the key of E. If you do change the key, Band-in-a-Box will offer to transpose the chordsheet for you.

Setting the Tempo

If you know the tempo value of your song, you can enter it in the tempo box. The song example above has a tempo of 120. There is an even faster way to enter a tempo. Locate the minus sign key [-] and the equal sign key [=] in the number row of your computer keyboard, they are usually next to each other. If you tap the minus sign key 4 times at your tempo, Band-in-a-Box will set the tempo automatically for you. If you tap the equal sign key four times, Band-in-a-Box will set the tempo and begin song playback at the tempo you tapped.

Shortcuts for song formatting

Typing special words, instead of chord names, will make the following settings:

begin + Enter sets the beginning of the chorus to the current bar
chorusend + Enter sets the end of the chorus to the current bar
end + Enter sets the end of the song to the current bar
tkc + Enter sets key signature to c, tkbb would set it to bb
trc + Enter transposes song to key of C
t125 + Enter sets tempo to 125

More fun with Band-in-a-Box…

That’s how easy it is to start creating music with Band-in-a-Box. Band-in-a-Box has many more features and user options, which are discussed in later chapters. Have fun making music with Band-in-a-Box!
Chapter 3: Band-in-a-Box 2010.5

Welcome to Band-in-a-Box 2010.5

There were over 50 cool new features added in Band-in-a-Box 2010, and now version 2010.5 adds 40 more! These include user wish list requests and enhancements to existing features, plus some wish list requests of our own.

40 New Features!

The amazing RealTracks features in Band-in-a-Box keep growing more powerful. Many of the new features in Band-in-a-Box 2010.5 let you make even better use of these exciting live studio tracks - features like enhanced pushes, the option to have Jazz chords play as triads or 7ths, half-time and double-time timebase settings, and StylePicker filtering. Plus we’ve released 101 new RealTracks in Sets 83 to 101 featuring more Jazz bass and guitar, Bluegrass fiddles and mandolins, Jazz B3 organ, Smooth Jazz guitar, bass, and saxophone, and much more.

There have also been enhancements to audio rendering, entering song settings, and notation.

These are the new features in Band-in-a-Box 2010.5

- The StylePicker now has a filter to show show/hide RealTracks styles or MIDI styles. So you can set this if you only want to see MIDI styles, or if you only want to see styles that use some or all RealTracks.
- If you like the current mix (of volumes, panning, reverb), and you want this applied as a default for all songs, you can now set this by Right clicking on the Combo radio control. Choose “Make Current Mix the Default,” “Load Default Mix,” or “Reset Mix (to factory defaults).”
- RealTracks’ naturally occurring pushes are enhanced in many styles. This requires updating the ST2/XT2 files, and these are included in the 2010.5 update.
- When rendering, you can now add a dB amount to the whole mix, so that the mix will be louder or softer. There is automatic “peak-limiting” added, so that the music will not distort if you set it too high.
- For Audio Track rendering, Reverb is now added to the mix if there is Reverb set for the audio track.
- Improved timing and performance on MIDI DXi/VST Softsynths. Files now render about 20 percent faster.
- Styles can now be made that are set to use Half-Time and Double-Time RealTracks. We include some of these styles. For example, you can make a Jazz Ballad style (tempo 65) that uses a Sax Soloist at tempo 140 (playing double time). The StyleMaker- Misc-More dialog now has setting called TimeBase: Normal/HalfTime/DoubleTime for RealTracks.
- MIDI Styles can now be expanded or reduced. For example, if you have a Bluegrass style at a typical tempo of 130 that is 16ths note based, and you would prefer it as a style that is 8th note based at a typical tempo of 260, you can do this in the StyleMaker by selecting the menu item Style-Expand. Style-Reduce is available also for styles that you want to reduce from 8th notes to 16th notes.
- If Band-in-a-Box cannot find your RealTracks folder or your Drums folder, a yellow hint message appears at boot up to alert you to that, and tells you how to fix it: “Note: You have RealTracks installed, but none are found in your RealTracks folder. You should point to your correct RealTracks folder in Prefs-RealTracks Settings.”
- RealTracks Pushes are now played a little quieter (2 dB quieter), so that they don't stand out as much.
- For HyperCanvas or TTS-1 users only. The Roland HyperCanvas and Cakewalk TTS-1 sound better in Band-in-a-Box if you use note 36 for bass drum, instead of note 35 (36 is more velocity sensitive). Now you will get a message to that effect when you exit the MIDI Driver dialog, and if you answer yes, it will set this for you, improving the sound of the drums with your HyperCanvas/TTS-1.
- For RealTracks, many Jazz comping styles now play triads (instead of 7ths) when simple triads are entered, instead of “jazzing them up” to 7ths chords (e.g. Guitar: Freddie, Wes Piano: Some Jazz. All Stride, Rehearsal). If you prefer this “the old way,” where triads are automatically “jazzed up” when comping using Jazz RealTracks, then you can set the Prefs-Realtracks settings option to force 7ths for triads.
- Enhancements for entering songs quickly: Typing special words, instead of chord names, will make the following settings:
  
  begin <Enter> - sets the beginning of the chorus to the current bar
  end <Enter> - sets the end of the song to the current bar
  chorusend <Enter> - sets the end of the chorus to the current bar
tkc <Enter> - sets key signature to C, tkbb would set it to bb
trc <Enter> - transposes song to key of C
t125 <Enter> - sets tempo to 125

- Quick-load a song by typing only. In chord entry mode (chordsheet or notation) type the word “song” followed by a file name or partial file name + Enter and the song will get loaded if it is in the current folder. Type “bossa” to load in the first song with bossa in the name AFTER the current song name in the current folder.
- To change to another folder, type “song” followed by the full path and file name. For example, type song and then c:\bb\zzjazz.mg1+Enter to load in that exact song file.
- Quick-load a style by typing “style” followed by a style name, e.g., stylezzbossa+Enter will load in zzbossa.sty.
- Enhancements for playing songs from the chordsheet
  - <Spacebar> or double click on ending bar (or a bar in the tag), and it will play from the ending (or tag).
  - This only applies to the chordsheet, since notation windows always play from the ending or tag already.
  - Right click on Chordsheet (or Notation) window to quickly set Chorus Begin, Chorus End, or Song Ending
- Utility function added to “Change all songs in current folder to a specific tempo.”
- Utility function added to “Change all songs in current folder to the current style name.”
- Utility command added to change channels by N on melody or soloist.
- Real Drums button now has a menu (like the RealTracks button) to choose RealDrums Preferences or the RealDrums Picker. Use Ctrl+click or Shift+click to choose the Preferences or the Picker directly.
- The auto-generated song memo now says if Real Drums come from the song or style.
- A message now appears if a frozen track is loaded, but the required RealTracks or RealDrums folders do not exist.
- Frozen tracks now start playing faster if played again.
- In the RealTracks Picker, the columns for Set # and Holds # sort are improved.
- Important change: The default for the tempo swapping feature for RealTracks is now true. It used to be false. Tempo-swapping is a nice feature that will automatically substitute a similar RealTracks that is recorded at a tempo closer to the current tempo. For example, if you load a ballad style, with a RealTracks piano at a tempo of 60, and then speed the song up to 200, BB’s tempo-swapping feature will choose a RealTracks piano that is closer to 200, likely one that is 190. Go to Prefs | RealTracks to disable this feature.
- Improved: Will keep on generating RealTracks even if some wav files are missing.
- Improved: Will not show this message if using ASIO and MS GS Wavetable is selected: “MIDI driver installed properly but in use.”

**Notation Enhancements:**
- Notes like Fb, Cb, E#, B# can now be entered. To do this, right click on a note (like F), and set the forced accidental to #, and the note will appear as E#.
- Right Click menu item added “edit section text”
- Option added for the Leadsheet Lyric memo start on new page on printout.
- If a song has lyrics (or other text) in the Lyric Memo or Lyric Document, these lyrics will now show up on the Big Lyrics window, so that they can be seen during playback. Note: if you have lyrics in text format, it is easy to paste them in as a Leadsheet Memo, and now you will see them on the Big Lyrics Window as well.
- When entering lyrics, additional buttons are available “Close lyrics” “Edit Lyrics” and “Enter as Section Text” (instead of Lyrics).

**New Features included in Band-in-a-Box 2010**

**Band-in-a-Box 2010 added over 50 cool new features!**

These exciting new features were added in Band-in-a-Box 2010. There’s a “Plug-in” mode, allowing you to simply Drag-and-drop tracks between Band-in-a-Box and your favorite sequencer (RealBand, Sonar, Reaper, ProTools, FL-Studio, Nuendo and more). RealTracks generate much faster now, typically 3X faster. RealTracks now support Shots, Holds, and Pushes. Endings are improved, and RealTracks endings are now 4 bars long, giving time for the natural decay of the instruments. Individual MIDI or RealTracks can be frozen now, so the arrangements can be saved and fixed, and will replay quickly without need for regeneration. Soloist RealTracks are now saved with the
song. We added Multiple Undo support, up to 999 levels of Undo. There are new Reverb and Bass/Treble controls for each track, allowing you to add these to individual RealTracks. All settings are now saved with each song.

The Details

The New Features in Band-in-a-Box 2010 for Windows are...

There now is a “Plug-in” mode for your favorite sequencer (RealBand, Sonar, Reaper, ProTools, FL-Studio, Nuendo and more). With the new plug-in mode, Band-in-a-Box is open as a small always-on-top window, and acts as a plug-in for your favorite DAW/sequencer, so that you can Drag-and-drop MIDI and audio (WAV) tracks from Band-in-a-Box to your favorite sequencer. Work in your favorite sequencer, type a progression in Band-in-a-Box, and then simply drag the track from Band-in-a-Box to your sequencer’s track at the desired track and bar location.

No more long waits for RealTracks to generate! RealTracks generate much faster, 3X faster on average. A typical song with RealTracks that took 20 seconds to generate will generate now in about 6 seconds. And if you freeze some or all tracks in the song (see below), playback of RealTracks is almost instantaneous.

Freezing (locking) MIDI or RealTracks/RealDrums. Any track can now be frozen (MIDI or Real track). When frozen, it won’t get changed or regenerated. This saves time when replaying previous songs, and allows you to freeze an arrangement that you like. If you freeze the whole song, you don’t have to wait at all for the song to regenerate. Next time you play, it is ready to go. (Note: this new freeze feature is different than the previous limited freeze feature that renders the whole arrangement to the audio track)

All Tracks can be Edited and Saved. MIDI tracks for bass, drums, piano, guitar and strings can now be edited, and saved with the file. If you freeze a track, edits can still be made to it, because it is only frozen from Band-in-a-Box making changes to it (you can still edit it), so that the MIDI track will be saved to the file. So you can customize the bass part to match a certain song, and save it with a frozen bass part, so that Band-in-a-Box won’t overwrite your edits. This includes RealCharts – if you wanted to edit the notation of a RealTracks solo for example.

Soloist generated RealTracks are now saved with the song, so you will hear the RealTracks play the same solo when you reload the song.

RealTracks now support new features, including Shots, Holds, and Pushes. Simply type in the chords as you normally would, adding periods (…) for shots and holds, and the RealTracks will play them. (Note: For this, you need the installer that creates a Library\Holds folder in your RealTracks folder.)

RealTracks endings have been enhanced, and are now 4-bar endings instead of 2-bar, allowing time for a natural decay of the instruments.

Multiple Undo support. Up to 999 levels of undo (configurable).

Always Save all song settings. Now all settings are saved with songs, including patches, reverb, volume etc., so that the song will play the same way each time, without having to set this in the Save With Patches dialog.

Reverb control added for individual tracks with RealTracks or RealDrums, so you can easily add reverb (0 to 127) for any RealTrack. Reverb type also settable, and saved with the song.

Bass/Treble Tone Control added for individual tracks with RealTracks or RealDrums, so you can easily adjust the bass/treble EQ for any RealTrack. Settings save with the song.

Band-in-a-Box window is now sizable, when size changes, chordsheet, notation, and other windows redraw in proportion to the new size. This allows you to have Band-in-a-Box open as a small window on screen with other programs, and you still see a full chordsheet. The screen size is remembered between sessions.

New favorite songs/styles dialog, with separate lists of “recently played” and favorite songs or styles. The previous “favorite” songs/styles dialog was a list of recently used songs/styles. Now there are 2 tabs in this dialog, showing you both recently used songs/styles, and a new list of “favorites” that you select as a favorite songs or styles. Favorite Song/Style lists can be edited, sorted, saved/loaded, and used with the jukebox. You can add an unlimited # of favorites. Also, a Sort button has been added to Favorite/Recent songs/styles dialog.

Play any RealTracks at normal, half-time, or double time with the Timebase option. Half time is used for fast tempo songs when a much slower tempo RealTrack has been chosen. Double time is used for slow tempo songs (e.g. ballads) when a much faster tempo RealTrack is chosen. This allows you, for example, in a ballad at a tempo of 70, to add a RealTracks Sax solo with a tempo of 140, and play it as a double time, which will match the ballad tempo of 70. All of your existing RealTracks can be used at three different tempos (normal, half-time, double time).
Automatic Tempo swapping of similar RealTracks. If you have similar RealTracks available at different tempos, Band-in-a-Box will automatically choose the best one to use. For example, if you have a ballad loaded, with an Acoustic Bass RealTracks at a tempo of 60, and you speed up the tempo to 140, and press play, Band-in-a-Box will automatically choose an Acoustic Bass RealTracks closer to tempo of 140, if it is the same genre and feel. This means you can use a simple Jazz style, and play it at various tempos, without having to set the best RealTracks based on tempos. The RealTracks that support the Tempo Swapping are listed in the next to last column of the RealTracks assign dialog.

There is an additional option to replace the current RealTracks selections with similar ones that would work better at the current tempo. This is an option available by pressing the Realtracks Toolbar button and then clicking on Select better RealTracks for this tempo. To use this feature disable the auto RealTracks selection in the Preferences.

Rendering now has a Normalize option, to normalize individual tracks or the complete arrangement. Normalizing boosts the volume to a maximum level without distortion. Most professional music tracks are normalized.

RealDrums picker dialog has been enhanced, with information about Artist name, Artist bio, and RealDrums Set number.

Songs that are “Saved-As” a different name now have the new name added to the Recently Used song dialog.

Support enhanced for non-concert instruments (Bb/Eb sax, trumpet etc.). Now when the chordsheet is transposed, you can type in chords in the transposed key, and they will show up as you have entered them, instead of requiring you to enter the chords in the concert key.

Rendering songs to audio is now much faster for songs with no MIDI, such as RealStyles.

Rendering RealTracks no longer require you to have a DXi or VST in use.

Lyrics enhanced:
- Undo added for entry of individual lyrics.
- [Enter] and [Close] button added to lyric entry.

More Soloists are now available, up to 2000.

RealTracks Picker dialog enhanced:
- Opens up faster.
- New columns added (tempo swappable, holds type).
- Columns are now sizable, and remember the sizes.

Rendering Wav dialog enhanced. It has a simpler layout. The Render wav file doesn’t need to be in same folder – it can be in any folder/drive. The Render dialog has a [Default] button.

StylePicker is enhanced. Favorites and Recent styles now appear in this dialog as separate lists. It now has the ability to add/remove styles as favorites. A Favorite Style indication (F) shows up for each style. You can filter any list by only showing favorite styles. Over time, you can build up a list of favorite styles, and only show them when needed.

Many messages changed to “yellow alerts” at top right of screen, so that you don’t have to respond to the message, interrupting work flow.

More New RealTracks

There are now one hundred and one sets of RealTracks available for Band-in-a-Box!

The basic Band-in-a-Box Pro package includes a basic set of RealCombos for Pop, Country, and Jazz. In addition, there are hundreds more RealTracks instruments available in one hundred and one different sets. See the Appendix for a full list.

RealTracks Sets 83 - 101

RealTracks sets 83 to 101 were released with Band-in-a-Box 2010.5. They include:
- Rock - Electric and 12-string Acoustic Rhythm Guitars in Modern Rock, Waltz and Blues Rock styles, also Acoustic Piano solo-accompaniment.
- Jazz - Acoustic and Electric Bass, Rhodes and Acoustic Pianos, Acoustic and Electric Guitars in Ballad, Ballroom and more.
RealTracks Set 83: LA Hard Rock
This set provides you with four distinct Electric Guitar styles, two with a “crisp” tone and two with a “fuzzy” tone, so you’re sure to find what you need for your song or section. Also included is the HardRockLA Bass style, a syncopated bass style with a big fat tone. As a bonus, we’re also throwing in the HardRockLA RealDrums style! This style has 5 different substyle options, combined together for a total of 8 different style variations. Each substyle was recorded at 3 different tempos, and with the superior stretching features in Band-in-a-Box, the entire tempo spectrum in between tempos is also covered.

RealTracks Set 84: Lite Pop
This set features 12-string Acoustic Guitar RealTracks styles, as well as 3 Pop Piano styles. The 12-string Acoustic Guitar provides a beautifully full sound which works great on its own, or in the context of a full band. There are two of these styles, one picking, and the other strumming, both at a slow ballad tempo. Additionally, we also include a style that uses the picking for the “A” section of your song, and strumming for the “B” section. The 3 Pop Piano styles continue our collection of “solo-accompaniment” piano styles. Two of the styles embody the melodic California sound, one a slow ballad, the other an upbeat energetic style. The third style is a flowing melodically arpeggiated style.

RealTracks Set 85: Rockin’ Bass
This set features two classic Brit-Rock basses, a heavily scooped and distorted thrash bass, and a deep rockin’ bass that turns out pulsing eighth notes. You can view tab and notation for every style in this set in Band-in-a-Box or RealBand. The wide range of tempos ensures that you'll have a rockin' bass for every occasion.

RealTracks Set 86: Blues Rock
Three unique and driving guitar styles are included: two with a crisp, unrelenting single-coil tone (which can be linked together as an A/B substyle) and one with a low, twangy fuzz tone. Also included is a dark-toned blues rock bass that syncs up nicely to the guitar styles. All of these styles are equipped with RealCharts, which means that even though you're listening to actual audio recordings of real musicians, you can see the notes they're playing on the on-screen fretboards, in TAB, in standard notation, and on the on-screen piano keyboard. Our unique stretch methods insure that you're covered for a range of tempos and all twelve keys.

RealTracks Set 87: Electric For All Occasions
This set offers an extensive selection of bright guitar sounds for all occasions. At each of the three tempos, we provide you with both clean and slightly distorted guitar tones. Plus you also have control over the particular texture of the guitars. All of the styles were recorded with both open chords, if you want a brighter sound, and barre chords, if you want a slightly more muted effect. All styles play any chord in any key, and our stretch methods insure that all in-between tempos are covered! All of these styles also come complete with notation and tablature.

RealTracks Set 88: 12-String Electric
RealTracks Set 88 offers some unique, clean 12-string electric guitar tones. The styles are split into two main categories: strumming and fingerpicking. The strumming styles offer a silky, sustained, solid rhythm while the fingerpicking styles deliver an open and bright feel that fills in the eighth notes. Both the strumming and fingerpicking styles were recorded at multiple tempos ranging from slow ballad to uptempo pop, and with the superior stretching features in Band-in-a-Box and RealBand, all the tempos in between are covered too! Notation and tablature are also included for all of your scoring and learning needs.

RealTracks Set 89: Northern Rock Ballad
RealTracks Set 89 provides Acoustic Guitar, High-Strung Acoustic, Banjo & Electric Bass. Both guitar styles feature open chords with traditional folk strumming patterns. These two guitars used together provide a full, rich sound by covering the full sonic spectrum. In addition, both guitars and the electric bass are equipped with RealCharts, which means not only are you getting real instruments played by real musicians, but you can see what they're playing in notation, TAB, and on the on-screen guitar/bass fretboards. The banjo is a nicely subtle, understated fingerpicking style that blends perfectly with the other instruments.

RealTracks Set 90: Jazz Organ
A collection of Jazz B3 organ styles from slow, laid-back ballads to energetic up-tempo swing and beboop. The style provides both comping and killer bass lines which play “in-2” for the A sections and walk for the B sections. There are 5 separate styles recorded over the range of tempos from 60 to 190 beats-per-minute. And, with the superior stretching features in Band-in-a-Box, all styles in between are automatically covered as well!
RealTracks Set 91: Smooth Jazz - Sax Soloing
Five new additions to your Smooth Jazz RealTracks collection: three alto saxes, a soprano, and a tenor. All of these styles show tasteful contrast with soothing melodies intertwined with fast jazz runs and phrases. This set also covers three avenues of smooth jazz: cool, poppy, and ballad. It offers a wide range of tempos ranging from dramatically slow to moderately fast. The inclusion of RealCharts means that not only will you be hearing Real Saxophone played by a top studio musician, but you'll be able to see exactly what's being played in both notation and on the on-screen piano keyboard.

RealTracks Set 92: Smooth Jazz - Trumpet Soloing
This set features four different soloists in the subgenres of cool, poppy, and ballad. The cool Jazz styles have a funky swung sixteenth note feel while the down-tempo poppy and ballad styles rely on even spacing and tasteful phrasing. You'll have a variety of tempos and all twelve keys at your fingertips thanks to the stretching methods used by Band-in-a-Box and RealBand, and with our RealCharts you'll be able to see exactly what's being played, in both notation and on the on-screen piano keyboard.

RealTracks Set 93: Smooth Jazz - Trumpet Soloing
RealTracks Set 93 adds more Rhythm & Soul to our collection of Smooth Jazz RealTracks styles! This set includes two electric piano soloist styles and two rhythm guitar styles all together. Both split up into two subgenres: a funky swung sixteenth feel and a slow even sixteenth ballad feel. And, the two electric piano styles provide you with even more options, as each one has three different effects sets: Chorus with delay effect, chorus alone, and completely dry. If you want the slick Smooth Jazz sound, go for the chorus & delay, but if you want the unadulterated sound of the real vintage electric piano, go for the dry. All four styles are also equipped with RealCharts which allow you to see the notes that are being played in notation and on the on-screen piano keyboard, and the guitars have the added benefit of correctly displaying TAB & the notes on the on-screen guitar fretboard. We've got you covered in ALL keys, and with the superior stretching features in Band-in-a-Box, a wide tempo range is covered.

RealTracks Set 94: Jazz Guitar Soloing and More
This set includes 4 electric guitar styles, ranging from medium-slow tempos up to fast bebop tempos, in both jazz waltz meters, as well as straight ahead 4:4 swing. In addition, there's an energetic samba soloist played on nylon guitar, and two solo accompaniment piano styles! These real pianos offer a fun and energetic feel and are the perfect companion to a show tunes singer. Every single style in this set is equipped with RealCharts, which means not only will you be hearing great real audio recordings of real musicians, but you'll be able to SEE what they're playing too, in notation, and on the on-screen piano keyboard. The electric guitars have the added bonus of displaying correctly in TAB and on the on-screen guitar fretboard.

RealTracks Set 95: Jazz Rhythm Guitar: Bossa and Swing
Included are four electric guitar styles that cover a large range of tempos, as well as two bossa styles, and a fast “Freddie” Acoustic Guitar. The Electrics are split into “FreeComp” and “GrooveComp” styles. The FreeComp styles are intended to be the sole comping instrument (no piano) featuring sophisticated rhythms and harmonies. The GrooveComp styles use more repetitive rhythms and more basic harmonies so that they can be used with other comping instruments such as piano or organ without getting in the way. The Bossa Guitars have a warm nylon tone, and were recorded at the tempos of 85 & 140, and with the superior stretching features in Band-in-a-Box, all of the tempos in between are also covered. The electric & acoustic guitars are also equipped with RealCharts which means that not only are you hearing actual audio performances by actual musicians, you can also see what they're playing in notation, TAB, and on the on-screen guitar fretboard.

RealTracks Set 96: Modern Bluegrass Waltz
This set includes a total of six new waltz styles on five different instruments! You will receive two acoustic guitars (one fingerpicking, one strumming), acoustic bass, fiddle, mandolin, and banjo. Every one of these styles covers all twelve keys, and covers a wide tempo range thanks to the high quality stretching features in Band-in-a-Box and RealBand.

RealTracks Set 97: Unplugged Country Swing
There are four country swing fiddle styles included, three of which feature melodic background playing over the tempo spectrum of 85 bpm ballads to the sprightly tempo of 140. Since they were recorded at intervals, the entire tempo range is covered, since Band-in-a-Box's superior stretching features can use those three tempos to cover all of the tempos in between. At 140, you also have the option of choosing the "chops" style, where the fiddle plays very short chordal shots on beats 2 & 4. This is a style that would generally only be used on faster tempo tunes. All of
these styles also feature RealCharts which means that not only are you hearing audio recordings of top studio musicians playing your song, you can SEE what they're playing too, in notation & on the on-screen piano keyboard!

**RealTracks Set 98: Unplugged, 12-String & Fiddle**

Three strummed acoustic 12-string guitar styles and two country boogie fiddle styles, all recorded over a wide tempo range. And with the superior stretching features in Band-in-a-Box, all the tempos in between are also covered. The 12-string styles were recorded at 85, 120 & 165 beats-per-minute, so if your song is at 95, no problem, you're covered with 85, which Band-in-a-Box can easily stretch up. Or, if you need 12-string at 160, no problem, the 165 bpm style can easily stretch down to cover that too! RealCharts are included with all 5 styles here, which means that not only do you get real audio recordings of top studio musicians playing your songs, you can see what they're doing in notation, on the on-screen piano keyboard, and for the guitars you can also view the notes in TAB and on the on-screen guitar-fretboard. And all keys are covered, so if you want to boogie down in C sharp, no problem!

**RealTracks Set 99: More Country Waltz: Pedal Steel, Bass & Fiddle**

Three bass styles offer a solid, rhythmic foundation over a wide tempo range, two fiddles offer a variety of melodic ideas, and two pedal steels offer rich layers of harmonies. That's a total of seven new styles, all of them crucial to your Country Waltz songs! In conjunction with previously release Country Waltz styles, it's easy to put together a full band at any tempo. All styles play effortlessly in any key, and the pedal steel & fiddle styles have the added bonus of RealCharts, which let you see the notes that are being played in notation or on the on-screen keyboard.

**RealTracks Set 100: More Western Swing: Pedal Steel & Electric Guitar**

RealTracks Set 100 includes 4 new electric guitar styles that can be used in conjunction with our previously release Western Swing styles. The styles were recorded at 2 tempos, 165 and 190, with basic comping patterns at both tempos; a "picked" style at the slower tempo, and a "held" style at the faster tempo. Plus we add to our increasing collection of Pedal Steel styles at both of these tempos as well. These swinging styles use the classic Western Swing C6 tuning. And you're not limited to 165 or 190, all tempos in between are also covered with the superior stretching features in Band-in-a-Box. With tempo-swapping enabled in Band-in-a-Box, the program will automatically use the best tempo for your song.

**RealTracks Set 101: Folk and Country Swing**

This library of country and folk crossover styles delivers a large collection on a variety of instruments. Included are Ukulele, Acoustic Bass Guitar, Electric Guitar, and Fiddle styles. The Ukulele and Acoustic Bass Guitars work well as playful duos: a moderate tempo acoustic-bass guitar and ukulele duo with a country feel and a faster tempo acoustic-bass guitar and ukulele duo with a cheerful island feel. The “Memphis” fiddle adds to our existing Electric Guitar styles, and the two Country Swing electric guitar styles can be used independently, or together as an A-B style. The fiddle and guitar have the added bonus of having RealCharts enabled, which allows you to view the notes being played in notation, on the on-screen piano keyboard, and on an on-screen guitar-fretboard.

**More about RealTracks**

For full descriptions of all of the RealTracks sets, please go to [www.pgmusic.com](http://www.pgmusic.com) and see the RealTracks page, [http://www.pgmusic.com/products_realtracks.htm](http://www.pgmusic.com/products_realtracks.htm). While you’re there be sure to check for new releases.
QuickStart Tutorial for the Version 2010 and 2010.5 New Features

Quick Song Settings
These are enhancements for entering songs quickly. Typing special words, instead of chord names, will make the following settings:

- `begin <Enter>` - sets the beginning of the chorus to the current bar
- `chorusend <Enter>` - sets the end of the chorus to the current bar
- `end <Enter>` - sets the end of the song to the current bar
- `tkc <Enter>` - sets key signature to c, tkbb would set it to bb
- `trc <Enter>` - transposes song to key of C
- `t125 <Enter>` - sets tempo to 125

Quick-Load Songs and Styles
You can quick-load a song by typing only. In chord entry mode (Chordsheet or Notation window) type the word “song” followed by a file name or partial file name + Enter and the song will get loaded if it is in the current folder. Typing “bossa” would load in the first song with bossa in the name AFTER the current song name in the current folder.

To change to another folder, type “song” followed by the full path and file name. For example, type song and then `c:\bb\zzjazz.mg1+Enter` to load in that exact song name.

Quick-load a style by typing “style” followed by a style name, e.g., `stylezzbossa+Enter` loads in zzbossa.sty.

Easy Big Lyrics Display
If a song has lyrics (or other text) in the Lyric Memo or Lyric Document, these lyrics will now show up on the Big Lyrics window during playback.

If you have lyrics in text format, it is easy to paste them in as a Lead Sheet Memo or into the Lyrics Document, and then you will see them on the Big Lyrics Window as well.

Improved Audio Rendering
For Audio track rendering, reverb is added to the mix if there is A. Reverb set for the audio track.

If you choose to merge in the audio track, you can adjust the volume to match it to the other tracks. You can add a dB amount to the whole mix to make it louder or softer. There is automatic “peak-limiting” added, so that the music will not distort if you set it too high.

<table>
<thead>
<tr>
<th>Merge Audio Track</th>
<th>Adjust Audio Track volume by</th>
<th>0 dB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Include 2 bar lead</td>
<td>Delay at start (seconds)</td>
<td>0</td>
</tr>
<tr>
<td>Include Drum Count-in sound</td>
<td>Delay at end (seconds)</td>
<td>2</td>
</tr>
</tbody>
</table>

DAW Plug-in Mode
There now is a “Plug-in” mode for your favorite sequencer (RealBand, Sonar, Reaper, ProTools, FL-Studio, Nuendo and more). With the new plug-in mode, Band-in-a-Box is open as a small always-on-top window, and acts as a plug-in for your favorite DAW/sequencer, so that you can Drag-and-drop MIDI and audio (WAV) tracks from BB to your favorite sequencer. Work in your favorite sequencer, type a progression in Band-in-a-Box, and then simply drag the track from Band-in-a-Box to your sequencer’s track at the desired track and bar location.

The DAW Plug-in mode is a mode within the regular Band-in-a-Box program. This mode allows you to transfer tracks, or parts of tracks, to other DAW Sequencers easily, by simply dragging the track icons from Band-in-a-Box (BB) to the tracks window of your DAW.

You can enter and exit the plug-in mode easily.

Press the [Plugin] button on the main toolbar and choose the menu item Start DAW Plug-in mode, or go to the Windows menu and choose Plug-in Mode for DAW.

When you do this:
1. Window size of Band-in-a-Box changes to a small size (you can resize it to the size/position that you want, and it will remember that).
2. Band-in-a-Box becomes always-on-top window (if this is option is set in Plug-In options).
3. You can now easily drag tracks from BB to your DAW, by mouse clicking on the part at the top (Bass, Piano etc.), and dragging to your DAW’s track.

You can also drag files to other programs, besides DAWs, if they accept a drop of audio files (WAV, WMA) or MIDI files. For example, Windows Explorer allows this. For this documentation, we will use Windows Explorer as an example. The [Drop] button is for DAWs that do not accept a direct drop of tracks that are not yet generated.

**Freeze Tracks**

**Freezing (locking) MIDI or RealTracks/RealDrums**

Any track can now be frozen (MIDI or Real track). You can make tracks Frozen by pressing the Freeze button (snowflake) on the toolbar, and then choosing which tracks that you want to freeze or unfreeze.

When frozen, it won’t get changed or re-generated. This saves time when replaying previous songs, and allows you to freeze an arrangement that you like. If you freeze the whole song, you don’t have to wait at all for the song to regenerate. Next time you play, it is ready to go. This new freeze feature is different than the previous limited freeze feature that renders the whole arrangement to the audio track.

There are a number of reasons that you would freeze a track.

**Reasons to Freeze a RealTracks track (audio):**
- Frozen tracks will play back instantly, not requiring time to generate.
- They play back the same way each time, so if you like a solo, you can “freeze it.”
- If you send a song to a friend as “frozen,” they will hear the same performance.
- For the Soloist track, if you generate a solo, it can now be saved (by freezing the track).

**Reasons to Freeze a MIDI track:**
- You can edit the MIDI data, to customize the performance to match a certain song, and this will be saved. Use the Notation window or Piano Roll to edit the track.

**More reasons to freeze any track:**
- Frozen tracks play back instantly, without requiring time to regenerate.
- They play back the same way each time.
- You can change the chord progression of the song, and have one part playing a different chord progression than the rest of the band. For example, type a “blowing” chord progression, generate a solo, freeze the solo track, then type a normal chord progression and generate the rest of the instruments (bass/guitar etc.) that will play the normal changes.
- Have different instruments play different styles. For example, the Bass could be generated using Reggae, then Frozen, and then the rest of the instruments generated using a Techno style.

**Un-Freezing a Track(s)**

This is also done for the Freeze button. Choose a frozen track to un-freeze it, or choose “Un-Freeze all tracks.”
Forcing Generation of a Song that is Frozen

Band-in-a-Box won’t touch tracks that are frozen. But if you want to change that, without having to Un-Freeze the tracks, you can do this easily.

Hold down the Shift key as you press the [Play] button (the fly-by hint will remind you of that), or choose the menu command Play | Generate (even if tracks are frozen).

When you do this, the song will regenerate, the tracks will get rewritten, and the song will stay frozen. So if you’re freezing songs to get the instant playback with RealTracks, but get tired of the “same-old” frozen arrangement, just press Shift+Play, generate a new arrangement, and press Save. Then the new “fresh-frozen” arrangement will play instantly, even with many RealTracks.

Tip: Obviously you wouldn’t use this feature to force regeneration of a frozen song if you have made custom edits to the song that you don’t want to lose, unless you’ve saved the song and have a backup copy.

All Tracks can be Edited and Saved. MIDI tracks for bass, drums, piano, guitar and strings can now be edited, and saved with the file. If you freeze a track, edits can be still made to it, because it is only frozen from Band-in-a-Box making changes to it (you can still edit it), so that the MIDI track will be saved to the file. So you can customize the bass part to match a certain song, and save it with a frozen bass part, so that Band-in-a-Box won’t overwrite your edits. This includes RealCharts – if you wanted to edit the notation of a RealTracks solo for example.

To edit a MIDI track (bass, drums, piano, guitar, strings), or the MIDI part of a RealTracks that has a RealChart (MIDI transcribed solo), simply open up the Notation window (or Piano Roll window), and click on the track and edit it. Make sure to Freeze the track by pressing the Freeze button and choosing Freeze for that track, or right-clicking on the instrument at the top of the screen and choosing Freeze. Now your edited tracks will save with the song.

If you keep the default setting of “Save all Settings with Songs,” you will find that all settings are saved, and loaded with each song. You shouldn’t have to visit the File | Save Song with Patches & Harmony dialog, unless you have some custom items that you don’t want to save with the song.

Note that if you have set a MIDI patch for one of the instrument parts (bass/drums/piano/guitar/strings) and you load in another style, Band-in-a-Box will overwrite your patches with the style patches. If it didn’t do that, you would be stuck with the same patches regardless of the style. So if you want a certain patch for a track, set it after you have loaded in the style that you want

RealTracks Enhancements

No more long waits for RealTracks to generate! RealTracks generate much faster, 3X faster on average. A typical song with RealTracks that took 20 seconds to generate will generate now in about 6 seconds. And if you freeze some or all tracks in the song (see below), playback of RealTracks is almost instantaneous.

This “speedup” feature works automatically; you should just notice that generation of RealTracks is much faster.
Soloist generated RealTracks are now saved with the song, so you will hear the RealTracks play the same solo when you reload the song.

When you generate a solo using RealTracks, Band-in-a-Box will remember this, and when you go to save the song, Band-in-a-Box will ask you if you want to save that solo (and thereby freeze the Soloist track). If you say yes, then the solo will play instantly the same way when the song is reloaded. Of course you can freeze the soloist track yourself at any time. Note that only one solo can be saved. You can’t generate a bunch of different segments of solos; only the last one will be saved.

**Shots, Holds, and Pushes**

RealTracks now support new features, including Shots, Holds, and Pushes. Simply type in the chords as you normally would, adding periods (…) for shots and holds, and the RealTracks will play them.

*Note:* You need the installer that creates a Library\Holds folder in your RealTracks folder.

The RealTracks Assign dialog that lists each RealTrack has the last column called “Holds” that lists whether that RealTrack supports Shots, Holds, and Pushes. If there is a number there (other than a blank field), then they are all supported.

If there is an “n” this means that they are supported, but you don’t have the Holds_## files in the RealTracks\Library\Holds folder.

This feature is enabled in the **RealTracks Settings** dialog. There is an override for the setting in the **Song Settings** dialog that will enable or disable the feature for just a certain song.

**Jazz 7ths Option**

For RealTracks, many Jazz comping styles now play triads (instead of 7ths) when simple triads are entered, instead of “jazzing them up” to 7ths chords. If you prefer them “jazzed up” then you can set the **RealTracks Settings** option to force 7ths for triads.

**Play any RealTracks at normal, half-time, or double time.**

With the Timebase option in the RealTracks Picker you can play any RealTracks at normal, half-time, or double time. Half time is used for fast tempo songs when a much slower tempo RealTrack has been chosen. Double time is used for slow tempo songs (e.g. ballads) when a much faster tempo RealTrack is chosen. This allows you, for example, in a ballad at a tempo of 70, to add a RealTracks Sax solo with a tempo of 140, and play it as a double time, which will match the ballad tempo of 70. All of your existing RealTracks can be used at three different tempos (normal, half-time, double time).

**Automatic Tempo swapping of similar RealTracks.**

If you have similar RealTracks available at different tempos, Band-in-a-Box will automatically choose the best one to use. For example, if you have a ballad loaded, with an Acoustic Bass RealTracks at tempo of 60, and you speed up the tempo to 140, and press [Play], Band-in-a-Box will automatically choose an Acoustic Bass RealTracks closer to tempo of 140, if it is the same genre and feel. This means you can use a simple Jazz style, and play it at various tempos, without having to set the best RealTracks based on tempos. The RealTracks that support the Tempo Swapping are listed in the next to last column of the RealTracks assign dialog.

There is an additional option to replace the current RealTracks selections with similar ones that would work better at the current tempo. This is an option available by pressing the Realtracks Toolbar button and clicking on Select better RealTracks for this tempo. To use this feature disable the auto RealTracks selection in the Preferences.

**RealTracks Picker dialog enhanced:**

- Opens up faster.
- New Columns added (tempo swappable, holds type).

Columns are now sizable, and remember the sizes.

**Audio Reverb**

Reverb control added for individual tracks with RealTracks or RealDrums, so you can easily add reverb (0 to 127) for any RealTrack. The reverb type is also settable, and saved with the song.
At the top of the screen, there is an “A.Reverb” control (Audio Reverb). Click on an instrument radio button, and then set the Reverb for it.

The Audio Reverb varies from 0 to 127. Clicking on the left hand side of the control allows you to enter a setting, or click on the up/down arrows. See the RealTracks and RealDrums chapter for more about this feature.

Note that this only applies to RealTracks, since MIDI tracks have MIDI Reverb, which is set via a MIDI Reverb control.

Bass/Treble Tone Control added for individual tracks with RealTracks or RealDrums, so you can easily adjust the bass/treble EQ for any RealTrack. Settings save with the song.

Choose an instrument and then use the tone control to adjust the tone from -18 (maximum bass) to +18 (maximum treble). Default is 0.

Audio Reverb and Tone can be set by clicking on the audio label.

Master Reverb and Tone can be set by clicking the Combo button, and then using the Audio Reverb and Tone controls.

For Audio track rendering, reverb is added to the mix if there is reverb set for the Audio track.

Rendering Tracks

Rendering now has a Normalize option, to normalize individual tracks or the complete arrangement. Normalizing boosts the volume to a maximum level without distortion. Most professional music tracks are normalized.

To enable this, in the Render dialog, choose the Normalize checkbox.

Rendering songs to audio is now much faster for songs with no MIDI, such as RealStyles.

Rendering RealTracks no longer require you to have a DXi or VST in use.
Rendering Wav dialog enhanced.

It has a simpler layout. The Render wav file doesn’t need to be in same folder – it can be in any folder/drive. The Render Dialog has a [Default] button.

You can add a dB amount to the whole mix to make it louder or softer. There is automatic “peak-limiting” added, so that the music will not distort if you set it too high.

New Favorite Songs/Styles Dialog

There’s a new dialog for these favorites with separate lists of Recently Played and Favorite songs or styles. The previous favorite songs/styles dialog was a list of recently used songs/styles. Now there are 2 tabs in this dialog, showing you both recently used songs/styles, and a new list of “favorites” that you select as a favorite songs or styles.

Favorite Song/Style lists can be edited, sorted, saved/loaded, and used with the jukebox. You can add an unlimited # of favorites.

The [F] button launches the dialog.

The “Favorites” and “Recently Played” Radio buttons toggle between a list of your recently played songs (or styles), and your favorite songs (or styles).
The favorites list will start off as an empty one. But you can add songs as your favorites, by clicking the Add Favorite button (this button is also found in the StylePicker).

Songs that are “Saved As” with a different name have the new name added to the Recently Played song dialog.

**Technical Note:** The list of songs/style favorites is stored in a text file called SongFavorites.txt (or StyleFavorites.txt) in the BB folder.

Also, a [Sort] button has been added to Favorite/Recent songs/styles dialog.

You can save and load sets of favorites or recently played songs (or styles). You can also make a custom play list order, and press the Juke button to play a jukebox in a certain order. So, for example, you can make a favorites list of your favorite Jazz songs, or favorite “Thursday Night Jam” songs, and load those in when needed.

**StylePicker Enhancements**

**Favorites and Recent styles now appear** in this dialog as separate lists. It now has the ability to add/remove styles as favorites. A Favorite Style indication (F) shows up for each style. You can filter any list by only showing favorite styles. Over time, you can build up a list of favorite styles, and only show them when needed.

Notice the two new categories, Favorite Styles and Recent Styles.
The favorite styles are the ones that you’ve identified as favorites, either by pressing the [Add Favorite] button in the Favorite Styles dialog, or the similar button in this StylePicker dialog. Note that an “F” appears beside the name of any style that is a favorite.

You can make any style a favorite by clicking the [Add Favorite] button. If you want to remove it, click the button again.

“Only Show favorites” will only show the favorite styles in any list that you have opened.

There is new a filter to show/show Real or MIDI styles. So you can set this if you only want to see MIDI styles, or if you only want to see styles that use some/all RealTracks.

**Lyrics Enhancements**

Undo has been added for the entry of individual lyrics using the Edit | Undo command.

There are new buttons in the Lyric Entry window.

- The [Line] button enters a forward slash “/” line break marker in the current lyric.
- The [Para] button enters a backslash “\” paragraph break marker in the current lyric.
- The [Enter] button enters the current lyric, equivalent to hitting Enter key or Tab key.
- The [Close] button closes the Lyrics Edit mode, equivalent to hitting the [L] button again.
- The [Section Text] button enters the text in the lyric box as section text at the current bar.
- The [Edit] button opens the Edit Lyrics dialog where lyrics and section text can be edited.

And much more…

**Multiple Undo Support**

Up to 999 levels of undo (configurable).

The default number of undos is 99. If you need to change this, it can be done in Opt. | Preferences “Number of Levels of Undo.” Range can be 5 to 999. You can also choose Edit | Redo to redo an undo.

**Technical Note:** Audio Undos are large WAV files, so are stored in an Undos folder in the BB directory. This directory is emptied when the undos are no longer needed.

**Always Save All Song Settings**

Now all settings are saved with songs, including patches, reverbs, volume etc., so that the song will play the same way each time, without having to set this in the “save with patches” dialog (Alt+F2).
Band-in-a-Box Window is Sizable

When size changes, chordsheet, notation, and other windows redraw in proportion to the new size. This allows you to have Band-in-a-Box open as a small window on screen with other programs, and you still see a full chordsheet. The screen size is remembered between sessions.

To resize the Window, first un-maximize it.

Then use the sizing control at the bottom right. The various Band-in-a-Box windows will scale as you do this. Band-in-a-Box will remember the position and size of the window between sessions.

The RealDrums picker dialog has been enhanced, with information about Artist name, Artist bio, and Real Drums Set number.

Support enhanced for non-concert instruments (Bb/Eb sax, trumpet etc.).

Now when the chordsheet is transposed, you can type in chords in the transposed key, and they will show up as you have entered them, instead of requiring you to enter the chords in the concert key.

To try this out, go to [Prefs] and click on [Display] to open the Display Options dialog. For the “Transpose” setting, choose “Alto Sax +9.” Now when you type in a chord (like Am7) it will show up as Am7 without requiring you to enter it in the Concert key.

More Soloists are now available, up to 2000.

Many messages changed to “yellow alerts” at top right of screen, so that you don’t have to respond to the message, interrupting work flow.

This is the end of the tutorial.

Thanks for taking the time to read this chapter. Have fun!
Chapter 4: The Main Screen

Main Screen Overview

Band-in-a-Box supports Windows themes. It will use the current theme that you have selected in the Windows Control Panel to use for windows and dialogs.

The main screen gives direct access to the major features and program settings of Band-in-a-Box for ease and convenience during a session.

There are five different areas on the main screen.

1. The Status Bar is used to show program running status messages and path names of the currently loaded song.
2. The Synth Window is the area between the Menu Bar and the Piano Keyboard where Instruments patches are set and levels are adjusted. It also includes buttons for adding harmonies to the Melody, Thru, or Soloist parts.
3. The Tool Bar area under the Piano Keyboard has buttons for direct access to important program features and menus. Hold the mouse cursor on any button to see a pop-up hint that describes its function.
4. The Title Window shares the Tool Bar area. In addition to the song title, it includes all the other settings for the song such as its Key Signature, Tempo, and Chorus settings. To the right of the Title Window are two floating, dockable toolbars that can be configured by the user.
5. The Chordsheet Area occupies the lower part of the screen. Chord changes for the song are typed into the numbered bars (cells) in the sheet. Part markers (a, b, through x) are entered here to switch between up to 24 Band-in-a-Box substYLES. Double lines are drawn on the chordsheet at the bar before a part marker. Repeats and endings are also shown.

The Band-in-a-Box window is sizable.

When the window size changes the Chordsheet, Notation, and other windows redraw in proportion to the new size. This allows you to have Band-in-a-Box open as a small window on screen with other programs, and you still see a full chordsheet. The screen size is remembered between sessions.

To resize the Window, first un-maximize it.

Then use the sizing control at the bottom right. The various Band-in-a-Box windows will scale as you do this. Band-in-a-Box will remember the position and size of the window between sessions.
Alert messages
You’ll see that many Band-in-a-Box messages appear as “yellow alerts” at the top right of screen. That way you don’t have to respond to the message, interrupting work flow.

Personalizing the Main Screen
Band-in-a-Box gives you many options to personalize the main screen.

Screen Layout
The Chordsheet area (or Notation Screen) can be placed at the top of the screen if desired by selecting the “Put Notation/Chords on Top” from the Window menu or by pressing Ctrl+T. (This is reversed by selecting the same option.)

Display Options
Go to Opt. | Preferences or click on the [Pref] button to open the Preferences dialog. Then click on the [Display] button to open the Display Options dialog where you can select a toolbar mode, show or hide the on-screen piano, pick a song title font and set options for the chordsheet display including the number of rows to display for the main chordsheet, the font to use, and the font size too. This allows you to read the chordsheet window from “across the room.”

If you choose a Custom font, you can choose the size as well. Choose a preset font, and the size will be set automatically to fit into the height of the row. Choose Jazz Symbols to see shorthand Jazz chord symbols in the chordsheet and notation. To revert to the “old look” that used a small System font, and lots of rows, you can choose that as the type of font “Small font (system).”

Whenever a new section occurs (a part marker) you have the option to start the new section on a new line and draw a grey line above to clearly mark the new section. A section can be just 2 bars long. With this Section Paragraphs feature you’ll see each section on a new line so that the form of the song is easy to see.

Transpose visually transposes the chordsheet and notation a number of semitones, e.g. +14 for tenor sax.
Color Schemes
You can choose from several color sets using the 256-color palette in Windows. Choose from pre-made color schemes or make your own. To change the color scheme, select Opt. | Preferences from the main screen, and then click on the [Colors] button in the Preferences dialog to launch the Color Selection dialog.

To select a pre-made color scheme, press the [Import..] button and choose from the list of schemes. Select [OK] to make the changes permanent. Use the [Export..] button to save and share your customized color schemes.

To make your own color scheme, click on the name of the element you wish to change (Chord Area, List Box, etc.), then click on the [Choose...] button to bring up the Windows Color palette and click on the color you desire.

Descriptive Hints
The pop-up hints make it “too easy” to become a power user. They are comprehensive fly-by-hints that appear when you move over an item, including hints for the dialog boxes and various windows.

Go to Opt. | Preferences or select the [Pref] button to open the Preferences dialog and set the type of hints to display, the time delay, and duration. Set a longer delay if you find that the hints are popping up too often and getting in your way.
Options and Utilities
These settings are found in the Opt. menu and the Opt. | Utilities submenu.

Language Selection
This item in the Opt. menu allows you to change language from English to another language for display. If there are other languages supported by your version of Band-in-a-Box, then they will display in this dialog box. The new language will be displayed the next time Band-in-a-Box is launched.

Edit Chord Shortcuts file (shortcut.txt)
Add your own chord shortcuts. Have you found a chord that Band-in-a-Box doesn't recognize? If so, you can make a text file called \b\shortcut.txt for your own shortcuts. (Note that this file doesn't ship with Band-in-a-Box or it would overwrite your file!) The file \bb\pgshortc.txt is only for shortcuts supplied by PG Music.

Refresh Chord Shortcuts...
When you have saved your shortcuts file click on Refresh Chord Shortcuts... to start using them. Changes to your chord shortcuts won’t take effect until you choose this command.

Status Bar
The name of the open song is identified in the status bar at the top of the screen. The full file name and path name are shown, as well as audio track information if present, the length of the song in minutes and seconds, and the current position of the highlight cell. Other “running status” messages such as Soloist Generation and Song Generation display in the status bar.

The status bar changes during playback to show additional information like the current bar and chorus location and the current style. The on-screen file name includes “*” when a file has been changed.

Taskbar hint
The entire song name displays in the taskbar hint when Band-in-a-Box is minimized. This is useful to find the name of a song playing when Band-in-a-Box is playing in the background.

Synth Window / Piano Keyboard
The Piano Keyboard:
This keyboard displays the notes (in different colors) that are being played by all instruments on various parts of the piano keyboard during playback (except drums). The MIDI Thru/Soloist is also displayed on the piano keyboard.
On the top row, guitar (green), melody (red), and soloist (pink) are displayed.
On the bottom row, bass (brown), piano (blue), and strings (grey) are displayed.
Chapter 4: The Main Screen

Instruments and Parts:

![Part Settings Table]

**Part Settings:** The Bass/Drum/Piano/Guitar/Strings/Melody/Soloist and Thru buttons refer to instrument parts.

The MIDI parts in use for the current song and style are shown in yellow, RealTracks and RealDrums are colored green. When a RealTracks part is underlined it has RealCharts notation or tablature that displays in the Notation window and also on the piano keyboard or guitar fretboard. Parts that are not used are in white. The names of muted parts display in red.

To change a setting for one of the parts you need to do the following:
- Select the part by mouse clicking on the part name, or on the button immediately to the left of the part name.
- Change the desired parameter to affect the new setting.
- Right click or double click on a part name for a menu of more settings and actions for the selected part.

<table>
<thead>
<tr>
<th>Mute</th>
<th>Solo</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Assign RealTracks...** [in Style: 446:Guitar, Electric, Rhythm Jazz Sw 140]...

(re)Generate this RealTrack... [446:Guitar, Electric, Rhythm Jazz Sw 140]

Save RealTrack as WAV...[446:Guitar, Electric, Rhythm Jazz Sw 140]

Set Track offset [0]...

Erase Track...

Freeze Guitar track  [not frozen]

You can **Mute** or **Solo** the individual part.
- **Assign RealTracks** generates the part as a RealTrack using any available RealTracks instrument.
- The RealTrack can be regenerated.
- An individual MIDI part can be rendered into a WAV file and saved in the location you select as a file named in the format “Untitled Song BBGuitar_MIDI_SingleRender.WAV”
- **Set Track offset** allows the track to moved ahead or behind by +/- 1000 ticks (at a resolution of 120 PPQ).
- **Erase Track** removes either the MIDI data or RealTracks audio from the track.
- **Freeze** the track if you do not want the part regenerated on each play. Tracks can be unfrozen.

**Instruments - Choosing**

![Instrument Panel]

The instrument panel allows you to change the instrument for any part:
- Clicking on the drop-down arrow produces an instrument list that you can choose from by highlighting and clicking on the desired instrument name.
- Clicking the [F] button produces a representative list of predefined favorite instruments that you can choose from.

The [GM2] button lets you select patches from a list of both General MIDI and General MIDI 2 patches if your system supports GM2.

Clicking on the instrument panel [+ ] button produces a comprehensive list of ALL of the patches available for your synthesizer, including ones on higher banks (if applicable). This list displays your patch names by name, where the patch is located (patch #, bank) and lets you pick them from an easily customizable list.
Combo Settings

When the combo button is selected you can choose one of your ten favorite preset instrument combos. The patches are set from the [Fav. Patches] button in the Preferences. For example, you could setup Combo #1 to be an Acoustic Jazz combo which would send out patches like Acoustic Bass, Acoustic Piano, Acoustic Guitar, Flute, etc.

When a Combo is selected changes to volume, reverb, etc. will apply to all parts. Right-click on the Combo radio button to open a menu of commands that apply to the entire combo.

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mute</td>
<td>Mute all tracks</td>
</tr>
<tr>
<td>Save all tracks as WAV file</td>
<td>Render the tracks together into one wave file or render them as individual wave files.</td>
</tr>
<tr>
<td>Song has changed, needs regeneration</td>
<td>Regenerate a new arrangement for all parts.</td>
</tr>
<tr>
<td>Render Song to Audio Track (and mute tracks)...</td>
<td>Mutes the individual tracks and plays the rendered audio wave, or you can Un-Render Song from Audio Track (Enables tracks, erase audio track)...</td>
</tr>
<tr>
<td>Freeze all tracks [not frozen]</td>
<td>Freeze all tracks</td>
</tr>
<tr>
<td>Un-freeze all tracks [not frozen]</td>
<td>Un-freeze all tracks</td>
</tr>
<tr>
<td>Save Current Mix as Default</td>
<td>Save the current mix as a default mix.</td>
</tr>
<tr>
<td>Load Default Mix</td>
<td>Load the default mix</td>
</tr>
<tr>
<td>Reset Mix</td>
<td>Reset the mix to factory defaults.</td>
</tr>
</tbody>
</table>

*Mute* will mute all parts.

*Save all tracks as WAV file* will render the tracks together into one wave file or render them as individual wave files.

*Song has changed, needs regeneration* will regenerate a new arrangement for all parts.

You can *Render Song to Audio Track*, which mutes the individual tracks and plays the rendered audio wave, or you can *Un-Render Song from Audio Track*, which will erase the audio track and play the individual tracks again.

The *Freeze* and *Un-freeze* commands apply to all tracks.

If you like the current mix (of volumes, panning, reverb), and you want this applied as a default for all songs, you can choose *Save Current Mix as Default*. *Load Default Mix* restores the default mix you have saved, and *Reset Mix* sets the mix back to “factory defaults.”

Drop Panel

The [Drop] button is used to drag and drop tracks from Band-in-a-Box to Digital Audio Workstations that don’t support direct drag and drop. Many DAWs will allow you to do this directly, but, if your sequencer does not support the direct drop of a track that is not yet generated, you can drag from a radio button (Combo, Bass, Piano, etc.) to the Drop panel. When the button turns bright green the track has been generated and is ready to drag from the [Drop] button to your DAW.
Audio

The Audio Playback settings dialog makes it easy to mute, solo, or change the volume of the audio track, similar to the control of the other instrument parts in Band-in-Box. There are also Tone and Reverb controls for RealTracks. Click on the “Audio” label on-screen to open this dialog.

Master Reverb and Tone can be set by clicking the Combo button, and then using the Audio Reverb and Tone controls.

Harmony

The Harmony area displays the current Melody and Thru Harmony. At the top right, you’ll see the harmony boxes for the Melody and the Thru/Soloist.

The [M] button is for Melody harmony—pressing the [M] button produces a list of harmonies you can choose from. In this case it's set to SuperSax for a Big Band Sax-section harmony.

This button permanently writes the generated harmony to the Melody track. Once converted, set the harmony to none to prevent a “harmony-on-harmony” effect.

The [No harmony] button disables the harmony for the song. The keystrokes Shift+F10 also allow or disable the Melody harmony.
Tip: You can also search for a harmony by a keyword (i.e. typing in the first few letters of a harmony name) in either the Harmonies or Favorite Harmonies dialog.

Pressing the [F] button produces a list of your favorites; the 50 most recently loaded harmonies.

The [T] button is for Thru/Soloist harmony. Either your live part or the Soloist will be harmonized in real time—in this case using George Shearing Quintet type harmony (piano, vibes and guitar). Pressing the [F] button produces a list of your favorites (the 50 most recently loaded harmonies). Pressing the Shift+F11 keys toggles the Thru harmony on and off.

Loop Section Settings
The loop button launches the Loop Section Settings dialog, allowing you to set a range of bars to loop in Band-in-a-Box.

The LoopSec/LoopScn checkbox turns the Loop Section on/off. When it shows “LoopSec” a selected range of bars repeats in an endless loop. “LoopScn” indicates a screen of notation is looping. The selection of “range of bars” or “screen” is made in the dialog.

The Wizard and Embellisher
The Wizard is an intelligent play along feature that uses your QWERTY keyboard as a substitute for an external MIDI piano-style keyboard or optionally works with a connected external MIDI keyboard on the Thru channel. Toggle this checkbox “on” to play along with Band-in-a-Box. The bottom row of the computer keyboard plays chord tones, the second row plays passing tones - you play any key in either row and never make a mistake!

Embellisher settings are accessed from the menu item Melody | Embellisher or the Embellisher button on the toolbar.

Toolbars
The main toolbar extends the full width of the screen. (It is divided in two here.)

The [New] button clears the Chordsheet to start a new song. Band-in-a-Box reminds you to save your work before it erases the chords.
The [Open] button is used to open (load) songs into the program from a standard Windows Open File dialog.

Use the [Prev.] button to immediately open the previous song in the same folder (in alphabetical order) without going through the usual file opening process.

Use the [Next] button to instantly open the next song in the same folder (in alphabetical order) without going through the usual file opening process.

The [Save] button saves the song to disk with the standard Windows Save As dialog.

This saves the song, allowing you to choose or confirm the name and location for the file save.

The [Save +] button opens the Assign Instruments and Harmonies to Song dialog where custom patches, harmonies, and other settings can be permanently saved with the song.

Click on the [Plugin] button to start the DAW plug-in mode and select plug-in settings for dragging and dropping tracks to your favorite digital audio workstation.

The [.MID] button allows you to make a Standard MIDI File and save it to disk as a file with extension .MID or to the Windows Clipboard with type “Standard MIDI File.” Type 0 and Type 1 MIDI files are supported, or you can also choose to save the song as a Karaoke file with the .KAR extension.

This is the “Render to WAV file” button, which will convert (render) your MIDI arrangement to an audio wave file. It includes a batch render feature to convert an entire folder of songs in a single operation.

**Transport Controls**

These buttons are like the transport controls on a CD player or a media player.

[Play] button generates a new arrangement and plays the song.
[Loop] plays the selected (highlighted) section of the chordsheet in a loop.
[Replay] plays the song from the beginning without creating a new arrangement.
[Stop] button stops the song or the Jukebox from playing.
[Pause] button pauses the song during playback.
[From] button is used to play a song starting anywhere in the song, including tags or endings. This feature is also available from the right-click menu in the Chordsheet.

The [Melodist] button opens the Generate Chords and/or Melody dialog, where you can choose the type (or genre) of Melodist you wish to have generate a complete new song with chord changes and melody as well as an improvised solo and an original song title.

The [Soloist] button opens the Select Soloist Dialog, where you can choose the Soloist you wish to have play over any given chord changes.

The [Juke] button is used to start or stop the Jukebox. The [↩] and [↪] arrow keys are used to move to either the previous or next song in the Jukebox.
The [Rec.] button is to record a song from the beginning. The music that you play into the computer will then be stored on the Melody track. The “R” key is the keyboard equivalent.

The [R. Aud] button launches the **Record Audio** dialog for live audio recording.

You can make yourself sound like a 5 piece vocal group or a 16-voice choir! Record a vocal part, and add a 4 part audio harmony. Press the audio harmony button on screen to do this.

Band-in-a-Box supports DirectX and VST audio plug-ins – you can apply them directly to the digital audio track. Use the cool PG Music plug-ins provided, or any other DirectX and VST plug-ins that you have.

This allows you to select and configure DXi (DirectX instruments) or VSTi software synthesizers. The “Use DXi Synth” checkbox must be selected in the **MIDI Driver Setup** dialog.

Sends out an “all notes off” message to your MIDI or software synthesizer, so it can function as a “panic” button to stop a hung or stuck note.

This button resets General MIDI devices by sending a GM mode On message and then setting up the Band-in-a-Box patches.

Opens the **PG Music Reverb** window where the type of audio reverb is selected. Preset reverb settings are available, or custom settings can be applied and saved.

This opens a list of tracks with the option to freeze or unfreeze all tracks or just freeze individual tracks. Frozen tracks play without regenerating for faster playback.

**Floating Toolbars**

These are Copy and Paste buttons for chords or notes. They *copy to* the Windows clipboard, and *paste from* the clipboard.

The Folder button allows you to change song and style folders or directories from within the program.

Use the Favorite Folders button to select a folder from previously used folders. **Shift**-click on this button to choose any folder.

Open an audio file (WAV, WMA, MP3) and the Audio Chord Wizard will automatically figure out the chords.

The Practice Window is where many of the features and add-on programs useful for learning can be launched.

This opens a menu with selections for the RealDrums Picker and RealDrums Preferences (settings).

This opens a menu with selections for the RealTracks Picker, RealTracks Preferences (settings), and a command to ‘Select better RealTracks” for the song tempo.

The Medley Maker allows you to quickly make a medley out of existing Band-in-a-Box songs.

The guitar button launches a guitar fretboard window that displays guitar notes as music is playing.
This button allows you to enter repeats, 1st and 2nd endings, DS al coda, DC al coda and more. The Auto-Find feature enters them automatically.

The [Intro] allows you to generate and insert an intro into a song with a “press of the button.”

The Big Piano button launches a Big Piano window. It will display the notes to any track (except drums) as the music is playing.

This launches the applet for your sound card mixer. Use the mixer to make global settings to your sound card's input and output options.

Press the Guitar Chord button to launch the **Generate Guitar Chord Solo** dialog.

The Ear Training button opens the Ear Training window that plays chord types and intervals for you to improve your playing-by-ear.

Launches the Pitch Invasion game that helps to develop perfect pitch as you shoot down “alien” notes invading from above.

Launches the Music Replay game that develops pitch, rhythm, and melody recognition by replaying what the program plays.

The Vocal Wizard selects and transposes the song to the best key for a singer’s vocal range.

This button launches the **Chord Options** dialog box, which allows you to add chord pushes, rests, shots, and held chords for any given bar.

The grace note button opens the **Melody Embellisher** dialog for customizing the Melody Embellisher.

You can convert your composition to an audio CD. Press the CD button to burn a CD with the built-in CD burner program.

This button connects to the [www.pgmusic.com](http://www.pgmusic.com) web site.

If you have a Sound Blaster card, this button runs the Creative Mixer.

The SoundTrack feature allows you to generate music of fixed length for backgrounds in videos, corporate presentations, jingles, etc.

The Reharmonist creates a chord progression based only on the melody. It can also reharmonize existing chord progressions.

This button opens the Notation window, where you can enter chords and lyrics, edit notation, and view MIDI notation.

The Lead Sheet notation is a full-screen notation window with optional Fake Sheet mode that shows 1st and 2nd endings, repeats, and codas.

Launches the Piano Roll window for editing the Melody or Soloist tracks in a piano roll format, including graphic controller editing.

The Audio Edit window displays a graphical waveform and allows editing. Hold **Shift** when pressing to open a moveable window.

Use the Print button to launch the **Print Options** dialog, which allows you to print Lead Sheet or Fake Sheet style notation.

The Drum button launches an animated Drum Kit window. Press it to launch this fully functional (and fun) GM-MIDI “virtual” drum kit.
The Song Title button generates a song title for the current song. Each time it is pressed a new title is generated.

This button opens the Big Lyrics window for full screen “Karaoke-style” scrolling lyrics.

Runs the Sequencer for control of multi-channel Melody or Soloist tracks. Each track can record up to 16 separate channels.

The Conductor window allows live, real time QWERTY keyboard or MIDI control of the song as it is playing.

The Audio VU meters display the input volume for audio recording and the output volume for audio playback.

There’s a Lyric Document window so you can easily copy and paste lyrics to and from your favorite word processor. The lyrics will then display in the Big Lyrics window.

This button opens the Windows Recording mixer where you set your recording inputs. Select Microphone or Line-in to record audio.

The [Pref] button will bring up a dialog box where you can set various settings all at once and access most of the program options.

The StyleMaker button opens the current style in the StyleMaker, allowing you to edit the style by editing the patterns.

This button opens the “Hybrid Styles” feature that allows you to create a new style by using instrument parts from up to five different styles.

This opens the Style Creation Wizard dialog, where Band-in-a-Box will automatically convert a MIDI file into a Band-in-a-Box style.

This is the Chord Builder button. Chords may be heard and entered to the chordsheet by clicking in this dialog.

The MIDI Monitor button launches a MIDI Monitor that displays the MIDI Data flowing in and out of your computer/synth.

The tuner button opens the Guitar Tuner so you can tune a guitar or other instrument that is plugged into the sound card.

The SB button opens the Sound Blaster control panel, but only if you use a Sound Blaster card. Sound fonts are loaded in the control panel.

This button toggles the chord display among standard (CMaj7), Roman Numeral (I maj7), Nashville (I M7), Solfeggio (Do Maj7) and Fixed Do.

This runs the stand-alone Title Generator program, which will generate and print 50 new song titles at a time.

**Title Window**

The Title window shows the basic information about the current song at a glance - its title, style, key, tempo, and the length and number of choruses. It also gives quick access to the Song List, the StylePicker, Memos, and Song Settings.

[Untitled Song]

The [Song] button launches the Load Song by Full Titles dialog box.

The [F] favorites button opens either a list of favorites or 150 recently played songs.
The [Style] button launches the StylePicker window. This window offers detailed information about each style.

The [F] favorites button either a list of favorites or 150 recently played styles.

The names of the last five songs are listed at the bottom of the File menu, and are numbered from 0 to 4.

Note: Pressing Shift+F3 on your computer keyboard will bring up a list of the last 150 songs that you've loaded.

The Song Title window allows you to enter the name of a song.

Click in the box with your mouse to start an insertion cursor and type in the name of your song. The title is automatically included when the song is printed.

Style Display Window

This window displays the current style in use. Both the name of the style file and the long name are shown.

Mouse over the style to see the full name or right mouse-click on the style name for a menu of style utilities. These include choosing and changing styles as well as playing the demo song for the currently loaded style. A right click also brings up the style memo at the same time.

Key Signature

The key signature of the song is displayed on the main screen under the title. To change the key, click on the key signature to choose a new key from the dropdown list box. Band-in-a-Box then asks you if you would like to transpose the song or not. Press [Yes] to confirm, or [No] to leave the melody and chords untransposed (only the key signature will change). An instance where you would say “no” is where you have entered a song without first setting the key signature and you want to apply the correct key signature.

Tempo Control

The current tempo displays in the Title window, with controls for easy tempo settings and adjustments.

Click the mouse on the spin control arrows to raise or lower the tempo in by 5 bpm (beats per minute) at a time. Use a right mouse click on the tempo arrows to change the tempo by 1 bpm at a time.

Tap the = (equal sign) key on the number row of your computer keyboard for 4 beats to set the tempo and start the playback immediately at that tempo. Or click the [=] button on the screen with your mouse pointer.

Tap the – (minus sign) key on the number row of your computer keyboard for 4 beats to set the tempo. Or click the [−] button on the screen with your mouse pointer.

Chorus Control

The Chorus Control buttons are used to set the overall format of your song.

Chorus Begin button: Click on the Chorus Begin Button to select the first bar of the chorus. The Bar number that you select is displayed.

Chorus End button: Click on the Chorus End Button to select the last bar of the chorus. The Bar number that you select is displayed.

Chapter 4: The Main Screen
The number of choruses possible for a tune is 40. Click on the chorus button and choose how many choruses you require.

As the song is playing the current chorus is displayed at in the chorus button. 2/3 shows that the second of three choruses is playing.

If you change the number of choruses, Band-in-a-Box will offer to fill up or remove choruses of the Melody track to match the new number of choruses.

Title window checkboxes

When the loop checkbox in the Title window is checked, the song plays endlessly until stopped by the Esc key, the space bar, or the [Stop] button.

Enables fake sheet mode for the chordsheet with 1st and 2nd endings and repeats. Right click to auto-detect repeats.

Press the [S] button, or choose Edit | Settings (for This Song)… to select additional settings for the current song.

The [Memo] button allows you to put in a memo to a song. You can type in a memo or you can paste text from the Windows clipboard.

The song memo has a “Close w/play” option to close the memo automatically when Play is pressed, and not reopen when Stop is pressed. This setting, in combination with the “Auto-open” setting, ensures that the memo opens when the song opens but closes during playback. The font for the song memo is size selectable.

Automatic Memo-Generation

The Song memo has a “summary” checkbox. If selected, you’ll see an additional window that automatically displays a full summary of the song (title/tempo/patches used in the song), as well as other special features, like substyle patch changes or harmonies.

The Auto-generated song memo says if RealDrums come from the song or style.

Chordsheet Area

Chords, rests, shots, holds, and part markers are entered in the Chordsheet.

The chordsheet can be viewed in the full linear view showing all bars, or optionally in fake sheet view that shows 1st and 2nd endings and repeat signs. Another option shows bars past the end of the song in gray.
Chapter 4: The Main Screen

In the Chordsheet, typing special words, instead of chord names, will make the following settings:

- begin + Enter sets the beginning of the chorus to the current bar
- end + Enter sets the end of the song to the current bar
- chorusend + Enter sets the end of the chorus to the current bar
- tkc + Enter sets key signature to c, tkbb would set it to bb
- trc + Enter transposes song to key of C
- t125 + Enter sets tempo to 125

You can quick-load a song by typing only. In chord entry mode type the word “Song” followed by a file name, or partial file name, and the song will get loaded in. For example, type c:\a\MySong.sgu to load in that exact song name. Type “bossa” to load in the first song with bossa in the name AFTER the current song name, in the current folder.

Quick-load a style by typing only “style” followed by a stylename, e.g., stylezzbossa<Enter> will load in zzbossa.sty.

Chord Entry

The basic way of entering a song into Band-in-a-Box is to type in the chords to the song on the chordsheet (worksheet). The arrow keys move the active (highlighted) cell around in the chordsheet. The Enter key advances to the next ½ bar. Chords can be entered from the QWERTY keyboard or an external MIDI keyboard (see Window | MIDI Chord Detection…).

Chords are typed in using any of the supported chord symbol displays:

1. Standard chord symbols (e.g., C or Fm7 or Bb7 or Bb13#9/E).
2. Roman numerals (I, V, VII).
3. Nashville Notation (1Maj7).
4. Solfeggio (DoMaj7).
5. Fixed Do. In Italy and other parts of Europe, chords like C7 are always referred to by the Solfeggio name (Do7 for C7) regardless of the key signature.

Notes: It is not necessary to type upper or lower case. The program will sort this out for you. Any chord may be entered with an alternate root (“Slash Chord”) e.g.: C7/E = C7 with E bass. Separate chords with commas to enter 2 chords in a 2 beat cell, e.g., Dm, G7

Shortcut Chords:

If you enter a lot of songs, you'll appreciate these shortcut keys.

- J = Maj7
- H = m7b5 (H stands for Half diminished)
- D = dim
- S = Sus

Example: To type CMaj7, just type CJ (it will be entered as CMaj7)
Add your own chord shortcuts.
You can make your own shortcuts text file and name it \bb\shortcut.txt. This allows you to add new chord shortcuts. (Note that this file doesn't ship with Band-in-a-Box or it would overwrite your file.)

If you find a chord that Band-in-a-Box won't accept like Csus2 (it expects C2), you can enter this on a single line (without the quotes) “Csus2@C2.” Then Band-in-a-Box will enter the chord C2 if you type in Csus2.

**Chordsheet Options**

You can set up the chordsheet with your own preferences. Go to Opt. | Preferences or choose the [Pref] toolbar button to open the Preferences, and click on the [Display] button to open the Display Options.

In the Chordsheet area of the Display Options you can pick a chordsheet font and the number of rows to display, or set an option to automatically adjust the number of rows to display.

Whenever a new section occurs (a part marker) you have the option to start the new section on a new line and draw a grey line above to clearly mark the new section. Sections can be as little as 2 bars long.

The “Extra line space between sections” setting determines the amount of space (in pixels) to add on a new line when there is a part marker.

**Transpose Chordsheet option**
The “Transpose” option is also found in the Display Options dialog. It is useful for non-concert pitch instruments like Tenor Saxophone. This option is also available on the Notation window.
If a Chordsheet or Notation window transpose setting is in effect, a yellow hint message opens on bootup as a reminder.

When the chordsheet is transposed, you can type in chords in the transposed key, and they will show up as you have entered them, instead of requiring you to enter the chords in the concert key.

To try this out, go to [Prefs] and click on [Display] to open the Display Options dialog. For the “Transpose” setting, choose “Alto Sax +9.” Then type in a chord, like Am7, and it will show up as Am7 without requiring you to enter it in the concert key.

**Part Markers**

Part Markers are placed on the chordsheet to indicate a new part of the song, to insert a substyle change, or to insert drum fills. They typically occur every 8 bars or so, but may be placed at the beginning of any bar.

Double lines are drawn on the chordsheet at the bar before a part marker.

**Section Paragraphs**

When you’re reading a book, a new section begins on a new line, with space between. Band-in-a-Box does that for chords too. Whenever a new section occurs (a part marker), we start the new section on a new line and draw a grey line above to clearly mark the new section. A section can be as short as 2 bars. You’ll see each section on a new line so that the form of the song is easier to see. The feature is configurable and optional.

**MultiStyles**

Band-in-a-Box MultiStyles are styles that can have up to 24 substyles; original Band-in-a-Box styles had two substyles, “a” and “b.” Band-in-a-Box MultiStyles typically have four substyles, but may have up to twenty-four, selected by using part markers “a” through “x.”

You can easily make your own MultiStyles, either from scratch, or combining parts from existing styles to make a MultiStyle. For example, if you have 10 favorite Country styles, you can quickly make a single MultiStyle that has 20 substyles available within the same song.

**Play Selected Area as a Loop**

To use this function, select a region on the Chordsheet.
Click on the [Loop] button, Shift+click on the [Play] button, or press F10 (Play Selected Area as Loop) and the program will play a selected region, and loop the selection. For example, you can select bars 19 and 20, and then press F10, and bars 19 and 20 will play looped.
Chapter 5: Playing Songs in Band-in-a-Box

Opening Files

The SongPicker is the commonly used feature for finding and opening Band-in-a-Box song files, but Band-in-a-Box also has helpful features for locating and opening all types of music files.

Find File

So many files, so little time? The Find File feature is a “Swiss Army Knife” that allows you to find a Band-in-a-Box song (or any file that Band-in-a-Box can open), including filtering by words found in the file name or any text in the file.

The File song files dialog opens from the File menu with the command Find File. For example, you can
- get a listing of all Band-in-a-Box songs on your PC with the word “Blues” in the title.
- get a listing of all Band-in-a-Box songs in the BB folder with the word “Reggae” in them. This produces a list of over 50 songs in the MegaPAK so you can quickly choose from them and know that, if you’re a reggae lover, you haven’t missed out on any Band-in-a-Box songs/styles with Reggae. A similar listing for “Blues” reports 454 files.

The listing stays between sessions, so you can then take your time to explore all the files that Band-in-a-Box offers matching your find term.
File Associations

Go to the menu item File | File Utilities to associate the file types for Band-in-a-Box songs and styles in Windows. Once set, this means that you can double click on a song or style and Band-in-a-Box will open up with that song or style.

Choose the menu items File | File Utilities | Associate File types (songs, styles) with Windows... to associate the Band-in-a-Box file types, and Remove File Associations (songs, styles) with Windows... to remove the associations.

Open File Dialog

The Open File dialog is opened with the Open toolbar button, the menu command File | Open, or the F3 function key. It shows and opens all available file types (MGU, WAV, WMA, MP3, MID, KAR, CDG, and CDA). And it remembers your preference, so you can restrict it to a certain file type.

If MySong.MGU is loaded, and a same named audio file (MySong.WMA, MySong.MP3, MySong.WAV, etc.) is present, Band-in-a-Box will open the audio file to the audio track. This allows third parties to make audio files with chords in them, by making a MySong.MGU and MySong.MP3 pair of files, which will load into Band-in-a-Box, yet will have the audio compressed to take up little disk space. For example, make a teaching set of trombone files for Band-in-a-Box, with audio trombone track, and Band-in-a-Box file with chords, all fitting in a small file size.

Custom File Selection Dialog

The custom Open File dialog opens if you press Ctrl+Shift+F3 to load a song. You can make it the default dialog if you go to Opt. | Preferences and select "Use custom filename dialog" under the Environment Options in the Preferences dialog. Then the [Open] button, or the menu command File | Open, or the F3 key will launch the custom Open File dialog. The custom Open File dialog has several advantages over the traditional Windows dialogs:
- The window is much bigger than the traditional one, allowing more room.
- There is a selectable font size and typeface.
- You can adjust the widths of the various columns.
- The Window remembers your settings.
- There are tabs at the top that allow sorting by name, date etc.
- Additional information is displayed (file size, time of file).
- You can open a song without typing the extension. For example, to open the song MySong.MGU you just have to type MySong, without MGU.
The Font Selection button lets you pick a font, size, and style for the dialog from any of the fonts installed in Windows.

The Search button allows you to search for a file by its name or part of a name.

The Favorite Folders button remembers the last few directories that you've used, allowing you to easily change between directories.

**Favorite Folders**

The menu command `File | Favorite Folders` launches the **Favorite Folders** dialog with a list of recently used folders. To open a song using this dialog you first select the folder from the list, and then you can directly open the song from that folder. This allows you to quickly find a song in another folder.

Hold the **Shift** key as you click the `[Open]` button. This will launch the **Favorite Folders** dialog, allowing you to pick the folder. This saves you the time needed to navigate through the Explorer-style folder choice, which can be time consuming if you’re hopping back and forth between folders.

Similarly, **Shift-clicking** on the `[Save As]` button will allow you to choose a favorite folder prior to seeing the **Save As** dialog.

**Favorite Songs (and Styles)**

There’s a dialog for these favorites with separate lists of Recently Played and Favorite songs or styles. There are 2 tabs in this dialog, showing you both recently used songs/styles, and a list of “favorites” that you select as a favorite songs or styles.

The `[F]` button launches the dialog.
The “Favorites” and “Recently Played” Radio buttons toggle between a list of your recently played songs (or styles), and your favorite songs (or styles).

![Favorites and Recently Played Radio Buttons]

Favorite Song/Style lists can be edited, sorted, saved/loaded, and used with the jukebox. You can add an unlimited # of favorites.

The favorites list will start off as an empty one. But you can add songs as your favorites, by clicking the Add Favorite button (this button is also found in the StylePicker).

You can make a new list of songs for a set by using the [Clear] button followed by the [Append], [Insert], and [Delete] buttons to add songs.

You can save and load sets of favorites or recently played songs (or styles). Once you have the set, you can press the [Juke...] button. This will play the set file in order, not randomly. It will start from the currently selected song.

The [Sort] button sorts the list alphabetically.

When “Save As” is used to save a song with a different name the new name will be added to the Recently Played song dialog.

**Technical Note:** The list of songs/style favorites is stored in a text file called SongFavorites.txt (or StyleFavorites.txt) in the BB folder.

**Favorite Styles in the StylePicker**

In the StylePicker, an “F” appears beside the name of any style that is a favorite. The favorite styles are the ones that you’ve identified as favorites, either by pressing the [Add Favorite] button in the Favorite Styles dialog, or the similar button in this StylePicker dialog.

You can make any style a favorite by clicking the [Add Favorite] button. If you want to remove it, click the button again.

“Only Show favorites” will only show the favorite styles in any list that you have opened.

**Global Song Overrides**

Global overrides are found in Preferences [Overrides], which allow you to set the overall song looping (always OFF, always ON, or as set in the song).

Similar overrides are available to see which other information gets loaded from a file, such as patches, harmonies, volume/reverb/chorus/panning/banks. For example, you can set every song to load with looping ON, and don’t load any reverb settings from songs.

For example, if you want every song loaded to have looping set to on, then set “Always set loop to ON.”

But if you are going out on a playing job, and don’t want any songs to loop, then set it to “Always set loop to OFF.”

If you want the settings to work the same way they did in previous versions, use the “As set in the song” setting, or press the [Defaults] button.
Chapter 5: Playing Songs in Band-in-a-Box

If this is not selected, notation symbols (slurs, staccato, crescendos) will not be loaded from the song.

The “Defaults for new songs” are settings from the **Song Settings** dialog.

When “Vary Style in Middle Choruses” is selected (default) the song will play in substyle B throughout the middle choruses, playing substyle A for the first and last choruses only. If this setting is not selected the substyle changes will follow the part markers entered on the chordsheet.

When “Allow Embellishment of Chords” is selected (default) Jazz styles can play embellished chords. For example, C7 might play as C13 or C7b9 for a more authentic sound.

The **Pop/Country** preset button turns both of these settings off for a typical Pop or Country arrangement that follows part markers and does not embellish chords.

The **Jazz** preset button turns both of these settings on for a typical Jazz arrangement to support soloing over the middle choruses and allow Jazz chord embellishments.

**Loading and Playing Band-in-a-Box Songs**

Band-in-a-Box supports most popular song formats in addition to its own native song files. It will open most audio file formats, and its powerful Audio Chord Wizard feature will interpret the chords from an audio file and write them to a Band-in-a-Box song file. You can also play karaoke files, including Karaoke MP3/CDG files with scrolling graphical lyrics, in Band-in-a-Box.

You can quick-load a song by typing only. In chord entry mode type the word “Song” followed by a file name, or partial file name, and the song will get loaded in. For example, type c:\a\MySong.sgu to load in that exact song name. Type “bossa” to load in the first song with bossa in the name AFTER the current song name, in the current folder.
In this section we will explain how to load and play existing Band-in-a-Box song files.

Open any song file with the familiar Windows-style dialog box, just like any other file on your disk. Or use the Find File feature (File | Find File) to filter files by words found in the file name or any text in the file.

Start song playback.

The [Loop] button plays the highlighted section of the chordsheet or notation in an endless loop. Click and drag the mouse to highlight a section of bars to loop.

Replays the song without regenerating the tracks, so the current arrangement is preserved. (Save the song to a MIDI file to permanently save the arrangement.)

Stop song playback.

Pause playback with the [Pause] button; resume by pressing it again.

Jump to any bar in the song. Press the [From] button to choose which chorus and bar number to jump to.

The SongPicker

The [Song] button opens the SongPicker window, a resizable window that lists all of the songs in the current directory and, optionally, its subdirectories. For example, if you get a song list of c:\bb, it can include songs in subfolders like c:\bb\styles34. You can lock the SongPicker to always open in the same folder and use the same list to keep track of all songs on your disk.

The first time that you select the [Song] button Band-in-a-Box automatically writes the song list. The current folder name is displayed in the title bar, with the total # of songs displayed. The Song List generation has a [Cancel] button so that it can be interrupted.

From then on, the SongPicker opens when the button is pressed and songs can be selected by title from the alphabetical list.

Songs can be sorted by any of the column headings, like Song Title, File Name, Style, Tempo, etc., by clicking the mouse on the heading at the top of the column.

Either a plus (+) or minus (-) sign will appear beside the selected column heading. A plus sign indicates that the column is sorted in ascending order; a minus sign indicates that it is sorted in descending order.

Filter

Use the filter to search by column, song title, file name, or style.
Folder Settings
The folder settings are at the bottom of the SongPicker.

Folder Settings
The Current Folder name is displayed.

The folder can be changed, either by:

1. Selecting the new folder.
2. Choosing a folder from recently used favorites folder.
3. Changing the current folder to the BB home folder.
4. Going “up” a folder (e.g. from c:\bb/styles to c:\bb).

When the new folder is chosen, the song list for that folder will be displayed. The song list may need to be rebuilt; the program will do that automatically.

- **Always open in this folder**: If the “Always open in this folder” item is selected, the song picker will always open up in the specified folder. So if you put all of your songs in c:songs, you can make the SongPicker always open to the c:songs folder.
- **Include Subfolders**: If “Include Subfolders” is selected, the SongPicker list will contain songs from the folder and any subfolders. So if you have subfolders to c:songs like c:songs\country and c:songs\jazz, you can see/search them all in the same SongPicker dialog.

**Tip**: If you choose c: as your folder, the SongPicker would find every Band-in-a-Box file on your hard drive and display it in the SongPicker. You might instead find it easier to put all of your songs within a folder like c:songs, and have various subfolders to that. And then set the SongPicker to always open up in the c:songs folder. Then you’ll have access to all of your songs easily.

Choose a song from the **Favorite Songs** dialog.

Open a song (or any media type) using the **Open File** dialog.

Find a song using the **Find song files...** dialog.

Copy the song list to the Windows clipboard where it can be pasted into any word processing program and printed.

Search for song by keyword will find the search term if it is present in any field. The filter (upper right) can also be used to search the song list.

Search Again repeats the previous search starting from the current point.

[Rebuild List] will exit the dialog and build or rebuild the song list file by loading in all of the songs in the directory. It will then launch the SongPicker dialog with the updated information.

Exports the list as a Comma Separated Value text file that can be opened by spreadsheets.

Click here to change the fonts in the SongPicker window.
Chapter 5: Playing Songs in Band-in-a-Box

The SongPicker lists if any RealDrums or RealTracks were not found, in a separate column (“d” indicates missing RealDrums and “t” indicates missing RealTracks). If you want to disable this feature, you can make a file named c:\bb\AlsoReadStylesWithSongListBuildUp_False.txt (contents irrelevant).

Check “Play when chosen” to automatically play the selected song.

Once you’ve loaded a song you’ll see the chords on-screen in the chordsheet so you can follow the chord changes and play along with the band.

You can double click on any bar to start playback at that location. There is also an option in the Preferences dialog to start and stop playback with the spacebar. The spacebar or double click can be used on an ending bar (or a bar in the tag), and it will play from the ending (or tag).
Change the Style

Try different styles by clicking on the [Style] button to choose from a list of the styles available in the StylePicker window. Styles that have the same feel (triplets, eighths, sixteenths) and a similar tempo range to the current prototype will be indicated with an (*) asterisk. Styles with a (^) caret have a similar feel but a different tempo range.

RealStyles and Styles with RealTracks

RealStyles are Band-in-a-Box styles that use RealTracks only. There is a separate category in the StylePicker for RealStyles.

It also lists Styles with RealTracks, a blend of MIDI tracks and RealTracks, with subsets for different musical genres. The style names for RealStyles are prefaced by an underscore, _

RealStyles [All] [212]
"Classic" RealStyles [122]

StylePicker window.
You can select RealDrums styles within the StylePicker. Highlight a MIDI style that you like, and press the RealDrums [Best] button, to see a list of the most compatible RealDrums styles for that style, or the [RealDrums] button to select from all available RealDrums.

You can also change the style at any bar in the song, so you could use a few similar styles to add variety while keeping the same feel. This is done in the Edit Settings for Current Bar dialog, which opens with either the F5 function key or the Edit | Settings for Current Bar menu command.

In the style change dialog (F5 and others) you can audition the style that you are considering.

Make a MultiStyle Song

If you have a song, you can also use more than 2 substyles for that song. For example, let’s say we have a song that is a Bossa Nova and you want to have a Jazz Swing section. Rather than finding a MultiStyle that has this exact combination, we can make one, in the song, for this song only as follows:

Load a song like c:\bb\styles0\zzbossa.mg4

Right click on a bar number, and choose “Define c/d.”

Then choose ZZJAZZ.STY from the StylePicker.

You will then see that there are 4 substyles now, a, b, c, d. You can use the “d” substyle for Jazz Swing walking bass, since it is the same as the “b” substyle from ZZJAZZ.

Load the song c:\bb\Tutorial BB 2008\ “Demo of MultiStyle in song only Bossa 2 Jazz.MG4” and you can see the finished result. This song switches styles using part markers.

Settings for Playback

You’ll find the Synth window at the top of the screen. Select an instrument part by clicking its name. The dot in the radio button beside the name indicates the selected part. Any changes to the Instrument, Volume, Pan, Audio Reverb, Tone, Bank, or MIDI Reverb will apply to that part.
Patch Changes

Patch changes are embedded in the Band-in-a-Box styles and these patches are loaded with songs by default. They can be disabled in the MIDI Options dialog found in the Preferences. Alternate patches can be saved with a song (Alt+F2).

Change the instrument patch by scrolling through the 128 General MIDI instrument names in the Instrument box, even while the song is playing.

General MIDI 2 support

General MIDI 2 standard (GM2) adds 128 new instruments to Band-in-a-Box styles and songs, including ukulele, mandolin, 12-string guitar plus many new and improved piano, organ, guitar, brass, and string sounds.

Note: The included Roland VSC3 synth supports the new GM2 instruments, as do many newer modules/sound cards. If yours doesn't, a similar instrument from the existing 128 General MIDI sounds will be substituted.

The type of GM2 support is set in the MIDI Driver Setup dialog (Opt. | MIDI driver setup...). The choices are:

- **General MIDI 2 support**: If you're using the Roland VSC3, or a newer Sound Canvas then choose this GM2 support.
- **Roland GS (older Modules)**: “Older” Sound Canvases (SC55/SC88) support GS, but not GM2. The good news is that they have the same patches available, just at different locations. So if you choose this option, Band-in-a-Box will find the patches at the “GS” locations instead of the “GM2” locations. If you have a newer GS module like the SC8820 that supports both GM2 and GS you should likely choose GM2.
- **No GM2 support**: Most sound cards don't have GM2 support yet, so just support the original 128 General MIDI sounds. Band-in-a-Box will use the closest instrument in these cases.

You can select the GM2 patch using the GM2 button next to the Instrument box. This shows a menu organized by instrument types.

Technical note: For a GM patch like Nylon Guitar the patch is 25. For a GM2 patch like Ukulele, the patch is also 25, but it is accompanied by two bank settings, MSB Bank Controller 0 setting of 121 and LSB Bank Controller 32 setting of 1.
When you select the instrument from this menu, it will make the bank settings (Bank0 and LSB) for you. You can also change the bank #s directly, and the patch in the box will change. GM2 patches can also be selected elsewhere in the program, such as the Edit Settings for Current Bar dialog and the StyleMaker.

**Additional Patches**

A “patch” is a MIDI instrument name. Examples of patches are Acoustic Bass, Electric Piano and Violin. Patches are used to emulate real instruments through MIDI playback. Band-in-a-Box defaults to using the standard bank of General MIDI patches used by all MIDI manufacturers, but many MIDI synthesizers and sound cards have additional patches available as alternatives to the basic GM list. These sounds are typically found on higher banks in memory.

**Patches on Higher Banks Dialog**

This displays your patch names by name and lets you pick them from an easily customizable list. You've probably got great sounds on higher banks -- now you can find and use them easily!

Clicking on the [+] button opens the **Patches on Higher Banks** dialog for easy access to patches on all other banks as well as General MIDI.

To narrow your sound search you can do one or all of the following:

- Open the patch list and select an instrument (i.e. Electric Bass, Acoustic Piano, etc.)
- Click on the “Include Family” checkbox to have other offerings of similar type shown. (i.e., all bass family patches, all keyboard family patches, etc.)
- Find a patch by keyword by clicking the [Search…] button and typing some letters that you know are in the name (e.g., “mando” will find your mandolin patch and any others containing “mando”).
Converting Synthesizer Patch Lists in Band-in-a-Box

Band-in-a-Box can read a patch file list generated by PowerTracks Pro Audio or Cakewalk, and convert it to a .PAT file for use in Band-in-a-Box.

Converting PowerTracks patch list to Band-in-a-Box .Pat files.

PowerTracks stores its patch lists in a single file, called PATCHES.INI. This file contains all of the patch lists for the synths supported by PowerTracks. Band-in-a-Box stores the patch list for each synth in a separate file, with an extension of .PAT.

To convert a PowerTracks patch file to a Band-in-a-Box Patch file, you will be choosing the c:\pt\ptw\patches.ini, and then choosing the synth that you want to convert to a .PAT file.

Press the [+ ] button to the right of the Instrument name on the main Band-in-a-Box screen.

This will open the Patches on Higher Banks dialog.

Press the [Open INI/INS…] button to launch the Open File dialog.

Choose the file c:\pt\patches.INI.

You’ll then see a menu of synths stored in the patches.INI file. Select one to convert. Create a name for the .PAT file (e.g. My Patch List.PAT) and save it to c:\bb.

Converting a Cakewalk .Ins file to a Band-in-a-Box .Pat file.
This is done using the same process described above for PowerTracks, except that you open the individual .INS file instead of a PATCHES.INI file. For example, if you have a Cakewalk file called “My Synth.INS” you would select this file name. You would then save that converted list to c:\bb\My Synth.PAT.

**Solo an Instrument Part**

While listening to Band-in-a-Box, you can easily solo (isolate) a certain part by holding the Control key and mouse clicking (left or right) on the instrument at the top of the screen. For example, if you want to hear only the Piano part, Control-Click on the Piano part. If you want to use hot keys for this, you can press Alt+2 (Mute-All) and then Alt+4 (Unmute Piano).

**Mute All Parts**

To mute/unmute all parts as the song is playing, simply press Alt+2 or right-click on the “Combo” radio buttons at the top of the screen.

**Changing Volume, Panning, Reverb, Chorus, Bank**

To change the Volume, Panning, Reverb, Chorus, or Bank of a part, click on the desired part to change. The names of MIDI instrument parts that are playing are colored yellow. If the part name is white when the song is playing it means that the instrument is not present. A red instrument part name means that the part is muted. Green instrument names indicate RealTracks and RealDrums. (Underlined parts have RealChart notation.)

Then click on the spin control arrow keys to increase or decrease the setting.

```
<table>
<thead>
<tr>
<th>Volume</th>
<th>Pan</th>
<th>Reverb</th>
<th>Chorus</th>
<th>Bank</th>
<th>LSB</th>
</tr>
</thead>
<tbody>
<tr>
<td>90</td>
<td>20</td>
<td>40</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
```

- The left mouse button increases/decreases by 5 at a time.
- The right mouse button increases/decreases by 1 at a time.

You can also click directly on the number field to open a dialog and type the value in directly.

**Chase Volumes.**

For a file with Volume change events (Controller 7) written into the Melody (or other tracks) – if the song is played back from somewhere in the middle, the most recent volume setting prior to the start of playback will be sent.

**Solo an Instrument Part**

While listening to Band-in-a-Box, you can easily solo (isolate) a certain part by holding the Ctrl key and mouse clicking (left or right) on the instrument at the top of the screen. For example, if you want to hear only the Piano part, Ctrl+click on the Piano part. If you want to use hot keys for this, you can press Alt+2 (Mute-All) and then Alt+4 (Unmute Piano).

**Muting Instruments**

To mute/unmute all parts as the song is playing, simply press Alt+2 or right-click on the “Combo” radio buttons at the top of the screen.

To mute an instrument click on the name of the desired part with the right mouse button. Click again to unmute. When the part is successfully muted, the instrument name will turn to red in color, indicating that the part is muted.

**Playing/Pausing/Stopping Songs**

Use the tool bar buttons to control the playback of your song in Band-in-a-Box.

You can also use the *Play* menu commands or keystrokes.
You can double click on any bar to start playback at that location. There is also an option in the Preferences dialog to start and stop playback with the spacebar. The spacebar or double click can be used on an ending bar (or a bar in the tag), and it will play from the ending (or tag).

**Lead-In Counts and Metronome**

These settings are made in the Preferences dialog. Click on the [Count-in/Met.] button to open the Count-in and Metronome Options.

The default count-in is two bars, but there is an option to shorten it to a 1 bar lead-in.

You can select any drum instrument for the count-in and choose different count-in rhythms (e.g. Tap on 2 and 4 instead of 1-2-3-4).

The Smart Lead-in feature avoids playing the count-in drum sound during a Melody pickup.

There's an option to play the drum count-in in all circumstances, useful when the style doesn’t have drums or for drummers who play along with Band-in-a-Box by muting the drum track.

You can display the Visible Metronome on-screen during the entire song (or just the lead-in). Choose the screen position, the size (up to near full screen size), and the visual metronome pattern. The on-screen metronome is a great way for a student to learn to keep on the beat, and with a settable size, students can view this from across the room.

The Audible Metronome can be set to sound “During record,” during “Record and Play,” or “None” - turned off entirely.

**Slide Tracks**

This is a menu command (Play | Slide Tracks...) that allows you to move any of the Bass, Drums, Piano, Guitar, Strings, Melody, or Soloist tracks ahead or behind by a definable amount. For example, slide the Bass track a little ahead of the rest of the band to make the bass player “drive the band.”

To slide tracks, select the Slide Tracks option from the Play menu. The values are measured in “ticks-per-beat” with 120 ticks being the equivalent of a quarter note. The musically useful range is from -10 to 10.
Allow Any Slides
If you want the slides to occur, then set this to YES.

Humanize Slides
If set to YES, the slides will be humanized to slide the track a different amount for each note. The amount varies from 0 ticks (none) to the slide setting for the instrument.
- Press the [Default] button to fill the tracks with default slide values.
- Press the [Zeros] button to 'zero-out' the slide values for all tracks.
- Press the [Update] button to affect your changes and hear the result instantly.

Tip: A track that always plays notes early by a certain amount tends to sound out of time, whereas humanizing the slide makes the track sounds more alive.

Play Selected Area as a Loop
Click on the [Loop] button, Shift-click on the [Play] button, or press F10 (Play Selected Area as Loop) and the program will play a selected region, and loop the selection. For example, you can select bars 10 and 11, and then press F10, and bars 10 and 11 will play looped.

To use this function, select a region on the Chordsheet.

Loop any Section of the song.
You can loop any section of the song. The program will then start playback at the first loop point and play the looped section until stopped.

Looping of a section of the song is enabled by the “LoopSec/ LoopScn” checkbox or with the keystroke NUMPAD 1.

Open up the Loop Section Settings dialog by clicking the Loop button, or pressing NUMPAD 2. The Loop settings dialog will then display.

The “Play within loop” command allows you to quickly play a looped section. Highlight the range of bars to loop on the Chordsheet, press NUMPAD 2 to open the Loop Section Settings dialog, and click the [Play within loop] button.
To enter settings manually in this dialog, you start by choosing either “Loop a Single Screen of Notation” or “Loop Range of Bars.”

“Loop a Single Screen of Notation” (Ctrl+NUMPAD 7) loops a single screen of notation at the current song location. The length of the loop is determined by the number of “Bars/Screen” specified in the Notation Window Options.

Select “Loop Range of Bars” if you want a custom range of bars, then enter the starting “From Bar” number, the “Chorus #,” and the “# bars” for the length of the looped section. You can then play the song with the [Play within loop] button and then [Close] the dialog.

Presets are available to set the loop points to Introduction, First / Middle / Last Choruses or First & Middle, Middle & Last combinations, Ending, or All.

Loop Keystroke Commands (useful for live performance)

NUMPAD 1 Toggle looping on/off.
NUMPAD 2 Open Loop Section Settings dialog.
Ctrl+NUMPAD 1 Play with last chorus looped.
Ctrl+NUMPAD 2 Play with middle choruses looped.
Ctrl+NUMPAD 3 Play with middle and last choruses looped.
Ctrl+NUMPAD 4 Jump to last chorus.
Ctrl+NUMPAD 5 Jump to ending.
Ctrl+NUMPAD 7 Loop Notation screen.
NUMPAD [DEL] Advances the notation, lead sheet, and guitar window by one chord (group of notes).
NUMPAD [INS] Backs up the notation, lead sheet, and guitar window by one chord.

Notebook users should set “Simulate NUMPAD Keys” to “ON” in the Preferences dialog, then use the regular number keys to trigger looping.

The Title bar at the top of the main screen indicates the looping status. If a song has a looped section, this will be listed at the top of the screen (e.g. “Will loop Middle Choruses” or “Currently looping Middle Choruses”). So you can tell what is going to happen with the looping during a live performance.
“Conductor”- Live Looping/Playback control.
As the song is playing, many “single key” hot keys are now available to control the playback and looping of the song.

Play along with your MIDI Controller Keyboard
If you have an external MIDI keyboard controller connected to your computer system, you can use the MIDI THRU features to play along with the program.

Boost THRU Velocity by 20 When playing along on a keyboard to the Band-in-a-Box “band,” if the sound of your keyboard is too quiet and increasing the THRU Volume doesn’t help enough, use this option to boost the THRU velocity and make your playing on the THRU channel louder. To set this “THRU velocity boost,” open the MIDI Settings dialog (Opt. | Preferences | Channels). Click on the [Options] button and set “Boost THRU Velocity by” to a value in the range of –127 to +127 in the MIDI Options dialog. (Default is 0.)

Harmonize your play along part by pressing the [T] button in the Synth window to choose a harmony, just as you would for the Melody.

Play Along with the Wizard
The Wizard is an intelligent play along feature that is controlled with the bottom two rows of your computer’s QWERTY keyboard or your connected MIDI keyboard. The bottom row of keys plays chord tones; the second row plays passing tones. You play any key in either row and never make a mistake! The Wizard keys are active during playback.

ASDFGHJKLM;’← This row plays PASSING Tones (2nd, Fourth, Sixth)
ZXCVBNM,,/ ← This row plays CHORD tones (root, 3rd, Fifth, Seventh)

In the Play menu, toggle Wizard uses “Smart” notes to “off” (unchecked) to have the Wizard provide you access to the chromatic scale. Toggle it “on” to have access only to the notes based on the chord/key of the song.
Also, the Wizard works with the harmony feature, so you can play along live in 4-part saxophone harmony for example.

MIDI Keyboard Wizard
By turning on this Wizard setting in the Opt. | Preferences Transpose dialog, notes played on a
Thru channel MIDI keyboard will be played through the Wizard. C, E, G, and Bb will be mapped to chord tones while D, F, A, and B will be passing tones.

**Changing Instruments / Settings for the Wizard**

As a play along instrument, the Wizard uses the Thru instrument part. To change the instrument patch, volume, reverb, etc. for the Wizard select the Thru instrument in the synth window.

**MIDI Normalize**

If performing a live set, or at a jam session, it helps to have the volume of all of the songs be similar. Now, with a MIDI Normalize feature, you can level the volumes to a setting in the program options. For example, you can set all volumes to be 70 and the program will make each song play within those levels. This is done in the Preferences [Arrange] tab.

When you have set the normalize to “on” the title window at the top of the screen reports that Normalization is set to 70, and that the velocity of the currently playing song has been increased from 49 to 70.

The normalization will affect bass, drums, piano, guitar and strings. If you select the “Including melody and Soloist” option, the normalization will also affect the Melody and Soloist parts.

**Outputting MIDI to an External Device**

Some external music hardware devices require chords played in root position to drive them in real time. An example of this is the Digitech Vocalist. It will let you sing into a microphone and harmonize your voice according to the chords that are input to the device. Band-in-a-Box has the capability of outputting a separate channel with the chords in root position to support such external devices automatically.

There are also settings such as complexity of chords, output channel, velocity, and note range. It will also drive “Real time Arrangers” like the Roland RA series. The best way to accomplish this is to access the Opt. | Preferences and select the [OutputCh.] button. You will then be given a window like this:

Click on the [Vocalist] button if you have such a device connected to your MIDI system. Band-in-a-Box will then send it the appropriate chord information automatically as your song is playing (e.g., root position triads).

**Add Real Instruments – RealDrums and RealTracks**

Your songs, styles, and solos can use live audio tracks recorded by studio musicians. These live recordings can be substituted for the Band-in-a-Box tracks in the RealDrums Settings or RealTracks Settings dialogs.

**RealDrums**

There are several ways to hear RealDrums with new or existing Band-in-a-Box songs. We provide many styles that already have RealDrums. These styles can be identified by the style name beginning with a minus sign. For example “-ZZJAZZ.STY” is a version of the ZZJAZZ.STY that uses RealDrums.
Chapter 5: Playing Songs in Band-in-a-Box

Styles (.STY) can have RealDrums (e.g. “–ZZJAZZ.STY”). This setting is found in the StyleMaker’s Misc. Style Settings dialog.

You can set the RealDrum style inside the StyleMaker, by pressing the [Misc] button, and then typing the name of the RealDrum style.

RealDrums can be substituted for MIDI drums on existing styles in the RealDrums Settings dialog, which opens with Ctrl+click on the RealDrums toolbar button or with the [RealDrums] button in the Preferences dialog.

With “Enable RealDrums” checked RealDrums may be used rather than MIDI. There is also a hot key combination to turn RealDrums on/off (Ctrl+Shift+F6).

The hot keys also work while the song is playing.

This will substitute RealDrums for MIDI styles. You can change the setting from 1 to 5.

If set to 1, almost all MIDI drums will get substituted by RealDrums. If set to 5, only RealDrum styles that match the style perfectly will get substituted.

Technical note: The text file a_pgmusic.ds provided by PG Music controls this, and users can make other files MySubs.ds if they make their own RealDrums styles.

Individual songs can have RealDrums assigned to them. You can set the desired style in the RealDrums Settings dialog with the “For this song only, use this RealDrum style” setting. This will let the current song use the specific RealDrums style.

The [RD] button opens the RealDrums Picker where you select the specific RealDrums style that you would like to assign to your song.

You can also open the RealDrums Picker directly from the toolbar with the RealDrums button.
RealDrums are normally saved with songs, unless you have unchecked “Save all Settings with Songs” in the Assign Instruments and Harmonies to Song dialog. In that case, you can select and save a RealDrums style with your song by going to File | Save Song with Patches & Harmony (Alt+F2) to assign a RealDrums style.

The Edit Settings for bar… dialog (F5 key) lets you use multiple RealDrums styles within a song - either using the RealDrums from a Band-in-a-Box style or specifying a RealDrums style to use at a particular bar.

RealTracks
What are RealTracks?
Just as RealDrums replace the MIDI drum track with live audio recordings of top session drummers, RealTracks add “Real” instruments recorded by top studio players and recording artists. These tracks replace the MIDI track for that instrument, and can be controlled just like the MIDI instrument (volume changes, muting, etc.). Best of all, they follow the chord progression that you have entered, so that you hear an authentic audio accompaniment to your song. These are not “samples,” but are full recordings, lasting from 1 to 8 bars at a time, playing along in perfect sync with the other Band-in-a-Box tracks. RealTracks can be built in to the style, and would replace the Bass, Guitar, Piano, or Strings part, or they can be generated to the Soloist (or Melody) track using the Soloist feature. We include a selection of Pop, Jazz, and Country RealTracks Combos with Band-in-a-Box Pro. Many more RealTracks are available as separate add-ons, or bundled into the various Band-in-a-Box PAKs for better value.

Using RealTracks in Songs - Assign RealTracks to Track Dialog
The Assign RealTracks to Track dialog assigns a RealTracks instrument to any of the Band-in-a-Box instrumental tracks. It also shows any RealTracks that are assigned to Band-in-a-Box tracks.

Note: RealTracks can either be assigned from the style or from the song. This dialog allows you to assign the ones in the song.

This dialog is launched by

1. Clicking on the RealTracks toolbar button and selecting RealTracks Picker Dialog.

2. Right-clicking or double clicking on an instrument name at the top of the Band-in-a-Box main screen and choosing Assign RealTracks in the menu.

3. Press the [Assign to Track...] button in the RealTracks Settings dialog.
The dialog allows you to assign a specific RealTracks instruments to a track in a song. It also displays any RealTracks that are currently assigned to each track.

Tip: RealTracks in styles are assigned in the StyleMaker. Press the [Misc.] button or use the StyleMaker menu command Style | Misc. Settings to go to the Misc. Style Settings dialog, then click on the [More] button for the More Settings dialog.

To use the dialog, first select the track that you want to assign. Then, select the RealTracks that you want in the list below it.
Freeze Tracks

Freezing (locking) MIDI or RealTracks/RealDrums

Any track can be frozen (MIDI or RealTracks). When frozen, it won’t get changed or re-generated. This saves time when replaying previous songs, and allows you to freeze an arrangement that you like. If you freeze the whole song, you don’t have to wait at all for the song to regenerate. Next time you play, it is ready to go.

You can make frozen tracks by pressing the Freeze button (snowflake) on the toolbar, and then choosing which tracks that you want to freeze or unfreeze.

<table>
<thead>
<tr>
<th>Freeze</th>
<th>Freeze all tracks [all frozen]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Un-Freeze all tracks [all frozen]</td>
</tr>
<tr>
<td>✔ Bass [frozen]</td>
<td></td>
</tr>
<tr>
<td>✔ Piano [frozen]</td>
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<td>✔ Drums [frozen]</td>
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<td>✔ Guitar [frozen]</td>
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<tr>
<td>✔ Strings [frozen]</td>
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<tr>
<td>✔ Melody [frozen]</td>
<td></td>
</tr>
<tr>
<td>✔ Soloist [frozen]</td>
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</tbody>
</table>

You can make frozen tracks by pressing the Freeze button (snowflake) on the toolbar, and then choosing which tracks that you want to freeze or unfreeze.

There are a number of reasons that you would freeze a track.

**Reasons to Freeze a RealTracks track (audio):**
- Frozen tracks will play back instantly, not requiring time to generate.
- They play back the same way each time, so if you like a solo, you can “freeze it.”
- If you send a song to a friend as “frozen,” they will hear the same performance.
- For the Soloist track, if you generate a solo, it can now be saved (by freezing the track).

**Reasons to Freeze a MIDI track:**
- You can edit the MIDI data, to customize the performance to match a certain song, and this will be saved. Use the Notation window or Piano Roll to edit the track.

**More reasons to freeze any track:**
- Frozen tracks play back instantly, without requiring time to regenerate.
- They play back the same way each time.
- You can change the chord progression of the song, and have one part playing a different chord progression than the rest of the band. For example, type a “blowing” chord progression, generate a solo, freeze the solo track, then type a normal chord progression and generate the rest of the instruments (bass/guitar etc.) that will play the normal changes.
- Have different instruments play different styles. For example, the Bass could be generated using Reggae, then Frozen, and then the rest of the instruments generated using a Techno style.

**Un-Freezing a Track(s)**

<table>
<thead>
<tr>
<th>Freeze</th>
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<td></td>
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</tbody>
</table>

This is also done for the Freeze button. Choose a frozen track to un-freeze it, or choose “Un-Freeze all tracks.”
Forcing Generation of a Song that is Frozen

Band-in-a-Box won’t touch tracks that are frozen. But if you want to change that, without having to Un-Freeze the tracks, you can do this easily.

Hold down the **Shift** key as you press the [**Play**] button (the fly-by hint will remind you of that), or choose the menu command **Play | Generate (even if tracks are frozen)**.

When you do this, the song will regenerate, the tracks will get rewritten, and the song will stay frozen. So if you’re freezing songs to get the instant playback with RealTracks, but get tired of the “same-old” frozen arrangement, just press **Shift+Play**, generate a new arrangement, and press **Save**. Then the new “fresh-frozen” arrangement will play instantly, even with many RealTracks.

**Tip:** Obviously you wouldn’t use this feature to force regeneration of a frozen song if you have made custom edits to the song that you don’t want to lose, unless you’ve saved the song and have a backup copy.

Editing and Saving Tracks

MIDI tracks for bass, drums, piano, guitar and strings can be edited and saved with the file. If you freeze a track, edits can be still made to it, because it is only frozen from Band-in-a-Box making changes to it (you can still edit it). The MIDI track will be saved to the file. So you can customize the bass part to match a certain song, and save it with a frozen bass part, so that Band-in-a-Box won’t overwrite your edits. This includes RealCharts – if you wanted to edit the notation of a RealTracks solo for example.

To edit a MIDI track (bass, drums, piano, guitar, strings), or the MIDI part of a RealTracks that has a RealChart (MIDI transcribed solo), simply open up the Notation window (or Piano Roll window), and click on the track and edit it. Make sure to Freeze the track by pressing the Freeze button and choosing Freeze for that track, or right-clicking on the instrument at the top of the screen and choosing Freeze. Now your edited tracks will save with the song.

The Guitar Window

This is a window for guitar and bass players! The on-screen fretboard displays any track on guitar, bass, mandolin, ukulele, or banjo. This feature has many option such as auto-setting of correct positions, notes named on-screen, auto-octave adjust to play in selected position, and a resizable guitar fretboard.

Launching the Guitar Window

To launch the Guitar window, press the Guitar Button, or **Ctrl+Shift+G**, or choose the **Window | Guitar Window** menu item.
Notice the various areas of the Guitar window.
- The top title bar states the key of the song is Cm, the Melody track is the track displayed, and the guitar is at the 8th position.
- The fretboard is displayed with the highest notes of the guitar at the top, and the open position of the guitar on the left.
- There are names for the open strings displayed on the left (E B G D A E).
- There are fret positions marked at the bottom of the fretboard. You can mouse click on these positions to change the current fret position.
- There are Note Names displayed for two positions on the guitar fretboard. One of the positions is the scale beginning with the third of the scale on the lowest string. In the key of F, this is the 5th position beginning on an A note (the third of the scale). Because it begins on the third of the scale, this position is referred to as the Phrygian Position (since an A Phrygian scale is the same as an F scale). Similarly, the other popular scale is the scale beginning on the 6th of the scale, in the key of F, this is up at the 10th position, and is called the Aeolian Position.
- There are note names displayed in color, with ellipses around the notes that are in the scale. The root note of the scale is highlighted in red, the third and fifth of the scale are in purple, and the rest of the scale tones are circled in gray.
- Pitch bends show up on the Guitar Fretboard. As the pitch bend occurs, a blue line moves along the string in real time, illustrating the height of the pitch bend. Load in the c:\bb\Tutorial\Pitch Bend demo song. You’ll then see pitch bends written as a blue color moving along the string.

**Automatic Settings for Guitar Display**

Band-in-a-Box does a lot of things automatically on the Guitar window to ensure that the notes are displayed intelligently on a guitar fretboard. These include:
- Automatically setting the two positions that will display the note names based on the key.
- Auto-Scanning the track to be played, and adjusting the display octave on the guitar fretboard to ensure that the best octave is picked to minimize the number of notes that will be outside of the current position displayed on the fretboard.
- After Auto-scanning the track, the best position for displaying the music on the guitar is determined. This is always one of the two positions, Aeolian or Phrygian, though you may over-ride this by clicking on any fret position.
- Color-coding note displays. In addition to the note names being outlined in the colors, when the note is played it is highlighted in green if it is a scale note and yellow if it is an out-of-scale note.

**Alternate Guitar Tunings**

The Guitar window supports alternate tunings, including DADGAD, Drop D, Double Drop D, Open G, and 11 others. You can also select “Nashville High Strung” tunings, which tune certain strings up an octave. These tunings are supported in Styles, Chord Diagrams, Guitar Tutor, Notation, Tab, and Printout. Learn how to play these tunings by watching the on-screen Guitar Fretboard or Notation/Tab window. Easily change any style to use the alternate tuning that you want.

In this discussion, we’ll be referring to DADGAD tuning, a popular alternate tuning. The same reasoning applies to all of the other alternate tunings available.

There are four ways you can use Band-in-a-Box playing in DADGAD (or any alternate) tunings.

1. See any Melody (or Soloist track) displayed in DADGAD tuning. This will display on the guitar fretboard, tab, and printout.
2. See guitar parts (chording etc.) in DADGAD tuning, using correct chord shapes. For this, choose a style that has DADGAD tuning, and view the guitar part.
3. Use the Guitar Tutor, to view DADGAD chording for any style.
4. View guitar chord diagrams in DADGAD tuning, by setting the Notation Window Options “Guitar Chord” to “DADGAD.”
Guitar Fretboard

To see the guitar neck displayed in DADGAD, choose *Melody | Track Type | Guitar – DADGAD Tuning.*

When you open up the **Guitar** window and choose the Melody track, you’ll see the DADGAD tuning.
Any melody will now display in the chosen tuning. Similarly, you can set the Soloist track to an alternate guitar tuning with the Soloist | Track Type menu.

The Guitar track (or Piano, Strings) is controlled by the style, and will only reflect the type of tuning stored in the style. Load in some alternate tuning styles included in Styles Set #44 – Requested 4 to see the chording on the guitar track in alternate tunings. Another way to see the guitar play chords in alternate tunings is to use the “Guitar Tutor.”

Select DADGAD tuning, and enable guitar Tutor.

Now, during playback, you will see guitar chords on the guitar fretboard in DADGAD tuning.
The examples above are for DADGAD tuning, but apply similarly to all 11 alternate tunings included. Some of the tunings are “Nashville High Strung.” These tuning have the lowest 3 strings tuned up an octave, to achieve a close sound. So a DADGAD High Strung tuning would have the lowest 3 strings “DAD” tuned up an octave. Listen to some style examples that use this tuning.

One of the tutors uses 3 note Jazz voicings to simulate the famous Big-Band chord guitar comping styles. If you use this tutor you'll only see 3 notes in the chords of course. Since it sometimes helps to see the entire 4 chord voicing in this case, there is the option to show the muted note as well.

The Tutor normally just shows the guitar part without writing it to any track. If you want to see the track in notation copy it to the Melody or Soloist track.

**Guitar Window Toolbar**

At the bottom of the Guitar window is the toolbar.

- The [Set…] button opens the Guitar Settings dialog, which allows you to set the guitar options.
- These buttons will chord step advance, or note-step advance. The chord step advance is the most commonly used function. It is also accessible by the hotkeys Ins and Del on the numeric keypad and will advance or go back one chord at a time, leaving the chord displayed on the guitar.
- This is the name of the current note that the mouse is over. If you click on the guitar at that position, the note will sound.
- If the Notation Window is open (in Editable Notation or Staff Roll mode), that note will get inserted on the notation at the current position on the timeline – you can disable that option to insert notes.
- When you open the Guitar Window, the first thing you'll want to do is choose the track that you want to display. Usually this will be a Melody track or a Soloist track.
- In the diagram here, the Melody track is the current track, and it has a red rectangle around it to indicate this.
- To get to the Soloist track, you would click on the [S] button or use the hotkey Ctrl+F5, which toggles between the Melody and the Soloist. Similarly, you can display other tracks like Bass, Piano, or Strings.
- The “position” button. This toggles between the two popular positions displayed with note names.
- There is a Guitar Tutor button.
- Generate a guitar chord solo based on the existing Melody track using correct guitar fret positions.
- When you have a note or chord highlighted press the [Ch-] or [Ch+] (insert guitar chord) button on the guitar, or 7 or 8 on the NUMPAD keypad. Each time you press the [Ch-] or [Ch+] you'll see that the guitar chord changes to a different voicing, cycling through the available 5-10 voicings possible for each chord. (Some notes won't have any chord voicings, for example a C# note on a Cmaj7 chord, because it is always a passing tone.)
- In a similar manner, you can convert a chord to a guitar note using the insert guitar note button. Pressing the [N+] (or 3 or 4 on the NUMPAD keypad) repeatedly cycles through playing the same note on all 6 strings.

**Big Piano Window**

The Big Piano window can display the notes of any track on a resizable piano keyboard. You can also set the range of the piano and number of octaves to display. Additionally, you can display notes names or guide notes -- showing the scale notes of the current key. Notes can be displayed using a different color for each note. There's an “Auto-Octave” setting that will scan the track to be displayed and auto-size the piano to the largest size that would display all of the notes. This 'Big Piano' makes it easier to learn piano parts from within Band-in-a-Box.

The Big Piano window is launched (or closed) by pressing the piano icon on the toolbar at the right-middle of the screen, or by pressing Ctrl+Shift+N, or choosing Window | Big Piano Window.
The default settings for this feature can be customized by pressing the [Settings…] button.

- The Big Piano window displays a single track on the piano.
- The piano can be resized by dragging the bottom of the window to enlarge it vertically.
- The key of the song is displayed at the top.
- The range of the piano is set automatically (based on the actual notes in the track) to show the largest possible piano.
- The notes of the scale are circled on the piano, with the note names included.
- The root of the scale is colored in red. As the song plays, scale tones are colored green; other notes are colored yellow.
- The name of the note that the mouse cursor is over is highlighted at the top of the window. Clicking on the Big Piano plays a note (using the Thru part) and this can be recorded or sent to the Notation window when entering notation. You can select the track to use by clicking the [B|D|P|G|M|S] line of buttons.
- RealTracks (and MIDI style) piano parts that are on the piano track will appear with hands-split (right hand in red, left hand in blue) in the Big Piano window

The Conductor

The Conductor provides live looping and playback control. As the song is playing, there are options to allow control the flow of playback by one of three methods:

1. Conductor window
2. QWERTY hot keys
3. MIDI keyboard

Many “single key” hot keys are available to control the playback and looping of the song. For example, pressing the “4” key will insure that the middle chorus is the next one played, and pressing the “S” key will insure that the middle section is looped. This would be useful to extend a song that has the last chorus playing. Custom loop points can also be set for each song. These settings are ideal for live performance, or “jam sessions” where you aren’t entering new Band-in-a-Box songs, but want full control of the playback. These loops happen seamlessly at the end of the chorus, so are suitable for the “dance floor.” In addition, you can control Band-in-a-Box from a standard MIDI keyboard, pressing MIDI keys corresponds to program functions. For example, load the next song, play/pause/tempo adjust/change thru patch/jump to middle choruses/open the notation or lead sheet window – all from your MIDI keyboard!

The Conductor is launched with the Conductor button on the toolbar, or the tilde (~) hot key, or menu option Window | Conductor Window.
You must enable the QWERTY keys to be active for the Conductor during playback. This is done by selecting the “Enable Control by QWERTY keys” checkbox on the Conductor window.

If you want to control the Conductor using the MIDI keyboard, you need to enable this by selecting the checkbox “Enable control by MIDI keyboard.” When this setting is enabled, any MIDI input will be interpreted as a hot key for the Conductor, and you won’t hear MIDI thru.

If you’d like the ability to switch your MIDI keyboard between Conductor mode and regular playing mode, you can do this using the lowest “A-natural” MIDI note on your keyboard. This is A1 on an 88-note keyboard. Note A1 will turn the Conductor off, Bb1 turns it on, and B1 will toggle the Conductor on only when the Bb1 note is held down. If you don’t have an 88-note keyboard, you can set the octave setting to a number higher than 1, for example if you set it to “3,” then notes A3/Bb3/B3 will turn the Conductor Off/On/Toggled.

Using the Conductor QWERTY or MIDI keys, you can:
- define and jump to up to 10 user defined sections in the song,
- jump back 1 bar/4 bars/# of bars/screen/part/chorus/section,
- jump ahead 1 bar/4 bars/# of bars/screen/part/chorus/section,
- LOOP 1 bar/4 bars/# of bars/screen/part/chorus/section,
- Pause/stop the song.

In addition, using the MIDI keyboard, you can also use the Conductor to:

- **A1** (note#21) Turn MIDI Conductor OFF
- **Bb1** Turn MIDI Conductor ON
- **B1** Turn MIDI Conductor ON only as note is held down

Here are the various functions available using the Conductor. The MIDI key and QWERTY hot key are shown.

C3 Normal Tempo

Ctrl =
C#  Half Speed Tempo
D3   Quarter Speed Tempo
Eb3  Eighth Speed Tempo
E3   Loop Section Enabled
F3   Play with last chorus looped
F#3  Play with middle choruses looped
G3   Play with middle and last choruses looped
G#3  Jump to last chorus (no loop)
A3   Jump to ending (no loop)
Bb3  Loop notation screen
B3   Decrease Tempo by 1
C4(48) Increase Tempo by 1
Db4  Decrease Tempo by 5
D4   Increase Tempo by 5
Eb4  Tap tempo - (press 4 times)
E4   Tap Tempo and play = (press 4 times)
F4   Play
F#4  Stop
G4   Pause
G#4  Replay
A4   MIDI Panic
Bb4  Previous Song
B4   Next Song
C5(60) This is a control character for THRU patches. When C5 is held down, pressing MIDI notes 61/62 decrease/increase the THRU patch by one, and 63-72 change THRU patches to Favorite patches.
Db5  Open Notation Window
D5   Lead sheet Window
Eb5  Reduce All Volumes by 5
E5   Increase all Volumes by 5
F5   ALL Mute/Unmute
F#5  Bass Mute/Unmute
G5   Piano Mute/Unmute
G#5  Drums/Unmute
A5   Guitar Mute/Unmute
Bb5  Strings Mute/Unmute
B5   Melody/Unmute
C6   Soloist Mute/Unmute
Db6  THRU Mute/Unmute
D6   Audio Mute
F6 to D7 Jump to Sections 1-10 of the song
Eb7  Loop Current Chorus
E7   Loop Current Section
F7   Loop Current Bar
F#7  Loop Current 4 Bars

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Customizing the Sections

Sections: This allows you to define up to 10 points in the song that are sections. By default, the following sections are defined for each song.

- Section 1: Start of song
- Section 2: Intro
- Section 3: First Chorus
- Section 4: Middle Chorus (i.e. start of chorus #2)
- Section 5: Last Chorus
- Section 6: Ending
- Sections 7-10 are user definable. To do this, type in any bar # using the bar/chorus format (e.g. 21/2 would be bar 21, chorus 2).

If you prefer to enter custom values for the section numbers, you can do this if you check the “custom” checkbox, and then type in up to 10 bar numbers for each section.

The section numbers are saved with the song. Once you have defined the sections, you can jump to a certain section of the song as the song is playing, simply by:

1. Pressing the 1-9 or 0 key on the QWERTY keyboard or,
2. Opening the Conductor window (~ hot key) and clicking on the section button or,
3. Pressing MIDI keys 77-86 (F6 to D7) corresponding to sections 1-10.

Mode (when to do the action).
By pressing a QWERTY hot key prior to an action, you can control when the action will take place. If no mode hot key is pressed prior to an action, the default mode will occur.

The default is set in the “Default Mode for section change” or “Default Mode for going back or ahead” combo box.

For example, by default, the section change will occur as soon as you press the key, and it will go to the equivalent place in the bar immediately before the beginning of the target section (so that the music stays in time, and the next section begins at the end of the bar). But you can change the default for the action to take place at the end of the current bar or current part marker etc.

Example uses of the Conductor:

In this example, we don’t have custom sections set, so the default sections apply (middle chorus = section 4 etc.).

- Jump to the start of middle choruses during playback (press “4”).
- Loop the middle chorus (press S, which is Loop Section).
- Jump to the end of the song (press 6).
- Pause the song (Backspace).
- Go back 1 chorus (Ctrl a).
- Go ahead 1 chorus (Shift A).

At the end of the current chorus, go back 1 section, press Y then Ctrl S.

These actions can also be done with the MIDI keyboard. See the MIDI keyboard mapping diagram for details.

Example using the MIDI keyboard. Assume Charlie is a piano player who uses his MIDI keyboard with Band-in-a-Box, and would like to play his keyboard, but also use it to control Band-in-a-Box.

He sets the conductor to allow his MIDI keyboard lowest notes A/Bb/B to turn the Conductor mode OFF/ON/Toggled-when held.

When he turns it off (low A note), he can play his keyboard normally.

If he wants to pause the song, he holds down the low B3 note as he presses the MIDI key for pause, which is G4. The song will pause, and the conductor mode turns off as he lets go of the B3 key, and he can resume his piano playing. If Charlie didn’t plan on using the MIDI keyboard for piano playing, he could leave it in conductor mode by turning it on with the A3 key.

The Jukebox

Use the Jukebox for continuous playback of a whole list of Band-in-a-Box songs or to play all or the songs in a folder. The ◻ Juk button plays the previous song in the directory; the Juk ◼ button plays the next song in alphabetical order.

The Jukebox will continue to play while you move to other Windows programs, providing continuous background music.

Click the [Juke] button to open the Options for Juke Box dialog.
Jukebox Options

Only Play song with melodies: If set to YES, the program plays only songs with melodies, that is, songs with an .MG? file extension. If NO, the Jukebox will include ALL songs in the subdirectory.

Change Melody instrument: If you set this option to “Yes,” then the program will randomly change the melody instrument among your favorite 10 Melody instruments.

Random order Playback: If set to “Yes,” the songs will be played in random order (though not repeating a song). If set to “No,” the songs will be played in the order they are listed in the subdirectory.

Hide Titles (until title clicked): This feature is used to play the “Guess the Song” game. When set to “Yes,” the titles are hidden till you click the title box.

Audible Count-in Click: While listening to the Jukebox, you might not want to hear the Count-in Click. If set to “No” you won’t hear the count-in click.

Harmony Settings: Set the Change Harmony box to true/enabled if you would like harmonies in a given number range to be randomly assigned for use with the Melody and Soloist/Thru tracks (if applicable to the song).

Generate Solos: Set this option to “On” to permit the Soloist to play a Solo over all the songs selected for Jukebox Playback.

1. Change to this directory by loading/opening a song from the c:\bb\solodemo directory.
2. Instead of playing the song you have loaded, press the [Juke] button.
3. Ensure that the Generate Solos checkbox is set to “Yes.”
4. Select [PLAY JUKE BOX]. The Soloist Select Dialog will pop up with a suggestion to use a Soloist for the first song in the Jukebox list. This is normal. Press [OK] to accept the Soloist suggestion. (The Jukebox will not bother you with the Select Soloist dialog again; it will simply choose an appropriate Soloist for any given song in the Jukebox song list.)
Preview:

The Jukebox Preview mode will optionally play just one chorus of each song, or play a set number of bars of each song (e.g. 8 bars).

To access this, press the [Juke] button, and select the Preview checkbox. Set the # of bars to use for the preview, a setting of 99 plays one chorus of each song.

Delay between songs:  The user can set a selectable time delay (in seconds) between songs.

Note:  To manually start playback of each song in the jukebox list, set “Pause Play Until MIDI or Key received” to On (checked) in the Preferences dialog. At the end of each song the jukebox will load the next song in the list and then pause until playback is started by sending a MIDI note or a computer keystroke.

Check “Loop Jukebox at end” for continuous jukebox play rather than stopping at the end of the list.

Change Directory:

You can change the directory before starting the Juke Box with the [Change Directory] button. You can also type a folder name directly, instead of using the folder dialog.

In the main screen, click on the [F] button to open the Favorite Songs list and make your own custom set lists for the Jukebox.

- Use the [Clear] button to blank the list.
- Songs can be added or removed from the list with the [Insert], [Append], and [Delete] buttons. [Add Fav] also adds a song to the Favorite Songs list.
- Use the [Save Set..] button to save the list of selected songs.
- The [Load Set] button loads a saved list of songs.
- The [Juke..] button plays through the list of songs automatically, like a jukebox.

This is a great feature for saving a list of current song projects, or for performing a live set with Band-in-a-Box accompaniment.
Medley Maker

Would you like to make a medley of various Band-in-a-Box songs (MGU) using Band-in-a-Box? This is easily done with the Medley Maker. Inside the Medley Maker, simply select the songs that you want, and Band-in-a-Box will make the medley for you. A medley is not simply joining songs together. A good medley uses a “transition” area between songs to introduce the new style, key, and tempo. The Medley Maker automatically creates a nice transition area for you, writing in chords that would smoothly modulate to the next song, style, key, and tempo!

To open the Medley Maker, click on the [A+B] button on the toolbar or choose File | Medley Maker. This launches the Medley Maker dialog.
Chapter 6: Making Songs in Band-in-a-Box

Make Your Own Songs

Now that you’ve seen how much fun it is to play music with Band-in-a-Box, we’ll show you how easy it is to make songs of your own. This section gives you step-by-step instructions from start to finish.

Getting Started

Clear the Chordsheet

Click on the [New] button to blank the Chordsheet.

Name the Song

Enter the title of the song by clicking in the title area and typing in the name.

Choose a Key

You can use the special operators “tk” and “tr” to set or transpose a key signature.

Typing tk and the Enter key will set the key of the song to C. Typing tkbb sets it to Bb. Note that this sets the key signature but does not transpose the song.

The “tr” operator sets the key signature and transposes the song. Typing trf and pressing Enter would transpose the song to the key of F, typing trab would transpose the song to Ab.

Another way to set a key signature is to click on the Key Select List and choose the key of your song. It’s easy to change the key by simply selecting another key from the list. Click on “YES” when the program asks, “OK to transpose WorkSheet” and Band-in-a-Box will automatically transpose the entire song into the chosen key.

You can have multiple keys in a song by changing the key signature in the Edit Settings for bar dialog (F5 function key). The new key signature is shown on notation.

Setting the tempo

The tempo is displayed under the title. You can quickly enter a specific tempo for the song by by typing the letter “t” together with the tempo and pressing Enter. For example, type t140 and Enter to set the tempo of the song to 140.

Click on the tempo box (hot key is Ctrl+Alt+T, or menu item Play | Tempo | Set Tempo...), and a dialog will open up allowing you to type in a tempo.

When choosing File | New the tempo will be set to the best tempo for the current style. The tempo for this style is 160 beats per minute (bpm).

Click the mouse on the arrow buttons to adjust the tempo.
- LEFT mouse click to change by 5 beats per minute at a time.
- RIGHT mouse click to change by 1 beat per minute at a time.

Tap the tempo

Not sure of the tempo for your song? Tap it in real time on either the minus [-] key or the equals [=] key on your computer keyboard. Four taps on the minus key sets the tempo, four taps on the equals key sets the tempo and starts the song playing. You can also click the mouse on the on-screen [-] and [=] buttons to the right of the tempo box.

“Framing” the Song

Framing a song designates the first and last bars of each chorus and the number of choruses Band-in-a-Box will play before playing the standard 2 bar ending.

You can type special words to set the beginning and end of the chorus, and the end of the song.
begin + Enter - sets the beginning of the chorus to the current bar
chorusend + Enter - sets the end of the chorus to the current bar
end + Enter - sets the end of the song to the current bar

Another option is to right-click a bar in the chordsheet to set it as the beginning or end of the chorus or the end of the song from the settings in the context menu. For example, these settings are available with a right-click on bar 16.

For this song, bar one is the first bar of the chorus and bar 32 is the last bar of the chorus. The chorus will play three times, jumping to the two bar ending the third time through.

With the “Loop” checkbox enabled the entire song will keep repeating until stopped.

(This is a different feature from the “LoopSec” checkbox, which loops a selected section of the song.) The “Fake” checkbox is for a “fake sheet” style of chordsheet display with 1st and 2nd endings and repeats.

The [S] button opens the Song Settings dialog for additional settings such as endings, tags, style variations, pushes, rests, and chord embellishments.

Chord Entry

Computer Keyboard Entry

The most common way of entering the chords for a song in Band-in-a-Box is by typing them in from the computer keyboard. Up to 4 chords per bar may be entered.

Chords are commonly typed-in using standard chord symbols (like C or Fm7 or Bb7 or Bb13#9/E), but you can enter them in any of the supported chord symbol display formats - Roman Numerals, Nashville Notation, Solfeggio, and Fixed Do.

Tip: To view a list of chords recognized by Band-in-a-Box refer to the Chord List topic in the Help file.

To start typing in chords:
- Go to the top (Bar 1) of the chordsheet. The Home key will go directly there.
- Blank the Chordsheet (if necessary) by clicking on the [New] button.

This is the chord highlight cell. Chords will be entered wherever this is placed. You may move this around by cursor keys, the Enter key, or a mouse pointer click.

The chord highlight bar moves 2 beats at a time (½ a bar). When you have the chord highlight cell over the area that you want to enter a chord, you simply type the name of the chord you would like to see there.

For example, type c6 to get the C6 chord. Note that you should never have to use the Shift key, as Band-in-a-Box will sort this out for you.
- Use b for a flat, e.g. Ab7.
- Use 3 for a sharp #, e.g. for F#7 type f37.
- Use / for slash chords with alternate roots, e.g. C7/E (C7 w/E bass). A chord like Gm7b5/Db will display correctly using a Db instead of a Gm7b5/C#, since Band-in-a-Box bases it on a Gm scale.
- Use a comma to separate the ½ bar, enabling you to enter 2 chords in a cell. In the example below, we would type Ab9,G9 to get the 2 chords in the cell on beat 3 and 4 of bar 2.

The sequence of keystrokes to enter all these chords above would be:
HOME c6->am7->dm7->ab9,g9->c6/e->a739

Note: We're able to type A7#9 as "a739" because Band-in-a-Box knows to use the uppercase of the 3, which is #. The > indicates a carriage return, or the Enter key.
An option (in Prefs-Display) for “11th chords” allows display of “9sus” chords as “11” (e.g., Bb11 instead of Bb9sus). This only affects how the chord is displayed, not how it is stored, and you can type either C11 or C9sus to enter the same chord.

Press Ctrl+F2 or right click on a chord, and an Edit control allows you to see and edit the current chords.

Enter Chords From MIDI Keyboard

You can also enter chords from an external MIDI keyboard using the Window | MIDI chord detection… feature. Play the chord on the keyboard, then press Ctrl+Enter to insert the chord into the chordsheet on the first beat of the current chord cell, i.e., beat 1 or beat 3 of the bar. Use Ctrl+Shift+Enter to insert the chord on the next beat, i.e., beat 2 or beat 4 of the bar.

Import a Band-in-a-Box Song

Easily import part or all of an existing Band-in-a-Box song to your current song, with options to specify source and destination range, type of information to import (chords, melody, lyrics, etc.) and more. Choose File | Import Song.

Audio Chord Wizard (Chords from MP3)

This feature analyzes a WAV, WMA, MP3, WMV, or CDA audio file and imports it to Band-in-a-Box. The Audio Chord Wizard is fully described in the Tutors, Wizards, and Fun chapter.

It works out the tempo, bar lines, and chord changes so you can easily make your favorite files into Band-in-a-Box songs.

Copy and Pasting Section of Chords

Copying of sections or selections can be done using drag-and-drop, simply drag regions around the chordsheet to quickly rearrange your song. Hold down the Ctrl key for finer control about insert/overwrite etc.
For example, if you have an 8-bar section at bar 9:

To copy it to bar 23, and insert the 8 bars at that location drag the bar # and drop it at bar 23.

To copy it to bar 23, and OVERWRITE the 8 bars at that location hold down the Ctrl key, and drag the bar # and drop it at bar 23. In the dialog that appears, just press OK.

Another way to copy chords is to launch the Copy Chords and/or melody dialog by pressing Alt+C. This allows you to copy chords/ melody/ soloist/ lyrics for a range of bars by entering the From and To locations and the number of bars to copy. Select the checkboxes for the items you want to include in the copy.

Insert Bars at destination
If selected prior to the Copy bars will be inserted onto the Chordsheet at the destination chosen.

# of times to repeat copy
If set to more than one, multiple copies will be made, optionally with transpositions on each copy. These are all applied to the first chorus only.

With each copy, transpose ___ semitones
If more than one copy is selected, this will transpose the song with each copy. This is most useful when wanting to learn a short phrase (“riff”) in different keys, or modulating a section of a song.

Random # of semitones
This will transpose the copy a random transposition and would be useful for advanced students who are trying to master a riff or phrase in all keys.

Copy 1st Chorus to whole song
If set, this will apply any of the copying commands in this dialog to all choruses of the song, not just chorus #1.

Copying chords to the clipboard.
Select the region to copy. To select a region of the Chordsheet (or the Notation or Audio Edit window), you can Shift+click on the end point to easily select a large area.

- Click on the starting bar.
- Shift+click on the ending bar.

Another way to select a region is by dragging the mouse over it. Place the mouse cursor at the bar to begin the selection. Then, holding down the left mouse button, drag the mouse over the region. As you do this you will see that the region will be inverted (white characters on a black background). When you have selected the proper region of chords to copy, then

- copy the selected (blackened) region to the clipboard
- click on the Copy button or choose Copy from the Edit menu.

Pasting chords to another section of the chordsheet.
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Assuming you have already copied some chords to the clipboard you then paste them into the chordsheet by:
1. Move the highlight cell to the bar to begin the paste of chords.
2. Click on the Paste button or choose Paste from the Edit menu.

Tip: Remember that the copied section remains in the clipboard and can be repeatedly used. Example: If you're inputting a song with verse, verse, bridge, verse you can just copy the first verse to the clipboard, and then repeatedly paste in the other verses. The information on the clipboard remains intact even if you load in a new song, which means you can copy and paste between songs.

Copy, Repeat X times, with Transpose.
The Edit | Copy From.. To.. menu command opens the Copy Chords and/or melody dialog, which has additional fields allowing you to define the number of times to repeat each copy and define the number of semitones you transpose. For example, you could have a 16 bar section, copy it 3 times with a semitone transpose each time. Or, take a single 4 bar phrase, and copy it 11 times, transposing up a 4th each time, generating the same 4 bar phrase in all 12 keys.

Deleting Chords
The chords at the current location of the highlight cell are cleared by the Delete key, the Windows “Cut” command, or by typing a comma and pressing Enter.
Deletion of chords over a range of bars can be done by selecting the range and pressing the Delete key on your computer keyboard. No confirmation dialog is required.

Previewing Chords
This feature allows you to hear chords as you type them in. After you type a chord name onto the Chordsheet (or notation window), press the Shift+Enter keys. This enters the chord onto the chordsheet and then plays the chord for you, using the patches on the Piano part and Bass Part. You can also listen to a chord that has already been entered, by just pressing the Shift+Enter keys after moving to that bar with the chord. If there is no chord entered at that bar, you will hear the last chord that was entered.
You can right-mouse click on the chordsheet and choose Chord Settings to launch the Chord Options dialog, and then press the [Preview] button to hear the current chord in the Chord Options Dialog.

The [Clear All] button erases all Rests/Shots/Pushes/Pedal Bass from a song.

Support for other chord display types
You can enter or display chords in Roman Numeral notation, Nashville notation, Solfeggio, or Fixed Do notation.
For example, the chord Gm7 in the key of F would be displayed as IIm7 in Roman Numeral Notation, 2m7 in Nashville Notation, and Rem7 in Solfeggio.

“Fixed Do” Notation

In Italy and other parts of Europe, chords like C7 are always referred to by the Solfeggio name (“Do 7” for C7) regardless of the key signature.

These systems are very useful for learning or analyzing tunes, since they are independent of the key signature. You can take an existing song, and print it out in Roman numeral notation, so you can study the chord progression. You can also type a chord in these systems, like “4” which will enter the 4 chord in the current key.

You can switch among any of these systems by pressing the Roman Numeral button on the right side of the screen to toggle among the various settings.

The Roman numeral and other nonstandard displays use superscript for the chord display when in the Notation window (or when printing out). Therefore, the alternative chord symbol displays are best viewed in the Notation window.

Tip: Print out a song in Nashville Notation or Roman numeral notation. Then, learn the song this way, i.e. 1maj7/4maj7. You’ll soon discover that it is much easier to play the song in any key. Since you know the song goes from the 1 chord to the 4 chord, so you can easily play it in the key of Bb, for example.

Advanced Chord Entry and Editing Features

“Nudge” Chords feature allows moving a range of chords by a number of bars/beats.

For example, let’s say that you have entered a complete song chord progression, and you then realize that all of the chords starting at bar 23 are 1 beat too late (maybe due to a time signature change). You can move all of the chords 1 beat earlier, by setting the nudge at bar 23, beat 1, and duration of the nudge to -1 (minus 1) beats.

You can nudge chords and/or Melody/Soloist parts.

A “Fold” routine converts a song with a single large chorus to multiple smaller choruses, with optional tag ending.
A Search/Replace Chords feature will search and replace chords, including support for asterisks (*) as wildcards. Search and Replace can be used with Roman numerals or numbers for chord names. So you can replace the V chord with V7, or the 5m chord to 5m7. Since these are remembered between songs, this feature is useful if you are changing multiple songs.

A “Simpler Jazz” option will simplify chords like C13#11#5 to simply C9.

**Breaks - Rests, Shots, and Held Chords**

Breaks are points in a song when one or more of the instruments rests, plays a shot, or holds a chord.

- **Rests** can specify any, some, or all instruments to rest at any bar. For example, you could rest all instruments except the bass for the first 4 bars, and then add the piano for 4 bars, and then add the entire band for the rest of the song. You may optionally disable the rests in the middle or final choruses (e.g., where you would likely have a solo, and rests may not be appropriate).

- **Shots** can specify certain instruments play a “shot,” where the chord is played and then a rest follows. For example, the song “Rock Around The Clock” has a shot on beat 1 followed by a rest for 2 bars. The duration of shots is 60 ticks per beat.

- **Held chords** specify that certain instruments hold a chord sustained for a certain number of bars. For example, you can have the bass and piano hold a chord sustained while the drums continue to play a pattern.

A chord can be specified as a REST by adding a period after the chord.

- C. indicates a C chord that is a REST.

- C.. indicates a C chord that is a SHOT.

- C... indicates a C chord that is a HELD CHORD.

**Selecting BREAKS for different instruments.**

You can specify that some instruments not be affected by the rhythm break. The coded names for the instruments are:

- B for Bass
- D for Drums
- P for Piano
- G for Guitar
- S for Strings

To type a rest for all instruments on a C chord type C.

To exempt instruments, add their letters following the break. For example,

C.bd will put a rest on all instruments EXCEPT the bass and drums.

To indicate a held chord for all instruments except the piano, type C...p
Breaks can also be set in the **Chord Options** dialog.

**Chord Options**

Chord options include rests, pushes, and pedal bass. The **Chord Options** dialog opens with the C7 toolbar button, or from the right-click contextual menu in the Chordsheet.

Normally, when a “shot” or a “held” chord is assigned, the instruments that are excluded from the shot/held chord play normally.

There is an additional option for those excluded instruments to stay silent. To set this, open the chord options dialog, and select a shot or held chord, and then select “Excluded instrument(s) should rest.”

This option gives you the ability to rest some instruments while others play the shot or held chord.

Other settings for how chords play are made in the **Edit** menu. You can choose **Edit | Settings (for This Song)** to open the **Song Settings** dialog and set the rests (breaks) to happen only in the first, middle, or last choruses.

There are also settings to allow pushes, pedal bass, and chord embellishment.

**Pushes**

"Pushes" (also called anticipations) are chords that are played before the beat. For example, in Jazz Swing, the piano player often “pushes” a chord change by playing the chord an eighth note before the beat. To execute a “push,” you can use either keystrokes or open the **Chord options** dialog box by right mouse clicking on a given chord.

To use keystrokes:

Type the caret symbol [^] before the chord. The caret symbol is located above the numeral 6 on your computer keyboard.

Type a single caret to get a chord an eighth note before the beat, e.g., \(^C7\)

Type a double caret to get a chord a sixteenth note before the beat, e.g., \(^^C7\)

In Jazz styles (and other triplet feels), the chord will be pushed by a triplet, regardless of whether there is a single or double caret (^).

**Velocity Boosts for Pushes, Shots, and Held Chords**

You can set the amount of velocity boost, so that the effect won't be too loud.

In the **Preferences** dialog (Opt. | Preferences) click on the [Arrange] button to open the **Arrangement Options**. Then type in the amount of velocity boost for pushes, shots, and holds.

The style can override the velocity for the pushes, and drum velocity for shots, held chords, and pushes is also set in the StyleMaker.

**Part Markers and Substyles**

**Part Markers**

Part Markers are placed on the chordsheet to indicate a new part of the song, to insert a
substyle change, or to insert drum fills. They typically occur every 8 bars or so, but may be placed at the beginning of any bar.

Double lines are drawn on the chordsheet at the bar before a part marker.

### Section Paragraphs

When you’re reading a book, a new section begins on a new line, with space between. Band-in-a-Box does that for chords too. Whenever a new section occurs (a part marker), we start the new section on a new line and draw a grey line above to clearly mark the new section. Sections can be as short as 2 bars. You’ll see each section on a new line so that the form of the song is easier to see. The feature is configurable and optional.

### MultiStyles

Band-in-a-Box MultiStyles are styles that can have up to 24 substyles; original Band-in-a-Box styles had two substyles, “a” and “b.” Band-in-a-Box MultiStyles typically have four substyles, but may have up to twenty-four, selected by using part markers “a” through “x.”

You can easily make your own MultiStyles, either from scratch, or combining parts from existing styles to make a MultiStyle. For example, if you have 10 favorite Country styles, you can quickly make a single MultiStyle that has 20 substyles available within the same song.

### Part Markers

Part Markers are placed on the chordsheet to indicate a new part of the song, to insert a substyle change, or to insert drum fills. They typically occur every 8 bars or so, but may be placed at the beginning of any bar.

### Changing Substyles

Each style has “a” and “b” substyles. Band-in-a-Box Multistyles also have “c” and “d” substyles, and could have from “a” to “x” for a total of up to twenty-four.

Most of these MultiStyles that we’ve made have 4 substyles, conforming to the following pop song format:

- **Substyle “a”** is usually used for the verse of a song.
- **Substyle “b”** is usually used for the “b-section” or the chorus, and for soloing in the middle choruses.
- **Substyle “c”** is usually used for the intro or for an opening verse or pre-verse.
- **Substyle “d”** is usually used for a break or interlude.

Double lines are drawn on the chordsheet at the bar before a part marker.

You can see the MultiStyle markers on the chordsheet.
There is always a part marker at bar 1 so that Band-in-a-Box knows which substyle to begin with. The song continues to play in one substyle until it encounters a new part marker. The substyle will change automatically on second choruses when the “Vary Style in Middle Choruses” song setting is selected.

**Placing Part Markers**

- Move the highlight cell to the bar where you want to place the part marker. Then press the P key on the computer keyboard. Repeatedly pressing P scrolls through all available part markers,
or
- Position the mouse cursor directly over the bar line (or an existing part marker). Then, click the left mouse button. Repeat this procedure to scroll through the available options.
- To remove a part marker keep pressing P or clicking the mouse until you reach the end of the available part markers and there is no marker on the bar number.

**Placing Drum Fills**

A one bar drum fill will occur in the bar preceding a part marker. If you want a drum fill at bar 7 of a song, you insert a part marker on the bar after the bar with the drum fill (i.e. Bar 8). You can either retain the original substyle or change the substyle (a, b, c, d, etc.) when you place the part marker.

**Section Paragraphs**

When you’re reading a book, a new section begins on a new line, with space between. Band-in-a-Box does that for chords too. Whenever a new section occurs (a part marker), we start the new section on a new line and draw a grey line above to clearly mark the new section. You’ll see each section on a new line so that the form of the song is easier to see.

For example, if you have a song with a 7-bar section, followed by 8-bar sections, earlier versions of Band-in-a-Box wouldn’t start the other sections on a new line. The result was that it was hard to delineate the sections, as if an entire story was told within one paragraph.
With the Section Paragraphs feature you’ll see each section on a new line so that the form of the lead sheet is easier to see. Sections can be as short as 2 bars.

The feature is configurable and optional with the “New line for every section (part marker)” setting in the Display Options dialog (Opt. | Preferences [Display] button).

Applying Styles

There are many styles available for use with the Band-in-a-Box program. Styles refer to styles of music like Jazz Swing, Latin, Blues, Pop, Rock, or Country. You can pick a musical style either before or after you have entered the chords to a song. Once a style is loaded, the song will be played back using your chosen style. All style files have the .STY extension.

In the chordsheet or notation you can quick-load a style by typing only “style” followed by a stylename, e.g., stylezzbossa<Enter> will load in zzbossa.sty.

Note: The program defaults to the “Jazz Swing” style or it may be “aliased” to another style, such as the newer J_WYNT_K style.

When a requested style is not found, Band-in-a-Box makes an intelligent substitution.

BOSSASM2.STY wasn’t found, but will substitute a similar style: BOSSA2.STY

This feature is available for every style that PG Music has made, and also can be customized by third-party or any users by making a text file (*.NA) with suggested alternative styles.

Load Previous Style, Load Next Style.

This function, analogous to the Load Next Song function, loads in the previous (or next) style in alphabetical order of the file name. These functions are found in the Styles menu, or use the hot keys Ctrl+Alt+Shift+F8 (or Alt+Shift+F8).

Current Style Window

The name of the current style is shown in the window below the song title.

The full (long) style name is displayed in a pop-up hint and also at the top of the screen.

There is a convenient “Load Song Demo” option for style demos. Click on the name of the style on the main screen, and the menu that displays will include the option to “Load Song Demo” for the current style.

The [Style] button opens the StylePicker window.
The [F] button opens a window with tabs for lists of **Favorites** and **Recently Played** styles.

### The StylePicker Window

The StylePicker window is opened by pressing the [Style] button or the **Shift+F9** keys. It lists all of the styles that are present in the `bb` folder.

The StylePicker window allows easy selection of styles by category or from a complete list of all styles. For example, you can select Jazz styles and see a list of all of your Jazz styles. Then you can select any style to see its full title, description, and examples of songs appropriate to the style.

If you have styles that don’t appear in the StylePicker (because you’ve just made them, or got them from a 3rd party) the StylePicker will automatically find those styles and add them to your list in an “Other Styles” category. The information regarding style name, Even/Swing, 8ths/16ths, and time signature are filled in for you.

The current style of the song is listed at the top of the window; in this case it is the Jazz Swing style (ZZJAZZ.STY). This is referred to as the Prototype Style. The prototype style can be changed to the current selection that is highlighted in the list by pressing the [*Change Prototype Style*] button.

**Favorite** and **Recently Played** styles appear in this dialog as separate lists. An “F” appears beside the name of any style that is a favorite. You can filter any list by only showing favorite styles. Over time, you can build up a list of favorite styles, and only show them when needed.
The favorite styles are the ones that you’ve identified as favorites, either by pressing the [Add Favorite] button in the **Favorite Styles** dialog, or the similar button in this **StylePicker** dialog.

### Filters
As well as only showing favorite styles, there are filters to display only styles of a certain “Feel” or “Tempo” or only the styles of a certain Styles Set number, as well as displaying the name of the Styles Set. To select this, open the **StylePicker**, and choose “Only Show Styles Set #.” When you pick Styles Set #, you can then see only that Styles Set listed, regardless of the category you are in.

There is also a filter to show/show hide Real or MIDI styles. So you can set this if you only want to see MIDI styles, or if you only want to see styles that use some/all RealTracks.

Styles can have different instruments (patches) for the “a” and “b” substyle. You can see a list of styles with multi-patches by looking at the “Styles with Instrument Changes” category.

### RealStyles, Classic RealStyles and Styles with RealTracks
RealTracks, live audio recordings by top studio players and recording artists, replace MIDI tracks and can be controlled just like MIDI instruments (volume changes, muting, etc.). Best of all, they follow the chord progression that you have entered, generating an authentic audio accompaniment to your song. They are not “samples,” but are full recordings, lasting from 1 to 8 bars at a time, playing along in perfect sync with the other Band-in-a-Box tracks. RealTracks can be built in to styles to replace some or all of the MIDI parts.

RealStyles are Band-in-a-Box styles that use RealTracks only. There is a separate category in the **StylePicker** for RealStyles. There is also a Classic RealStyles category in the StylePicker. It contains styles that are intended to be commonly used RealTracks. They are divided into genres, so you can go to Classic RealStyles – Jazz to easily find RealStyles for Jazz Swing, Bossa, etc.

RealDrums style beginning with a minus sign, -, the StylePicker has a special category called “Styles with RealDrums.” This lists many RealDrums styles (.STY) that we’ve made. We always name the RealDrums style beginning with a minus sign, so that “-ZZJAZZ.STY” would be the ZZJAZZ.STY, but using RealDrums instead.

### Selecting RealDrums Styles
You can also select RealDrums styles within the **StylePicker**. Highlight a MIDI style that you like and press the RealDrums [Best] button, to see a list of the most compatible RealDrums styles for that style, or the [RD] button to select from all available RealDrums.

You can override the RealDrums for a certain song by selecting any RealDrums set with the [RD] button, which opens the **RealDrums Picker**.
Or use the [Best] button, which will show you RealDrums that match the feel of the currently selected style. Or force MIDI drums for this song.

There is a hot key combination to turn RealDrums on/off (Ctrl+Shift+F6). This also works while the song is playing.

When you open the StylePicker window, it shows you which styles would work best in your song, highlighting all styles that have a similar tempo, genre, and feel to your song. You can preview styles before loading them so you can hear what they'll sound like in your song. The window remembers the style and genre that you've used, and will return to it the next time you visit the window.

For each style, you see the following information:

- ZZJAZZ is the name of the .STY style file.
- "sw" indicates that the style is in a Swing feel vs. "EV" for Even feel.
- The “8” indicates that the style is an 8th note feel (vs. 16th note feel).
- 160 is the tempo for this style.
- Jazz Swing Style is the full name of the style.
- SD #0 indicates that the style is found on Styles Disk #0, one of the original 24 Band-in-a-Box styles.

Styles that are similar to the prototype are indicated with an asterisk (*). These are styles that have the same feel (triplets/ eighths/ sixteenths) and a similar tempo range. Styles with similar feel but a different tempo range are marked by a caret (^) symbol. So you can quickly see styles that are similar to Jazz Swing (in this example). The styles J_BASIE and J_DIXIE could be substituted with a perfect match so are marked with an asterisk (*). Styles like J_DJANGO are marked with a caret (^) because they sound best in a much faster tempo than the prototype Jazz Swing style.

Use the filters to display all styles, or only ones that you choose.

There is also a filter to show show/hide Real or MIDI styles. So you can set this if you only want to see MIDI styles, or if you only want to see styles that use some/all RealTracks.

You can play the style demo from the StylePicker window by pressing the [Load Song Demo] button.

The [Search] button that lets you find data in any of the fields. Also, the StylePicker window opens up at the current style.

There is an option for this called “Defaults to current style.” When you choose a style with the song playing, it will switch to the new style and continue playing!

When you find a style that you'd like to test, double click on its name in the list to hear a preview of your song in the new style. Note that you must set the option Preview on Double Click for this to work.

Alternatively you can press the [Preview] button. The [Preview] button generates and plays an arrangement with the new style; use the [Stop] button to end the preview.

Change the tempo by typing in a new tempo in the t= field at the top.

You can [Reduce] or [Expand] the duration of the chords, useful when changing the feel of songs.
If the Prompt With Preview item is set, the program will ask you if you want to change the feel of the song's melody, or auto-reduce/expand the chord durations when the styles change.

When a new style is previewed, patches appropriate to the new style get loaded in if you have selected “Auto Change Melody/Soloist Patch.” So when you load in a “Chopin Piano Style” the Melody patch of your song will change to Piano. This allows the song to blend in with the new style.

This will copy the Styles List to the clipboard so that it can then be printed as a text file from any word processor.

If you have added new styles to Band-in-a-Box (or edited the BBW.LST file) the StylePicker’s [Re-Build] button will update the styles list.

You can add your own styles to the StylePicker list by pressing the [Edit] button to launch the StylePicker Editor.

StylePicker Editor

When you first launch the StylePicker Editor, there won’t be any styles added, so you’ll see a screen with only a blank category with no styles on it.

The category here is called “My Styles,” you can change the name using the yellow “Category Name” area. For this example, change the name to “Favorite Jazz.”

Let’s add a Style to the list.

Press the [Add New Style] button.

A style has been added, called NONAME.STY. You now need to fill in all of the information in the colored fields to supply the information for the style you have added.
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Note: For this example, we’ll add a Jazz style called NEWONE.STY. This style is included in the C:\bb folder. This information includes:

1. Name of the Style (8 characters maximum + .STY).

   ![STY name [8 char name + .STY]](NEWONE.STY [Choose...])

   You can type in the style name, or press the Choose button to pick a style name from the ‘bb folder. If the style doesn’t exist, a <not found> will appear in the style list beside the style name (as it does for the NONAME.STY). Press the [Choose] button and choose NEWONE.STY.

2. Long Name of the style. This is a descriptive name that appears on the StyleMaker, and can be up to 32 characters. Enter “A Brand New Jazz Style.”

   ![Long Style Name [32 chars]](A Brand New Jazz Style)

3. Memo and Examples. You can enter a memo for the style, and example songs that could be played in that style. The memo and example can total 200 characters maximum. Enter a memo and examples for NEWONE.STY.

   ![Memo](This is our first memo for a new style.)

   ![Examples](Works with most Jazz songs.)

4. We now enter settings to tell Band-in-a-Box what Soloist it should use when making improvisations using this NEWONE.STY. For this, we need to know the genre of the style (Jazz, Country, and Pop etc.), whether it is in an even or shuffle feel, and whether a soloist should be playing primarily 8th or 16th notes. From the drop down combo box that appears, for this Jazz Swing style (newone.sty), we should choose “Jazz Swing Triplet feel 8th notes.”

   ![Soloist type](Jazz Swing Triplet feel 8th notes)

   By doing this, Band-in-a-Box will then choose from many Jazz Swing type of Soloists available in BB. But if we want a specific soloist to always be used, we can specify that soloist number. You can see the soloist numbers in the Soloist dialog. In this example, we leave this at zero, so Band-in-a-Box will choose between many different soloists.

   ![Instead of soloist type, always use Soloist #](0)

   This setting enables double time soloing when the style is played at slower tempos.

5. Next we describe the feel of the style. Are the 8th notes straight or shuffle? Is the time signature 3/4 (waltz) or 4/4, is it a 16th note based style (tempo usually less than 120), or an 8th note style (tempo usually above 120). For the NEWONE.STY, enter these checkboxes as shown.

   ![not straight 8ths, not a waltz, and not 16th notes.](Not straight 8ths, not a waltz, and not 16th notes.)

6. Next is the Tempo area. Here you can enter the typical tempo and the range of the tempo for the style.

   ![Typical Tempo](140)

   ![Tempo Range: from 120 to 180](100)

7. You can assign a number for the style disk. We recommend that you use numbers higher than 1,000 and pick a unique number for your styles. You can then search for them easily. It is not necessary to enter a Style disk #.

   ![Style disk # (over 255)](1000)

8. When a style is chosen in the StylePicker, it will send out patch changes on the Melody and Soloist tracks, to make the song sound more authentic in that style. The settings for Melody and Soloist patches allow you
to select which patch types will get sent out. Here we choose “Jazz Patches” for our NEWONE.STY

We’re finished adding the NEWONE.STY.

We could now continue adding new styles, and categories, for all of our new styles that are not in the list.

But let’s see our added style on the StylePicker.

Press the [OK – Save] button. This exits the dialog, returning to the StylePicker. The StylePicker will recommend rebuilding the style list for the added styles. Answer “Yes” to this.

You will then see a rebuilt style list, and your category “My Styles” and your new style “NEWONE.STY” will appear in that category.

Technical notes:

Information about styles you make yourself is stored in a file called A_USER.LS3. This is a text file, but it is better to edit it using the StylePicker editor.

You can make other .LS3 files using the StylePicker editor, using the [Save As] and [Open] buttons.

You can also erase an .LS3 file from disk. Third party added styles are also stored in .LS3 files. Band-in-a-Box will load in all of the .LS3 files that are in the `bb` folder (in alphabetical order), and append them to the StylePicker list.
Technical Information about the BBW.LST file

The Help topics “Select Style with information” and “LS3 files” have information about adding styles to the Styles List.

If you are technically minded and want to modify the styles list file then read on.

The Styles List is built from a text file called BBW.LST. You should only edit this file if you want to change the list of styles, or add styles that you have created.

Technical Information about the BBW.LST file

This is the text file that defines the styles that appear in the Style Picker Dialog box in Band-in-a-Box. You may edit this file to change the information, add/remove styles etc.

File Rules:
- Any line beginning with a semicolon “;” is a comment
- Lines beginning with ~ indicate a new category like jazz, country, pop
- Lines beginning with @ are a description of a style in the format @a\b^c\d
  - where a = style file name e.g. zzjazzsw.sty (max. 8 chars + .sty)
  - b= Long Style Name e.g. Jazz Swing Style (max. 32 chars)
  - c= Style memo
  - d= Examples of songs that can be played in this style
- c and d combined can be a maximum of 255 characters, e.g. c could be 200 characters and d could be 50
- Each style description must be on one-line, carriage returns not allowed in the middle of a style description.

Once made, you add the new information to the style picker by choosing the re-build option inside the style picker. This rebuilds the binary file BBW.LSV from this file BBW.LST.

You can list a style more than once, for example Pop Ballad might be listed under Jazz and Pop Ballad. You can also make your own categories. Like My Favorite styles, and build up a list.

The limit of number of styles in the StylePicker is 20,000 to accommodate the large number of third party styles developed for Band-in-a-Box.

Example excerpt from the BBW.LST file

```
~Jazz
@ZZJazzSW.STY\Jazz Swing Style^This is the “built-in jazz swing style”using bass, drums and piano. Bass plays half notes in “a” section and walks in “b” section.*Satin Doll, Sweet Georgia Brown
@A.STY\This is A^ How about this A style Useful for A songs
@BluHill.sty\Blueberry Hill Style^This is Blueberry Hill*Fats Domino songs
@GARNER.STY\Errol Garner Style^This is garner*I’ll Remember april
@GARNER2.STY\Errol Garner Style #2^This style is in 2 feel for a and b*OLDFOLKS
```

Third Party Styles – LS3 Files

You can create LS3 files to add information to the StylePicker dialog about your styles. The LS3 files are for third party added styles and style data descriptions.

An LS3 file cannot exceed 65,000 bytes (65K). If you need more, use 2 LS3 files. The style data and descriptions show up in the style picker dialog.

- Lines beginning with @ are for style descriptions (memos etc.)
- Lines beginning with the 3 chars ^@ are for the style data
- More information on the format of the style data line is found at pgmusic.com/styledata.htm.

Here's a summary of the style data line (on the next 4 lines)

```
; stylename,soloist# to use (1-255),soloist type to use (see list on web),double time OK (false/true),
; time sign. (3 or 4),straight or swing (sw/ev),16ths or 8ths (8/16),tempolow(30-500),
; tempo high range (30-500), tempo mid range (30-500), style disk # (0-30000) PG uses 1-255)
; melody patch to use (1-128 or higher-see list on web),soloist patch to use (1-128 or higher-see list),
```

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Favorite Styles Button

Another way to load a style is with the favorite styles button, located to the right of the StylePicker button. This opens a dialog with separate lists of Recently Played and Favorite styles.

You'll see “Favorites” and “Recently Played” Radio buttons that toggle between lists of recently played styles and your favorite styles.

The favorites list will start off as an empty one. You can add styles as your favorites by clicking the [Add Fav] button. A similar button is found in the StylePicker window.

Use these buttons to navigate the list.

Use these buttons to modify the list.

The [Search] button will search for a style in the list by name, or part of a name.

The [Sort] button sorts the list alphabetically.

You can save and load sets of Favorites or Recently Played styles.

Use the [Clear] button to clear the list and start a new one.

Click the “Play When Chosen” checkbox to have Band-in-a-Box play your song immediately upon selecting a style.

If this is enabled, every style you select will be added to the top of the list.

Technical Note: The list of style favorites is stored in a text file called StyleFavorites.txt in the BB folder.

Style Aliases Dialog

The Style Aliases selection is found in the Styles menu.

Let's say you've got a new style for Jazz called “Wynt_K.” You can create an alias so that when Band-in-a-Box looks for a Jazz Swing style, it will load in “Wynt_K” instead, so you don't have to make changes to all your songs.
And when you have found a new favorite style, just change the alias. You can also load or save sets of “Alias” files and share them with others.

To type in a style name that you don't have, use the [Custom] button.
- To create a new alias, click on an empty spot (i.e. no alias defined) in the alias list, or click on the alias you wish to edit if you wish to change an existing alias.
- Press the [Choose] button below the Original style box and select the style you wish to be replaced.
- Press the [Choose] button below the Substitution box and select the replacement style (alias).

If you have made a mistake and wish to change your style selection, press the [Clear] button. When you have successfully made an alias, you will notice that there will be a small arrow in the Styles box on the main screen indicating that you have an alias loaded.

You can Export and Import alias files to share with your friends by clicking the [Import..] button to read an alias file from a floppy, or click the [Export..] button to send one out to a disk.

**Tip:** You can temporarily totally disable the Alias feature by unchecking the “Allow Any Style Aliases” checkbox. You can also have confirmation of alias substitutions by checking the “Confirm Substitution” checkbox.

Enable/Disable Style menu item. (Alt+S E)

The Styles menu has an item to Enable/Disable the style. When disabled, the name of the style will have an X at the beginning, which indicates a disabled style. The disabled style won't sound or write any data to the MIDI file. The most common use for disabling a style is when a MIDI file is loaded to the Melody track. Then the style won't sound and conflict with the full arrangement on the Melody track.

**Forced Styles option**

This allows you to keep a style in memory. This way, all subsequent songs that are loaded will not change the style (even if they have a different associated style), so you can easily play songs in the same style. If you've found a new favorite style, you can try it out in all kinds of songs without having to reload the style each time.

For example, let's say we've discovered the “GARNER” style, and want to try it out on all kinds of songs. Select Styles | OK to load styles with songs so that the item is NOT checked. Now when you load a song the new style doesn't load and you can play the song in GARNER.STY. You can temporarily override this setting by loading in another style using the [STY] button or the Style menu, and the new style loaded will stay in until you choose another one.
Using MultiStyles

Band-in-a-Box MultiStyles are styles that can have up to 24 substyles; original Band-in-a-Box styles had two substyles, “a” and “b.” Band-in-a-Box MultiStyles typically have four substyles, but may have up to twenty-four, selected by using part markers “a” through “x.”

You can easily make your own MultiStyles, either from scratch, or combining parts from existing styles to make a MultiStyle. For example, if you have 10 favorite Country styles, you can quickly make a single MultiStyle that has 20 substyles available within the same song.

There are 2 types of MultiStyles

1. MultiStyles in styles, working for every song (e.g. NR_CURR+.STY Nashville Rock Current Multistyle).
2. MultiStyles for a specific song only.

MultiStyles in Styles (“+” Styles)

Styles can be made that have multiple substyles, and you can choose the various substyles using the letters a, b, c, d, etc. up to “x” for 24 substyles.

Our naming convention for MultiStyles is to use a + sign at the end of the style name. For example, MyStyle+.STY would be a MultiStyle.

You can use these substyles easily, just enter the StylePicker and find the category “Styles With MultiStyles,” or search for the “+” character.

For example, load the song NR_CURR+.MGU from the c:\bb\Tutorial BB 2008 folder. This loads the NR_CURR+.sty. When you see the “+” in the style name, you’ll know that this is a MultiStyle.

Right click on a part marker, and you’ll see that there are 4 substyles available.

In the style NR_CURR+, there are 4 substyles, a, b, c, and d.

Standard Pop Song form with 4 substyle MultiStyle

In NR_CURR+ (and as a general rule for styles with 4 substyles):

- “a” substyle is for the verse.
- “b” substyle is for the chorus.
- “c” substyle is for the intro (or first verse).
- “d” substyle is for the break (or interlude).

Choose your substyle by clicking on the part marker, or right clicking to select and define substyles. Here we have chosen “c” substyle, appropriate for the intro or first verse of the song (because the playing is sparse and sustained).

Making your own MultiStyles in Styles

You can make a style that is a MultiStyle. For example:

- Open the StyleMaker, press [Misc].

In the MultiStyle group box, type the name of a style that you would like to use for the c/d section.
If you’d like more substyles, add more styles separated by semicolons (e.g., “zzjazz;zbossa;c_george”). Then you’d have 8 substyles from “a” to “h.”

Note that each of these styles can have a specific RealDrums style, either stored in the style itself (Misc. Style Settings “RealDrums Settings”), or substituted via MIDI substitutions in RealDrums settings.

**MultiStyles in Songs**

If you have a song, you can also use more than 2 substyles for that song. For example, let’s say we have a song that is a Bossa Nova and you want to have a Jazz Swing section. Rather than finding a MultiStyle that has this exact combination, we can make one, in the song, for *this song only* as follows:

Load a song like `c:\bb\styles0\zbossa.mg4`

Right click on a bar number, and choose “Define c/d.”

Then choose ZZJAZZ.STY from the StylePicker.

You will then see that there are 4 substyles now, a, b, c, d. You can use the “d” substyle for Jazz Swing walking bass, since it is the same as the “b” substyle from ZZJAZZ.

Load the song `c:\bb\Tutorial BB 2008\ “Demo of MultiStyle in song only Bossa 2 Jazz.MG4”` and you can see the finished result. This song switches styles using part markers.

---

**Using RealTracks and RealDrums in Songs**

Your songs, styles, and solos can use live audio tracks recorded by studio musicians. Many Band-in-a-Box styles already use these tracks, and you can substitute these live recordings for the Band-in-a-Box MIDI tracks in any song. There is a full chapter on RealTracks and RealDrums, but here is what to do to use them in your song.

**Using RealTracks in Songs - Assign RealTracks to Track Dialog**

The Assign RealTracks to Track dialog assigns a RealTracks instrument to any of the Band-in-a-Box instrumental tracks. It also shows any RealTracks that are assigned to Band-in-a-Box tracks.

**Note:** RealTracks can either be assigned from the style or from the song. This dialog allows you to assign the ones in the song.
1. Clicking on the RealTracks toolbar button and selecting RealTracks Picker Dialog.

<table>
<thead>
<tr>
<th>Realtracks Picker Dialog</th>
<th>(Shift Click)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Realtracks Preferences</td>
<td>(Ctrl Click)</td>
</tr>
<tr>
<td>Select better RealTracks for this tempo: [Bass, Piano]</td>
<td></td>
</tr>
</tbody>
</table>

2. Right-clicking or double clicking on an instrument name at the top of the Band-in-a-Box main screen and choosing Assign RealTracks in the menu.

3. Press the [Assign to Track] button in the RealTracks Settings dialog.

The dialog allows you to assign a specific RealTracks instruments to a track in a song. It also displays any RealTracks that are currently assigned to each track.
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Tip: RealTracks in styles are assigned in the StyleMaker. Press the [Misc.] button or use the StyleMaker menu command Style | Misc. Settings to go to the Misc. Style Settings dialog, then click on the [More] button for the More Settings dialog.

Using RealDrums in Songs

There are several ways to hear RealDrums with new or existing Band-in-a-Box songs. Many styles already use RealDrums, and there are several ways to tell if your song is using them.

You’ll see that “Drums” is colored green in the Synth window, and by selecting the Drums radio button the name of the RealDrums set will show above the instrument box.

Right-click on “Drums” and a menu opens that includes the name of the RealDrums in the style. Click on this menu item to open the RealDrums Picker and select a different set.
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The RealDrums Picker can also be opened directly by clicking on the toolbar button.

This action selects a RealDrums for the current song. It does not change the RealDrums set used in the style.

**RealDrums Styles**

**Styles with RealDrums**

There is a separate category in the StylePicker for styles with RealDrums.

These styles can be identified by the style name beginning with a minus sign. For example “–ZZJAZZ.STY” is a version of the ZZJAZZ.STY that uses RealDrums.

Styles (.STY) can have RealDrums (e.g. “–ZZJAZZ.STY”). This setting is found in the StyleMaker’s Misc. Style Settings dialog.

You can set the RealDrum style inside the StyleMaker, by pressing the [Misc] button, and then typing the name of the RealDrum style.

RealDrums can be substituted for MIDI drums on existing styles in the RealDrums Settings dialog, which opens with Ctrl+click on the RealDrums toolbar button or with the [RealDrums] button in the Preferences dialog.
With “Enable RealDrums” checked RealDrums may be used rather than MIDI. There is also a hot key combination to turn RealDrums on/off (Ctrl+Shift+F6).

The hot keys also work while the song is playing. This will substitute RealDrums for MIDI styles. You can change the setting from 1 to 5.

If set to 1, almost all MIDI drums will get substituted by RealDrums. If set to 5, only RealDrum styles that match the style perfectly will get substituted.

Technical note: The text file a_pgmusic.ds provided by PG Music controls this, and users can make other files MySubs.ds if they make their own RealDrums styles.

Individual songs can have RealDrums assigned to them. You can set the desired style in the RealDrums Settings dialog with the “For this song only, use this RealDrum style” setting. This will let the current song use the specific RealDrums style.

The [RD] button opens the RealDrums Picker where you select the specific RealDrums style that you would like to assign to your song.

You can also open the RealDrums Picker directly from the toolbar with the RealDrums button.

RealDrums are normally saved with songs, unless you have unchecked “Save all Settings with Songs” in the Assign Instruments and Harmonies to Song dialog. In that case, you can select and save a RealDrums style with your song by going to File | Save Song with Patches & Harmony (Alt+F2) to assign a RealDrums style.

The Edit Settings for bar... dialog (F5 key) lets you use multiple RealDrums styles within a song - either using the RealDrums from a Band-in-a-Box style or specifying a RealDrums style to use at a particular bar.
Arranging Your Song

Note: The chapter titled The Main Screen has additional information on the settings described here.

Setting the tempo
The tempo is displayed under the title.

Tempo is set based on Style when choosing File | New. The tempo is set to the best tempo for the current style.

Let’s say you wanted to change the tempo to 160 beats per minute (bpm). Click the mouse on the arrow buttons to adjust the tempo.
- LEFT mouse click to change by 5 beats per minute at a time.
- RIGHT mouse click to change by 1 beat per minute at a time.

You can quickly enter a specific tempo for the song by clicking on the tempo (hot key is Ctrl+Alt+T, or menu item Play | Tempo | Set Tempo…), and a dialog will open up allowing you to type in a tempo.

Tap the tempo
Not sure of the tempo for your song? Tap it in real time on either the minus [-] key or the equals [=] key on your computer keyboard. Four taps on the minus key sets the tempo, four taps on the equals key sets the tempo and starts the song playing. You can also click the mouse on the on-screen [-] and [=] buttons to the right of the tempo box.

“Framing” the Song
Framing a song designates the first and last bars of each chorus and the number of choruses Band-in-a-Box will play before playing the standard 2 bar ending.

Here we have selected bar one to be the first bar of the chorus and bar 32 to be the last. The chorus will play three times, jumping to the two bar ending the third time through.

With the “Loop” checkbox enabled the entire song will keep repeating until stopped. (This is a different feature from the “LoopSec” checkbox, which loops a selected section of the song.)
The “Fake” checkbox is for a “fake sheet” style of chordsheet display with 1st and 2nd endings and repeats.

The [Memo] button allows you to put in a memo to a song. You can type in a memo or paste text from the Windows clipboard. The song memo has a “Close w/play” option to close the memo automatically when “Play” is pressed, and not reopen when stop is pressed. This setting, in combination with the “Auto-open” setting, ensures that the memo opens when the song opens, but closes, during playback.

The [S] button opens the Song Settings dialog for additional settings such as endings, tags, style variations, pushes, rests, and chord embellishments.

Song Settings Dialog
As well as the [S] button in the Title window, the Ctrl+N keys or the Edit | Settings (for This Song)… menu command brings up the Song Settings dialog.
Here, you can choose from song settings such as chorus variations, chord embellishments, tag jumps, and endings, to make your song interesting and varied.
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This button opens a dialog box where the song’s title and its main settings can be typed in. These settings are usually made in the main screen title window.

This button opens the **Edit Settings for Current Bar** dialog.

This button opens the **Chord Options** dialog where you can edit chords and add rests and pushes.

These are additional song settings that are saved with the song.
Vary Style in Middle Choruses
If set to “Yes,” the song will play in substyle “b” throughout the Middle Choruses. The Middle Choruses are considered all choruses except the first and last ones.

For example, in the Jazz Swing Style, since the “b” substyle is Swing, all of the middle choruses will have swing bass. (Whereas the “a” substyle is playing half notes on the bass.)

If set to “No” the middle choruses will play A and B substyles exactly as they appear in the song as outlined by the part markers.

Allow Pushes in Middle Choruses
This is most frequently used if there are pushes in a song (indicated by the “^” symbol), but you don’t want these pushes to play in the middle choruses. Simply set the checkbox to “No” (disabled) and the pushes will be ignored in the middle choruses. This is to allow for uninterrupted soloing choruses.

Allow Rests in First/Middle/Last Chorus
These parameters allow you to decide which choruses will play any rests that are present in a song (indicated by the “.” symbol). For example, you may have put rests into a song but don’t want the rests to play in the middle choruses, since you are using them for soloing: simply set the ALLOW RESTS IN MIDDLE CHORUSES checkbox to “No” (off).

Allow Pedal Bass in Middle Choruses
This determines whether Pedal Bass effect will be allowed in middle choruses.

Allow Embellishment of Chords
The Jazz styles include embellishment of chords. This means that if you type a C7 chord, the piano part may play a C13 or a C7b9. This makes the arrangement sound more authentic, as this is a common practice in Jazz playing. It also means that you don’t have to worry about inputting these types of extensions into your arrangements, since they will turn up automatically if this feature is enabled.

Tip: If you are hearing b9 and b13 embellishments on a C7 chord that is clashing with the melody, you should rename the chord C9 or C13, which will ensure natural 9 and 13 embellishments.

Tag Settings
A tag (also referred to as a coda) is a group of bars that are played in the very last chorus of a song. If you select the “Tag Exists?” check box then the tag will play during the last chorus of the song. After the bar you specify as the “Tag Jump After Bar #” the song jumps to the “Tag Begin At Bar #” and plays through the “Tag Ends After Bar #” and then plays a 2 bar ending as usual.

Song Endings
Band-in-a-Box will optionally create a two bar ending for your song, the standard ending is 2 bars appended to the end of the song.

The “Use 4 Bar ending for RealTracks” option allows extra time for the natural decay of the instruments.

The “Start the ending 2 bars early” option gives you an alternative to end the song on the last bar of the song. Band-in-a-Box will still play an ending on the chord that you specify, and the ending will occur as a 2 bar phrase beginning 2 bars before the end of the form. This results in more natural endings for many songs.

No Endings
Song endings can be turned off for all songs, or on a song by song basis. For example, you might want to have your own custom ending that ends the song on the 3rd beat of a bar by playing a shot.

To turn the song ending off for a single song, set the “Generate 2 bar Ending for this song” checkbox to = “Off” (cleared).

To turn song endings off for all songs, choose Opt. | Preferences and then press the [Arrange] button to open the
**Arrangement Options** dialog.

Set the “Allow any Endings” checkbox = “Off” (cleared).

**Fade Out Song**

You can now quickly choose a fadeout ending, just press the [Fade] button in Song Settings, and Band-in-a-Box will fadeout the last “x” bars of the song (you can specify how many bars). Or customize the fadeout with precise values for each bar.

**Sections on a new line (for this song)** is an option to enable/disable the Section Paragraphs feature for this particular song.

**RealTracks options for this song only** set the RealTracks options for the song without changing the global RealTracks Settings.

- **Solos should have a ‘bluesy’ feel**
  When set, any soloist or RealTracks background soloist, will treat any major triad (C, F, etc.) like a dominant seventh (C7, F7) and use flatted 7th for soloing.

- **Allow RealTracks substitutions based on tempo**
  When set, the program will find the best RealTracks to use at the current tempo. For example, it might substitute an acoustic bass recorded at a higher tempo, closer to the tempo of your song. The RealTracks name will appear on the main screen with a tilde (~) to indicate the substitution.

- **Allow RealTracks Shots, Holds and Pushes**
  When set (recommended), Band-in-a-Box will create realistic shots, holds, and pushes in your song. If unchecked, Band-in-a-Box will simulate a shot. Not all styles have these available. Check the RealTracks\Library\Holds folder and the RealTracks Picker “Holds” column listing the set number.

- **Allow RealTracks Half-time/Double-time**
  When set, this song will allow RealTracks to play at half time (twice the usual tempo) or double time (half the usual tempo). This allows you, for example, in a ballad at a tempo of 70, to add a RealTracks Sax solo with a tempo of 140, and play it as a double time, which will match the ballad tempo of 70.

**Repeats and Endings**

You can add repeats and endings so that the Lead Sheet window will display and printout using 1st /2nd endings. The Repeats and 1st/2nd Endings button launches the **Edit Repeats and Endings** dialog where you can enter repeats, 1st and 2nd endings, DC, DS al coda and more. The “Auto-Find” feature will intelligently detect 1st/2nd endings automatically for you, so you can view and convert any Band-in-a-Box song to include 1st/2nd endings in lead sheet format.

The **Edit Repeats and Endings** dialog can also be entered by right-clicking on the chordsheet and selecting Repeats/Codas/1st-2nd endings from the pop-up menu.

When you have created your repeats and endings, either manually or automatically, simply select the “Fake Sheet” checkbox on the Chordsheet or Lead Sheet window. Band-in-a-Box will hide the repeated bars and display the fake sheet using 1st and 2nd endings.

There is a tutorial for this feature in the **Tutors and Wizards** chapter, and also in the Help file topic **Repeats Edit Dialog**.
Add a Melody – MIDI and/or Audio

Record a MIDI Melody

Band-in-a-Box is much more than an intelligent arranger and accompanist. You can record your live MIDI performance to the Melody or Soloist track, enter a melody in the Notation note-by-note, or use the Wizard feature to record with either your computer keyboard or a connected MIDI keyboard controller.

If you want a metronome to play while you are recording, you can select it in the Opt. | Preferences dialog. You can even have a visual metronome if you like.

Press the [Rec] toolbar button to begin recording. This launches the Record Melody dialog box, which prompts you to set the position (bar and chorus) where you wish to start recording.

Pressing the [Record] button will start Band-in-a-Box recording what you play on the Thru track. An audible count-in is played prior to recording.

You can punch in/out, overdub, and record directly to the ending or the tag, and use the filter to choose which MIDI events are recorded.

Once you have completed recording your melody, Band-in-a-Box will ask you if you would like to keep the take and if you would like to copy the recorded chorus to the whole song.

Sequencer Mode

There are 2 tracks in Band-in-a-Box to add your own recordings. These are the Melody and Soloist tracks. Normally you would want a single part on each of them. But, since MIDI information can have separate channels, it is possible to store 16 separate parts on each of the Melody and Soloist parts. When the track has been set to “Multi (16) -Channel” we refer to this as “Sequencer Mode.”

If you want to use the 16 separate parts for the Melody track, you need to set the Melody Track type to “Multi (16) -Channel.”
Now, when you are in this multi-channel mode, output from the Melody part will be on whatever MIDI channel the information is stored on, and will not be using the Melody MIDI channel. Both the Melody and Soloist tracks can be set to multi-channel play, for a total of 32 channels.

Tip: Looking for inspiration? At the click of a button, the Band-in-a-Box Melodist will write entire new songs from scratch, complete with Chords, Intro, Melody, Solo, Ending, and even an original Title. Or you can enter your own chord changes and let the Melodist create a new melody over them. There are more than 100 Jazz, Pop, Rock, Latin, Country, and Classical melody styles.

Embellishing the Melody
When musicians see a Lead Sheet that has a melody written out, they almost never play it exactly as written. They change the timing to add syncopation, change durations to achieve staccato or legato playing, add grace notes, slurs, extra notes, vibrato, and other effects. Now you can have Band-in-a-Box do these automatically using the Embellisher.

If you enable the Embellisher, any Melody will be embellished as it is played so that you hear a livelier and more realistic Melody - and it's different every time.

The Embellisher button opens the Melody Embellisher dialog with many user options to control the embellishment settings. The Embellisher Presets allow you to choose a combination of common settings for the Embellisher quickly.

The Embellisher only active while the music is playing; the recorded Melody track isn't affected. There is an option for the Embellisher to only humanize the timing of the music if the timing was "stiff" to begin with. This allows the Embellisher to leave the timing of human input melodies alone, and humanize only the ones that were entered in step-time.

The Embellisher Memo describes the current embellishment, with statistics counting the number of embellished notes.

You can save/load your own presets for the Embellisher. When you have made a custom setting in the Embellisher dialog, press the Export button to save the data as an .EMB file.

When you want to recall the saved preset, press the Import button, and load in a previously made .EMB file. You can share your favorite presets with other installations of Band-in-a-Box using the EMB files.

Record a Live Audio Track
You can record an audio track of your live vocal or instrumental performance and save it to an audio wave file along with the Band-in-a-Box accompaniment. Make sure that you have a microphone plugged in to your sound card, or a connection from a mixer, keyboard, or other audio device connected to the Line In jack on your sound card.
Click on the [R.Aud] button to prepare to record and audio track. The VU Meters will also open automatically when the Record Audio dialog is opened.

The VU Meters will close or stay open when the dialog is exited depending on the “Leave VU Meters open” setting in the Record Audio dialog.

The VU meters show the average strength of the signal, with a dB scale, and a clip indicator. Clipping indicates that the signal has overloaded, and will sound distorted (clipped). The green area represents normal levels, while red indicates an overload. Ideally, the sounds should remain in the green and avoid the red altogether. Unlike analog recording, where it's good to get a “hot” high signal, digital recordings need to absolutely avoid high levels since any overload of the signal will result in clipping and a ruined recording.

The Record Audio dialog displays the mono/stereo status of the recording. If you want to change to/from stereo (to/from mono), press the [Audio Options] button in this dialog. The mono/stereo track status is also indicated on the Title bar at the top of the main screen.
Set the start point for the recording.
You can record from the Start of the song, somewhere in the middle, or punch in by choosing a bar and chorus # to
start recording.

Press [Record].

Audio recording begins. If you've set the “Show VU Meter while recording” option, then
the Recording VU Meter will open up and display during recording so you can monitor
the VU meters.

Press [Stop] or press the [Esc] key.

You will then see the “Keep Take?” dialog.
If you are happy with your recording, you
should choose [OK -Keep Take] and the
audio will be added to the Audio track.
You can listen to the results by pressing
[Play].

If you are not happy with the results, you can choose Edit | Undo Keep Audio Take and you will be back to where
you were prior to the recording. You can also choose the option to [Take Again], which reopens the Recording
dialog.

Options

- Copy 1st chorus to whole song
- Overdub underlying audio
- Retain audio past last recorded

If you've recorded only 1 chorus of the song, you can choose the option to
copy that first chorus of audio to the whole song. This will fill up the whole song with the audio by repeating it as
many times as necessary. Then you'd just need to record the ending of the song.

At the end of recording, you receive an option to overdub with the underlying
audio. This means that both recordings will be merged together to form a new file, with both recordings preserved.
There is also an option to “Retain audio past last recorded.” This allows you to “punch out” and preserve the rest of
a previously recorded take.

Opening and Importing Audio Files

A mono or stereo WAV file can be imported to the Audio track, optionally merging with or replacing any existing
audio track. Choose the menu item Audio | Import Audio (WAV, WMA, MP3, WMV) File. You then choose an
audio file to import. The Import Audio File dialog is then displayed, which allows selection of the point to insert the
audio file, and whether to merge or overwrite existing audio in the range.

Audio Chord Wizard (Chords from MP3)

This feature analyzes a WAV, WMA, MP3, WMV, or CDA audio file and imports it to Band-in-a-Box.
Using the Audio Chord Wizard is a great way to learn and practice popular songs as you
play along and see the chords. There is a Chordsheet window in the Audio Chord Wizard that shows the chords for the whole song on a single screen. This allows you to click on a bar on the chordsheet to jump to that area of the song.

You can mark sections of the song using part markers, and the sections will begin on a new line with a line space between so they are clearly seen. You can then learn the form of the song, as you can see the various sections (intro/verse/chorus/break) at a glance, or quickly jump to any section simply by double clicking on that part of the chordsheet.

The Audio Chord Wizard is fully described in the *Tutors, Wizards, and Practice Aids* chapter.

**Harmonize the MIDI Melody**

Press the `[M]` button in the Synth window to add a MIDI harmony to the Melody track. Pressing the `[F]` favorites button brings up a list of the last 50 harmonies used.

The *Select Melody Harmony* dialog box allows you to choose from any of the pre-defined harmonies and even allows you to define your own.

This button opens the Harmony Maker, where you can customize Harmonists.

You can search for a harmony by a keyword (i.e. typing in the first few letters of a harmony name) in either the Harmonies or Favorite Harmonies dialog.

This button is to turn off any notes that are stuck on. (There shouldn’t be any.)

Enter the number of the harmony you want to go to and press [Go To #].

Pressing either the `[Fav]` or the `[F]` button produces a list the 50 most recently loaded harmonies.

The [No harmony] button disables the harmony for the song. The keystrokes **Shift+F10** also allow or disable the Melody harmony.
When adding a harmony to the Melody (or Soloist) you can use the option to loosen up start times of for the harmony notes to achieve a more natural, richer harmony sound.

Choose menu item Melody | Edit | Utilities | Loosen Start Times. You can select the range of adjustments. For example, if you want the notes to be played earlier, use a negative number. A setting of minus 5 to positive 6 would cause the start times to be varied up to 5 ticks early and 6 ticks late. There is also a setting to choose whether you want only the harmony notes present on the track to be affected, leaving the original melody unaffected.

Convert Track to Harmony

This feature permanently writes the specified harmony to the Melody or Soloist track, instead of being applied in real time. Use the buttons in the Select Melody/Soloist Harmony dialogs, or the Convert Harmony... menu command found in the Melody and Soloist menus. You’ll then see a dialog allowing you to choose the range of the song to add the harmony, either the whole song or a specified range of bars.

There are options to “Eliminate Note Overlap” and “Loosen start times of notes” for the harmony notes to achieve a more natural, richer harmony sound. The melody is not affected, only the harmony notes, and there are options for the range of spread for the harmony notes.
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Note: Once the track is converted you should set the harmony to “None” or you will hear harmonies being applied to the harmony notes, i.e., “harmony-on-a-harmony.”

Live Harmonies While Band-In-A-Box Is Stopped

Normally, the Live Harmony feature is not active when Band-in-a-Box is stopped. But you can in fact use the Live Harmony even while a song is not playing.

You need only to open the Harmony | Real Time MIDI Harmonies menu item. Note that this Live Harmony dialog must remain open for this feature to be active.

When this dialog (shown above) is open, you can play a chord in the Left hand (below the split point set in the dialog), and the chord you play is and displayed in the dialog. Then, the notes that you play in the right hand will get harmonized according to this left-hand chord.
If you set the **Only Harmonize if Left hand chord held down** you'll be able to control what notes get harmonized by holding down the chord when you want a note to be harmonized.

**Play Along with the Wizard**

The **Wizard** is an intelligent play along feature that is controlled with the bottom two rows of your computer’s QWERTY keyboard. The bottom row of keys plays chord tones; the second row plays passing tones. You play any key in either row and never make a mistake!

In the **Play** menu, toggle **Wizard uses “Smart” notes to “off”** (unchecked) to have the Wizard provide you access to the chromatic scale. Toggle it “on” to have access only to the notes based on the chord/key of the song.

This also allows you to record to the Melody or Soloist track without an external MIDI keyboard, and can even be used to trigger the Soloist Wizard. Also, play along using the Wizard works with the harmony feature, so you can play along live from your QWERTY keyboard in 4-part saxophone harmony for example.

**Playing the Wizard**

The Wizard Keys are active during playback. The active keys are the lower 2 rows of the keyboard.

```
ASDFGHJKL;’ ← This row plays PASSING Tones (2nd, Fourth, Sixth)
ZXCVBNM, . / ← This row plays CHORD tones (root, 3rd, 5th, 7th)
```

**Melody Wizard**

For songs with melodies, there are QWERTY keys (Enter, \, T, 6) that trigger notes from the melody as the song is being played. Other keys trigger 1-4 approach notes from below or above. The notes can be recorded, to humanize a stiff melody with better timing, and approach notes also useful for sight reading, rhythm practice or to perform.

Works with harmonies
- Melody notes: T, 6, Enter, \n- Same Melody note: 5
- Approach notes: QWER YUIO
- Octave set: 1, 2, 3

MIDI notes also work (if **Preferences [Transpose]** is set to “Allow Melody Wizard on THRU part”).
- Octave set: E(40), F(41), G(43)
- Melody notes: F(53), G(55)
- Approach notes: B(47), C, D, E A, B, C, D(62)

To use the Melody Wizard, make sure the Keyboard Wizard is enabled on the main screen.

This will also enable the MIDI Wizard on the QWERTY keys.

If you also want to use the Melody Wizard on MIDI notes, go to **Preferences [Transpose]** and enable “Allow Melody Wizard on THRU part” in the **Settings for transposing songs when loaded or “Do it Now”** dialog.

* .MGU

Then, choose a song that has a Melody track.

Mute the Melody track by right clicking on the Melody track (Alt+9).

Play the song.

**ENTER or \**

As you play the song, you can use the **Enter** key or the \ key (or T or 6 above the T) to play Melody notes.

**W,E,R,T**

These will be approach notes up to the melody. You can start on any note.

**Q,E,R,T**

Starting on a Q instead of W will use wider voicings for approach notes.

**I,U,Y,T**

These will be approach notes down to the melody. Start on any note.

**O,U,Y,T**

Starting on an O instead of I will use wider voicings for approach notes.
### MIDI Keyboard Wizard

By turning on this Wizard setting in the **Options** > **Preferences** > **Transpose** dialog, notes played on a Thru channel MIDI keyboard will be played through the Wizard. C, E, G, and Bb will be mapped to chord tones while D, F, A, and B will be passing tones.

### Changing Instruments and Settings for the Wizard

As a play along instrument, the Wizard uses the Thru instrument part. To change the instrument patch, volume, reverb, etc. for the Wizard select the Thru instrument in the synth window.

### Import a MIDI File

With the amazing Band-in-a-Box Chord Wizard, you can convert any MIDI file into a Band-in-a-Box song, complete with Melody and Soloist parts. Then apply all of the powerful music making features of Band-in-a-Box to create new accompaniments, add harmonies, add soloing, and embellish the melody. And when you're finished, you can always resave your song as a MIDI file again.

### MIDI File Chord Interpretation Wizard

You can open up any MIDI file in Band-in-a-Box, and Band-in-a-Box will automatically figure out the chords of the song for you. It automatically analyzes the MIDI file, figures out where the bass, piano, melody and other tracks are, and then figures out the chord changes for the song. The chords are written onto the Band-in-a-Box Chordsheet like any other song. You can also read tracks into the Melody and Soloist tracks.

To interpret a MIDI file, go to **File** > **Import Chords from MIDI file** or use the keystroke combination `Ctrl+Alt+I`. This launches the **Interpret Chords from MIDI file** dialog where either user settings or presets can be applied to specify how the chords should be interpreted.

![Interpret Chords from MIDI file](image)

Select a preset or choose custom settings for the MIDI Chord Wizard.
You can open an entire MIDI file into Band-in-a-Box. The chords will be automatically interpreted by the Chord Wizard and the MIDI file will play and display on the Melody track. A “silent” style will be loaded so you'll only hear the MIDI file. When the file is saved, the extension will be MGX, allowing you to easily identify the BB songs that you have that contain entire MIDI files.

**Add a Solo - “The Soloist”**

That’s right! Band-in-a-Box can “solo like a pro” in hundreds of styles. Use the [Soloist] button on the main screen to open the Select Soloist dialog box and choose from over up to 2000 Soloist profiles.

You can select a Soloist type (e.g. Modern Jazz) and see only soloists matching the type. And you can also filter to show/not show soloists from Soloist sets that you don't have.

Use the preset Soloist settings, or choose a Mode and which Choruses to solo.

**RealTracks Solos**

Band-in-a-Box has RealTracks instruments, which are live audio recordings of studio musicians. These RealTracks replace the MIDI track for that instrument, and can be controlled just like the MIDI instrument (volume changes, muting etc.). RealTracks can be can be generated to the Soloist (or Melody) track using the Soloist feature.

There are hundreds of RealTracks soloists available, starting at #361 in the list of soloing styles.
RealTracks solos are saved with the song, so you will hear the RealTracks play the same solo when you reload the song. When you generate a solo using RealTracks, Band-in-a-Box will remember this, and when you go to save the song, Band-in-a-Box will ask you if you want to save that solo (and thereby freeze the Soloist track). If you say yes, then the solo will play instantly the same way when the song is reloaded. Of course you can freeze the soloist track yourself at any time. Note that only one solo can be saved. You can’t generate a bunch of different segments of solos; only the last one will be saved.

With the “Trade” feature, you can Trade 2’s, Trade 4’s, or Trade 8’s between your live playing and the Soloist.

There is a dedicated function to vary the start times of notes on the Melody or Soloist tracks, with options for what notes to affect (harmony, chords, and amount of variance). Choose menu item Soloist | Edit Soloist Track | Utilities | Loosen Start Times.

Using the Soloist Feature

1) Generate a Soloist and practice the solo by looping it, slowing it down, or printing it out, until you can perform a great solo on any chord changes!

2) Generate a Soloist and attach a Harmony such as “Big Band Brass” to create phenomenally quick and interesting Big Band Arrangements automatically. Generate a standard MIDI file or print them out (with PowerTracks Pro) for you and your friends.

3) Have the Soloist play a solo according to your accompaniment and arrangement (along with the other members of your Band-in-a-Box, of course!)

4) Trade 4’s in a call-response fashion with the Soloist (you solo for 4 bars, Band-in-a-Box solos for 4 bars, etc.)

5) Concentrate separately on different aspects of your playing with assistance from the “Wizard.” From soloing with proper phrasing and “feel” (the best notes are included automatically) to accompanying a soloist with confidence and authority (Tip: try muting out one of the accompaniment parts such as the piano or guitar part and play along to the Soloist in a supportive role-- its fun!)

6) Use the Soloist track to record another part in addition to the Melody and other parts provided by Band-in-a-Box.

7) Generate a Soloist on chords/keys that you would like to practice. Band-in-a-Box will play and solo with you all day without getting bored. For example, if you want to work on your II-V7-I progressions (“two-five-one”), you can just type the chords you want, and generate a solo to play over those changes. As the solo plays, you see the notation, can you can sight read along. Pressing the “Loop Screen” checkbox on the notation will loop the notation screen so you can master each 4 bar phrase (II-V-I) and then move ahead to the next one!

The Soloist Maker [Edit] button gives access to the advanced settings in the Soloist Editor where you can edit existing profiles or create new Soloists of your own.

To see the Soloist part play in standard music notation open the Notation window and press the [S] button at the far right of the instrument buttons.
Automatic Songs - “The Melodist”

Feel like composing a brand new song? With Band-in-a-Box you can compose a new song, in the style of your choice complete with intro, chords, melody, arrangement, and improvisations, all created by the program! All you have to do is pick from one of the “Melodists” and press [OK] - the program then automatically generates the intro, chords, melody, and arrangement in the chosen style. It even auto-generates a title! You can go from nothing to a completed song in less than 1 second!

You can also auto-regenerate any part of a song and modify it to suit you. The Melodist will also generate a melody over an existing chord progression. A “Melodist Juke Box” mode creates and performs new compositions in succession.
Launching the Melodist

To launch the Melodist, press the [Melodist] button on the main screen, or use the Shift+F5 hot keys.

Melodists can be filtered by “Genre” (e.g. EZ listening) to show only Melodists in that genre.

You can also filter to show/not show Melodists from Melodist sets that you don’t have.

Check “Show if N/A” to list all Melodists, even if they are not present in the :\bb folder.

Note: Band-in-a-Box also has a SoundTrack feature that allows you to generate music in the style you choose for any length of time you specify. Click on the SoundTrack toolbar button to launch this feature.

Edit Functions

- Edit | Undo and Edit | Redo allow you to Undo (or redo) most operations.
- Multiple Undo supports up to 999 levels of undo (configurable). The default number of undos is 99. If you need to change this, it can be done in Opt. | Preferences “Number of Levels of Undo.” The range can be 5 to 999. You can also choose Edit | Redo to redo an undo.

Technical Note: Audio Undos are large WAV files, so are stored in an Undos folder in the BB directory. This directory is emptied when the undos are no longer needed.

- Edit | Cut functions like a delete command. It removes bars of chords from a song.

Highlighting Regions

This feature makes it easier to perform editing operations, such as copy/insert, etc. Simply highlight the region and select the option. This feature also aids in Copy from..to...; Erase; Transpose; Insert; and Delete. For example, if you select (highlight) a region by dragging the mouse and then choose one of the Edit menu commands the dialog box will automatically adjust to the correct values, based on the region that you've highlighted.

To select a region of Chordsheet, Notation, or Audio window, you can Shift+click on the end point to easily select a large area.

The Copy Chords and/or melody dialog is typical of the range selection dialogs used by several functions. You are able to set a range for the function to be either part of the song, or the whole song.

Copy and Pasting a Section of Chords

Copying a section of chords is done in the same manner as copying text in a Windows word processor (read on if you are unfamiliar with how this is done). There are also similar “keyboard shortcuts” for these operations as listed in Keystroke Commands – Hot Keys section of this guide.

Copying Chords to the Windows Clipboard

- Select the region to copy. Place the mouse cursor at the bar to begin the selection. Then, holding down the left mouse button, drag the mouse over the region. As you do this you will see that the region will be inverted (i.e. looks dark). When you have selected the desired region of chords to copy, release the mouse button.
- Copy the selected region to the clipboard. Click on the Copy button or choose Copy from the Edit Menu.
**Pasting Chords from the Windows Clipboard**

Assuming you have already copied some chords to the Clipboard (see previous topic), you are then ready to paste the copied chords into another part of your chordsheet.

- Move the highlight cell to the bar to begin the paste of chords.
- Click on the Paste button or choose **Paste** from the Edit Menu.

Tip: The copied section remains in the clipboard and can be used repeatedly. Example: If you're inputting a song with verse, verse, bridge, verse, you can simply copy the first verse to the Clipboard, and then repeatedly paste-in the other verses. The clipboard contents remain intact even if you load in a new song, so you can copy and paste between songs.

**Additional Copy function for Chords/Melody**

The menu command **Edit | Copy From.. To..** launches the **Copy Chords and/or melody** dialog.

**Copy Chords and/or melody**

<table>
<thead>
<tr>
<th>Copy From Bar #</th>
<th>1</th>
<th>Chorus #</th>
<th>1</th>
<th>Copy Chords</th>
<th>Clear</th>
<th>Copy Bar Settings</th>
<th>Column 10</th>
<th>30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Num Bars to Copy</td>
<td>8</td>
<td>Copy Bar Settings</td>
<td>Column 10</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copy To Bar #</td>
<td>17</td>
<td>Chorus #</td>
<td>1</td>
<td>Copy Melody</td>
<td>Clear</td>
<td>Copy Soloist</td>
<td>Column 6</td>
<td>12</td>
</tr>
<tr>
<td>Insert Bars at destination</td>
<td>1</td>
<td></td>
<td>Clear</td>
<td>Copy Lyrics</td>
<td>Column 10</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td># of times to repeat copy</td>
<td>1</td>
<td></td>
<td>Clear</td>
<td>Copy Lyrics</td>
<td>Column 10</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>With each copy, transpose</td>
<td>0</td>
<td>semitones</td>
<td>Clear</td>
<td>Copy Lyrics</td>
<td>Column 10</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Random # of semitones</td>
<td>Column 10</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This allows you to copy Chords, Melody, Soloist, and Lyrics for a range of bars. If you're copying the Melody/Soloist you'll need to specify which chorus you wish to copy.

If you want to extend the song by inserting a new section by copying an existing range of bars, then select the “Insert Bars at destination” checkbox to insert the extra bars.

**"K" Quick Copy Method**

By simply typing “K” at a bar followed by the **Enter** key you can instantly copy the last 8 bars to the current position. By adding additional keys in the K command, you can customize this shortcut (e.g. typing K 12, 3 would copy from bar 3 for 12 bars to current position.) The current position is advanced to the bar beyond the copy. This speeds up song entry!

For example, if you're entering a song that has a repeating section of chords for 8 bars. Type in the first 8 bars of chords, and then move to bar 9 and then type: k, **Enter**.

The last 8 bars will be copied to bar 9-16, and the cursor will be moved to bar 17, so you're ready to continue with the tune. If you get to bar 25, and would like the chords from 1-8 to be copied to 25-32, type k, 1 and this will copy 8 bars from bar 1 to bar 25.

The chords always get copied. The Melody, Soloist, and Lyrics also get copied if these items are set in the **Copy Chords and/or melody** dialog.

**Copy Rests**

With the menu selection **Edit | Copy Rests** you can copy the attributes of a chord over a range of other chords. Rests also include shots and held chords.
Erase From.. To..

To erase bars with additional control for erasing the Melody, Soloist, and/or Lyrics, choose **Edit | Erase From.. To..** to launch the **Erase Chords and / or melody** dialog box:

With this dialog, you have complete control over erasing a number of bars of chords and/or the Melody, Soloist, and Lyrics. If you're erasing the Melody, Soloist, or Lyrics you need to specify which chorus you wish to erase.

**Intro Bars – Auto Generate (or Remove)**

To generate an intro, press the [Intro] button (or choose the **Edit | Intro Bars...** menu item). The **Generate Chords for Intro** dialog opens.

With a single press of a button you can auto-generate a 2, 4, or 8 bar intro for any song. The chords will be different each time, and you can keep trying as often as you like until you get the progression that you want. The intro generated will be an intelligent chord progression (i.e. appropriate for an intro) in the chosen style of music (Jazz/Pop). It can have optional pedal bass, and will “lead” correctly to the first chord of the song.

The duration of the intro can be set to 2, 4, or 8 bars. You can also get a pedal bass figure inserted throughout the intro. Press the [Remove Intro] button to delete any intro present in your song.

**Insert / Delete Bars**

- Choose **Edit | Insert Bars** and the program will ask you to type in the number of bars you wish to **insert**.
Choose Edit | Delete Bars and the program will ask you to type in the number of bars you wish to delete.

Nudge Chords/Melody

The “Nudge” feature allows moving a range of chords by any number of bars/beats. For example, let’s say that you have entered a complete song chord progression, and you then realize that all of the chords starting at bar 23 are 1 beat too late (maybe due to a time signature change). You can move all of the chords 1 beat earlier, by setting the nudge at bar 23, beat 1, and duration of the nudge to -1 (minus 1) beats.

You can nudge chords and/or Melody/Soloist parts.

Repeats/codas/1st-2nd endings

Most lead sheet-style printouts contain 1st/2nd endings, repeats, coda, tag, and sign markings. Band-in-a-Box now supports entry, display, and printout of song forms using these symbols. This command launches the Edit Repeats and Endings dialog where you can enter repeats, 1st and 2nd endings, DC, DS al coda and more.

The “Auto-Find” feature will intelligently detect 1st/2nd endings automatically for you, so you can view and convert any Band-in-a-Box song to include 1st/2nd endings in lead sheet format.

When you have created your repeats and endings, either manually or automatically, simply select the “Fake Sheet” checkbox on the Chordsheet or Lead Sheet window. Band-in-a-Box will hide the repeated bars and display the fake sheet using 1st and 2nd endings.

Reduce (durations of chords by ½) cuts chord durations by 50% (e.g., 4beats>>2beats, 2beats>>1beat, etc.).

Expand (durations of chords by 2) doubles the durations of chords (e.g., 1beat>>2beats, 2beats>>4beats, etc.).

Unfold (convert To 1 BIG Chorus)

Choose Edit | Unfold (convert to one BIG chorus) to unfold a multi-chorus song into one BIG chorus.

If you have a song with 3 choruses and want to convert it to a single large chorus, this command unfolds the song into just that; one BIG chorus. This is useful for customizing a song with style, patch or tempo changes in different verses.

Fold (convert 1 chorus to multiple)

A “Fold song” routine converts a song with a single large chorus to multiple smaller choruses with optional tag ending. If you have imported a MIDI file, you might have a file that is 96 bars long, but really consists of 3 choruses of 32 bars each. You can convert this to a 32-bar song by using the Edit | Fold song option, including inserting tag endings, and 2-bar endings.
Set Time Signature (range of bars)

Under the Edit | Set Time Signature (range of bars) menu item, you can assign a specific time signature at any bar and apply it to a range of bars, as often as you want.

For example, to have one bar (bar 13) of 5/4, select Edit | Set Time Signature… and toggle the 5/4 button. Then, type in the bar beginning and ending range in the space provided. (In this case, 13 and 1.)

Transpose

This submenu lets you transpose the entire song by a number of semitones, or specify a range to transpose with the Transpose From.. To.. command.

To transpose part of a song, simply highlight the area you wish to transpose and select Transpose From.. To.. in the submenu. When you have confirmed the starting bar and the number of bars you wish to transpose, click on the “Transpose to Key” area and select the destination key.

A Song Memo of up to 2000 characters may be added. When a song has a memo associated with it the label on the Memo button (located to the right of the song title) is pink. Clicking on the [Memo] button launches the Song Memo dialog, where you can type or edit a memo about the song and select an “Auto-open” option that will show the memo each time the song is loaded.

The Song Memo has an option to close automatically during playback. When this option is set, the Memo button will close when play is pressed, and not reopen when stop is pressed. This setting, in combination with the “Auto-open” setting, ensures that the memo opens when the song opens, but closes during playback. The font for the song memo is size selectable.
If the “Summary” checkbox is selected, you’ll see an additional window that automatically displays a full summary of the song (title/tempo/patches used in the song), as well as other special features, such as substyle patch changes or harmonies.

**Auto-Generate Song Title** allows you to generate a title for a song. There is also a button on the main screen for this.

**‘Jazz Up’ The chords**
This will “Jazz Up” the chords by changing chords like C and Cmaj to 7th and 6th chords. Song embellishment will be turned on for the song. Select the type of 7ths from the list box, and then click on the [OK – Jazz UP] button.

**‘Jazz Down’ The chords**
This will “Jazz Down” the chords by changing chords with 7ths (e.g. C7) to triads (e.g. C) and 9ths and 13ths to 7th chords. Song embellishment is turned off. Press [OK – Jazz Down] to proceed.

**Search/Replace Chords** allows you to search and replace chord names, including wild cards.

---

**Edit Dialogs**

**Chord Settings**

If you can’t remember the various keystrokes to put in rests and pushes, you can use the Chord Options dialog box instead. To get to the Chord Options dialog box press the [C7] button, click with the right mouse button onto the chordsheet, or use the keystrokes Alt+F5.

You can launch the Preview, Chord Builder, or Chord Substitution functions from this window.
You can enter pedal bass with any chord. For example, if you are in the Key of F, and would like a pedal on a C note for 2 bars (on an Fm7 chord), then type in the settings as shown. This will play the rhythm specified – in this case the pattern will play on beat 2 and 4.

The [Clear All] button erases all Rests/ Shots/Pushes/ Pedal Bass from a song.

### Settings for Current Bar

The number of beats per bar, tempo changes, patch, style, and harmony changes can be made by selecting the Settings For Current Bar option on the Edit menu or by pressing F5 after you have selected a bar to edit.

### Settings Apply to Chorus #

You can specify the changes you make to happen for every chorus and/or a specific chorus. This applies to bar settings like tempo changes, style changes, RealDrums changes, patch changes, volume changes, and harmony changes.

### Number of Beats this Bar

The initial time signature of the song is determined by the style (e.g., Jazz =4/4, Waltz =3/4). In some songs you will want to change the time signature, for example, you might want a single bar of 2/4, or 8 bars of 3/4 time. This option allows a change of time signature during a song.

The change takes place at the beginning of the bar and continues until a new time signature change is specified. You can select from 1 to 4 beats per bar. Time signature changes are printed on the Notation/Lead Sheet.

**Example: A song in 4/4 time with a single bar of 6/4 time.**

The maximum # beats per bar is =4, so we’ll split the 6/4 bar into 2 bars, a 4/4 bar and a 2/4 bar. Insert a # beats per bar =2 at the beginning of the 2/4 bar, then restore the time signature to 4/4 by assigning # beats per bar =4 for the next bar.
## Tempo Change

If you want to change the tempo at a certain bar of the song, then use this dialog box to type in the new tempo in beats per minute. The tempo change takes effect at the beginning of the bar and remains until a new tempo change at another bar is inserted. Alternatively, you can specify a percentage change in tempo.

## Key Signature Change

You can have multiple keys in the same song with the new key signature shown on notation.

Select the new key signature you want from the combo list and you will see the new key signature drawn on the notation at that bar.
Style Changes
To choose a new style for this bar you can select the style from the **StylePicker** by pressing [.STY] or from the \bb folder by pressing [Open].

The [Preview] button in the **StylePicker** allows you to listen to the style before loading it. This allows you to hear what the selected style will sound like in your song.

When chosen, the name of the style change for the current bar will be displayed. Click on [Clear STY] if you want no style change to occur.

You can have multiple RealDrums styles within a song. You can either enter a change of RealDrums or you can enter a change of style, which will also result in a change of RealDrums.

The name of the new RealDrums style is displayed. The [Clear RD] button deletes the style change.

Individual styles have instrument patches assigned to them. “Send Patch changes with style change” allows the option to send those assigned patches at the current bar. If you would like to keep the patches that had been previously used in the song, deselect this option.

Notation - Start a New Line
You can set the notation to start a new line at any bar. This allows you to customize the number of bars on each line, and is used in conjunction with the Notation Options settings of bars-per-line on the notation.

This feature works for chord sections.

Instrument Changes
Volume and patch changes can be made for instrument parts and the audio track at any bar.

Volume changes can be specified values or fade up/down amounts. There are presets to mute or restore the volume level for a part.

Patch selections include patches on higher banks, which are accessed with the [+] button.

You can set a harmony to begin or end at this bar for the Melody or Soloist/Thru track. If you choose < no harmony > a harmony that was previously playing will stop.

Set a specific beat for the harmony to begin, for example on a lead-in or pickup note at the end of a bar. You can also switch to different harmonies in the middle of your song.
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Style, tempo, key, signature, volume, patch, and harmony changes will be recorded on your song worksheet indicated by a small red square around the bar that will be affected. Changes remain in effect from that bar forward until new changes are recorded or until the next chorus if you have set the changes to apply only to the current chorus.

### Piano Roll Window

You can edit your tracks using the “Piano Roll” window, similar to the type found in many sequencer programs. Edit the Melody or Soloist tracks with greater ease and precision. There are 2 panes in the window – one for notes and the other for controllers, velocity, and other data. All notes and controllers are displayed as black/gray bars on a grid. You can change note duration and pitch by selecting and dragging with your mouse.

The Piano Roll window enables precise graphic editing of note timing and duration. You can also graphically edit note velocity, controllers, program changes, channel aftertouch, or pitch bend.

The Piano Roll may be opened as a movable window, which floats above the Band-in-a-Box main window, or it may be opened embedded, in the same position as the Chordsheet/Notation panels in the Band-in-a-Box main window.

### Track Selection

Select the Track - Bass, Drums, Piano, Guitar, Strings, Melody, or Solo.

It is most practical to edit the Melody and Solo tracks. The other tracks for the accompaniment are rewritten every time Band-in-a-Box rebuilds the song (every time you click the [Play] button). So if you edit a “backing track,” be sure to save as a MIDI file before rebuilding the song, or your edits will be lost.
Keyboard Pitch Panel

1. Click on a single note of the keyboard to select all notes of the clicked pitch.
2. Click-drag on the keyboard to select all notes in a pitch range.

For instance, you could drag C5 thru C6 to select an octave of notes. Then Shift-click A3 to add all A3 notes to the selection. Then Ctrl-click F5 to remove all F5 notes from the selection.

Note Panel

Horizontal bars represent notes. Notes can be selected, edited (start time, pitch, duration), inserted, and deleted.

Note Selection

Selected notes are red.

1. Click on individual notes to select.
2. Shift-click on individual notes to add to the selection.
3. Ctrl-click on a note to invert (toggle) its selection.

Overlapping notes are displayed in bold Aqua color, making them easy to identify. Overlapped notes can be eliminated from the right-click menu in this window.

Click on white space and then drag a rectangle around notes to select a group of notes. Only notes that start within the rectangle are selected. If the left edge of a note is not inside the rectangle, it will not be selected. This is a feature, not a bug!

1. Shift-drag a rectangle to add another group of notes to the selection.
2. Ctrl-drag a rectangle to toggle the selection of the notes in the rectangle.

Graphic Event Panel

Graphically display and edit non-note MIDI events. This panel only shows MIDI events specified in the Chan, View/Edit, and Controller Type controls.
Zero-value events are drawn as small hollow squares, to make them easy to identify.

When graphically inserting controller and pitch bend events the event density is adjustable from one event per 1 tick up to one event per 30 ticks.

With events such as pitch bend or controllers like modulation and sustain, it is important to take care to end a “gesture” with a zero-value event. Otherwise, subsequent notes will be affected, with an unwanted “hanging” permanent pitch bend, permanent vibrato, or sustain pedal locked down.

**Event Selection**

Selected Events are red.

**Graphic Event Ruler Time Selections:**

The Graphic Event Ruler will only select non-note events. In addition, it will only select the type of MIDI events specified in the Chan, View/Edit, and Controller Type controls. When you make a Ruler Time selection, ONLY THE VISIBLE events in this time range are selected. Other MIDI events in this time range are not selected.

**Snap-to-Grid**

Selections, Inserted Notes, or Edited Notes will snap to the grid spacing. If you do not want snap-to-grid, select [NONE] in the drop-down menu.

**Note Duration**

Set the default duration of new inserted notes. It is easy to mouse-edit a note's duration after a note is inserted, so it is usually sufficient to select a typical note duration that makes sense for your purposes and then mouse-edit the duration of “exception” notes after they are inserted.

**View/Insert Channel**

If a track contains multiple channels, “All” will display MIDI events on all channels. Otherwise, select the channel that you need to see. If “All” is selected, new MIDI events are inserted on the Band-in-a-Box track's assigned channel.

Except for perhaps multi-channel Guitar tracks, Band-in-a-Box plays all track events on the assigned track channel. Therefore, in almost all cases, the channel of track events does not matter.

For instance, if the Melody track is set to transmit on channel 4, all events on the Melody track will be sent on channel 4 regardless of the “actual channel” of each track event.

**Ghost Notes**

When viewing a single channel, notes on other channels can be ghost-displayed in light gray. This is
useful when viewing multi-channel tracks.

**View/Edit Graphic Data**

Determine what graphic data to view or edit in the bottom Graphic Data panel. Choose Velocity, Controller, Program Change, Channel Aftertouch, and Pitch Bend. If Chan is not set to “All,” only the selected channel events will be displayed.

**Controller Type**

If “View/Edit” is set to “Control,” the Controller Type control becomes visible. The Graphic Data panel will display the chosen controller type. If Chan is not set to “All,” only the selected channel events will be displayed.

**Cursor Location Info Panel**

The Info Panel shows the cursor’s Bar:Beat:Tick and MIDI note or controller value (depending on the cursor location). In cursor locations where a value would be nonsensical, the status text values are blank.

For instance, in the Note panel, Bar:Beat:Tick and Pitch are displayed. In the Ruler panels, only Bar:Beat:Tick is displayed. In the left Piano panel, only Pitch is displayed. In the Graphic Event panel, Bar:Beat:Tick and Event Value are displayed.

**Chord Ruler and Note Time Ruler Panel**

There are two top rulers. The top Chord Ruler displays chords and the Playback Location Indicator. The Note Time Ruler displays bars and bar subdivisions. When zoomed-in, more subdivisions are displayed. When zoomed-out, fewer subdivisions are displayed.

Click or drag in the Chords Ruler to set the Insertion Point (useful if you wish to use the menu Edit/Paste (Ctrl+V) to paste into the Piano Roll). If a song is playing, a Chords Ruler click will stop playback.

Double-click the Chords Ruler to start playback at the indicated bar. You can also set the Insertion Point and then tap Ctrl+G to start playback at the desired location.

Notes can be selected with the Note Ruler. However, the Note Ruler does not select non-note events such as controllers or pitch bend.

1. Click-drag on the Note Ruler to select a time-range of notes.
2. **Shift**-click-drag to add a time-range of notes to the selection.
3. **Ctrl**-click-drag to invert the note selection of a time range.

For instance, you could drag to select all notes in bars 2 thru 7. Then you could Ctrl-drag to toggle off note selections in bar 4. By using the **Shift** and **Ctrl** keys, very flexible time selections can be made.
Note Editing

Edit Note Time Stamp (start time):
Move the cursor over the left of a note. An east-west cursor appears. Then click-drag the note to a new time (horizontal dragging).

If multiple events are selected, and you want to move all selected events, use **Shift**-click-drag. Otherwise a click on a note will deselect the previous selection, and it will only select/edit the clicked note.

Edit Note Pitch:
Move the cursor over the middle of a note. A north-south cursor appears. Then click-drag the note pitch (vertical dragging).

If multiple events are selected, and you want to transpose all selected events, use **Shift**-click-drag. Otherwise a click on a note will deselect the previous selection, and it will only select/transpose the clicked note.

Edit Note Duration:
Move the cursor over the right of a note. A right-arrow cursor appears. Then click-drag the note duration (horizontal dragging).

If multiple events are selected, and you want to change duration of all selected events, use **Shift**-click-drag. Otherwise a click on a note will deselect the previous selection, and it will only select/edit the clicked note.

Insert a Note:
Hold the **Shift**+**Ctrl** keys. The cursor becomes a pencil. Click where you want the note and it is inserted with a duration from the “Dur” drop-down menu, and on the channel selected by the “Chan” drop-down menu.

If “Snap” is enabled, the note is inserted at the nearest grid boundary. For instance, if the snap-to-grid setting is a quarter note, inserted notes will snap to the nearest quarter note boundary.

There are many on-screen visual cues to assist cursor positioning. The Cursor Position Time Markers in the Time Rulers can assist time positioning. The Cursor Pitch Marker in the Keyboard can assist pitch positioning. The Cursor Location Info Panel gives precise time and pitch info. Also, the Note Panel has time grid markings, and pitch accidentals are marked in light gray on the background.

If you make a mistake inserting a note, you can hit the **Delete** key to remove the new note. Alternately, it is very easy to immediately drag the note to correct mistakes in time, pitch, or duration.

Delete a Note:
Select a note (or group of notes), then tap the **Delete** key. Alternately, select some notes, right-click, and choose the “Delete Selected Events” item in the pop-up menu.

Eraser tool
For quickly deleting individual notes or controllers. **Shift**+**Ctrl**-click on a note or graphic event. If multiple events have been selected, all selected events will be deleted.

Splitter Bar
A vertical Splitter Bar sits between the Note and Graphic Event panels. If you want to maximize the Note panel to see more notes, drag the Splitter down. If you want to maximize the Graphic Event panel for more accurate event editing, drag the Splitter up.

Two graphic event mouse editing modes for editing graphic events:

1. Add Mode
   Add/subtract the same amount to all selected events.

2. Scale Mode
   Scale the selected events. Select one or more Graphic Events, and move the mouse over one of the events. **Shift**-drag vertically, and the events are scaled in a proportional fashion. Large-value events are scaled more than small-value events. This keeps the same shape of a gesture, but makes the gesture bigger or smaller.

Note Velocity Line Tool
- With **Add Mode**, note velocities will exactly match the slope of your drawn line.
- With **Scale Mode**, the Line Tool will shape the dynamics, but note velocities are scaled to follow the approximate shape of your drawn line. With Scale Mode, you can insert a Velocity fade, or change the velocity of a region, while preserving the Velocity dynamics of the music.
Edit Events

Edit Event Value:
Move the cursor over the top half of an event. A north-south cursor appears. Click-drag vertically to scale event values. To scale a selected group of events, Shift-click-drag vertically on one of the events in the selection.

Edit Event Time:
Move the cursor over the bottom half of an event. An east-west cursor appears. Click-drag horizontally to slide the event in time. To slide a selected group of events, Click-drag horizontally on one of the events in the selection.

Insert Events

Line Tool:
With no modifier keys, the “white space” cursor is a Line Tool. Move the cursor to white space and then click-drag to draw a line. When the mouse button is released, a series of events are inserted which follow the line slope.
To avoid choking the MIDI stream, the maximum event density is one event per 10 ticks. Repeated events of the same value are not inserted. Therefore, long gradual Line Tool fades have a lower density than short extreme Line Tool fades.

Pencil Tool:
Move the cursor over white space and hold the Shift+Ctrl keys. A Pencil Tool appears. Shift+Ctrl-drag to freehand-draw a curve. If you don't get the curve quite right on the first pass, just keep holding the mouse button and move the mouse back-and-forth to draw your desired freehand curve. When the mouse button is released, a series of events are inserted to follow the freehand curve.
To avoid choking the MIDI stream, the maximum event density is one event per 10 ticks. Repeated events of the same value are not inserted. Therefore, many freehand curves have a fairly low density.

Delete Events

Make a selection of events with the Ruler or by clicking on events. Then tap the Delete key. You can also right-click and choose the “Delete Selected Events” item in the pop-up menu.

Right-Click Contextual Menu

The pop-up menu can be accessed by right-clicking on the notes, graphic events, or any of the rulers.

<table>
<thead>
<tr>
<th>Undo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delete Selected Events</td>
</tr>
<tr>
<td>Select All Notes and Graphic Events (On All Channels)</td>
</tr>
<tr>
<td>Select All Note Events (On All Channels)</td>
</tr>
<tr>
<td>Cut</td>
</tr>
<tr>
<td>Copy</td>
</tr>
<tr>
<td>Paste - Replace</td>
</tr>
<tr>
<td>Paste - Merge</td>
</tr>
<tr>
<td>Re-Channel All Events to the Track Channel (Ch = 4)</td>
</tr>
<tr>
<td>Re-Channel Selected Events to the Track Channel (Ch = 4)</td>
</tr>
<tr>
<td>Re-Channel Selected Events to the Current View Channel</td>
</tr>
<tr>
<td>Eliminate Overlapped Notes</td>
</tr>
<tr>
<td>Cancel Popup</td>
</tr>
</tbody>
</table>

Undo:
Duplicates the Band-in-a-Box Edit | Undo (or Ctrl+Z) action.

Delete Selected Events:
Deletes any selected events (highlighted in red). This can also be accomplished by tapping the Delete key.

Select All Notes and Graphic Events:
If the “Chan” combo box is set to All, this item will select ALL EVENTS on ALL CHANNELS (all events in the track). Otherwise, ALL EVENTS are selected which match the CURRENT MIDI CHANNEL.
Select All Note Events (Of Current Channel): (right-click the Note Panel or Note Ruler)
If the Chan combo box is set to All, this item will select ALL NOTES on ALL CHANNELS, but it will not select any non-note events. Otherwise, ALL NOTES are selected which match the CURRENT MIDI CHANNEL.

Select All Note Events (Of Current Channel): (right-click the Graphic Event Panel or Graphic Event Ruler)
If the “Chan” combo box is set to All, this item will select ALL GRAPHIC EVENTS of the CURRENT VIEW/EDIT TYPE on ALL CHANNELS. Otherwise, ALL GRAPHIC EVENTS of the CURRENT VIEW/EDIT TYPE are selected which match the CURRENT MIDI CHANNEL. For instance, you could select all channel 4 modulation events, then Delete, to easily remove all of those events from the track.

Cut:
Copy selected events to the clipboard and then remove them from the track. Can also be accomplished with the menu Edit | Cut (or Ctrl+X) action. If you wish, it is possible to cut from the Piano Roll, and then paste into the Notation window, or vice-versa.

Copy:
Copy Selected Events to the clipboard can also be accomplished with the menu Edit | Copy (or Ctrl+C) action. If you wish, it is possible to copy from the Piano Roll, and then paste into the Notation window, or vice-versa.

Paste - Replace:
If no events are on the clipboard, this item is dimmed.
The paste occurs at the time location of your right-click. Move the mouse cursor to the desired insert location. Right-click on the Note Panel, Graphic Event Panel, or any of the Rulers. Then choose this item from the pop-up menu. Any previous event types in the paste range which match event types in the clipboard are removed before the clipboard data is added to the track.
If the “Chan” combo box is set to All, pasted events keep their original (copied) MIDI channel. Otherwise, the pasted events will be re-channeled to match the “Chan” combo box.

Paste - Merge:
If no events are on the clipboard, this item is dimmed.
The paste occurs at the time location of your right-click. Move the mouse cursor to the desired insert location. Right-click on the Note Panel, Graphic Event Panel, or any of the Rulers. Then choose this item from the pop-up menu. Events from the clipboard are merged with existing data in the track.
If the “Chan” combo box is set to All, pasted events keep their original (copied) MIDI channel. Otherwise, the pasted events will be re-channeled to match the “Chan” combo box.
The feature can also be accomplished with the menu Edit | Paste (or Ctrl+V) action (to match the Notation window, which also uses a merge style of pasting). Before using the main menu Edit | Paste (or Ctrl+V), first make sure the insertion marker is set to your desired paste time location.
This is easy to do. Just click or drag in the Chord Ruler to place the insertion marker where you want it. Then tap Ctrl+V.

Re-Channel All Events to the Track Channel (Ch = xx)
Re-channel all notes and graphic events (the entire track) to the MIDI Output channel assigned for this track. Sometimes this can come in handy to bring some “sanity” into Piano Roll editing.
For instance, though the default Melody output channel might be channel 4, meaning that Band-in-a-Box transmits any events in the Melody track on channel 4. The actual events in the Melody track might be channel 1, or a mixture of several channels.
For ordinary playback or note tweaking, it doesn't matter if the event channels are “mixed up,” as long as you have the view channel set to All. But if you wish to use Paste - Replace, the Paste - Replace function is smart enough not to “stomp on” a track's events that differ from the channels of the clipboard MIDI data. So if you force all events to the track channel, the Paste - Replace function will always replace appropriately.

Re-Channel Selected Events to the Track Channel (Ch = xx)
Re-channel only the selected events to the track channel.

Re-Channel Selected Events to the View Channel
When editing a multi-channel guitar part or editing an imported multi-channel MIDI file, this command may be useful. Beware that it might initially appear confusing.

For instance, one might set the view channel to ALL, and make a selection (intending to set these events to Ch 12). Then set the view channel to 12, and of course the selected events disappear (if the events had some other MIDI Channel). But then when you invoke “Re-Channel Selected Events to the View Channel,” the MIDI events will reappear on the Piano Roll.

Eliminate Overlapped Notes
Overlapping notes are displayed in bold Aqua color, making them easy to identify. Selecting this menu command will remove the overlap.

Horizontal Scroll Bar, [+ and -] Buttons
Scroll in time, and zoom the horizontal display.

Vertical Scroll Bar, [+ and -] Buttons
Scroll to see different note ranges (does not scroll the Graphic Event Panel) and zoom the vertical display.

Zoom Buttons
Use these buttons, found in the right border of the Graphic Event panel, to zoom and un-zoom the Piano Roll view.

Zoom to Selection
Make a selection of notes, and then click the Zoom To Selection button. The vertical pitch range and horizontal time range adjusts to fill the note panel with the selected notes.

Un-Zoom
Return to the previous view range after zooming in on a region.

Zoom All
Zoom the window so that all track notes are visible at a glance.

View and Print Notation
Open the Notation window with the Notation button. You will see standard notation on the grand staff. There are 3 notation modes in Band-in-a-Box, selected with the buttons in the Notation window toolbar.

1. Standard Notation for display of notes, chords, lyrics, and optional guitar tablature as well as entering chords and lyrics. Notation is not editable in this mode.

2. Editable Notation to enter or edit notation with the mouse

3. Staff Roll Notation works like the Editable Notation plus note velocities and durations can be viewed and edited with the mouse.
The Standard Notation window can be used for notation display and the entry of chords and lyrics. Just type a chord name and it will be inserted at the current time line location (the black vertical stripe just under the tool bar.)

Click on the instrument buttons to see the notation for the different parts: Bass, Drums, Piano, Guitar, Strings, and the Melody [M], or the Soloist [S].

Press the [Opt.] button to set Notation window options such as track type, bar resolution, lyric font size, and position, transpose options, and Regular or Jazz fonts.

This button opens the Lead Sheet window, which provides a full screen of notation either for an individual instrument or for multiple instruments that you choose to view together by clicking the instrument buttons while holding the Ctrl key.

Print out any part with the Print Button. In the Print Preview window save your notation as a graphic file to upload to the Internet or to e-mail.

The [#] button opens the Event List for editing the Melody or Soloist tracks.

This is the button for note-based lyrics, which are automatically aligned with the corresponding note in the Melody track.

Use the plus and minus buttons to zoom the Notation in and out.

The text button lets you enter section text or boxed text into the notation.

When the Scrub button is selected, notes will play as the mouse is dragged over them while holding down the left mouse button.

Switch to Editable or Staff Roll notation modes with these buttons.

**Editable Notation Mode**

Click on the Editable Notation button to go to Editable Notation mode. Chords, lyrics, and text can be entered as in the Standard Notation window; the Editable Notation mode also permits point-and-click entry of notes and rests as well as drag-and-drop editing.
This is the screen for step-entry of a melody or for editing existing parts. There are checkboxes for different note entry modes.

The Note or Rest checkboxes determine whether a note or a rest will be inserted when the mouse is clicked.

When the Mono checkbox is selected, the notation is entered as monophonic (one note only). This is useful for melodies that only have one note playing at a time. Mono mode is a faster way to enter notes, because the Notation window will automatically delete a note that is present at the same location that you are putting a new note on. So if you have mistakenly put a B note on as a C, you just click on the B note, and if in mono mode the C note will be deleted automatically.

The notation has confirmation dialogs to prevent accidental entry of a duplicate note (same pitch near same time) of a very high or very low note (large # of ledger lines).

**Clean Notation**

When music has been played in from a MIDI keyboard, there are frequently effects like grace notes, glitches, and notes played off time. The Clean Notation mode is an intelligent feature that “cleans up the notation” for you. It does this by eliminating the display of grace notes and glitches, and also simplifies the Notation display so it is more readable. Clean Notation doesn’t affect the actual track it just controls how it is displayed. In general this should be on, since it improves the display. But if you want to see every grace note or glitch that was played, then turn it off.

**Beat Divisions**

In the Editable Notation mode each beat is sub-divided by either 3 or 4 broken vertical lines.

- Swing styles use 3 lines to divide each beat into eighth note swing triplets.
- Straight styles use 4 lines to divide each beat into sixteenth notes.

**Tip**: The edits you make to Band-in-a-Box accompaniment parts will be overwritten when the [Play] button is pressed and the program generates a new arrangement. To hear the song play as edited, use the [Replay] button found next to the [Play] button. Edited songs can be permanently saved as a MIDI file with the [.MID] button.
Staff Roll Notation Mode

Click on the Staff Roll Notation button to go to Staff Roll Notation mode.

In addition to the editing features of the Editable Notation mode, in Staff Roll mode the velocity (vertical line) and duration (horizontal line) of notes can be edited with the mouse.

Adding Note-Based Lyrics to Your Song

Open the Notation window by pressing the notation button.

Press the [L] button on the Notation toolbar. The Lyric Edit window opens up and the current note is highlighted. In this example, lyrics have already been entered in bars 1 and 2, and the first note of bar three is highlighted. The first syllable of the word “Swanee” has been typed in the lyric box.

Now by pressing Enter or Tab “Swa–” will be entered under the highlighted note and the highlight will automatically advance to the next note.

Lyric Edit Window

The [Line] button enters a forward slash “/” line break marker in the current lyric.

The [Para] button enters a backslash “\” paragraph break marker in the current lyric.

The [Enter] button enters the current lyric, equivalent to hitting Enter key or Tab key.

The [Close] button closes the Lyrics Edit mode, equivalent to hitting the [L] button again.
The [Section Text] button enters the text in the lyric box as section text at the current bar. The [Edit] button opens the Edit Lyrics dialog where lyrics and section text can be edited.

**Viewing the Lyrics**

The big [L] button in the user configurable toolbar opens the Big Lyrics/Karaoke window. The font and colors are selectable, you can show or hide the chords, and words highlight as the music plays.

![Big Lyrics window](image)

The big [L] button in the user configurable toolbar opens the Big Lyrics/Karaoke window. The font and colors are selectable, you can show or hide the chords, and words highlight as the music plays.

**Lead Sheet Notation Window**

The Lead Sheet Notation window displays a full page of notation with lots of options such as a selectable number of staves per page, clefs to show, font size, margins, scroll-ahead notation, and lyrics. You can set it to a big font size and read the notation from across the room. Since the notation scrolls ahead, you can read ahead without waiting for a page turn.

**Launching the Lead Sheet Window**

You can launch the Lead Sheet window from the main screen by pressing the Lead Sheet button (or Alt+W). The Lead Sheet button is also accessible from the Standard Notation window.

![Lead Sheet window](image)
During playback, red rectangles highlight the current bar. If the bar is empty (or in Fake Sheet mode), the Lead Sheet will draw the staff lines and bar lines in red.

Multiple Tracks of Notation

Multiple tracks of notation can be viewed together in the Lead Sheet window. To select tracks, hold down the Ctrl key and click on the part buttons at the top of the screen in the order that the tracks should appear from top to bottom. For example, clicking on [M], and then on [P] and [B] with the Ctrl key held down would display and print the multi-stave staff system shown. Multiple tracks can also be printed like a score.

Multiple lines of Lyrics on Fake Sheet.

If your song has 1st and 2nd endings or multiple verses of lyrics, multi-line lyrics can be displayed, so you’ll see all verses on the same fake sheet. Load in the song c:\bb\Tutorial - BB 2005\Listen Multi-line lyrics Demo.MGU.

Open the Lead Sheet and select “Fake Sheet Mode.”
This song has a 1st/2nd ending entered, with separate lyrics for each ending. Multiple lines of lyrics will also appear if there are lyrics in multiple verses (choruses).

**Lyric Position**

In the Notation Window Options, “Lyric Position” allows you to vertically position the height of the lyrics.

**Lead Sheet “Lyric Text Block”**

A large text block can now be appended to the Lead Sheet window and printout. This is ideal for song lyrics that you want entered as a text entry appended to the end, multiple verses of lyrics, or any other text.

Open the Lead Sheet window and select the [Memo] button to launch the Lead Sheet Memo.

The memo will be automatically positioned after the end of the lead sheet and printout. Use extra blank lines in the Lead Sheet Memo to control where it displays on the page.

There is an option to print the Lead Sheet memo on a new page of the printout.

Press the [Choose Font] button to select the font you would like for the memo. A text block will be appended to the Lead Sheet window and printout. This could be song lyrics that you want appended to the end, multiple verses of lyrics, or any other text.
Lead Sheet Printing

Click on the [Print] button to print your song as sheet music. There are print options for “# of copies to print” and “print specific page #.”

In the Print Preview screen the notation can be saved as a graphics file to be imported to a document or uploaded to an Internet page.

Choose the file type that you'd like to save to. If you want an exact rendition of the screen, choose MONO BMP, since bitmap files are saved without any loss of quality. If you want a smaller file of your composition for Internet use, choose a format like JPG, or PNG. These are smaller, because they compress the data, with some loss of quality.

To save a JPG file, press the [OK -Preview/Graphics] and [Save...] buttons and then select “Save to File Type: JPG.” You can then see the estimated size of the file, and can change settings by pressing the Low/Medium/High resolution buttons.

The notation can also be copied as a bitmap to the Windows clipboard and then pasted into any application. This is done by clicking on the [Clipbd] button in the Print Preview screen.

To print a specific page, press the [OK -Preview/Graphics] and [Print Page] buttons.
Multi-Channel Notation (Sequencer Mode)

Normally you would want a single part on the Melody and Soloist tracks. But, since MIDI information can have separate channels, it is possible to store 16 separate parts on each of the Melody and Soloist parts. When one of these tracks has been set to “Multi (16)-Channel” we refer to this as sequencer mode.

Now, when you are in this multi-channel mode, output from the Melody/Soloist part will be on whatever MIDI channel the information is stored on, and will not be using the Melody/Soloist MIDI channel.

If you click on the Lead Sheet window, you’ll see the entire MIDI file displayed on separate tracks of notation. This is likely “too much information” to read, unless you are a symphony conductor.

To customize the notation display for sequencer mode, press the lead sheet options button and see the settings for Multi-Channel Track display.
Chapter 6: Making Songs in Band-in-a-Box

Select “CUSTOM channels play/display” and press the [Set...] button to launch the **Sequencer Window (Multi-channel track on Melody/Soloist)** dialog. Then you can customize which channels will play and display.

This dialog can also be opened by clicking on the [SEQ] button on the toolbar.

In the example picture, we have set Channel 2 (Bass) and Channel 4 (Trumpet) to show on the notation, and have set all of the channels to play (to hear them).

For a specific channel, (e.g. channel 3: piano), we see the following information.

Channel 3: Acoustic Piano (this is the patch name found on the track).

There are 842 events in the track; usually every note is an event.

We have customized the piano track so that it can be heard (play=true), but not seen in notation (Show=false).

There is a small button at the right of the track line that allows you to delete/rechannel or merge the channel with another channel.

You can also change the patch (instrument) for that track by using the instrument patch combo box.

Now that we’ve customized the display, we are seeing bass and trumpet on the notation, and hearing the entire track.
Digital Audio Features

There is a File | Open Audio command, to open WAV, WMA, MP3, WMV, or CD Audio files. Once opened, you can play the audio track along with a Band-in-a-Box song.

Open an MP3/WAV/WMA or audio CD track, and play back at 1/2, 1/4, or 1/8 speed without affecting pitch. This is great for transcribing or analyzing audio. To play it at a slower speed, choose the desired speed on the Play | Tempo menu.

Audio Chord Wizard (Chords from MP3)

This amazing wizard automatically figures out the chords from any MP3, WAV, or WMA (Windows Media Audio) file and displays them in Band-in-a-Box. Just load in any MP3 file and you'll instantly see the chords. Using the Audio Chord Wizard is a great way to learn and practice popular songs as you play along and see the chords.

Chordsheet Overview

There’s a Chordsheet window in the Audio Chord Wizard that shows the chords for the whole song on a single screen. This allows you to click on a bar on the chordsheet to jump to that area of the song.

You can mark sections of the song using part markers, and the sections will begin on a new line with a line space between so they are clearly seen. So you can then also learn the form of the song, as you can see the various sections (intro/verse/chorus/break) at a glance, or quickly jump to the any section simply by double clicking on that part of the chordsheet.
If we want to renumber the bars, right click on the waveform timeline at the place that you would like to be bar 1, and choose “Set Bar One.”

To change the # of bars per row, or rows per screen, right click on the chordsheet.

The +/- buttons at the bottom right of the window also change the row height.

Chords may be edited in the Audio Chord Wizard with a right mouse click on the chord. When Edit Chord is selected, a highlight cell opens at the chord location. Type in the name of the new chord using standard Band-in-a-Box chord entry characters and press the Enter key to make the edit.

Individual edits can be removed with the Remove Chord Edit command, or all edits in the song can be removed with the Remove All Chord Edits command. Part markers, chord symbols, key signature, and tuning setting are saved in Band-in-a-Box, and are passed back and forth to the Chord Wizard.

As well as the chords of the song, the Audio Chord Wizard also figures out,
- the tempo of the file,
- bar lines throughout the song,
- fine tuning detection (e.g. 5 cents sharp from A440).

**Note:** Audio Chord Wizard estimates the chord progression of an audio file. It is NOT an Audio-to-MIDI transcriber, which would be a much more elaborate program.

The digital audio capability offered in Band-in-a-Box enables you to combine MIDI music with live digital audio recordings of voice and live instruments in a fully produced arrangement.

It also offers the ability to render a MIDI or MIDI+AUDIO composition into a single digital audio wave file. This file can then be converted into a CD-Audio or streaming Internet audio file.

Digital audio features are fully described in the Working With Audio chapter.
**Record a Vocal or Any Live Instrument**

To start recording audio, plug your instrument or microphone into the computer’s sound card. The Line Out from electronic instruments or amplifiers can be plugged directly into the Line In jack. To record your voice, or an acoustic instrument such as a flute, plug a microphone into the Mic jack.

If you have a Sound Blaster card, this button is used to select the Microphone input and/or Line In input to record digital audio. The Windows mixer Record settings can also be used.

Open the **Record Audio** dialog box with the [R. Aud] button. This dialog box lets you set the parameters for the recording session.

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**Record Audio**

Set Recording Levels

Test Recording Level (VU Meters)

Leave VU Meters open while recording

Record Audio From

- Start of Song
- From Bar #
- Lag
- End

Track type is Stereo

Audio Options...

Punch-In Record

From: [ ] [ ] [ ] [ ]

Thru: [ ] [ ] [ ]

Overdub underlying Audio

- No MIDI recording
- Also Record MIDI to Melody
- Also Record MIDI to Soloist

Note: From/Thru defaults to the Audio Edit window’s highlighted range (if currently open).

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You can adjust recording levels from this dialog with the [Set Recording Properties] button.

Once you have set the recording properties and tested the recording input levels, recording is easy. Simply tell Band-in-a-Box the place in the song where you want to start recording, whether or not you want to record the MIDI data along with your acoustic instrument, and press [Record]. If you choose to start recording from the beginning of the song, Band-in-a-Box will start with a lead-in count before the music starts playing. If you are starting from elsewhere in the song recording starts instantly.

### Punch-In Recording

Punch-in audio recording allows you to punch-in record or overdub a section of audio. You can hear the existing audio part when you are overdubbing.

To select a punch-in range, open the Audio Edit window and highlight the punch-in section. The highlighted range will set the From: and Thru: values for Punch-In Record.
Press the **Esc** key or click on [Stop] to stop recording. Band-in-a-Box will prompt you to keep the take or take again.

When you get a take you like, press the [OK – Keep Take] button to save your recording. Use the Options to record one Chorus and then copy it to the whole song, to overdub underlying audio on the track, and to retain audio past the new take just recorded (punch out).

### Add Audio Harmonies

You can apply a harmony to the audio part – allowing you to automatically create up to 4 part vocal harmonies from your singing. And don’t worry if your singing is not in perfect tune, Band-in-a-Box can now “fix” vocals to the correct pitch - automatically! Band-in-a-Box generates the harmonies using the world-leading TC-Helicon Vocal Technologies engine.
Once you have recorded a vocal part into Band-in-a-Box, you can use this feature in many ways, including:

- Record yourself singing into a Band-in-a-Box file. Create a vocal harmony for part or all of the song by selecting a Band-in-a-Box harmony and choosing the Generate Audio Harmonies option (Harmony | Audio Harmonies & Pitch Tracking or Audio | Audio Harmonies & Pitch Tracking). You can then hear yourself singing in perfect harmony!

- Did you hit a few “out-of-tune” notes when you recorded your singing to Band-in-a-Box? Fixing your “out-of-tune” singing is easy, by instructing the program to correct the pitches to the Melody track.

- When you’ve recorded your singing voice, in addition to harmony voices, you can add unison voices that “fatten” your sound. Each unison voice can have different vibrato and pitch characteristics.

- Each harmony voice can have up to 4 “choir” voices, duplicated and shifted slightly in time, pitch and more to create an authentic, full choir sound. Create a 16 voice choir from your single vocal performance!

**Audio Reverb**

The Audio Reverb control for individual tracks with RealTracks or RealDrums lets you easily add reverb (0 to 127) for any RealTrack. The reverb type is also settable, and saved with the song.

At the top of the screen, there is an “A.Reverb” control (Audio Reverb). Click on an instrument radio button, and then set the Reverb for it.

The Audio Reverb varies from 0 to 127. Clicking on the left hand side of the control allows you to enter a setting, or click on the up/down arrows. See the RealTracks and RealDrums chapter for more about this feature.

Note that this only applies to RealTracks, since MIDI tracks have MIDI Reverb, which is set via a MIDI Reverb control.

**Bass/Treble Tone Control added for individual tracks with RealTracks or RealDrums**, so you can easily adjust the bass/treble EQ for any RealTrack. Settings save with the song.

Choose an instrument and then use the tone control to adjust the tone from -18 (maximum bass) to +18 (maximum treble). Default is 0.

Audio Reverb and Tone can be set by clicking on the audio label to open the Audio Playback settings. These settings can also be applied to the audio track in Band-in-a-Box.

Master Reverb and Tone can be set by clicking the Combo button, and then using the Audio Reverb and Tone controls.

For Audio track rendering, reverb is added to the mix if there is reverb set for the Audio track.
More Audio Effects

You can add professional audio effects like reverb, echo, and compression by choosing a plug-in from the Audio menu (Audio | Plug-in). Band-in-a-Box comes with a large selection of high quality audio effects built-in, and DirectX plug-ins are supported.

The plug-ins apply audio effects or utilities such as compression to the already recorded audio part. A typical plug-in dialog is shown. The [Preview] button will play a short sample of the processed track, and the Edit | Undo command will restore the original track if applied before another edit is performed.

The Medley Maker

Would you like Band-in-a-Box to make a medley of various Band-in-a-Box songs (MGU)? This is easily done with the new Medley Maker. Inside the Medley Maker, simply select the songs that you want, and Band-in-a-Box will make the medley for you.
A medley is not simply joining songs together. A good medley uses a “transition” area between songs to introduce the new style, key, and tempo. The Medley Maker automatically creates a nice transition area for you, writing in chords that would smoothly modulate to the next song, style, key, and tempo!

To open the Medley Maker, click on the [A+B] button on the toolbar or choose File | Medley Maker. This launches the Medley Maker dialog.

To make a medley,
- add songs by pressing the [Append] or [Insert] button.
- remove songs using [Delete].
- change the order of the songs using [Move Up], [Move Down].
- for any song, customize using the “Settings for this song” group box, including changing the style, tempo, key, start bar, # of bars, and # of transition bars. Press [Update] after customizing to see your changes in the medley list.
- choose the type of information to include with your medley (styles, key signature changes, lyrics, etc.) in the “Include with Songs” group box
- choose a number of transition bars (the default is 4). Transition bars are automatic bars of chords inserted by Band-in-a-Box to transition from one song to the other, generating an “outro” and an “intro” between songs.

Press the [Make Medley NOW] button to generate a medley.

The maximum size of the medley is 255 bars (about 7 minutes).

You can have multiple choruses, so if you had 3 choruses of a 250 bar medley, it would last 750 bars.

### Saving Songs

Once you have made a song (or have made changes to a song), you will probably want to save the song by clicking on the [Save] button. Or choose Save from the File menu, or press F2, or Ctrl+S.

Use [Save As] to save a song with a different name or in a different location. Shift-clicking on the [Save As] button will allow you to choose a favorite folder prior to seeing the Save As dialog. (Songs that are “Saved As” with a different name have the new name added to the Recently Played song dialog.)

Songs will always be saved with last file extension letter of “U,” regardless of whether they are made with a built-in style or not. For example, if you make a song with ZZJAZZ.STY as the style (one of the 24 built-in styles) early versions of BB would save the song as MySong.MG1, where the “1” indicates Style #1 – ZZJAZZ. Now it is saved as MySong.MGU. Older songs loaded in with .MG1 will still be re-saved as MG1 to prevent duplicate song files.

**Note:** Make sure you remember to save your songs as Band-in-a-Box song files (not only as MIDI files). The Band-in-a-Box song files contain the names of the chords, etc. and are much smaller than MIDI files.

If you have an audio file associated with the song, the audio portion will be saved separately, and will be called MySong.WAV.

### Saving Song Settings

By default all settings are saved with songs unless the “Save all Settings with Songs” box is unchecked (off) in the Assign Instruments and Harmonies to Song dialog (Alt+F2 or File | Save Song with Patches & Harmony).
This includes RealTracks, RealDrums, and RealTracks solos as well as Patches, Volume, Audio and MIDI Reverb, Tone, Panning, Bank, Harmony (both Melody and Thru), and the Soloist.

If you have some custom items that you don’t want to save with the song you can uncheck the “Save all Settings” box and use this dialog to save only the settings you want to keep.

To save certain patches with a song:

a) Choose the patch (instrument) that you would like from the dropdown patch list. Leave the other instruments at = 0 for no patch change. Remember that the General MIDI numbering system is always used for instruments.

b) Press the [Fill w/Patches] button. This will fill the patch number boxes with the current patch settings showing on your main screen instrument panel.

Use the checkboxes to choose which instruments you would like to save and whether you would like to save the Melody and Thru harmony assignments and the Soloist selected to play on the song. You can also save the instruments as “On” or “Off” for each song. For example, you could have a song with no piano part.

Tip: You can optionally save these kinds of settings with your songs for added realism. You can, for example, make a song with the piano a little quieter than usual, or add reverb to the melody patch, or pan the bass to one side, etc.

Use the “Frozen” checkbox to put the track into a frozen state where it gets saved with the specific arrangement and won’t be overwritten by Band-in-a-Box. You can still edit the frozen tracks.

Select the “For this song only, force MIDI drums” checkbox if you always want MIDI drums, not RealDrums, used with the song.

Select “For this song only, use this RealDrum style” to assign a specific RealDrums style to your song. Press the [RD] button to choose the RealDrums style.
This dialog box is usually used in combination with and not instead of saving a song. To save a song with this embedded information to your hard drive, you therefore:

1. Choose File | Save with Patches and Harmony (Alt+F2).
2. Choose the patch and other settings that you want to embed.
3. Press the [Save] button to save the song to disk.

Note that if you have set a MIDI patch for one of the instrument parts (bass/drums/piano/guitar/strings) and you load in another style, Band-in-a-Box will overwrite your patches with the style patches. If it didn’t do that, you would be stuck with the same patches regardless of the style. So if you want a certain patch for a track, set it after you have loaded in the style that you want.

**Saving Frozen Tracks**

Any track can be frozen (MIDI or RealTrack). When frozen, it won’t get changed or re-generated. This saves time when replaying previous songs, and allows you to freeze an arrangement that you like. If you freeze the whole song, you don’t have to wait at all for the song to regenerate. Next time you play, it is ready to go.

All tracks can be edited and saved. MIDI tracks for bass, drums, piano, guitar and strings can be edited, and saved with the file. If you freeze a track, edits can be still made to it, because it is only frozen from Band-in-a-Box making changes to it (you can still edit it), so that the MIDI track will be saved to the file. So you can customize the bass part to match a certain song, and save it with a frozen bass part, so that Band-in-a-Box won’t overwrite your edits. This includes RealCharts — if you wanted to edit the notation of a RealTracks solo for example.

To edit a MIDI track (bass, drums, piano, guitar, strings), or the MIDI part of a RealTracks that has a RealChart (MIDI transcribed solo), simply open up the Notation window (or Piano Roll window), and click on the track and edit it. Make sure to Freeze the track by pressing the Freeze button and choosing Freeze for that track, or right-clicking on the instrument at the top of the screen and choosing Freeze. Now your edited tracks will save with the song.

**Saving MIDI and Karaoke Files**

Your Band-in-a-Box songs can be saved as Type 0 and Type 1 MIDI files as well as Karaoke files and General MIDI lyrics. Click on the [.MID] button to launch the dialog.

**Choose Destination for Standard Midi File**

Select the type of MIDI file you want to save in the dropdown “MIDI File type” combo box.
By default, Band-in-a-Box writes Type 1 multiple track Standard MIDI Files. You can also save Type 0 MIDI files, they have all of the parts on a single track and are used by many hardware modules and other devices that play MIDI files because they are simpler to play (since they only have 1 track).

Karaoke files (.KAR) are a special type of sing-along MIDI file with text events for the lyrics and a specific order for the tracks. There is an option to write the MIDI file with separate tracks for each drum instrument. In the “MIDI File type” combo box select “Drums on separate tracks.”

**MIDI File Options**

Use this button to set custom MIDI file settings in the **MIDI file options** dialog. This dialog is also available from the [MIDI File] button in the **Preferences** dialog (Opt. | Preferences).

- **Include Patch Changes in MIDI files**
- **Include Part Marker text markers**
- **Include 2 bar lead-in in MIDI file**

**Write Lyrics in** General MIDI format

- **Write Section Text as Text Events**
- **Include Volume/Reverb/Chorus/Panning**
- **Include Forced Channel Meta Event**
- **Include Guitar Position Controller**
- **Write Soloist part on channel 5**
- **Write Harmony to MIDI file**
- **MIDI File Harmony on separate tracks**
- **Write Guitar part on 6 channels**
- **For partial range MIDI files, chop off sustaining notes at end**

For songs with RealDrums:
- **Also generate MIDI Drums in the MIDI file**
- **Also generate RealDrums in xxxx_RealDrums.WAV file**

**Include Patch Changes in MIDI files** will include the patch (instrument) changes.

**Include Part Marker text markers** writes descriptive text part markers to the MIDI file if selected.

If “Include Part Marker text markers” is selected the resulting MIDI file will have text markers. Then, in PowerTracks Pro Audio (in the Bars window) you’ll see the descriptive text markers.

For example, at bar 3, there is an “A, Chorus 1” marker, to indicate a part marker “a” substyle and chorus 1. Text markers are also read in from MIDI files, and displayed as Section Markers on the Notation.
Include 2 bar lead-in in MIDI file
If you don't want to create a MIDI file containing the first 2 bars of the 1—2—1-2-3-4 count-in you can select this option. If there is a Melody pickup, then the 2 bar lead-in will remain in the file.

Write Lyrics in General MIDI format
The GM specification has agreed upon specific requirements for writing lyrics in MIDI files, which are supported, so that lyrics that you save in Band-in-a-Box should show up identically in other MIDI programs. This is one of the MIDI File options in the Preferences dialog. We recommend the GM format.

<table>
<thead>
<tr>
<th>Write Lyrics in General MIDI format</th>
<th>General MIDI format</th>
</tr>
</thead>
<tbody>
<tr>
<td>Write Section Text as Text Events</td>
<td>General MIDI format</td>
</tr>
<tr>
<td>Include Volume/Reverb/Chorus/Panning</td>
<td>General MIDI format</td>
</tr>
<tr>
<td>Include Forced Channel Meta Event</td>
<td>PG Music format (old)</td>
</tr>
</tbody>
</table>

Write Section Text as Text Events
Your section text can be included in the MIDI file as text events.

Include Volume/Reverb/Chorus/Panning
This will include the volume, reverb, chorus, and panning settings that you have made in the Band-in-a-Box synth window in your MIDI file.

Include Forced Channel Meta Event
This will include the forced channel META event. It is recognized by PowerTracks Pro Audio and other PG Music Inc. programs only.

Include Guitar Position Controller
This will insert a controller 84 which PG Music uses to indicate the fret position. Since some synths also use this for Portamento Control, you should use this setting with caution.

Write Soloist Part On Channel 5
Normally the program writes the Soloist part on channel 8. Since that could also mean the left hand of a piano track using the convention of channel 8/9 for piano, this option allows you to write it on channel 5 instead.

Write Harmony To MIDI File
If set to YES, the harmony will be written to the MIDI file. If not, just the melody will be written to the MIDI file.

MIDI File Harmony on separate tracks
If set to YES, the harmony will be written to the MIDI file on separate tracks for each voice. You could use this to print out individual parts to your printer for example.

Write Guitar part on 6 channels
If set to YES, the styles that are Intelligent Guitar Styles will result in a MIDI file that has the Guitar part written on 6 channels (11-16). Then, when you read it in PowerTracks, or another sequencer that uses the convention of 11-16 for guitar strings, the guitar part will display correctly.

For partial range MIDI files, chop off sustaining notes at end turns off notes that would be “hung” because their associated Note Off event does not fall within the range of bars saved to the MIDI file.

If song has RealDrums
Also generate MIDI Drums in the MIDI file can be unchecked if your song uses RealDrums and you don’t want MIDI drums included in the MIDI file.

Also generate RealDrums in xxxx_RealDrums.WAV file saves the RealDrums (which are audio) as a separate wave file. This allows you to easily import the entire Band-in-a-Box song into another program for editing.

Set range of bars for MIDI files.
Set Range... When making a MIDI file, you can select a range of bars to be included. Highlight any range of bars, and the MIDI file will be made for just that range.
For example, you could select Chorus #2 if that is the chorus that you want. The resultant MIDI file will be made from the selected range.

Alternatively, without selecting a range on the chordsheet, you can make a MIDI file for a partial range by pressing the MIDI file button, and then the “Set Range” button.

**Batch convert a folder of songs to MIDI files.**

You can convert an entire folder of Band-in-a-Box songs to MIDI files with a single command and choose the resultant file names to be based on either the file name or the song title name. Press the “Batch mode” button in the MIDI file dialog to access this feature.
Save Options

-[File on Disk] saves a MIDI file to your hard drive or floppy disk. You can then load the MIDI file into your sequencer for further editing.

-[Clipboard] copies the MIDI file to the Windows Clipboard as a Standard MIDI File. This feature allows clipboard enabled programs to Edit | Paste the Band-in-a-Box MIDI file directly into the program. For example, you can clipboard-paste Band-in-a-Box MIDI data to PowerTracks Pro Audio, CakeWalk, Musicator, etc.

The Melody/Soloist (with harmonies) will be written to the MIDI file. If you’ve set a Melody or Soloist/Thru Harmony, that MIDI data will be written to the MIDI file also. See the settings in the Opt | Preferences dialog box to control how the harmony is written to a MIDI file.

The Chordsheet part markers are written to the MIDI files. They can be read by PowerTracks Pro Audio and by Band-in-a-Box if re-importing the MIDI file with the Chord Wizard.

Recording to External Hardware Sequencers

Many people use Band-in-a-Box in live situations. If you are unable to bring your computer with you, a good alternative is a hardware sequencer or a keyboard with a built-in sequencers that reads Standard MIDI Files. To transfer songs to the Sound Brush, follow these simple steps:
- Make a MIDI file of the song by pressing the button.
- Either save the file directly to a floppy disk or copy it to the floppy from your hard drive.
- The Sound Brush is then able to read the IBM formatted disk with MIDI files on it.

MGX Files

When a MIDI file is loaded onto the Melody (or Soloist) track, the Track Type for the Melody (or Soloist) gets set to Multi-Track. When the file is saved, the extension will be MGX, allowing you to easily identify the Band-in-a-Box songs that you have that contain entire MIDI files.

Saving Audio Files

If you have recorded an acoustic instrument, Band-in-a-Box can render the MIDI data to a wave file (*.wav) and merge it with your live audio recording to produce a complete digital audio file.

Press the [.WAV] button and Band-in-a-Box will render the song arrangement to an audio wave file.

![Render to Audio File](image)
The **Render to Audio File** dialog box permits you to save your file as a wave file (*.wav), a Windows Media Audio (*.wma) file, or other compressed audio formats supported by your system. You can direct render “MIDI only” songs into high quality wave files with the included Roland VSC DXi or any other DXi or VST softsynth you have. The MIDI parts are converted directly to audio without being rendered (recorded) in real time, usually in just a few seconds.

Use the Batch feature to convert an entire folder of Band-in-a-Box songs to audio files. There is an option to name the resultant audio files based either on the original file name or the song title name.

Another option resets the DXi synth after each render. This insures that no audio (stuck notes etc.) from the previous file is retained.

**Frozen Tracks**

Any track can be frozen (MIDI or RealTrack). When frozen, it won’t get changed or re-generated. This saves time when replaying previous songs, and allows you to freeze an arrangement that you like. If you freeze the whole song, you don’t have to wait at all for the song to regenerate. Next time you play, it is ready to go.

**Save your Configuration**

The **[Pref]** button opens the Preferences dialog box, which allows you to set the program settings that are saved in the Band-in-a-Box for Windows configuration file called INTRFACE.BBW. The various Preferences are described in detail in the Reference chapter.

**Custom Preferences**

You can save and load custom preferences files with your current settings saved and restored. For example, you can have a preference that remembers a certain group of songs, notation transpositions, etc.

The **Opt. | Return to Factory Settings** menu command saves preferences to disk, so that the settings can be restored at any time.
Choose the menu item Opt. | Save Preferences As to save a configuration or Options | Open Preference to load a saved configuration.

Burn Your Own Audio-CD

You can burn your Band-in-a-Box composition directly to an audio CD that will play in any standard CD player.

To burn your CD:

Press the [.WAV] button to open the Render to Audio File window. Then press the [Burn to Audio CD] button. This renders the file to a stereo wave file, and then launches MiniBurn, the built-in CD burner application in Band-in-a-Box. The song just rendered will be listed in the burn list.

You can add other files to the list to make up a full CD, or choose [Burn CD - No Finalize] to allow other files to be burned to the CD later. The CD will not be playable until finalized.

Note: This feature requires that you have a CD-R or CD-RW drive. If your drive is not recognized by MiniBurn then you should burn the rendered .WAV file to CD using the software supplied with the CD drive.

Congratulations!

You have completed the full process of song production in Band-in-a-Box.

You can now produce a complete song in Band-in-a-Box with a melody, solo, and harmonies plus RealDrums and RealTracks and your own audio track with harmonies and professional effects.

You can print out beautiful notation in a professional Jazz font, complete with chord symbols, lyrics and your own text markers and annotations. And you can save your song in various MIDI and audio formats for playback from your computer, over the Internet, or from an audio CD.

You’re ready for endless hours of fun and great music with Band-in-a-Box.
Chapter 7: RealTracks and RealDrums

RealTracks

What are RealTracks?

RealTracks create Band-in-a-Box tracks with live audio recordings of top studio musicians and recording artists. These tracks take the place of the MIDI track for that instrument, but can still be controlled just like the MIDI instrument (volume changes, muting, etc.). Best of all, they follow the chord progression that you have entered, so that you hear an authentic audio accompaniment to your song.

RealTracks are not “samples,” but are full recordings, lasting from 1 to 8 bars at a time, playing along in perfect sync with the other Band-in-a-Box tracks. There are many Band-in-a-Box styles that use RealTracks, and they can be built into any style to replace the Bass, Guitar, Piano, or Strings part. They can also be generated to the Soloist (or Melody) track using the Soloist feature and saved with the song.

Band-in-a-Box Pro includes a selection of RealTracks combos for Pop, Jazz, and Country.

More RealTracks

There are hundreds of RealTracks available, either as separate add-ons, or bundled into the various Band-in-a-Box PAKs for better value. To see which RealTracks you have, visit the (main menu) Opt. | What add-ons do I have? dialog. This will list the RealTracks sets that you have. This feature is also available from the Help menu.

When a song is loaded, played or saved, a yellow hint message will appear if any RealTracks are missing, listing the files that are missing.

RealTracks Settings

Ctrl+click on the RealTracks toolbar button to go directly to the RealTracks Settings dialog, or Shift+click to open the RealTracks Picker. A single click on the toolbar button opens a menu with selections for the RealTracks Picker Dialog, the RealTracks Preferences (RealTracks Settings dialog), and a manual command to Select better RealTracks for this tempo for the Bass, Piano, Guitar, and Strings parts if there are any available.

The RealTracks Settings dialog can also be accessed by selecting the [RealTracks] button from the Preferences window.
In the **RealTracks Settings** dialog you can Enable/Disable the RealTracks feature.

**RealCharts (notation from some RealTracks)**

Most RealTracks now display notation, i.e. RealCharts, showing the notes that are being played. Some Guitar RealTracks also show tablature and an accurate on-screen fretboard guitar display to show what is being played on guitar.

To see which instruments have RealCharts, visit the **Assign RealTracks to Tracks** dialog and sort column 11, “Chart.” Instruments with an “N” or “Gt” in this column have RealCharts.

- Instruments with “Gt” in the Chart column have RealCharts with accurate guitar tab and on-screen guitar fretboard display.
- If the instrument is Acoustic Piano and there is an “N” in the Chart column, the instrument has a Jazz piano RealChart. RealTracks piano parts that are on the piano track will appear with the right and left hands split in notation.
- The various other instruments with an “N” (Pedal Steel, Slide Guitar, Resophonic, Trumpet, Alto Sax, Tenor Sax) have RealCharts in standard notation.

At the top of the screen, if a track has RealTracks, but is NOT a RealCharts track, then the track name is green.

Real Instrument charts: If a track has a RealChart, the track name is green and underlined with a short line.

RealGuitar charts: If a track has RealChart, and is a guitar track with accurate tab and on-screen guitar fretboard display, then it is green and underlined with a long line.

The RealCharts can be saved to MIDI files or with Band-in-a-Box songs (MGU).

RealCharts are optional and are selected in the **RealTracks Settings** dialog.

- “Show RealCharts notation from styles and songs” will show RealCharts that have been generated from styles or songs stored with RealTracks.
- “Show RealCharts notation for Soloists” will show RealCharts that have been generated from the **Select Soloist** dialog.
- “Save RealCharts in MIDI files” will save the RealChart to a MIDI track so you can analyze it in other programs.
- “Save RealCharts in BB Songs (MGU)” will save the RealChart MIDI information to the MGU file.
RealTracks Folder

The RealTracks styles are stored in c:\bb\RealTracks (assuming that c:\bb is your Band-in-a-Box folder).

You can choose an alternate location by pressing on the folder button and picking an alternate folder. Then, click on the [Update] button to confirm the new location.

You don’t need to visit this folder when using RealTracks; it is used internally by Band-in-a-Box, so you shouldn’t add or remove files from this RealTracks folder unless you “know what you’re doing.”

If Band-in-a-Box cannot find your RealTracks folder a yellow hint message appears at boot up to alert you to that, and tells you how to fix it: “Note: You have RealTracks installed, but none are found in your RealTracks folder. You should point to your correct RealTracks folder in Prefs | RealTracks Settings.”

Applying RealTracks Settings

You can apply an overall Volume Adjust to the RealTracks. If they are too loud overall, try a Global Volume Adjust of about -10 dB.

“Allow soloing to crescendo” can be applied to some RealTracks to have the intensity of the solo building up, with the flashiest part of the solos playing as the solo builds.

If you have similar RealTracks available at different tempos, Band-in-a-Box will automatically choose the best one to use. For example, if you have a ballad loaded, with an Acoustic Bass RealTracks at tempo of 60, and you speed up the tempo to 140, and press [Play], Band-in-a-Box will automatically choose an Acoustic Bass RealTracks closer to tempo of 140, if it is the same genre and feel. This means you can use a simple Jazz style, and play it at various tempos, without having to set the best RealTracks based on tempos.

The RealTracks that support the Tempo Swapping are listed in the next to last column (headed TS) of the RealTracks assign dialog.

For example, if we load in a Ballad Jazz style like _BALFRED.STY.

We can see that the name of the Bass RealTracks style has a tilde (~) symbol at the beginning. That indicates that it could be changed to a different RealTracks style at a higher tempo.

Now let’s increase the tempo of the song to a higher tempo, like 115. We will see that the name of the RealTracks instrument switches to one that is suitable for a tempo=110. So when you press play, you’ll hear the RealTracks closest to your tempo, without having to do anything to make this happen.

The default for the tempo swapping feature for RealTracks is “true.” (It was originally false.) There is an option in the RealTracks Settings dialog to disable automatic tempo swapping. When automatic RealTracks substitution is disabled (unchecked) the “Show message when better RT are available at this tempo” setting will be turned on.

A yellow message appears if RealTracks are selected, but better RealTracks are available for the current tempo.

Better RealTracks are available, closer to the song tempo, for the following tracks: Bass, Piano, Guitar, Strings
Chapter 7: RealTracks and RealDrums

You can then substitute all four parts by pressing the RealTracks toolbar button and then clicking on Select better RealTracks for this tempo.

<table>
<thead>
<tr>
<th>Realtracks Picker Dialog</th>
<th>(Shift Click)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Realtracks Preferences</td>
<td>(Ctrl Click)</td>
</tr>
<tr>
<td>Select better RealTracks for this tempo: [Bass,Piano,Guitar,Strings]</td>
<td></td>
</tr>
</tbody>
</table>

The Tempo Swapping (TS) column of the RealTracks Assign dialog shows which RealTracks are eligible for Tempo Swapping. The tempo swapping only occurs if you have the RealTracks in your installation.

The “speed up” feature works automatically and uses CPU resources during playback. If you have a multi-core machine, you may not notice this at all, since it will use different cores than the main Band-in-a-Box thread. If you have an older machine, low on memory, slow hard drive etc., you can disable this feature to ensure that your machine is doing less CPU work during playback.

4-bar endings allow time for a natural decay of the instruments. By “4-bar endings” we are referring to a 2-bar ending that has an additional two bars to allow for the natural decay of the audio instrument (instead of being quickly faded out). 4-bar endings are on by default. You can disable 4-bar endings globally by leaving this box unchecked or on a song-by-song basis in the Song Settings dialog, Edit | Settings (for this song).

When this is set, reverb will be added to the RealTracks and RealDrums.

RealTracks support Shots, Holds, and Pushes.

Note: You need the installer that creates a Library\Holds folder in your RealTracks folder.

The RealTracks Assign dialog that lists each RealTrack has the last column called “Holds” that lists whether that RealTrack supports Shots, Holds, and Pushes. If there is a number there (other than a blank field), then they are all supported.

If there is an “n” this means that they are supported, but you don’t have the Holds_## files in the RealTracks\Library\Holds folder.

Assuming that you have the Holds files for the RealTracks that you are generating, then you just use Band-in-a-Box as you would normally, and type chords with shots (e.g. C...), holds (C…), or pushes (^C or ^^C for 8th or 16th note push), or combinations of push and hold (^C…).

Many Jazz comping styles play triads (instead of 7ths) when simple triads are entered, instead of “jazzing them up” to 7ths chords. Enable this setting if you prefer to have triads automatically “jazzed up” when comping using Jazz RealTracks.

The [Demos] button displays a menu of song demos with RealTracks in the bb\RealTracks – Demos folder.
Assign to Track launches the Assign RealTracks to Track dialog, where RealTracks instruments are listed and assigned to Band-in-a-Box tracks.

Save the new settings you have made in this dialog by pressing the [Update] button. Most changes will take effect the next time you press [Play].

The installation routine for Band-in-a-Box usually installs (decompresses) the audio files to WAV files. If you decided not to decompress them during the installation, you can press the [Install] button to complete that process by decompressing any WMA/MP3 files in the RealTracks folder that do not have a .WAV file, or that have an older .WAV file.

The small button to the right of the [Install] button installs .WAV files for a single folder. This will search the selected folder and find .WMA files that can be expanded to .WAV files.

The [Archive] button will erase the .WAV files in the RealTracks folder when there is a smaller .WMA file available. The .WAVs can be restored at a later time by pressing the [Install] button.

The small button to the right of the [Archive] button archives .WAV files for a single folder. This will search the selected folder and find .WAV files that can be erased because a .WMA file with the same name also exists. [Install] will restore the .WAV file.

The [Verify] function checks your installation to find if RealTracks are properly installed, or any files are missing.

1. It checks the Bt0 status of the RealTracks st2, compared to the Bt0 found in the RealTracks folder.
2. It issues error messages if a st2 is found, but not the RealTracks folder.
3. Issues a message if xt2 not found (for a chording RealTracks).

[Defaults] sets RealTracks Settings back to default settings.

Press [OK] to make your selection and exit the RealTracks Settings dialog.

Press [Cancel] to exit the RealTracks Settings dialog without making any changes. To see the [Cancel] button, it may be necessary to expand the window by maximizing it or dragging down the lower border.

Using RealTracks

There are three ways that you can use RealTracks with Band-in-a-Box.

1. RealTracks in songs. The [Assign to Track] button in the RealTracks Settings dialog allows you to assign specific RealTracks instruments to a track in a song. It launches the Assign RealTracks to Track dialog, which also displays the current RealTracks that are assigned to each track. This dialog is also available with a right mouse click on any Band-in-a-Box part name. Then select the Add/Remove RealTracks menu command.

2. RealStyles. These are Band-in-a-Box styles (.STY) that have at least one RealTrack. For example the style called “=GeorgeP.sty” is a RealStyle because it uses RealPedalSteel for the Strings part, as well as other instruments (MIDI bass, MIDI piano, MIDI guitar, RealDrums).

   Technical note: You can add a RealTrack to an existing style in the StyleMaker, using [Misc] [More] “Assign RealTracks to style.” The RealTracks gets generated on one of the Band-in-a-Box style tracks (Piano, Guitar, or Strings).

3. RealSoloists. These are Soloists that are generated on the Soloist track, by pressing the Soloist button on the main screen. Soloists 361-363 are using the RealTracks.
Tip: You can quickly go to Soloist 362 by typing 362 and pressing “Go To #” or using the Favorites if you’ve previously chosen this soloist.

Using RealTracks in Songs - Assign RealTracks to Track Dialog

The Assign RealTracks to Track dialog assigns a RealTracks instrument to any of the Band-in-a-Box instrumental tracks. It also shows any RealTracks that are assigned to Band-in-a-Box tracks.

Note: RealTracks can either be assigned from the style or from the song. This dialog allows you to assign the ones in the song.

This dialog is launched by

1. Shift+click on the RealTracks toolbar button, or click and select RealTracks Picker Dialog.

2. Right-clicking or double clicking on an instrument name at the top of the Band-in-a-Box main screen and choosing Assign RealTracks in the menu.

3. Press the [Assign to Track...] button in the RealTracks Settings dialog.

The dialog allows you to assign a specific RealTracks instruments to a track in a song. It also displays any RealTracks that are currently assigned to each track.
Tip: RealTracks in styles are assigned in the StyleMaker. Press the [Misc.] button or use the StyleMaker menu command Style | Misc. Settings to go to the Misc. Style Settings dialog, then click on the [More] button for the More Settings dialog.

Assign to this track
- Bass
- Piano
- Drums
- Guitar
- Strings
- Melody
- Soloist

To use the dialog, first select the track that you want to assign. Then, select the RealTracks that you want in the list below it.

The list can be sorted by clicking on any column heading. As well as Name, Instrument, Type (Rhythm or Soloist), Feel (Even or Swing), Tempo, Genre, and Number there are more columns with additional information about each RealTrack instrument.

The tempo shown is the “base” (or typical) tempo for the RealTracks instrument as it is played, but RealTracks have a tempo stretching capability that enables their application over a wide range of tempos. If saving a song with RealTracks and the audio base tempo is different than the song tempo, a warning message will show, asking you to confirm that you want to save it like this.

- The “N/A” column shows “N/A” for RealTracks that you have not installed yet or haven’t purchased, if “Show RealTracks that are N/A” is checked.
- “Set” is the number of the RealTracks set that includes the instrument.
- The “Stereo” column shows whether the instrument playback is stereo or mono.
- Instruments with an “N” or “Gt” in the “Chart” column will display the RealTrack in notation.
- The “Artist” column has the name of the musician playing on the RealTrack instrument. See the “Artist Bio” box for information about the player.
Chapter 7: RealTracks and RealDrums

- The letter “Y” in the “TS” column means that Tempo Swapping is supported for the instrument. If you have similar RealTracks available at different tempos, Band-in-a-Box automatically chooses the best one to use.

- “Holds” indicates whether that RealTrack supports shots, holds, and pushes. If there is a number there (other than a blank field), then they are all supported.

“Memo” field - This describes the currently selected RealTracks style, and includes some useful tips, such as a suggested tempo range and Band-in-a-Box styles to use it with.

“Artist Bio” - The RealTracks have been recorded by top studio musicians. The artist names and bio are displayed for the RealTracks. Double click here to view the full memo.

“User comments” - You can enter your own comments about any style in this field. The comments are saved in RTUserMemos.txt

Use the song and style demos to audition RealTracks.

The [Song Demo (MGU)] button will display a list of songs in the bb\RealTracks – Demos folder that use the selected RealTrack instrument. Click on the song name and then press the [Play] button to hear it.

The [Style Demo (.STY)] button shows a list of styles that use the currently highlighted RealTracks instrument. Clicking on a style name will load the style into the current Band-in-a-Box song. Press [Play] to hear your current song played with the RealTracks style that you want to audition.

Press the [Rebuild] button for more information, or after you have installed new RealTracks.

With the Timebase option you can play any RealTracks at normal, half-time, or double time. Half time is used for fast tempo songs when a much slower tempo RealTrack has been chosen. Double time is used for slow tempo songs (e.g. ballads) when a much faster tempo RealTrack is chosen. This allows you, for example, in a ballad at a tempo of 70, to add a RealTracks Sax solo with a tempo of 140, and play it as a double time, which will match the ballad tempo of 70. All of your existing RealTracks can be used at three different tempos (normal, half-time, double time).

[Defaults] sets the dialog to default values.

[Settings] launches the RealTracks Settings dialog.

[Save Style] button saves the current style, but with RealTracks assigned to the style equal to the current song’s RealTracks. The volumes used in the style will match the volumes set on the main screen in Band-in-a-Box (compared to a default of 90). For example, if you set the bass volume to 40, the Style will be saved with a negative decibel (dB) setting, so that it will playback at a quieter volume (when all volumes are set to 90).

[Audition (WMA)] and [+] buttons play a short WMA file demo of the currently selected RealTracks, without affecting the currently loaded song in Band-in-a-Box. The [Audition WMA] button plays a solo file, and the [+] button plays a file in context with a band.

The [None] button sets the current track to no RealTracks assigned for the song.

This sets all RealTracks for the song to “None.” It will also optionally disable RealTracks present in the style for this song.

Select “Disable RealTracks for this track (Force this track to MIDI)” if you want to have no RealTracks instrument for this track, even if the style specifies a RealTrack.

Since RealTracks are add-on purchases for Band-in-a-Box, your version may not contain all RealTracks. Selecting the “Show RealTracks that are N/A” checkbox will show you all available RealTracks.
Tip: Opt. | What add-ons do I have? will tell you what RealTracks sets you have.

- [ ] Show RealTracks Variations
- [ ] Show if Tempo is out of Range

Some RealTracks have variations available, such as the Acoustic Jazz Bass, which has variations that play in “2” only, in “4” only, or in “2” and “4” (for “a” and “b” substyles). Normally you will want to “Show RealTracks Variations.”

Use “Show if Tempo is out of Range” checkbox to show/hide RealTracks that are out of compatible tempo range.

A filter is available. Type a filter text (e.g., bass) and press [Update] and you will then see the list filtered to show only RealTracks that have the word bass somewhere in the title, memo, genre, etc. Pressing [Show All] will cancel the filter, and show all RealTracks again.

Multiple search terms work with the filter. If you separate terms with a space, each term is searched for separately. So a search for “Country Guitar Ev 120” will find any Country Guitar styles with an Even feel that would work with a tempo of close to 120. Adding a search term that has a number will filter for RealTracks that match the tempo or within a compatible range.

[Generate Track] will generate a RealTracks instrument on the currently selected track.

This button will close the dialog, and assign the RealTracks instrument to the current track. Then, when play is pressed, the RealTrack will generate.

Freeze Tracks

Any track can be frozen (MIDI or Real track). When frozen, it won’t get changed or re-generated. This saves time when replaying previous songs, and allows you to freeze an arrangement that you like. If you freeze the whole song, you don’t have to wait at all for the song to regenerate. Next time you play, it is ready to go. This freeze feature is different than the previous limited freeze feature that rendered the whole arrangement to the audio track.

You can make frozen tracks by pressing the Freeze button (snowflake) on the toolbar, and then choosing which tracks that you want to freeze or unfreeze.

There are a number of reasons that you would freeze a track.

Reasons to Freeze a RealTracks track (audio):
- Frozen tracks will play back instantly, not requiring time to generate.
- They play back the same way each time, so if you like a solo, you can “freeze it.”
- If you send a song to a friend as “frozen,” they will hear the same performance.
- For the Soloist track, if you generate a solo, it can now be saved (by freezing the track).

More reasons to freeze any track:
- Frozen tracks play back instantly, without requiring time to regenerate.
- They play back the same way each time.
- You can change the chord progression of the song, and have one part playing a different chord progression than the rest of the band. For example, type a “blowing” chord progression, generate a solo, freeze the solo track, then type a normal chord progression and generate the rest of the instruments (bass/guitar etc.) that will play the normal changes.
Have different instruments play different styles. For example, the Bass could be generated using Reggae, then Frozen, and then the rest of the instruments generated using a Techno style.

**Un-Freezing a Track(s)**

![Freeze Table]

This is also done with the Freeze button. Choose a frozen track to un-freeze it, or choose “Un-Freeze all tracks.”

**Using RealTracks in Styles.**

For this discussion, we will assume that we are using RealPedalSteel, in the style “=GeorgeP.sty.”

<table>
<thead>
<tr>
<th>Freeze</th>
<th>Freeze all tracks [all frozen]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Un-Freeze all tracks [all frozen]</td>
</tr>
</tbody>
</table>

✓ Bass [frozen]
✓ Piano [frozen]
✓ Drums [frozen]
✓ Guitar [frozen]
✓ Strings [frozen]
✓ Melody [frozen]
✓ Soloist [frozen]

Note: We use this naming convention for Real Styles. This is optional.

The first letter of “=” indicates that at least one instrument is a RealTrack.

The last letter(s) indicate(s) which instrument it is.

“P” = Pedal Steel, “G” = Guitar, “PG” = Pedal Steel and Guitar.

So the name “=GeorgeP.sty” tells you that it is a style called George, that has RealPedalSteel. The MIDI tracks will be the same as another country style that we have called C_George.STY

Load in the song c:\bb\Tutorial BB2008\=GeorgeP.mgu

You will see that the Strings part at the top of the screen is highlighted in green. That indicates that this is a RealTrack.

To play the song, just press [Play]. You’ll then hear pedal steel guitar on the String part.

You can adjust the volume of the pedal steel part with the Volume control for the String part, just as with any Band-in-a-Box part, or mute it by right clicking on the String part.

Note: The RealTrack can optionally be generated on the Piano, Guitar, or Strings parts in a Band-in-a-Box style.

**Finding all styles that have RealTracks.**

Open the **StylePicker** and locate the category called RealStyles.

RealStyles [All] [212]
“Classic” RealStyles [122]
Styles with RealTracks [All] [663]
Styles with RealTracks [Jazz] [101]
Styles with RealTracks [Blues] [80]
Styles with RealTracks [Rock] [227]
Styles with RealTracks [Country] [272]
Styles with RealDrums [755]

RealStyles are styles that use only RealTracks instruments and RealDrums. They are all audio, with no MIDI tracks.

Styles with RealTracks are a combination of RealTracks instruments and MIDI instruments. They use RealDrums.

Styles with RealDrums are MIDI styles that use RealDrums.
New styles can be created with RealTracks and RealDrums in the StyleMaker, and existing styles can also have RealTracks or RealDrums substituted for the original MIDI tracks. See the StyleMaker topic in the chapter titled User Programmable Functions.

**Using RealTracks in Solos.**

Press the Soloist button (Shift+F4) and launch the **Select Soloist** dialog. Get to Soloists in the range 361 and higher. You can do that either by:

1. Typing 361 and pressing **Go To #**.

2. Choosing Favorites will allow you to return to a recently chosen Soloist

3. Choose the Genre “RealTracks (audio soloists)” from the list of genres to see all available Soloists that use RealTracks.

As with other Soloists, press the [**All Solo**] button to make sure that the Soloist will be generated for all choruses, or [**Melody and Solo**] if you just want the Soloist for a certain chorus.

Your RealTracks solo will be saved with the song and the Soloist track will be frozen and marked with an asterisk (*).

**Saving Your RealTracks**

RealTracks that have been frozen will be saved with the song. Frozen tracks will play back instantly, not requiring time to generate. They play back the same way each time, so if you like a solo, you can “freeze it.” If you send a song to a friend as “frozen,” they will hear the same performance.

**Rendering RealTracks to .WAV**

The RealTracks performance is not saved with the Band-in-a-Box MGU file. This is because the Band-in-a-Box MGU file only contains chords/melody/lyrics (and an optional audio track WAV file)

As with other MIDI Band-in-a-Box parts and RealDrums, the RealTracks can be saved by

- Rendering the performance to a WAV file, or
- separate WAV files.

**Technical Tip:** If you want to permanently attach a RealTracks WAV file to a MySong.MGU song, you could render to separate WAV files, and then rename the RealTracks WAV file to MySong.WAV. Then the RealTracks will be on the Audio track.

When a song is loaded, played or saved, a yellow hint message will appear if any RealTracks or RealDrums are missing, listing the files that are missing.

**Are other RealTracks available?**

There are hundreds of RealTracks available with more in production. Check [http://www.pgmusic.com/products_RealTracks.htm](http://www.pgmusic.com/products_RealTracks.htm) for the latest releases.
RealDrums

The RealDrums feature replaces MIDI drums with audio drums. A single click on the toolbar button opens a menu with selections for the RealDrums Picker Dialog and the RealDrums Preferences.

Shift+click on the RealTracks toolbar button to go directly to the RealDrums Picker, or Ctrl+click to open the RealDrums Settings dialog.

Why do RealDrums sound better than MIDI Drums?

The RealDrums are recordings of top studio drummers, playing multi-bar patterns. MIDI drums are patterns based on single drum hits, being programmed, typically on a quantized grid, of what people assume drummers are typically playing. We record drummers at multiple tempos, so the playing you hear at various tempos is also musically different, not just “sped up.” Drummers play different types of fills etc. at slower/faster tempos, and these are captured with RealDrums.

Technical note: If interested, you can see which tempos have been recorded by looking in the c:\bb\drums\ folder for the particular style you are interested in.

How Do RealDrums Work?

There are several ways to hear RealDrums with new or existing Band-in-a-Box songs. The simplest way is to select a style that already uses RealDrums. They have their own category in the StylePicker.

Styles with RealDrums [755]

Styles with RealDrums are identified in the list by a style name beginning with a minus sign. For example “-ZZJAZZ.STY” is a version of the ZZJAZZ.STY that uses RealDrums.

You can see what RealDrums set is used in a particular style is in the StyleMaker’s Misc. Style Settings dialog. Open the StyleMaker and click on the [Misc] button to get there.

You can change the RealDrums style, or assign RealDrums to a style that doesn’t have them, by clicking on the RD button and making a selection from the RealPicker list.

RealDrums can also be enabled to substitute for MIDI drums when a song is played, or they can be assigned to a specific song. This is done in either the RealDrums Settings or the RealDrums Picker.

RealDrums Settings

RealDrums can be substituted for MIDI drums on existing styles in the RealDrums Settings dialog, which opens from the RealDrums toolbar button (Ctrl+click) or with the [RealDrums] button in the Preferences dialog.
With “Enable RealDrums” checked RealDrums may be used rather than MIDI. There is also a hot key combination to turn RealDrums on/off (Ctrl+Shift+F6).

The hot keys also work while the song is playing.

This will substitute RealDrums for MIDI styles. You can change the setting from 1 to 5.

If set to 1, almost all MIDI drums will get substituted by RealDrums. If set to 5, only RealDrum styles that match the style perfectly will get substituted.

This feature selects variations of RealDrums instruments with each PLAY.

Most RealDrums styles (starting with RealDrums set 5) contain many instrument variations (“brushes vs. Sticks”, “HiHat vs. Ride Cymbal” “Percussion only” etc.). Now, by selecting [Pref] [Real Drums] “…choose different variations with each PLAY,” you can hear a different variation each time play is pressed, so the song sounds fresh each time. One time you’ll hear it with brushes, the next time with sticks and ride cymbals, etc.

When selecting RealDrums styles to use for a style, BB will use your preferences for brushes and sticks. For example, if you choose “Favor Brushes”, BB will always choose from among variations that include brushes (when available).

We have “artist” support. This allows you to choose among different drummers playing the same style. For example, we have multiple artists playing the “JazzBrushes” style. You can set Band-in-a-Box to choose a different artist with each play, or always choose a specific artist.

This will replace the RealDrums that you don’t have with ones that you do have.

Songs can have RealDrums added to them. To do this, set the desired style in the Preferences RealDrums Settings dialog, or with File | Save Song with Patches & Harmony.

This will let the current song use the specific RealDrums style.

Click on the [RD] button to select a specific RealDrums style to use in a particular song. This will launch the RealDrums Picker with a list of all available RealDrums styles.

The [Clear] button clears the currently selected RealDrums for the song.

When this is set, if you save a specific style with a song, you’ll hear a new variation of that style each time you press PLAY, with different drum instruments.

This allows the RealDrums to change styles with multistyles, style changes, or specific RealDrums style changes entered at any bar in the Edit Settings for Bar dialog (F5).
In the RealDrums Settings dialog, there are now buttons that will, for a chosen RealDrums style, enable you to (1) play the RealDrums demo song, (2) show a menu of BB styles that would work with the RealDrum style and (3) play a song demo of various BB styles that work with the Real Drum style.

**INSTALL button.** When this is pressed, WAV files will be created from any RealDrums styles that are still WMA files. Make sure that you have enough space available on your hard drive prior to installing the RealDrums. The small button installs WAV files for a single folder.

*Note:* Usually the WAV files have already been created upon installation, if so this feature isn’t needed.

This will erase the WAV files in the Drums folder when there is a smaller WMA available. The WAV files can be restored by pressing the [Install] button. The small button archives files for a single folder.

**Selectable Folder for your RealDrums styles.** Now you can choose any folder (e.g. e:\Drums) for your RealDrums. This allows you to, for example, conserve space on your C:\ drive.

If Band-in-a-Box cannot find your Drums folder, a yellow hint message appears at boot up to alert you to that, and tells you how to fix it: “Note: You have RealDrums installed, but none are found in your Drums folder. You should point to your correct Drumss folder in Prefs | RealDrums Settings.”

**Tempo checking for chosen RealDrums styles.** If you choose a RealDrums style, and the tempo is out-of-recommended-range for the style, Band-in-a-Box will inform you of that – you can still use the style of course. RealDrums styles that get chosen automatically by Band-in-a-Box will always be compatible with your song.

**RealDrums Picker – Assign RealDrums to Songs**

Shift+click on the RealTracks toolbar button to open the RealDrums Picker, or Ctrl+click to go directly to the RealDrums Settings dialog.

A single click on the toolbar button opens a menu with selections for the RealDrums Picker Dialog and the RealDrums Preferences (RealDrums Settings dialog).

The RealDrums Picker is also available from the RealDrums Settings dialog, by selecting “For this song only, use this RealDrum style” and clicking on the [RD] button.

The RealDrums Picker is used to assign a particular RealDrums style for just the one song you are working on. RealDrums made by you (or others) that are added by you to the Drums folder also appear in the RealDrums Picker dialog.
A filter is available. Type a filter text, (e.g. bossa) and press [Update], and you will then see the list filtered to show only RealDrums that have the word bossa somewhere in the title, memo, genre etc. Pressing [Show All] will cancel the filter, and show all RealDrums again.

Multiple search terms work with the RealDrums Picker. If you separate terms with a space, each term is searched for separately. So a search for “Bossa Rock Ev 120”, will find any Bossa Rock styles with an Even feel that would work with a tempo of close to 120. Adding a search term that has a number will filter for RealDrums that match the tempo or within a compatible range.

There are additional settings to define your selection in the RealDrums Picker.

- “Show if Tempo is out of Range” will show styles that wouldn’t work well at the current song tempo. The acceptable range is shown in the list of styles Lo/Hi (9th and 10th) columns.
- “Show if Feel does not match” will show a song where the drums are in Even feel and the style is Swing (or vice versa).
- “Show RealDrums that are not Favorites” (*) You can assign a style as one of your favorites by clicking in the first column. Then you can sort by favorites or use this option to only see favorites.
- “Show RealDrums” that are N/A” These are styles not found in the Drums folder, likely because they are add-on styles not purchased yet. Press the [Rebuild] button and check the RealDrums Settings to confirm that you have the correct Drums folder selected.

If Band-in-a-Box cannot find your Drums folder, a yellow hint message appears at boot up to alert you to that, and tells you how to fix it: “Note: You have RealDrums installed, but none are found in your Drums folder. You should point to your correct Drums folder inPrefs | RealDrums Settings.”
“Memo” is a memo description of the style. These are stored in bb\RDPGMemos.txt file. You can also add your own memos in the User Comments box below.

The “Artist Bio” shows brief summaries of the careers of the top drummers featured in RealDrums.

RealDrums for this song: [from style] NashvilleEven^8-HiHat

This shows the current RealDrums for this song. This can either come from the style, or a specific RealDrums for this song, set in this dialog.

Tip: RealDrums in styles are assigned in the StyleMaker. Press the [Misc.] button or use the menu command Style | Misc. Settings to go to the Misc. Style Settings dialog and make your selections in “RealDrums Settings.”

Set this if you want MIDI drums and want to override a RealDrums that is set in the style.

This sets the drums to no RealDrums override for the song, and optionally also forces MIDI drums (i.e., no RealDrums for the style either).

The RealDrums list can be sorted by any of the column headings.

* Click in this column to enter an asterisk, indicating that this is a favorite style.

Click on the name of the RealDrums style name that you want to select for the song. Names ending in a caret ^ have variations available.

^ Clicking in the caret column will show the variations for the selected RealDrums style (if available).

Genre is the type of music that the RealDrums style comes from, such as Jazz, Rock, or Country.

Genre (more) suggests additional types of music that the RealDrums style might work for.

/4 indicates the time signature, which is 4/4 by default. If the column is empty the time signature is 4/4, if there is a 3 in this column the time signature is 3/4.

Ev* indicates the feel of the RealDrums style, either Even or Swing.

The listing in the 8 column indicates whether the meter is based on eighth notes (8) or sixteenth notes (16).

Lo is the slowest tempo for which the RealDrums style is suited.

Hi is the fastest tempo recommended for the style.

X indicates a style with a tempo that is out of range for the song.

N/A are styles not found in the Drums folder.

Artist is the name of the drummer who recorded the RealDrums.

# is the number of the RealDrums set for the style.

You can type in your own comments about any style in the “User comments” field and they are are saved in a file called RDUserMemos.txt
RealDrums styles ending in a caret (^) have variations available. They are listed here. Where there are two instruments shown, such as Brushes/Sticks, the first one plays in the “a” substyle and the second in the “b” substyle.

<table>
<thead>
<tr>
<th>Variations</th>
</tr>
</thead>
<tbody>
<tr>
<td>01-Sticks</td>
</tr>
<tr>
<td>02-Brushes</td>
</tr>
<tr>
<td>03-Ride, Ride, Ride</td>
</tr>
<tr>
<td>04-CrStk, CrStTm</td>
</tr>
<tr>
<td>05-Brush, Sticks</td>
</tr>
<tr>
<td>06-Brsh, 2atB</td>
</tr>
<tr>
<td>07-Brsh, St, 2atB</td>
</tr>
<tr>
<td>08-Sticks, 2atB</td>
</tr>
</tbody>
</table>

[RD Demo] loads and plays a demo of the chosen RealDrum style.

[SongDemo] shows Band-in-a-Box styles that will use this RealDrums style if “Substitute RealDrums” is selected. The song demo for the style will get loaded.

[BB Styles] shows Band-in-a-Box styles that will use this RealDrums style if “Substitute RealDrums” is selected. The style will get loaded if the menu selection is made.

[PlayNow] loads the selected RealDrums and starts playback. If you haven’t played the song yet, since you haven’t generated non-drums tracks, you will only hear drums. In that case, press Shift+Click to generate all tracks.

The [Stop] button stops the song playback. Click (or Shift+Click) on [PlayNow] to resume.

The [Audition] button doesn’t load the style but instead uses Media Player to play a demo .WAV file for the style.

Rebuild builds the list of RealDrums present as folders in the bb\Drums folder. If you add new drum styles, press this button to update the list. (These are stored in a bb\DrumFolderNames.txt file.)

[Defaults] returns the dialog to default settings, which will show all available styles.

Press [OK] to make your selection and return to the RealDrums Settings dialog.

Press [Cancel] to return to the RealDrums Settings dialog without making a selection.

**Note:** When a song is loaded, played or saved, a yellow hint message will appear if any RealTracks or RealDrums are missing, listing the files that are missing.

RealDrums Selection in the StylePicker

You can also select RealDrums styles within the StylePicker. Highlight a MIDI style that you like, and press the RealDrums [Best] button, to see a list of the most compatible RealDrums styles for that style, or click on the [RD] button to open the RealDrums Picker and select from all available RealDrums.
Audio Controls for RealTracks and RealDrums

Tone Control
There is a bass/treble Tone control for individual tracks with RealTracks or RealDrums, so you can easily adjust the bass/treble EQ for any RealTrack. The Tone settings save with the song.

Choose an instrument and then use the tone control to adjust the tone from -18 (maximum bass) to +18 (maximum treble). Default is 0.

Audio Reverb Control
The A. Reverb control for individual tracks with RealTracks or RealDrums is so you can easily add audio reverb (0 to 127). The reverb type is also settable, and saved with the song.

At the top of the screen, there is an “A. Reverb” control (Audio Reverb). Click on an instrument radio button, and then set the Reverb for it.

The Audio Reverb varies from 0 to 127. Clicking on the left hand side of the control allows you to enter a setting, or click on the up/down arrows.

Note that this only applies to RealTracks, since MIDI tracks have MIDI Reverb, which is set via a MIDI Reverb control.

Auto-Add Reverb
There is also a feature that automatically adds reverb to RealTracks, according to instrument type. No reverb is added to the Bass part, for example, but most instruments get reverb. This feature defaults to on, but you can turn it off in the PG Music Reverb dialog, which opens with the [Aud. Rev] toolbar button or in [Pref][RealTracks].

If you just want more or less reverb added, you can adjust the Strength %. For example, the default Band-in-a-Box reverb setting is 40 for most tracks. If you set the strength to 75%, it becomes 30.

Audio Playback Settings
Audio Reverb and Tone can also be set in the Audio Playback settings by clicking on the audio label.

Master Reverb and Tone can be set by clicking the Combo button, and then using the Audio Reverb and Tone controls. For Audio track rendering, reverb is added to the mix if there is reverb set for the Audio track.
Reverb Settings

The default is a “room” type of reverb but you can also set the type of reverb. To do this, press the Audio Reverb toolbar button, and adjust the various parameters in the PG Music Reverb dialog.

You can enable/disable the audio reverb. If you disable it, this will save some CPU cycles, so this might be advisable on an older/slower machine if you hear that the audio is clicking or not keeping up.

Click on the green Select a Preset button to open the list of presets. This list will show only the “Band-in-a-Box Default Reverb” until you save some presets of your own.

As you adjust the settings they will be applied to the current song. The Swap “Default” button toggles between your current settings and the default settings. This allows you to hear the effect of the changes you make to the settings.

Use the row of “room” buttons to load typical settings for different types of spaces. These buttons are a convenient way to either apply a particular effect or to load settings that you can then tweak to make your own preset.

Reverb Parameters

Pre-Delay is the time delay of first reflections.

Decay is the time it takes for reverb to decay. Reverb time is measured as RT60, the time it takes for reverb to decay to a level -60 dB below the dry signal level.

LF Roll off gradually reduces the bass frequencies. If you can’t add enough reverb because the sound gets too muddy, try increasing the LF Roll off slider. It is adjustable between 50 Hz and 500 Hz.

HF Roll off is the rate at which the high frequencies die away as the reverb decays. Rooms with hard surfaces are typically bright, but rooms with soft surfaces are usually darker. It is adjustable between 1 KHz (dark) to 11 KHz (bright).

Density is the density of low-level echoes near the end of the reverb tail. High Density settings add a sheen to the sound.
Mix the proportion of original signal to the reverb signal.

Output adjusts the final level of the plug-in.

**Typical Reverb Settings**
- A large hall might have long Pre-Delay, long Decay, and moderate Density.
- A hard large space such as a Gymnasium, might have long Pre-Delay, high Density and high HF Roll off.
- A soft large space such as a concert hall with carpet, padded seats, hangings, might have medium Density and low HF Roll off.
- A small hard space such as a tile washroom, might have short Pre-Delay, medium-to-long Decay, high Density, and high HF Roll off.
- A small soft space such as a large living room, might have short Pre-Delay, short Decay, medium-to-low Density, and low HF Roll off.

**Saving Settings to Presets**
You can save your reverb types as presets, and the current settings will also be saved with the song in a DX Settings\PGReverbSettings.bin file.

To save the current settings to a preset, type in a name for your preset in the “Preset Name” field.

Then click on the Save Preset arrow and choose a location in the Preset list. You can write over an existing name.

A prompt will ask you to confirm that you want to save the preset.

Select [Yes] to save the new preset to the chosen location.

**Auto Reverb**
Enable “Auto-Add Reverb to RealTracks” to automatically apply preset amounts of reverb to RealTracks according to instrument type. No reverb is added to the Bass part, for example, but most instruments get reverb.

If you just want more or less reverb added overall, you can adjust the Strength %. For example, the default Band-in-a-Box reverb setting is 40 for most tracks. If you set the strength to 75%, the Band-in-a-Box becomes 30.

You can save the current settings as the Default Reverb.

Click on [Restore Defaults] to go back to the original “factory” reverb settings for Band-in-a-Box Default Reverb.
Chapter 8: Notation and Printing

Band-in-a-Box offers a variety of notation and printing features, both for viewing parts on-screen as they play and for printing them as sheet music.

To view the notation, open the Notation window by pressing the notation button on the main screen. Close the Notation window by pressing the notation button again.

Band-in-a-Box offers multiple modes of notation for different purposes. The notation defaults to Standard Notation mode, other modes are selected with buttons on the Notation window toolbar.

- **Standard Notation** to display or print Notation and enter lyrics. The grand piano staff and/or guitar tablature with notes, chord symbols, and lyrics.
- **Editable Notation** to enter or edit notation. A special staff with time divisions for mouse-based editing.
- **Staff Roll Notation**, to enter or edit notes, velocity, and duration. The note heads are shown with editable velocity and duration lines.
- **Lead Sheet Notation** to display or print notation as full arrangements or in fake sheet style. This is a full screen notation window with notes, chord symbols, and lyrics.

**Exploring the Notation Window**

With the Notation window open, the toolbar at the top of the window gives you access to its many features and options.

- **Options Button**
  - Opens the Options dialog box.
- **Lead Sheet Button**
  - Press to launch the Lead Sheet Notation window.
- **Print Button**
  - Press this button to print the notation to any printer supported by your Windows system.
- **Notation Mode Buttons**
  - 3-stage buttons to select a Notation window mode - Standard Notation, Editable Notation, or Staff Roll mode.
  - This box displays the name of the note that will be inserted when you click the mouse.
Note / Rest checkboxes

These determine whether a Note or a Rest will be inserted when the mouse is clicked.

When this is selected, the notation is entered as monophonic (one note only) to avoid extra notes in a single note melody line.

The Clean Notation Mode cleans up the notation by eliminating display of redundant grace notes and glitches for easier reading.

While a song is playing, click the “LoopScn” button and the song will loop the bars shown on the notation screen.

You can display or print any track from the program. Press the appropriate button to change to the desired track.

You can edit events including all MIDI events and lyric events using the Event List Editor.

To enter note-based lyrics press the Lyrics button on the Notation toolbar.

The zoom buttons make it easy to increase or decrease the font size of the notation.

Add or edit Section Text on the Notation.

When this button is pressed in you can drag the mouse over notes to hear them.

Chord Step Advance

Use the Ins and Del keys on the numeric keypad to step advance on any track by one chord. The track MIDI data can display on the on piano, guitar, lead sheet, drums, and notation window(s).

This feature advances the current track and displays the next group of notes on that track. For example, if the current track is set to the Melody track, pressing the chord advance buttons will display the next note or chord of the melody. The Chord Advance feature is a great way to study the notes being played, and to navigate around the track.

Note: In this context, “chord” is referring to any group of notes, or a single note, that occurs in a track at or near the same time. You can adjust the width of what Band-in-a-Box determines a ‘chord’ to be in the Notation Options - More dialog.

Standard Notation Window

The Standard Notation window displays the notation for any individual track, and allows for the entry of chords and lyrics. Features include:
- Notation display for the Bass, Drums, Guitar, Piano, Strings, Melody, or Soloist track.
- Optional display of guitar chord diagrams.
- As the notation plays, the notes that are sounding are **highlighted in red**. This helps with sight reading or following the music.
- You can set the notation to scroll either 1 or 2 bars ahead of the music without interfering with your view of the current notation.
- Handles Jazz eighth notes and triplet figures correctly.
- Automatic options such as *auto durations, clean notation, mono display, minimize rests, hard rests,* and *engraver spacing* produce very musical and readable notation.
- Beamed notes are automatically given slanted beams.
- Groups of 5 notes will automatically display as groups of 3+2 or 2+3, or can be set this way manually. If you'd prefer to see them as a group of 5 notes, you can right mouse click on the timeline, and set the resolution to 5 for that beat.

**Right-click menu for Standard Notation**

This menu opens with a right mouse button click in the Standard Notation window.

<table>
<thead>
<tr>
<th>Command</th>
<th>Shortcut</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cut</td>
<td>Ctrl X</td>
</tr>
<tr>
<td>Copy</td>
<td>Ctrl C</td>
</tr>
<tr>
<td>Copy From .. To ..</td>
<td>Alt C</td>
</tr>
<tr>
<td>Paste</td>
<td>Ctrl V</td>
</tr>
<tr>
<td>Chord Builder...</td>
<td>Ctrl Shift B</td>
</tr>
<tr>
<td>Play Current Chord</td>
<td>&lt;Shift&gt; Enter</td>
</tr>
<tr>
<td>Chord Settings...</td>
<td>Alt F5</td>
</tr>
<tr>
<td>Bar Settings...</td>
<td>F5</td>
</tr>
<tr>
<td>Song Settings...</td>
<td>Ctrl-N</td>
</tr>
<tr>
<td>Preferences...</td>
<td>Ctrl-E</td>
</tr>
<tr>
<td>Repeats/Codas/1st-2nd Endings...</td>
<td></td>
</tr>
<tr>
<td>Play from Bar 1</td>
<td></td>
</tr>
</tbody>
</table>

Use this menu to access major editing features and dialogs. You can change to another notation mode by selecting it in the list.

**Keystroke Commands**

- To bring up the **Notation Options** window, press **Alt+N+O**.
- To change between notation views, press **Alt+N+N**.
- To bring up the **Print Options** window, press **Alt+N+P**.
- To loop the screen, press 1 on your numeric keypad.
- To jump 4 bars ahead, press the **DOWN** arrow key.
- To step 4 bars back, press the **UP** arrow key.
Editable Notation Mode

Enter the Editable Notation mode from the notation screen with a single mouse click on the Editable Notation button.

In the Editable Notation mode you can enter, move, and edit notes and rests using standard mouse techniques – point and click, drag and drop, and right-click to open the Note Edit dialog box.

When mousing over notes in this window, summary information about the note is displayed (pitch/channel/velocity/duration).

To enable this feature, click on the [More.. ] button in the Notation Options to open the Other Notation Options dialog. Then select the “Show Popup Hint for Note Properties” checkbox.

Resolution

The above example is in Jazz Swing style so Band-in-a-Box has automatically set the grid resolution to 3 per beat (triplets). This resolution can be changed in the Notation Options dialog, but the program automatically sets the resolution to the correct value based upon the Band-in-a-Box style that is in use.

- Swing styles use 3 lines to divide each beat into eighth note swing triplets.
- Straight styles use 4 lines to divide each beat into sixteenth notes.

Example of swing (triplet) resolution.  Example of straight (16ths) resolution.
Beat Resolution
The user can manually set the resolution for any beat in the Beat Resolution dialog, which opens with a right click on the black vertical time line.

Setting the Treble Clef Resolution for this beat to 5 allows a group of five notes to be placed on one beat.

Tip: Although you can edit any track (e.g., Bass track), your edits to Band-in-a-Box instrument parts will be lost if you press [Play] and the song arrangement is regenerated. To save edits to accompaniment parts, save your song as a MIDI file for export.

Entering Notes
To insert a new note on the staff move the mouse to the location that you want. If you want beat 1, move to the first dotted line in the bar. Click on the staff over the note that you want.

Confirmation dialogs show warnings to prevent accidental entry of a duplicate note (same pitch near same time) and of a very high or very low note (large # of ledger lines).

The Current Note box in the toolbar will give you the name of the note that you're on.

Click with the left mouse button to insert the note:
- To insert a sharp: Hold down the Shift key as you click the note.
- To insert a flat: Hold down the Ctrl key as you click the note.
- To insert a natural: Hold down the Alt key as you click the note.

Brackets (#) are drawn around accidentals after a bar line as a courtesy, where no accidental is required.

How is the length of the notes determined?
Band-in-a-Box uses an intelligent auto-duration feature to determine how long the note should be. Auto-durations mean that you can enter a lead sheet style melody by just clicking once per note, dramatically speeding up the entry of notation.

Any note that is entered will initially have a duration of 2 bars (2 whole notes). When the next note is put in 2 beats later, Band-in-a-Box will adjust the duration of the previous note to just shorter than 2 beats. This means that you don't have to worry about durations at all, and can simply point and click to enter the notes where you want them. If you want to override the auto duration, you can edit the note using the right mouse key, which will permit you to type the exact duration that you want.

Entering Rests
Insert a rest by holding the back-quote key (tilde key without pressing Shift) then clicking on the notation window. Another way to enter a rest is to click the Rest checkbox and then point and click where you want the rest to appear. This automatically shortens the duration of the previous note.

Tip: If it is important to see rests less than a quarter note, make sure you de-select the Minimize Rests checkbox in the Options dialog box.

Forced Rests (Hard Rests)
This allows you to insert a rest in the notation, which will be in effect even if you have Minimize Rests set to false. For example, we are able to display a 16th note rest even though the Minimize Rests feature is on. To do this, click
on the [Rests] button and then click on the notation at the location that you'd like a 16th note rest. The Hard Rest will show up in blue in the editable notation window and can be removed by holding the [DEL] key and clicking on the rest.

**Moving a note in time.**
If you want to change the start time of a note, drag the note with the left mouse button to the new location. This is a simple way to move the note. Alternatively, you could edit the note numerically with the right mouse button.

**Changing the pitch of a note.**
Similarly, you can drag the note vertically to change the note value, and release it when you're on the note you want. Hold down the **Shift**, **Ctrl**, or **Alt** key to have the note inserted as a sharp, flat, or natural respectively.

**Insert Bends In Notation.**
In the Editable Notation window, any note can be made into a bend by holding down the “b” key on the computer keyboard and right-clicking on the note.

**Right-click Editable Notation menu**
A right-click of the mouse in the Editable Notation window will open this menu.

<table>
<thead>
<tr>
<th>Edit Current Chord…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insert Lyrics</td>
</tr>
<tr>
<td>Edit Lyrics…</td>
</tr>
<tr>
<td>Edit Section Text…</td>
</tr>
<tr>
<td>Insert Section Text…</td>
</tr>
<tr>
<td>Section Letters</td>
</tr>
<tr>
<td>Notation Symbols</td>
</tr>
<tr>
<td>Cleanup Orphaned Notation Controller Events</td>
</tr>
<tr>
<td>Chord height adjustment…</td>
</tr>
<tr>
<td>Notation Mode</td>
</tr>
<tr>
<td>✓ Editable Mode</td>
</tr>
<tr>
<td>Staff Roll Mode</td>
</tr>
</tbody>
</table>

**Edit Current Chord**
This opens a text box with the name of the chord at the current location. Type in any changes and press **Enter** or **Tab** to return to the Editable Notation window.

**Insert Lyrics** opens the Lyric Edit window.

**Edit Lyrics** opens the lyrics event list editor.

**Edit Section Text** opens the **Text Events** list where section text can be inserted, edited, or deleted.

**Insert Section Text** opens the **Section Text Event** dialog box where either regular or boxed section text is entered along with its time and vertical position in the window.

**Section Letters**
Select a section letter from an alphabetical list and it will be inserted into the notation at the current location of the time line bar. Use this same item to remove section letters.
Notation Symbols for Expression and Articulation

The Notation Symbols are entered from the Notation Event dialog, which is accessed from the right-click menu in the Editable Notation window. This dialog lets you insert (or remove) notation symbols such as,

- Slurs
- Crescendo
- Decrescendo
- Staccato
- Accents
- Legato
- Marcato
- Staccatissimo

Select a notation symbol from those listed and the Notation Event dialog will open. In this dialog you can further define the event and its precise location, then press [OK - Insert Event] to insert it into the notation. Use the [OK - Remove Event] to delete an existing event that is no longer needed.

The Event Type list box lets you choose the event type (slur, decrescendo, etc.).

The Length of Event field determines the length of a slur, crescendo, or decrescendo. The length is specified in beats and ticks. If an event is a “single-peg” event, such as a staccato or accent, then this field will cause multiple events to be inserted if the range is greater than zero (and the range spans multiple pegs). If you had highlighted an area of the Notation window prior to right clicking on it (to launch the pop-up menu and choose the notation symbols menu item) then this field is set based on the length of the highlighted area.

Note: The highlighted area does not actually include the very last peg at the very edge of the highlighted area.

The Clef field, if present, indicates the clef in which the event will be inserted (or removed from). Most events affect only one clef at a time, and therefore you must choose the clef and this field will be preset based on where you had initially right-clicked with the mouse on the Notation window (you did this to get
the pop-up menu that launches this dialog). For example, if you had right clicked on the treble clef, then this will be set to treble.

When **Snap to notes toward beginning / end of range** is enabled slurs, crescendos, and decrescendos will be based on notes that exist at the beginning and end of the specified range.

The **Offset** field, if present, lets you adjust make adjustments to the vertical position of an event, e.g. slurs or chord height.

The **Start Time** field is the start time of the event (in Measures:Bytes:Ticks).

**OK – Insert Event** – exits this dialog and then inserts the event into the notation track.

**OK – Remove Event** – exits this dialog and then REMOVES the event (if it exists in the specified time range) from the notation track.

**Cleanup Orphaned Notation Controller Events**

This command will remove notation symbol events (such as staccato) that are no longer close enough to a note to display properly.

**Chord height adjustment**

Use this to adjust the height of a certain chord by adjusting the “Offset:” value in the Notation Event dialog.

Note that a positive value moves the chord symbol lower, and vice versa.

**Modes**

Clicking on another notation mode will change to that screen while staying at the same location in the song.

**Editing Note Values**

Right click on a note. This brings up a variation of the right-click window with added commands for editing or deleting notes. Click on **Edit Note** to launch the **Note** dialog.

In the **Note** dialog box, you can manually change the characteristics of a note by entering the exact values you wish for any given note. For example, you can change the velocity and duration by increments of 1 tick, as well as the note's pitch and relative positioning in the bar.

There are **spin buttons** in the note attributes window. Holding the spin increments continuously, and **Shift-clicking** (or right-clicking) increments by a higher amount.

**Shift+clicking** on the spin buttons changes:

- the pitch of a note by an octave instead of a semitone.
- The velocity, duration or time stamp by 5 instead of 1.

For example, to change the octave of a note, **Shift-click** (or right click) on the spin arrows.

Click on **Delete Note** in the right-click menu to remove the selected note from the Notation.
Select a region of notation to edit

To select a region of the notation you can **Shift+click** on the end point to easily select a large area.
- Select a small region by dragging the mouse.*
- Enlarge the region by **Shift**-clicking on the end point.

*Note: *Shift-click is also used to enter a sharp (#) note, so the selection via **Shift**-click requires that a small region be already selected.

**Force Accidental** - If a note is being displayed as a sharp, but you want it to appear as a flat (or vice versa), you can force that here. Notes like Fb, Cb, E#, B# can be entered. To do this, right click on a note (like F), and set the forced accidental to #, and the note will appear as E#.

**Note Type** - You can choose for the note to be Normal, Invisible (note will sound but will not appear in regular notation), or Guitar Bend (a B will appear above the note). Note that the guitar bend is for notation only and does not affect the sound of the note.

**Staff Roll Notation Mode**

Click on the Staff Roll notation mode button to enter the Staff Roll mode.

This mode is similar to the Editable Notation Mode, except that the beats begin right on the bar line. You can see the duration of the note visually represented by a horizontal blue line and the note’s velocity displayed as a vertical blue line.

**Tip:** If you can't see these lines, press the [Opt.] button to check that “Show Note Durations, Show Velocity Lines,” and “Show Bar/Beat Lines” options are enabled.

**Using the Mouse to Edit Velocity and Duration**

There is an additional function available in this mode; **right mouse drag**. Place the mouse cursor on the note head and hold down the right-mouse button. Then, starting at the note head, drag the cursor horizontally to set the note's duration, or drag it vertically to set the note's velocity.
Piano Roll Window

For advanced editing of notes plus graphic controller editing, go to the Piano Roll window, either by selecting the Piano Roll button on the toolbar, or the Window | Piano Roll Window menu item.

Notation Window Options

Press the [Opt.] button in a notation window to bring up the Notation Window Options dialog box:

Track Type

Normally you'd leave the track type set to Single Channel, but you can also set it to Multi-Channel, Guitar, or Piano.

Multi (16)

All MIDI channel assignments are preserved and output on playback. This would be useful for importing an entire MIDI file, and playing it from the Melody channel using a silent style.

Guitar: MIDI channels 11 to 16 are assigned to the guitar strings 1 to 6. Correct guitar tablature replaces the bass clef, the notation will be up an octave, and guitar channel assignments are saved with MIDI files.

Piano: In this mode, channels 8 and 9 are treated as the left and right hand of a piano part.

Triplet Resolution (Swing)

Band-in-a-Box automatically sets the resolution whenever a style is loaded. When a style has a triplet feel (such as Jazz Swing or a Shuffle style), Band-in-a-Box selects Triplet Resolution. This ensures that Jazz eighth notes (swing triplets) are handled correctly. When a style with a straight feel loads (Pop, Latin) the Triplet Resolution setting is automatically turned off. Then the notation shows even eighth notes, not triplets, and each note and duration is rounded to the nearest sixteenth note when displaying the music.

Show Bar/Beat Lines

This setting is for the Staff Roll mode only. When turned off (unchecked) only the staff lines will show, helpful for editing note Duration and Velocity lines.

Show Note Durations

A Staff Roll mode setting to show or hide the horizontal Duration lines.

Duration Line Color (Green /Blue)

There are two color choices for the Duration lines, green or blue.
The [Update] button applies the changes made to the Notation Window Options. Pressing [OK] will have the same effect.

Snap to grid lines
If the Snap To Grid Lines checkbox is checked, the inserted note will be lined up with the closest grid line. This is similar to the way a graphics or typesetting program aligns elements accurately on a page. This means that you don’t have to click exactly on the beat to have the note inserted precisely on the beat.

Scroll Ahead
The Notation window can be set to scroll 1 or 2 bars ahead of the music without interfering with your view of the current notation. To enable this feature, select the number of bars you wish to scroll-ahead in the Notation Window Options (1 or 2). Select zero bars to disable this feature. When the notation scroll-ahead feature is enabled, the lyrics will also scroll ahead.

Highlight playback notes in Red
Good sight-readers who like to read ahead can use this option to disable the highlighting of notes in red as the song is playing so it won't be distracting.

Note Colors
Notation can display notes in different colors based on absolute note names or relative to chord or key. Colors are definable; the default color scheme is one that was introduced by the Russian composer Alexander Scriabin (1872-1915).

Colored notes will appear in color for printout on color printers or when saved in a color graphics file.

Pressing the [Edit] button launches the Note Color Editor dialog.

Change the colors by clicking on the color above the note name.

Pressing the [OK-Save] button will close the dialog and save the file as c:\bb\default.NCL.

You can also save/load different NCL files for different color sets.
Note Names

There is an option to display note names in the center of the note head. You can display absolute note names (A, Bb etc.) or you can display numbers relative to the key or the current chord. This is helpful for learning to read music. Combined with the ability to display large font sizes, this achieves the big note look common to “EZ-2-Play” music books.

Channel numbers can also be displayed on the notation. When editing notes, it is often helpful to see the channel number of each note. By setting Note Names to “Channel Numbers” you’ll see the channel number for each note written into the note head of the notes. This is useful when viewing an entire MIDI file that you've loaded onto the Melody track, and want to examine the channel information, or for editing a guitar track that uses channels 11 to 16.

Notation Fonts

You can use the PG Music fonts or Jazz fonts for your chords and notation. Or you can choose Arial or any other font on your system for chords, lyrics, text, and titles. The Jazz fonts have the “handwritten manuscript” look. It's a great alternative to music fonts that look too “computerized.”

Jazz Music Fonts for Notes, Symbols, Chords, and Titles.

To select just the Jazz music font select the “Use Jazz Music Font” option, then choose your Chord, Lyrics, Text, and Title fonts.

Click [Regular Fonts] for a quick overall change to regular fonts in the Notation window.
The [Jazz Fonts] button installs a pre-selected group of Jazz fonts.
The [Arial] button installs the regular notation font and Arial for everything else.

You can select from any of the fonts installed on your computer using the settings found in the Notation Options dialog.

Check “Use Jazz Music Font” to use the Jazz font, and check “Jazz Symbols” to use shorthand Jazz chord symbols in the notation.

The Lyrics and Text fonts appear in the Notation window, the Lead Sheet and the printout.
The Title font is used for the Titles, Composer, and Styles names that appear on the Lead Sheet window and printout. You can choose from selected fonts, or use the “Other…” selection to use any font. For example, you could use PG Text Extended (PGTextje) for a jazzy look.

Note: Using the PG Music notation and text fonts requires that they be installed in your Windows | System directory. The fonts are installed automatically with the program.
Jazz Chord Symbol Graphics (circles, triangles)

Jazz and Pop music often use certain non-alphabetic symbols for chord types. These include a delta (triangle) for major chords, a circle for diminished, and a circle with a slash for half-diminished. Also, tensions like b9 and b13 are stacked vertically and contained in brackets. You can now select this option, and see these symbols for display/printout on the Chordsheet, Notation, and Lead Sheet windows.

The Jazz Chord Symbol Graphics can be displayed independently on the Chordsheet and the Notation or Lead Sheet windows.

To get the Jazz Chord Symbol Graphics on the Chordsheet, choose Opt. | Preferences | Display Options and set “Chordsheet Font” to “Jazz Chord Symbols.”

You’ll then see a chordsheet like this.

To see the Jazz Chord Symbol Graphics on the Notation/Lead Sheet printout, set the Notation Options. The Notation will then look like this.

The Lyrics and Text fonts appear in the Notation window, the Lead Sheet, and the printout. The Title font is used for the Titles, Composer, and Styles names that appear on the Lead Sheet window and printout. You can choose from selected fonts, or use the “Other…” selection to use any font. For example, you could use PG Jazz Text Extended (PGTextje) for a jazzy look.

Note: PG Music notation and text fonts are installed automatically by the program in your Windows | System directory.

Bars/Screen

This option lets you to choose the number of bars per line for both the on-screen notation display and printing.

Guitar Chord Diagrams

These are available on the notation, lead sheet, or printout for Folk, Pop, and Jazz voicings. There is an option to show the fret numbers on the diagrams.
Tab
When set, the Guitar and Bass parts will print tablature notation.

Show fret #s on chord diagrams
This will display the fret numbers for each string on the guitar chord diagrams.

Load notation layout w/songs
When this box is checked your Notation Option settings will be saved with the song and restored the next time you load the song.

Show Key Signature
If turned off, you won't have the key signature box displayed on the Notation Screen. This will save some space on the screen.

Transpose Options
These preset transpose settings for non-concert instruments like brass and woodwinds will auto-select the correct transpose settings and clef split points for the instrument. For example, Trumpet +2 will write the music up 2 semitones, and the split point will be adjusted to display the music in treble clef.

Guitar and bass settings are also included.

If a Chordsheet or Notation window transpose setting is in effect, a yellow hint message opens on bootup as a reminder.

Transpose
The Transpose setting lets you manually adjust the Notation window to display notes either higher or lower than their actual pitches.

Clefs split at
This setting determines the split point for placing notes on the Bass or Treble clef. The default setting is C5, middle C. Use a higher split point, such as C6, if you want notes up to a B above middle C written on the bass clef with ledger lines.

Max Ledger Lines
You can specify an upper limit of a note range so that high notes won't result in an excessive number of ledger lines. The default is 6, which would show a maximum of 6 ledger lines above the treble clef staff.

Show Velocity Lines
This is a Staff Roll mode setting to show or hide the vertical Velocity lines. Line color is determined by the Duration Line Color setting.

Use chord scale for enharmonics
The sharps and flats in Band-in-a-Box notation are context sensitive to the chord names. For example, if you are in the key of Eb, and the chord is E7, a G# note will show up as G#, and not Ab. This means that the notation accidentals will automatically show up correctly.

Enharmonics for chord tones are automatically based on the chord.
Enharmonics for passing tones are based on chords if “Use Chord Scale Enharmonics” is set to true. For example, on an F#7 chord in the key of Eb, the Ab note is part of the F#7 scale (as a G#, the 2nd of the scale), but is also part of the Eb key of the song. If you want to display based on the chord scale, setting “Use chord scale enharmonics” will display the note as a G# instead of an Ab.

**Enharmonics on slash chords**
A chord like Gm7b5/Db will display correctly using a Db instead of a Gm7b5/C#, since Band-in-a-Box bases it on a Gm scale.

**Engraver Spacing**
This is another one of the program’s intelligent features which spaces the Notation appropriately to avoid overlapping notation while accounting for space required by accidentals, rests, etc. This feature is visible only in Standard Notation mode.

**Notation Settings**

***Tick Offset***
The Tick Offset on the notation options is one of the keys to great looking notation. It accounts for playing that is before or behind the beat. The track is automatically scanned to determine the best tick offset so that you don't have to set this yourself. This results in better looking notation. You can change/override this setting in the Notation Window Options dialog box, but normally the best tick offset is set automatically.

For example, to properly notate Jazz performances, it is sometimes necessary to set the tick offset to approximately -15. This effectively adjusts for a performance that has been played slightly ‘behind’ the beat or, in Jazz terms, “very laid back.”

***Minimize Rests***
When checked, Band-in-a-Box will eliminate unnecessary rests. For example, if staccato eighth notes are displayed as sixteenth notes separated by sixteenth rests the setting will remove the rests and show the notes as eighth notes.

***Detect Fine Resolution Notation***
Improved auto-transcription identifies and correctly displays up to 128th notes. If for some reason you prefer to disable it, there is an option to do so. To set a beat to a certain specific resolution right mouse-click on the Time Line located at the top of the Notation window. You'll then see a Beat Resolution dialog where you can set the resolution for both the Treble and Bass clefs.

***New Line each***
Use this setting to automatically start a new line on each chorus, on each chorus and the intro, or on each part marker. It applies to the Lead Sheet notation screen and to printing.

If you want to control how many bars per line get displayed for a regular (non-fake sheet mode) display, use the Edit Settings for Current Bar (F5) options, and select “Notation - Start a New Line” on bars that you’d like a new line of notation. That setting, in combination with the Notation Window Options setting for “Bars/Screen,” and “New Line each” allow you to save custom settings for bars per line in non-fake sheet mode.

***R/L Cursor Edits***
This is used in the Keystroke Note Editing features.
Bar Number Font and %
Select any installed font for the bar numbers and adjust its size in a percentage range from 10% to 1000%. These settings affect the notation, lead sheet, and printout.

Display Font Size %
To select the notation font size for display, enter the Display Font Size as a percentage, either more or less than 100%. The same setting is available in the Lead Sheet window and the Print dialog.

Chord Vertical Position
This controls how high the chords will be written above the staff. If set to 5 the chords will be written 5 notes above the top of the staff. If your piece contains a lot of high notes, then set the chord position to a high setting.

Lyric Position
You can adjust the height of the lyrics by setting the lyric height (smaller values like –8 are higher on the notation).

Auto-Hand split Piano track
When checked, the Piano track (not any other track) will be displayed on both clefs with intelligent hand-splitting. You can print out the Piano track with the hands separated.
You can also manually split a piano part on a Melody or Soloist track using the intelligent hand-splitting routines. The left/right hands display in red/blue on the big piano, and on the bass/treble clefs on the notation. For example, if you have a MIDI file that is a solo piano piece, File | Open MIDI file will put the music on the Melody track.

Then choose Melody | Edit | Utilities | Piano Hand Split. Make sure that Melody | Track Type is set to piano. You will then see the piano part split into 2 hands intelligently.

Display Patch Names on Notation
When this box is checked in the Notation Window Options, the patch name for the track is displayed on the notation, lead sheet, and printout.
[More] button

The [More..] button opens the Other Notation Options dialog.

Inserted Note Defaults
These settings determine the default values for notes that you enter manually.

Duration %
Notes are not always played for their full duration. If a whole note is inserted with a duration of 80%, the note would play for 80% of 4 beats = 3.2 beats.

Velocity
The loudest possible note has a velocity of 127; a velocity of 0 is silent.
Channel
Assign the MIDI channel of the inserted notes.

Play Inserted Notes
When checked, notes that you insert will sound briefly as they are inserted. This lets you hear that the note you inserted sounds correct.

Advanced Notation Settings
These advanced settings give you control over the clean notation features.

Chord Note Separation in MS and Chord Total Separation in MS
This lets you set the width of chords. Band-in-a-Box will display a new group of notes on the notation for every chord. If you know that a track is single notes and therefore couldn't have any chords, set the chord note separation to a small value like 10ms and then every note will be displayed on a new note stem. The chord width parameter is also used for the “chord step advance” feature.

Glitch Duration in MS and Glitch Velocity
When set properly, “Glitches” will not be shown on the notation. Any note less than a certain length of time or less than a certain velocity can be filtered out.

Line Thickness Settings
These settings allow you to control the thickness of various line elements of the notation. For example, if you set the Bar Line width to 200%, the bar lines will be twice as wide, and easier to see. This affects display and printout.

Show Popup Hint for Note Properties
If this is checked the note properties pop-up will open if you hover the mouse cursor over a note in the Editable Notation window.

Confirmation Required to enter a note more than \(X\) Ledger Lines
To prevent accidental entry of very high/low notes, this means that a confirmation dialog would be needed to enter notes with more than \(X\) ledger lines.

Defaults button
Click [Defaults] to have all modifications revert back to factory settings.

Keystroke Note Editing
You can easily edit notes using only keystrokes. By stepping through the notes one-by-one, when a note is highlighted you can change the pitch using the cursor keys, and other values (timing, duration, channel) with other hot keys. This speeds up editing of notes. To use this function, you do the following:
1. Open up the Notation window.
2. Move the mouse cursor to the note that you want to edit, and then press the Chord Advance (INS or DEL key on the Numeric Keypad). This highlights the current note.
3. With the note highlighted in red, use the cursor up/down keys to change the pitch of the note. You hear the pitch change as the note changes.

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4. Use the cursor left/right keys to change the note's start time, duration, channel, or velocity (depending on the setting of the “Right/Left Cursor Edits” field in the Notation Options Dialog. Press the Esc key or [Stop] button when you're done.

**Section Text for Notation**

You can add custom Section Text and Boxed Text messages at any position in the notation track, with optional box to appear around the text.

To put a section text comment on the notation track:

- Open up the notation window, and press the button to enable Editable Notation mode.
- Right click on the track at the point that you want to enter the section text. Answer YES to the question “Would you like to enter Section Text?”
- This launches the **Section Text Event** dialog box that allows you to type in the text. You can set the Text Event Type to “Boxed” or “Regular.”

![Section Text Event dialog box](image)

**Easy Entry of Section Text on Notation Window**

Typing a backslash “\” followed by any text puts that text at the beginning of the current bar as a boxed section text message. For example, \Hello would put “Hello” in a boxed section text event.

Typing \ launches the edit dialog for the section text.

**Guitar solo**

Type the section text that you want, such as “Guitar Solo”, and then press Enter.

![Guitar solo notation](image)

This text can be entered once per bar. You can use this for section headings, or even to enter lyrics bar by bar.

**Scrub Mode on Notation**

Scrub mode allows you to move the mouse over a group of notes and hear them playing. To enable the scrub mode, press the Scrub button in the Notation window toolbar. Then hold the mouse and drag it over the notes that you want to hear.
**Lead Sheet Window**

The Lead Sheet window displays a full screen of notation with one or more parts. Other options include a selectable number of staffs per page, clefs to show, font size, margin, scroll-ahead notation, guitar chord diagrams, and lyrics. If you like to sight-read along with Band-in-a-Box, this is the window for you.

Launch the Lead Sheet window from the main screen by pressing the Lead Sheet button (or Alt+W keys), or with the **Window | Lead Sheet Window** menu option. This button is also available from the Standard Notation window.

As the notation scrolls ahead, you can read ahead without waiting for a page turn. During playback, red rectangles highlight the current bar. If the bar is empty (or in Fake Sheet mode), the Lead Sheet will draw the staff lines and bar lines in red.

The Lead Sheet is also useful as a kind of “Print Preview” feature, as it offers you the ability to correlate the on-screen notation to a printout.

You can move around the Lead Sheet window in various ways. Cursor keys and mouse clicks will move a small blue rectangle around the screen, which lets you type in chords at that location. Double-clicking the mouse at any bar will start playback from that position.
Selecting Parts in the Lead Sheet


To view multiple parts, click first on the button for the top part you want to view, and then hold down the Ctrl key and click on the other parts you want to view in the order you want to see them, from top to bottom. You will then see a group of tracks, displayed in the order that you requested them. To revert to a single track of notation, simply click on a track without holding the Ctrl key down.

There is an option in the Lead Sheet Options dialog to allow you to display the chords above each track, or just the top track of the notation. If you press [Print] from the Lead Sheet window you will be able to print out the multiple tracks of notation.

Lead Sheet Options Dialog

Pressing the [Opt.] button in the Lead Sheet window or the [Leadsheet] button in the Preferences dialog launches the Lead Sheet Options dialog.

The settings in this dialog are applicable to the Lead Sheet window only. If you want to set options that are shared by the Lead Sheet window and the Notation window, press the [Notation Options...] button.

Treble Clef and Bass Clef

These checkboxes choose which clefs will display in the Lead Sheet view.

AutoSet Clefs

When set, Band-in-a-Box will attempt to pick the clef for you automatically displaying the bass clef when you are on the bass track or any other track with low bass notes. It will show both clefs when on the piano or drum track.

Clef Sign Every Line and Key Signature Every Line

By default, the Clef and Key will be shown at the beginning of every page, but if you want one every line, you can check these options.
Band-in-a-Box have multiple keys in a song, the new key signature is shown on notation.

**Chords and Staff Lines**
Both are shown by default. Uncheck this box if you don’t want them to display.

**Show Bar #s**
Choose whether the bar numbers will be shown for each bar, only at part markers, or not at all.

**Show Title**
If set, the song title will be displayed along with other information like Composer Names and Style information that is set in the *Print Options* dialog of the Notation window. To set these options choose File | Print from the menu.

**Fake Sheet displays multiple lines of lyrics** shows lyrics for 1st and 2nd endings or multiple choruses stacked as multiple lines on the fake sheet.

**Fakesheet bars/line**
You can set a custom number of bars to display on each row of the fake sheet.

For example, enter “4,6,4” in the Lead Sheet Window options and the program will use 4 bars for the first row, 6 for the second, and 4 for the rest.

**Fakesheet include ending bars**
Fakesheets can optionally include the 2-bar song ending.

**Restore Defaults**
You can reset all the Lead Sheet Options back to default settings by pressing the [Restore Defaults] button.

**Notation Options**
To set Options that are shared by the Lead Sheet window and the Notation window, press the [Notation Options...] button.
Margins

Set margins for the Lead Sheet window, just like the margins in a word processor. For example, if you want the lead sheet window to only take up the top part of the screen, set a bottom margin (of, say, 2 inches) and then make the lead sheet window smaller by pulling the bottom up.

This feature has no effect on printout; the Print dialog has its own margin settings.

Show Chords above each track

When using multiple tracks of Notation, this determines whether each track will show the chord names or not.

Show track names for multi-track notation

If checked, the Band-in-a-Box track names will be inserted at the start of each part in the multitrack notation display.

Harmony display

- **Convert Harmony to track** will add a harmony to an existing Melody.
- **Remove** will remove the harmony from the track.
- **Split Harmonies to different tracks** enables the splitting of the harmonies to different tracks on the lead sheet.
- **Show Harmony Voice** allows you to select ALL tracks, which will cause each track to display on a different track on the Lead Sheet. Or select a specific Voice to display only that voice. For example, if you choose “Voice 2” and press OK, you'll now see just voice 2 of the harmony.

You can control the volume of the selected harmony voice relative to the other voices in the harmony. The Play Volume of harmony voice setting can be set to:

- **Normal** Harmony plays as normal.
- **Solo** Only the selected voice will play.
- **50% Solo** Selected voice is much louder than other voices.
- **Quiet** Selected Voice is much quieter than other voices.
- **Muted** Selected Voice is muted.

These settings are useful to sight-read along on harmonies, and learn to hear inner voices of a harmony.

Staves Per Page

The number of staves shown in the lead sheet can be set by typing in a number or using the [+ and -] buttons. If “Auto-Set” is selected, the number of staves will be set automatically, attempting to fit the lead sheet on a single page.

Font Size

Choose the font size with one of the preset buttons for popular sizes, or type a number between 45% and 300% in the Lead Sheet Options dialog.
Fake Sheet Mode

The Lead Sheet window has its own Fake Sheet Mode checkbox. When it is NOT selected, the lead sheet will work as it always has (in linear mode).

When Fake Sheet Mode IS selected, the form will show like a lead sheet, with only one chorus showing, and 1st/2nd endings and repeats displayed.

The Fake Sheet can show multiple lines of lyrics for 1st and 2nd endings or several verses stacked in multiple lines.

Multiple lines of Lyrics on Fake Sheet.

If your song has 1st and 2nd endings or multiple verses of lyrics, multi-line lyrics can be displayed, so you’ll see all verses on the same fake sheet.

Load in the song c:\b\ Tutorial - BB 2005\Listen Multi-line lyrics Demo.MGU. Open the Lead Sheet and select “Fake Sheet Mode.”
This song has a 1st/2nd ending entered, with separate lyrics for each ending. Multiple lines of lyrics will also appear if there are lyrics in multiple verses (choruses).

In the **Notation Window Options**, “Lyric Position” allows you to vertically position the height of the lyrics.

**Lead Sheet Memo**

You can enter a memo to add to the Lead Sheet printout. Click on the [Memo] button in the Lead Sheet to open the **Lead Sheet Memo** window. You can copy/paste from/to this memo.

The text in the Lead Sheet Memo also displays in the Big Lyrics window. If you have lyrics in text format, it is easy to paste them in the memo and then see them on the Big Lyrics window as well.

The memo will be automatically positioned after the end of the lead sheet and printout. Use extra blank lines in the **Lead Sheet Memo** to control where it displays on the page.

There is an option to print the Lead Sheet memo on a new page of the printout.

Press the [Choose Font] button to select the font you would like for the memo.

A text block will be appended to the Lead Sheet window and printout. This could be song lyrics that you want appended to the end, multiple verses of lyrics, or any other text.
Harmony Notation Display
Harmonies can be displayed on the Lead Sheet window (or printed) with separate notation tracks for each harmony voice. View each harmony on a separate track, or view/print a single harmony voice. To examine the harmony display features, load in the song “Night_T.MGU.” The melody of this song was previously converted to a harmony using the Melody | Edit | Convert Melody to Harmony option, so this song contains a harmony on the Melody part.

Open the Notation window (Ctrl+W) and you'll see all four voices of the harmony on the same treble clef.

Four-part harmony on single staff.

Now open the Lead Sheet window. Band-in-a-Box now recognizes that this is a harmony (generated by Band-in-a-Box), and displays each voice on a separate track of the lead sheet.
For example, you can see the first Bb note has the other harmony voices playing G (drop 2), F, and D.

Press the [Print] button to print out “Voice 2.” If needed, press the notation “Transpose Options” to first visually transpose the instrument to Eb for an “Alto Sax” chart.

Multi-Channel Notation (Sequencer Mode)

Normally you would want a single part on the Melody and Soloist tracks. But, since MIDI information can have separate channels, it is possible to store 16 separate parts on each of the Melody and Soloist parts. When one of these tracks has been set to “Multi(16)-Channel” we refer to this as sequencer mode.

Now, when you are in this multi-channel mode, output from the Melody/Soloist part will be on whatever MIDI channel the information is stored on, and will not be using the Melody/Soloist MIDI channel.

If you click on the Lead Sheet window, you’ll see the entire MIDI file displayed on separate tracks of notation. This is likely “too much information” to read, unless you are a symphony conductor.

To customize the notation display for sequencer mode, press the Sequencer toolbar button, and see the settings for Multi-Channel Tracks.

Press the “CUSTOM channels play/display” buttons to launch the Sequencer Window (Multi-channel track on Melody/Soloist) dialog. Then you can customize which channels will play and display.

Lyrics

Band-in-a-Box supports lyrics in three different ways, Note-based Lyrics, Line-based Lyrics, and a Big Lyrics (Karaoke) window. The complete list of lyrics functions is found in the Lyrics menu.
Note-based Lyrics

Note-based lyrics offer accurate placement of lyrics by placing a word under each note. You can enter note-based lyrics by pressing Ctrl+L keys or pressing the [L] button on the Notation toolbar to open the Lyric Edit window.

Lyric Edit Window

The [Line] button enters a forward slash “/” line break marker in the current lyric.
The [Para] button enters a backslash “\” paragraph break marker in the current lyric.
The [Enter] button enters the current lyric, equivalent to hitting Enter key or Tab key.
The [Close] button closes the Lyrics Edit mode, equivalent to hitting the [L] button again.
The [Section Text] button enters the text in the lyric box as section text at the current bar.
The [Edit] button opens the Edit Lyrics dialog where lyrics and section text can be edited.

As you enter the lyrics, the note is highlighted. Pressing the Tab or Enter key moves to the next note. You can “undo” lyrics with the Edit | Undo command.

When you are finished a line of lyrics, hit the [Line] button. This enters a backslash “\” line break marker in the current lyric.

Note-based lyrics are saved with the MIDI file, so you can use them in your other MIDI programs.

Lyrics Event List

You can edit the lyrics using an event list as well. This allows you to enter lyrics at any point, not just tied to a note.

Once you press the # button, you then press the [Edit Lyrics] button. You can then see the Edit Lyrics dialog.

From here, you can Edit lyrics, Insert new lyrics, Append lyrics to the end of the track, or Delete lyrics. A single lyric event can be 128 characters.
The Lyrics Menu
The complete list of Lyrics functions is found in the *Lyrics* menu.

<table>
<thead>
<tr>
<th>Function</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Enter Lyrics at current bar</strong></td>
<td>Opens the Lyric entry box at the current location of the timeline or highlight cell.</td>
</tr>
<tr>
<td><strong>Big Lyrics Window</strong></td>
<td>Opens the Big Lyrics window for viewing lyrics and, optionally, chord symbols.</td>
</tr>
<tr>
<td><strong>Lyric Document Window</strong></td>
<td>Displays a full screen of formatted lyrics. Easily copy and paste lyrics to and from your favorite word processor.</td>
</tr>
<tr>
<td><strong>Copy Lyrics to Clipboard</strong></td>
<td>This function allows you to copy a song's lyrics (and/or the chords) to the Standard Windows Clipboard. By pasting this data into a word processor, you can print out the lyrics in the font of your choice. The dialog has options to allow copying of note-based and/or line-based lyrics. With either option you can choose to include the chord symbols, have double or single line spacing, and make margin settings.</td>
</tr>
<tr>
<td><strong>Copy 1st chorus Lyrics to whole song</strong></td>
<td>Copies the note-based lyrics for the first chorus to the rest of the song.</td>
</tr>
<tr>
<td><strong>Erase all Lyrics</strong></td>
<td>Erases note-based and line-based Lyrics.</td>
</tr>
<tr>
<td><strong>Erase Note Lyrics only</strong></td>
<td>Erases only the note-based lyrics.</td>
</tr>
<tr>
<td><strong>Kill Lyrics Choruses</strong></td>
<td>Select to kill lyrics in the First Chorus, Middle Choruses, or Last Chorus from a list box.</td>
</tr>
<tr>
<td><strong>Move Lyric ahead to timeline</strong></td>
<td>If you have a note-based lyric that you want to time shift ahead or back, you can click on the time line at the destination that you want, and then choose this item. You can also shift lyric times using the Lyric Event list.</td>
</tr>
<tr>
<td><strong>Move Lyric back to timeline</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Timeshift Lyrics (ticks)</strong></td>
<td>These are functions that apply to the entire lyric track. They are useful when you're inserting bars or beats into the song and need to move the lyrics around to keep them in sync.</td>
</tr>
<tr>
<td><strong>Insert Beat(s) in Lyrics</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Delete Beat(s) from Lyrics</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Edit Lyrics as Event List</strong></td>
<td>Opens the <strong>Edit Lyrics</strong> dialog with Edit, Insert, Append, and Delete functions.</td>
</tr>
<tr>
<td><strong>Line-based Lyrics</strong></td>
<td>Opens a submenu with additional features.</td>
</tr>
</tbody>
</table>
Copy Line Lyrics to Note Lyrics converts line-based lyrics to note-based lyrics. It is imprecise, because the line-based lyrics don’t correspond to individual notes. But you can edit the positions of the note-based lyrics using the event list or the Move Lyric back/ahead to time line functions discussed above.

Move Line lyrics to Note Lyrics works like the Copy Line lyrics to Note Lyrics function, except it erases the Line-based lyrics.

Auto-Update all songs in folder to Note-based Lyrics will update an entire folder worth of songs, copying the Line Lyrics to Note Lyrics. Only Note-based Lyrics get displayed in the Big Lyrics Dialog, so this feature will allow you to see these lyrics in the Big Lyrics Window.

Move Lyrics Up or down row(s)… moves a line of line-based lyrics up/down a number of rows.

Erase Line-based Lyrics only erases only the line-based lyrics, preserving the note-based lyrics.

Tip: Lyrics are printable above or below the chord line, or printed separately after song end. Lyrics will also support international characters such as è, š, and ó.

Lyric Document Window

The Lyric Document window displays a full screen of fully formatted lyrics so you can easily copy and paste lyrics to and from your favorite word processor. If you have the lyrics available you can quickly paste them into Band-in-a-Box.

You may already have the lyrics to your song typed into a word processor, nicely formatted with font/color/bold choices etc. Previously, you would need to retype them into Band-in-a-Box and would lose your formatting. Now
you can simply Copy/Paste them to/from your word processor. This allows you to quickly add lyrics to any Band-in-a-Box song, and they will display in the Big Lyrics window.

You can open this window by choosing Window | Lyric Document Window, or pressing Ctrl+Alt+Shift+L. In addition, if “Auto-open lyrics window for songs with lyrics” is set to true in the Lyric Window Options dialog (Opt. | Preferences [Big Lyrics]), the Lyric Document Window will open up automatically when the song is loaded, and close when the next song is loaded.

To use the window type or paste in text from a word processor. You can select fonts and colors as you would in a word processor. Since the data is stored in RTF format, it should look very similar to the appearance it would have in WordPad.

You can transfer “line based” or “note based” lyrics from the Notation Screen of Band-in-a-Box to the Lyric Document window. Press the Copy Lyrics button to do this. This launches the Options for Copy Lyrics to Clipboard dialog allowing you to select which elements to copy (line lyrics/ note-based lyrics/ chords) and formatting options. Then click on [OK Copy to Text Clipboard]. A message will tell you that the lyrics have been copied to the clipboard. Click on [OK] to paste the lyrics into the Lyrics Document Window. These lyrics will then display in the Big Lyrics window.

You can also print directly from this window and copy to/from the Song Memo (using copy/paste).

**Big Lyrics (Karaoke) Window**

The Big Lyrics window is great for sing along or Karaoke. It opens from the Lyrics menu, with the keystrokes Ctrl+Shift+L, or with the [L] toolbar button.

Each word is highlighted as it plays, and the window can be customized by clicking on the [Options] button. Click on any word in the Big Lyrics window to start the song playing from that point.

**Lyric Window Options**

Add chord symbols, customize your color scheme, choose a favorite font, and select a size in the Lyric Window Options dialog. Chords can be displayed on a row above the lyrics on the Big Lyrics window.

On the Big Lyrics window Options dialog, if you set “Show chord symbols above the lyrics,” you then see the chords written on a separate line.

When there are no lyrics for a few bars, the Big Lyrics window displays the chords in a line divided by bars so that they are easy to read.

Separate chord colors are used for the Chords and Lyrics, allowing these elements to be visually separated.

You can also select the color for the chords in the options dialog.

With this option selected the Big Lyrics scroll a page at a time. When the lyric cursor reaches the next-to-last line of the lyrics it will scroll to the top of the page, allowing uninterrupted reading of lyrics.
If you have the Lyrics window option “Auto-open lyrics window for songs with lyrics” selected, and a MIDI file (or .KAR) containing lyrics is opened, the lyrics window will open to show the lyrics.

The popular Karaoke file format (.KAR) can be opened directly into Band-in-a-Box just like MIDI files. Chord symbols are displayed (Band-in-a-Box intelligently analyzes the chords of the song), as well as the lyrics from the Karaoke files.

**Karaoke MP3/CDG Files**

Audio Karaoke files are popular using several formats. The most common is CDG format, which includes the lyrics in graphic format on audio CDs. Since the computer user doesn’t always use audio CDs, there is a format that combines MP3 (containing the music) and CDG (the graphical lyrics). You can open up MP3/CDG files inside Band-in-a-Box and see the scrolling lyrics from your Karaoke files. If you want to play along on your own instrument, you can use the Audio Chord Wizard to figure out the chords and display them in its Chord window.

To Open a Karaoke File, use File | Open, and find a WAV, MP3, or WMA file that has a same named CDG file in the same folder. Then the Karaoke window will open and display the lyrics.

The Big Lyrics window has some options for the Karaoke window.

![Lyric Window Options](image)
You can choose to have a background to the window, either a moving one, or fixed picture. These pictures are in the c:\bb\KaraokeBMP folder, and you can add your own BMP or JPG image to that folder.

The Big Lyrics window’s [Print] button opens the Options for Copy Lyrics to Clipboard dialog. This function allows you to copy a song’s lyrics (and/or the chords) to the standard Windows clipboard. By pasting this data into a word processor, you can print out the lyrics in the font of your choice.

The dialog has options to allow note-based and/or line-based lyrics to be copied to the clipboard.

With either option you can choose to include the chord symbols, have double or single line spacing, and make margin settings.

Process Lyric Lines cleans up the display of lyrics by inserting and/or removing extra spaces in line-based lyrics.

Printing

Band-in-a-Box prints Lead Sheet style notation with chords, melodies, lyrics, and text notes. It will also print instrument parts from your Band-in-a-Box arrangements, either individual instruments or multiple parts. Most songs will fit on one page, so your printout will look similar to a standard fake book.

You can easily make and print out a custom fake book of all of your tunes. Instantly transpose and print parts for brass or reed instruments. Print options include title, bar numbers, composer, style, and copyright information.

Print Options

Pressing the printer button launches the Print Options dialog box. Print options include title, bar numbers, composer, style, and copyright.
Chapter 8: Notation and Printing

Customize your printed sheet music in the Print Options dialog box.

**Chords**
If selected, this will include the chords of the song on the lead sheet. Remember that you can set the height that the chords will appear in a different dialog box (the Options Dialog box).

**Notes**
If you want only a chord lead sheet with no Notes, then turn this off. Otherwise it should be ON.

**Staff Lines**
Set to off (uncheck) to print a “chords only” fake sheet with chord symbols and bar lines but no staff lines or notation.

**Treble Clef**
Normally you will want to include the treble clef unless you're printing a bass part or left hand piano part alone and want to save space.

**Bass Clef**
For melodies or solos, you probably won't want the bass clef printed. For other parts (piano, bass, drums, etc.) you should set this option to YES.

**AutoSet Clefs**
With this setting the program will print only the clefs that are necessary. For example, a Melody would probably print with just the treble clef, while a bass part would use only the bass clef, and a piano part would use both clefs.

**Tab**
Enables tablature display and printout for guitar and bass tracks.

**Clef Split At**
This determines where the notation will split the treble and bass clefs. Middle C is normally considered to be C5, and C4 is one octave below. For a melody or soloist part, you will probably want the entire part to be printed on the treble clef, so you could choose to split the clefs at C4.
Show Bar #s
There are options to include the bar # on the printout (e.g., every bar, every part marker, every row, every page).

<table>
<thead>
<tr>
<th>Template Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every Part Marker</td>
</tr>
<tr>
<td>None</td>
</tr>
<tr>
<td>Every Part Marker</td>
</tr>
<tr>
<td>Every Bar</td>
</tr>
<tr>
<td>Every Row</td>
</tr>
<tr>
<td>Every Page</td>
</tr>
</tbody>
</table>

There are **print templates** in the print dialog to achieve various printout styles - Normal/Lyrics Only/Chords and Lyrics/Chords Only/Blank Paper. In the print dialog, select the desired print template. To return to default settings choose the “Normal” template.

**Bar #s Below By**
This sets the vertical position of the bar numbers in the printout between 1 and 7. 1 is closest to the staff and 7 is farthest from the staff (lowest).

**Lyrics**
Lyrics can either be printed above the chords, below the staff, separately at the end (on a separate page), or not printed at all. Normally lyrics are printed below the staff.

**Clef Sign Every Line**
Leave this unchecked if it’s not needed and you want an uncluttered look.

**Key Signature Every Line**
Most modern fake books don't include the key signature every line. If you would like to see a key signature at every line, set this to “Yes.”

**Print Note-based Lyrics**
Set to “Yes” to print the Melody part with Lyrics, or turn off to print just the music for the melody line.

**Print Range**
(First Chorus/Last Chorus/Whole Song)
You can either print the First chorus, the Last chorus, or the whole song. When you change this setting, Band-in-a-Box will reset the number of staves per page setting in order to auto-fit the printout to one page, if possible.

**Tip:** You’ll want to print the last chorus in a song that has a tag ending, or if you want to see a 2-bar ending printed.

**Custom**
A specific range of bars can be printed, either by highlighting a region or entering a range of bars.

To print out, for example, bars 11 to 16 of a song in the **Print Options** dialog, press the [Custom] button, and enter the range bar 11 for 5 bars. The song will then print only that range of 5 bars.

**Include Lead-In**
If your song has a lead-in (pickup) to bar 1 then make sure you've checked the Lead-In. Actually, Band-in-a-Box sets this for you by looking for notes in the lead-in measure. You can override this automatic setting, if necessary.

**Font Size**
This is the font size for the printed music. Changes will be seen in the Print Preview.

**Staves per page**
Band-in-a-Box will automatically auto-fit on 1 page, use this to override the auto setting. Remember that the title takes up 1 stave. The “Auto-Set” option will set the number automatically, and will try to fit the lead sheet on a single page.
Chapter 8: Notation and Printing

You can also select the ‘Always fill tempo’ option, which automatically writes the current tempo on the song sheet.
On print out, if “Include ‘a’ / ‘b’ part markers” is set bar numbers will include “a” or “b” after them (the name of the substyle).
Use “Offset Bar Numbers by” to offset the display of bar numbers on the prinout or lead sheet. For example, if you want bar 1 to display as bar 17, enter an offset of 16.

Title/Style/Tempo/Composer/Copyright
Enter this information in the fields provided. If the title is long the font size will be reduced, and the title won’t be underlined. Titles are limited to 60 characters.
- Click the [A] button to print the title in upper case.
- The [T] button automatically inserts the current tempo setting for the song.
- The [©] button will insert the copyright symbol into the copyright field.
- The [S] button will enter the full style name into the Style field.

Setup Printer
This launches the setup dialog box for your printer. If you choose a new printer, Band-in-a-Box will automatically set this as your default printer.
Click on the [Setup...] button to open the printer properties to set paper size, resolution, page orientation and other settings controlled by the printer driver.

Tip: In the Notation Options you can specify an upper limit of a note range with the “Max Ledger Lines” setting high so notes won’t have an excessive number of ledger lines.

Print Preview
This feature allows you to preview what the printed pages will look like by displaying them on-screen.

Use the [Prior], [Next], [First], and [Last] buttons to navigate additional pages.

Press the [Opt] button to open the Preview Options dialog.
In the Preview Options you can set the exact number of pixels to display for the print preview, the same settings are also used if you choose to save the pages to a graphics file in the popular .JPG, .TIF, or .BMP file types.

Printing your song to a graphics file allows you to embed your notation in a document, or in an HTML file for use on your web site.

This feature is only limited by available memory. This allows high resolution BMP’s like 2400 x 3000. A BMP of 2400x3000 is 300 dpi for an 8”x10” image.

When saving to a JPG file there are additional quality settings.

When you have selected your file options press the [OK] button.

You will then see a high-res graphic on screen, and you can save that to a BMP using the [Save...] button.

To save a JPG file press the [Save...] button and then select “Save to File Type:” JPG.

You can then see the estimated size of the file, and can change settings by pressing the Low/Medium/High resolution buttons.

**Display Options**

Use this button to display the notation across the full width of the screen.

This button will shrink the notation to display a full page at a time.

**Saving the page(s) as Graphics files**

The [Save...] button saves the current page as a Graphics file.

The [Save++] button saves all of the pages to graphics files named songnamexxx.bmp, where xxx is the page number.

With the clipboard button you can quickly copy a bitmap to paste into other applications.

**Printing from the Print Preview**

You can print the page(s) by pressing the [Print...] button to return to the Print Options and then pressing the [OK – Print] button.

In the Print Options you can set the number of copies to print.

Press the [PrintPage] button to enter a page number and print only that page, not the complete song or a full chorus.
Chords-Only Lead Sheet Display and Printout

Need a simple fake book style chord chart? You can display just the chords in the Lead Sheet window or print out a lead sheet with just chord symbols.

To print a chords-only lead sheet, uncheck the Staff lines checkbox in the Print Options dialog.

There are print templates in the Print Options dialog to achieve various printout styles - Normal/Lyrics Only/Chords and Lyrics/Chords Only/Blank Paper. In the Print Options dialog, select the desired print template. To return to default settings choose the “Normal” template.

Printing Multiple Parts

To print more than one track of notation:
- Open the Lead Sheet window.
- Click the mouse on the track that you want on the top stave.
- Ctrl+click (hold down the Control key and click the mouse) on the tracks that you want below the top stave.

You will then see a group of tracks, displayed in the order you selected them.

Press [Print] from the Lead Sheet window to print the multipart Band-in-a-Box notation.
Print Multiple Songs

To print out a single song you use the [Print] button in the Notation window. If you want to print out several songs, use the Print Multiple Songs feature to print them all out at once.
This allows you to print all of the songs in a subdirectory with one command. This feature is accessed from the *File* | *Print Multiple Songs* menu item.

You can set options to refine which songs will get printed. For example, you might want to only print songs in a certain style (e.g. Bossa Novas), or only songs beginning with letters R to Z, or only songs with melodies.

Before you print out a whole bunch of songs, it is important to set the options that you'd like, as the program will use the same options for each song. Use the Print Options dialog box. Perhaps you want to print out only the first chorus of each song, for example. The program will automatically set each song to print out on 1 page if possible.

First, make sure that you are in the correct directory that you want to print. This is displayed in the [Change Directory] button.

For example, if the box under the [Change Directory] button says “C:\bb” then the songs in C:\bb will be printed. If you want to print songs in a different subdirectory, then press the [Change Directory] button.

If you want to print all of the songs in a subdirectory, then press the [All Songs] button. Pressing this button sets the “Start” and “Finish” ranges to start at “ 0 ” (blank) and finish at “ZZ.” Since song files with names like 8dayweek.mgu will appear before the letter A when sorted alphabetically, the blank string “ 0 ” is used instead of the letter A to ensure the inclusion of all songs.

Normally you'll want the “Range of Songs to Print” set to “All Songs,” but if you've already printed out songs from A to M, and want to resume printing starting at N, you can specify this range N to Z so that you don't have to print out everything again.

If “Only print songs with melodies” is set then only files that have a melody in them (i.e., song files ending in mg?) will print.

“Only print songs with style extension of _” is useful if you want to only print out certain styles. For example if you only want to printout Jazz Swing songs, then you can set this to style 1 which is Jazz Swing. Style 4 is Bossa Nova.

The 24 built-in styles each have a number associated with them. All user styles have a style character of U.

Here are the style #s for the built in styles.

Jazz Swing  1  Heavy Rock  D
Country  12/8  2  Miami Sound  E
Country  3  Milly Pop  F
Bossa  4  Funk  G
Ethnic  5  Jazz Waltz 3/4  H
Blues Shuffle  6  Rhumba  I
Blues Even  7  Cha Cha  J
Waltz (Old) 3/4  8  Bouncy 12/8  K

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If your printer requires loading each sheet, you might want the program to beep after each printed song. The “Beep after each printed song” setting is useful to monitor the printout if you aren't near your printer, because if it stops beeping, then printout has stopped, and you may be out of paper.

“When completed, beep “x” times” will notify you that the job is finished by beeping a specified number of times.

These buttons start and stop printing the multiple songs.

Band-in-a-Box monitors the Print Manager to avoid overloading it with songs to print. So if the Print Manager has more than 2 songs waiting to print, Band-in-a-Box will pause before printing a new song. If your printer runs out of paper, the Windows Print Manager and Band-in-a-Box will wait for you to put more paper in before automatically resuming printout. The status of the Printout is displayed at the top of the dialog box.
Chapter 9: Automatic Music Features

Automatic Medleys - “The Medley Maker”

Would you like to make a medley of various Band-in-a-Box songs (MGU) using Band-in-a-Box? This is easily done with the new Medley Maker. Inside the Medley Maker, simply select the songs that you want, and Band-in-a-Box will make the medley for you. A medley is not simply joining songs together. A good medley uses a transition between songs to introduce the new style, key, and tempo. The Medley Maker automatically creates a nice transition area for you, writing in chords that would smoothly modulate to the next song, style, key, and tempo!

To open the Medley Maker, click on the [A+B] button on the toolbar or choose File | Medley Maker. This launches the Medley Maker dialog.

![Medley Maker Dialog](image)

To make a medley,
- Add songs by pressing the [Append] or [Insert] button.
- Remove songs using [Delete].
- Change the order of the songs using [Move Up], [Move Down].
- For any song, customize using the “Settings for this song” group box, including changing the style, tempo, key, start bar, # of bars, and # of transition bars. Press [Update] to see your changes in the medley list.
- Choose the type of information to include with your medley (styles, key signature changes, lyrics, etc.) in the “Include with Songs” group box
- Choose a number of transition bars (the default is 4). Transition bars are automatic bars of chords inserted by Band-in-a-Box to transition from one song to the other, generating an “outro” and an “intro” between songs.

Press the [Make Medley NOW] button to generate a medley.

The maximum size of the medley is 255 bars (about 7 minutes).
The current size and time of your medley is displayed in the Length label.

![Length: 104 bars 3m:3s](image)

You can have multiple choruses, so if you had 3 choruses of a 250 bar medley, it would last 750 bars.

![# of Choruses 1](image)

**Tip:** Your medley will use RealDrums if you have RealDrums enabled. If so, you should keep the various tempos of the songs within a close range. Because the quality of the RealDrums stretching would go down if a song in the medley had a much lower tempo than the previous one, it is tempos that slow down to avoid.

### Automatic Songs – “The Melodist”

**Feel like composing a brand new song?** Using the “Melodist” feature you can compose a new song in the style of your choice, complete with intro, chords, melody, arrangement, etc. All you have to do is choose from one of the many “Melodists” available and press [OK] button. The program then creates the intro, chords, melody, and arrangement in any given style. The Melodist will also generate a melody over an existing chord progression.

Once the song is generated, the chords and melody are part of the regular Band-in-Box tracks, and as such can be edited, printed, saved as MIDI file, etc. You can also regenerate any part of a song to further refine your Band-in-a-Box compositions.

A Melodist “Jukebox” mode creates and performs new compositions in succession. Besides the compositional advantages of the Melodist, utilizing this feature can also be a powerful practicing aid for improving your sight reading by reading the melodies generated in various keys using the Lead Sheet window, and improving your ear by playing along with the chord progressions in the generated songs using the ear training window.

This feature can be a powerful practicing aid for sight reading and improving your ear.

Press the [Melodist] toolbar button to launch the Melodist.
Selecting the “All” checkbox displays all available Melodists, or they can be filtered by genre (e.g. Dixieland) to show only melodists in that genre.

To filter the Melodists, de-select the “All” checkbox and then check on the genre that you are interested in.

You can also filter to show/not show melodists from Melodist sets that you don’t have.

Scroll down the list, and pick the Melodist that you’d like to use.

The left side of this screen displays the list of the Melodists available, including Pop, Swing, Bossa, Waltz, Rock, Bebop, and Jazz Ballad.

The Melodist will generate Intro, Chords, Melody Harmony, Style, and Solos using the group of settings preset with the selected Melodist. Scroll down the list, and pick a Melodist that you’d like to use.

**Generate Chords / Generate Melody / Generate Intros / Auto-Titles**

The items that are selected will be generated. The convenient preset buttons will automatically set the appropriate settings to popular presets.

The [Chords & Mel.] button will set the checkboxes to Generate Chords & Melody (but not Solos).

The [All] button will generate Chords, Melody, and Solos.

The [Chords] button sets the options to generate Chords only (no Melody).

The [Melody] button will set the options to generate only a Melody (no chords) over an existing chord progression.

**Insert Bass Pedals**

When selected, a Pedal Bass figure will be inserted during the intro and at the end of sections.

**Solo in Middle Choruses**

This will generate an improvisation in the middle choruses of the song. Any Soloist can be selected.

**Allow Style Changes**

When selected, this option allows a Melodist to load in an associated style. If you don’t want Melodists to change the current style that you have loaded, then de-select this option.

**Form**

This selection box allows you to choose between a song generated with a specific form (AABA 32 bars) or “free” form. The AABA defaults to 32-bar form, which is the most popular song form.

If you’d prefer for the song to have no form, you could set the song to “no form” This wouldn't be a very musical setting, but might be useful for practicing or ear training.

**# Choruses**

This determines how many choruses of the song form (Melodies) are to be generated. For example, if set to 5, the Melodist will generate 5 choruses, enough for an intro chorus, ending chorus, and 3 Middle Choruses. The # choruses setting defaults to the # choruses present in the current song.

This button sets the Melodist back to its default settings.

**Tempo / Auto Tempo**

The Tempo Setting determines the tempo of the song, and defaults to the current tempo of the previous song. If the “AutoTempo” is checked, the tempo will be set at the tempo range stored within that Melodist. For example, if a Melodist is called “Fast Waltz,” it would have a fast tempo range stored inside the Melodist, and the song would be generated at a fast tempo if the “AutoTempo” option is set.
A2 Transpose
In songs with an AABA form, it is common for the second “A” section to be transposed. For example, the first “A” section might be in the key of Eb, and the second would be transposed up to the key of Gb. Melodists store these settings, and some Melodists are set to transpose the A2 sections. If you don't want to allow Melodists to transpose the form in this way, set the A2 transpose to none.

If set to “section plus” it will transpose the A2 section, and might also transpose 2 bars early or 2 bars late. The song will only get transposed if the particular Melodist is set to transpose the section. This feature is discussed in more detail in the Melody Maker section.

This area determines the key for the song. If set to “Any Key” the program will randomly pick a key for the song, weighed more heavily toward the popular keys (C, F, etc.). “min. key%” determines what % of songs are generated in minor keys vs. major keys.

If set to 20, then 20% of the songs would be generated in minor keys.

Select whether you want to generate the Whole Song or just part of it. If you select Part of Song, you can specify which bar and chorus to start at, and how many bars to generate.

Tip: You can also set the “Song Key Combo” box to a specific key, or set it to use the current key of the previous song. If you want to generate only part of a song, an easy way to set the range of bars is to highlight/select the bars by dragging the mouse over the chord area prior to launching the Melodist dialog. Then the “Generate” form will be automatically set to “Part of Song” and the range of bars will be set to the selected area.

Replace Thru form
If you have set the Melodist to “Generate Part of Song” you might choose to generate only bars 5 and 6 of the song form in the “A” section of an AABA form. If the form of the song is AABA, you'd normally want the regenerated section to be repeated throughout the form in all of the “A” sections. This option will instruct the Melodist to copy the generated bars 5 and 6 to the other “A” sections (bars 13 and 14 and bars 29 and 30).

Tip: If you'd like to remove the current Intro, Melody, or Soloist Track, press the [Kill Intro], [Kill Melody] or [Kill Soloist] button.

Press the [Search] button and type in part of a Melodist name, memo, style name, or other text associated with a Melodist. This will cause the Melodist selection to change to the next item containing the text. Similarly, you can type in a # of a Melodist and press the [Go To #] button.

Press the [Juke Songs Now] button to launch the Melodist Jukebox. It will continuously generate new songs and play them in Jukebox fashion. Using the “From…To” setting, you can set the range of Melodists to include in the Jukebox, or keep the Jukebox on the same Melodist by deseleting “Change Melodists.”

Write to track
Usually, the Melodist is written to the Melody track. If you'd prefer the Melody to be written to the Soloist track, perhaps as a counter-melody, then change this setting to Soloist.
The Favorites button in the **Generate Chords and/or Melody** dialog allows you to pick a Melodist that you've used recently.

The **Favorite Melodists** dialog keeps track of the last 50 melodists that you've used, so you can easily recall them.

Highlight the melodist you want to use and press the [OK] button, or double-click on the selection you would like to make.

If you'd like to create your own Melodists, or permanently change the settings of existing Melodists, press the [Edit…] button to launch the Melodist Maker.

**Automatic Intro – Song Intros**

With a single button you can generate a 2, 4, or 8-bar intro for any song. The chords will be different each time, and you can keep pressing until you get the progression that you want. The intro generated is an appropriate chord progression in the chosen style of music (e.g. Jazz/Pop), with optional pedal bass, and leads correctly to the first chord of the song. Intros can also be removed.

Press the [Intro] button or select **Edit | Intro Bars** to generate an intro. Once you press the [Intro] button, the Intro Dialog is displayed.

**Generate Chords for Intro (or Remove Intro)**

- **Chord Types** - You can choose between Jazz and Pop styles of chords.
- **Intro Length (bars)** - This sets the duration of the intro to 2, 4, or 8 bars.
- **Starting chord (after intro)** - This setting assures the generated intro smoothly transitions into the song.
- **Remove Intro** - Pressing this button removes the intro.
- **Pedal Bass** - Inserts a pedal bass figure throughout the intro.
- **Use Maj7 instead of Maj6** - Choose between using Maj7 or Maj6 chords.

**Note:** The Melodist also has settings to auto-generate intros and song titles.
**Automatic Song Title Generation**
The Song Title generator names every song that the Melodist writes, if the Auto-Titles checkbox is selected. This feature can be used on its own to suggest titles for your own compositions. It will keep making titles until you get one you like.

Press the [TITLE] button to generate a song title, a new title will appear immediately in the title area of the screen. Click again for another one. Select Edit | Undo Title to go back one title.

**Fiesta for Coconut Grove**

**Customizing the song title generator**
These word lists stored in a text file called TITL1.TXT. This file has several sections, each with two sets of words that will be put together. You can add new sections, with an adjective section and a noun section. Please see the comments included in the file TITL1.TXT for details on adding text to the file.

**Automatic Sound Track Generator - “SoundTrack”**
The SoundTrack feature allows you to generate music in the style you choose for any length of time you specify. As the “producer,” you select the genre, length of time, instruments, and fade-in/fade-out options. The SoundTrack adjusts the tempo and duration to match the settings, and then allows you to save the file as a WAV, WMA (Windows Media Audio), or MP3 file for further use in your own projects.

Generate original music (over 20 genres) or select from over 50 supplied SoundTrack types (Bluesy/Excite/Healing/Jazzy/Tropics, etc.). For example, you can generate a 30-second audio music clip in the genre of your choice in just a few seconds!

To use the SoundTrack feature, press the SoundTrack button (on the toolbar at right/middle of screen), or choose the Window | Generate Soundtrack menu item.

You will then see the Generate SoundTrack window.

**Note:** The SoundTrack feature renders to audio files (WAV/WMA/MP3) using DXi or VSTi synths only. You need to have at least 1 DXi/VSTi synth installed for the feature to work. Typical Band-in-a-Box installations include the Roland VSC DXi.

First, you should load in a song. There are several types of songs that you can load in:

- You can generate a brand-new-royalty free composition by pressing the [Generate Song Now] button, after choosing a Genre and variation.
- You can choose from over 100 premade “SoundTrack” compositions that we have made. These are designed to be suitable for background music for various uses.

**Load Soundtrack song...**

- Joyous 1 - Happy Sunday, MGU
- Joyous 1 - Laughter, MGU
- Majesty 1 - A Grand Day, MGU
- Majesty 1 - Raise the Flag, MGU
- Majesty 1 - The Procession, MGU
You can load in existing songs, song demos that we have provided for the styles, or songs that have RealDrums, or finally there is a button to load in *any* song. Please note, if using an existing song (composed by someone else), make sure that you have sufficient rights to use the song for your project.

Once you have loaded in a song, you can now choose a portion of the song to use for your project. Assume that you want a 30 second clip of music. Set the desired duration to 30 seconds.

Then press the [Adjust # of bars and Tempo] button. This will give a number of bars at a tempo that closely matches your current settings, that will last 30 seconds.

Adjust the “Starts at Bar” of the music. To start at the beginning, choose bar 1.
You can choose which instruments to include in the arrangement. Use the [Play] and [Stop] buttons to hear the work-in-progress. You can also loop the song playback.

Now, generate your SoundTrack file. This will save a file in WAV, WMA, or MP3 format.

Set Fade-in, Fade-Out options in seconds for the audio clip.

You can hear your finished audio clip by pressing the [Preview] button.

**Automatic Solo Generation – “The Soloist”**

To select a pre-made Soloist, click on the [Soloist] button on the toolbar, or press Shift+F4, or choose Soloist | Generate and Play a Solo. The “Select Soloist” window opens.

Pick a type of Soloist in the “Soloist type” list box and choose the appropriate style, or enable the “Auto” checkbox and press the [Suggest] button next to it. This brings up a list of Soloists in that style; simply choose which one you like.

You can select genres of soloists (e.g. Modern Jazz) and see only soloists in that genre. To do this, de-select the “All Genres” checkbox, and then check on the genre that you are interested in.

The [Fav] button on the Select Soloist window brings up a list of the most recently used (favorite) 50 Soloists. The Soloists that you use most often will likely be at or near the top of this list, making it easier to select the Soloist you want than scrolling through your entire list of available Soloists. Select the “Double Time?” checkbox (set to “true”) if you want a double-time solo; 16th notes instead of 8ths.

You can also filter to show/not show soloists from Soloist sets that you don’t have.

If you can’t find the Soloist you’re looking for, try pressing the [Search] button to type in part of a name to search for.

Go To# box allows you to select from the list exactly which Soloist to choose (if known).

The “Memo” field has a brief description of the Soloist style, and the name of the current database is shown.
Chapter 9: Automatic Music Features

The pre-made Soloists may set the style, instrument, and harmony, but you can change these settings to your own choices.

**Clear**

The [Clear] buttons will remove the currently selected Instrument, Harmony, or Style.

**Choose(1)**

Use the [Choose(1)] button to select an instrument and automatically set the soloist note range for that instrument.

**Harmony 17 SuperSax (4+1)**

For a harmonized solo, choose a harmony from the Harmony list.

**Choose(2)**

Use the [Choose(2)] button to select any style from the \bb folder.

**RealTracks**

“Real” instruments replace the MIDI track for that instrument, and can be controlled just like the MIDI instrument (volume changes, muting etc.). Best of all, they follow the chord progression that you have entered, so that you hear an authentic audio accompaniment to your song. These are not “samples,” but are full recordings, lasting from 1 to 8 bars at a time, playing along in perfect sync with the other Band-in-a-Box tracks. RealTracks can be generated to the Soloist (or Melody) track.

Get to Soloists in the range 361-363. You can do that either by:

1. **Go To #**

   Typing 361 and pressing [Go To #].

2. **Fav**

   Choosing [Fav] will allow you to return to a recently chosen Soloist.
3. Choose the Genre “RealTracks (audio soloists)” from the list of genres to see all available Soloists that use RealTracks.

As with other Soloists, press the [All Solo] button to make sure that the Soloist will be generated for all choruses, or [Melody and Solo] if you just want the Soloist for a certain chorus.

Your RealTracks solo will be saved with the song and the Soloist track will be frozen and marked with an asterisk (*).

Soloist generated with RealTracks are saved with the song, so you will hear the RealTracks play the same solo when you reload the song.

**Solo Mode**

In Normal Solo Mode, Band-in-a-Box solos in the normal way of improvising choruses of the song.

Several other options are provided for adding improvisation to your song in a variety of ways, including Fills, Around Melody, Trade, Solo Wizard, and a user-defined Custom setting.

**Fills%**

Fill instructs the Soloist to play fills or “noodle” on the song for a user-defined period of time (% box).

**Around Melody**

To solo around the Melody, do the following:
- Open up a song that has a Melody, preferably a sparse Melody with some space in it so that a Soloist might be able to “jump in.”
- Press the [Soloist] button. Select the Solo Mode “Around Melody.”
- Set the Soloist to play in All Choruses, and uncheck the “Mute Melody in Middle” option.
- Press [OK] and the Solo will be generated, playing riffs at times when the Melody isn’t playing.

**Tip:** For added effect, add a guitar chord solo to the Soloist part using the Chord Solo button in the Guitar window and choosing Solo as the destination, or simply choose a Guitar Harmony like 32 J Pass.

**Trade**

There is a type of soloing where different soloists trade phrases. For example, “trading fours” refers to a solo lasting four bars, usually followed by a different melodic solo or drum solo for the next four bars. Band-in-a-Box can trade 2, 4, or 8-bar phrases.

This means that you can alternate your own phrases with those played by the Soloist. Click on the number button beside the “Trade” radio button to toggle between trading 2’s, 4’s, or 8’s. Band-in-a-Box can generate the first phrase or the second phrase.

**Soloist Wizard**

This option in the Select Soloist dialog enables the Soloist Wizard. As you play notes on either a MIDI keyboard connected to the computer or on the QWERTY keyboard, the program will play correct notes in the style of the current Soloist! This means that you can play a “perfect” solo every time, simply by pressing any key on your MIDI keyboard or QWERTY keys.

**Tip:** The Soloist will use the velocities you play or pick its own, depending on the setting in Opt | Preferences | Use MIDI velocity for Soloist Wizard.
Custom Solo Generation

The [Custom] button located on the Soloist Selection dialog launches the Generate Solo for a Specific Range of Bars dialog. This allows you to set the range for the solo:

Tip: You can have these values preset to the values you’d like by first selecting/highlighting the range of bars that you’d like from the Chordsheet screen, then clicking on the Soloist button.

In real life, a Soloist tends to play a couple of extra notes after the solo section ends. Setting “OK to solo for an extra beat” allows the Band-in-a-Box soloist to behave in the same way.

If you want to overdub a solo and you have multiple solo tracks going at once, de-select “Overwrite existing solo in range.”

Once you press the [Generate Solo Now] button, the portion of the solo that you have selected will be (re)generated. The song will automatically start playing 2 bars before the new part, so you can quickly hear the new solo.

There are additional buttons and checkboxes to further define the Soloist

Auto-Suggest

If the “Auto” checkbox in the Select Soloist Dialog is on, you will find that an appropriate soloist is already selected for you. If you would like a different soloist, press the [Suggest] button and Band-in-a-Box will suggest another appropriate choice. Keep pressing until you are satisfied with the choice.

Load/Save settings w/song

These settings allow the saving and loading of Soloist settings. Enable these checkboxes if you with to load and save these settings with a song.

Force to # of Choruses

Allows you to set a song to a definable number of choruses (e.g. 5) so that there are enough choruses for everyone to take a turn Soloing. This box allows you to quickly decide how many choruses you would like Band-in-a-Box to generate without having to open the Play | Looping | Force loaded songs to # choruses menu item. The default is 5. Note that when this setting is enabled (by setting the checkbox to “true”), all songs subsequently loaded using this Soloist will also change to the number of choruses indicated in this box.

Solo Which Choruses?

Select which choruses you would like the Soloist to solo over. Choose from first, middle, last, any combination, or all three choruses.

Press the [All Solo] button if you wish to have the Soloist play over everything.

Press the [Melody & Solo] button to have the Melody play the first chorus, then have the Soloist come in on the second chorus, then have the Melody “play the tune out” on the last chorus.

Melody Influenced Solos

When musicians solo for a song, the solo is typically influenced by the melody as well as the chords. Band-in-a-Box can also allow the melody to influence the type of solo generated by its Soloist feature. The result is a much better solo generated for the song.
A strength (%) setting allows you to control how much the solo will be influenced by the melody. Choose the melody influence (%), and one of several presets to control the type of influence (pitches/rhythms/note density, etc.).

To generate a solo that is influenced by the Melody, select the Enabled checkbox in the “Melody Influences Solo” group box.

Choose the type of influence by choosing a strength (0 to 100%) and a type. The default method works best on simple melodies or Pop tunes, and others work on Jazz and complex melodies.

**Melody Influenced Soloist Settings**

A “Custom” method is available, allowing you to launch a dialog that let’s you change various parameters to control how the solo will match the notes, rhythm, and density of the melody. When this method is selected a [+...+] button will display.

Click on this button to open the **Melody Influenced Soloist Settings** dialog.

- **Enable Melody Influenced Soloist** – enables melody influenced soloing when selected (true).
- **Overall strength** – how much you want the melody to influence the solo.
- **First melody note MUST match riff** – the first note of the riff must match the pitch of the melody at this point in the song.
- **Last melody note MUST match riff** – the last note of the riff must match the pitch of the melody at this point in the song.
- **Overall Melody MUST match riff** – the pitch needs to be found somewhere in the riff for this condition to be true.
Target Phrase Anchor Point score – phrase anchor points are points where both the pitch and timing of the Melody note and the riff match each other.

Rhythm Matches – per cent of time that a melody note is found at the same time as the note in the riff at the same point (pitch is irrelevant).

Density - # of Notes Matches – the number of notes in the melody compared to the number of notes in the solo. For example, 8 melody, 10 solo = 80%. Note: If set to exactly 49, 59, 69 etc., soloist will stay quieter when the melody is not playing.

If Melody is not playing, then soloist is not playing

Passing Notes acceptable % - percentage of time that passing notes in the riff are OK (if not found in the melody). For example, if set to 20%, it is OK if 20% of the notes are passing notes.

Melody – Favor phrases that match melody – higher numbers will make the soloist follow the melody more.

Soloist Maker

The [Soloist Maker [Edit] button launches the Soloist Editor module where you can make your own or modify an existing Soloist. This feature allows you to define your own Soloists. See the following Soloist Maker topic for a full description of this feature.

This button launches the More Soloist & Melodist Settings dialog.

This dialog can also be accessed from the Opt. | Preferences [Soloist] button.

Set “Use MIDI Volume for Soloing Wizard” to true if you want MIDI velocity information sent to the Soloing Wizard. If you have a velocity sensitive MIDI device attached to your computer and you want to control the dynamics of the Soloist, you should enable this feature.

Set the “Trigger Playback Early” to true to enable song playback to start before the Soloist has actually completed composing a solo. Otherwise, Band-in-a-Box will completely compose a solo before song playback begins.

Soloist/Melody Velocity Adjust

This box allows you to quickly boost or reduce the volume of the Soloist part relative to the other instrument parts. For a realistic mix the soloist instrument is set slightly louder than the other instruments/parts in a song. The default is 5.

Use large soloist files (ST3) is selected to use the optional large soloist databases, *.ST3 files, instead of the smaller ST2 files. The ST3 files have improved phrases, but the solos take longer to create.

Create Long Phrases

Set this checkbox to “true” (enabled) if you would like the Soloist to use the longest musical phrases it “knows.”

If OK to treat the V Major triad as a V7 is set, all Jazz MIDI soloists and some Jazz and Country RealSoloists will treat the V chord as V7 (dominant seventh).

Using the Soloist Feature

1. Generate a Soloist and practice the solo by looping it, slowing it down, or printing it out, until you can perform a great solo on any chord changes!
2. Generate a Soloist and attach a Harmony such as “Big Band Brass” to create phenomenally quick and interesting Big Band Arrangements automatically. Generate a standard MIDI file or print them out for you and your friends.
3. Have the Soloist play a solo according to your accompaniment and arrangement (along with the other members of your Band-in-a-Box, of course!)
4. Trade 4’s in a call-response fashion with the Soloist (you solo for 4 bars, Band-in-a-Box solos for 4 bars, etc.)
5. Concentrate separately on different aspects of your playing with assistance from the “Wizard.” From soloing with proper phrasing and “feel” (the best notes are included automatically) to accompanying a soloist with confidence and authority.

**Tip:** Try muting out one of the accompaniment parts such as the piano or guitar part and play along to the Soloist in a supportive role - its fun!

6. Use the Soloist track to record another part in addition to the Melody and other parts provided by Band-in-a-Box.

7. Generate a Soloist on chords/keys that you would like to practice. Band-in-a-Box will play and solo with you all day without getting bored. For example, if you want to work on your II-V7-I progressions (“two-five-one”), you can just type the chords you want, and generate a solo to play over those changes. As the solo plays, you see the notation, can you can sight read along. Pressing the “Loop Screen” checkbox on the notation will loop the notation the screen so you can master each 4 bar phrase (II-V-I) and then move ahead to the next one!

---

**Technical Notes:**

1. The Soloist has its own separate channel and settings. But when the Soloist uses a harmony, it becomes linked to the Thru Harmony channels and settings. Since we are already using 12 of the available 16 MIDI channels in Band-in-a-Box, we didn’t want to use up another 2 channels on dedicated Soloist Harmony channels. So if you want to hear a Soloist with harmony, use the THRU Harmony settings. In other words, wherever a Thru harmony is selected, the Soloist part will use the Thru Harmony settings.

2. We have designed the Soloist to not repeat any solo ideas so that the solos are always fresh, with new ideas forming and playing all the time. As a result, we have included a **refresh Soloist** menu item (under the Soloist menu) that, when selected, will allow the Soloist to think about all of its musical notions again.

Choosing the **Refresh Soloist** option is like telling the soloist “It’s O.K., you can play whatever you like, even if it’s something that you played 5 minutes ago...” It’s a good idea to refresh the Soloist regularly to ensure maximum “idea” availability.

3. The Soloist menu contains many options. It has all of the same editing options found in the melody menu, so you can treat the Soloist track as a 2nd melody track. Even if you don’t plan on using the Automatic Soloist feature, you can just use the Soloist track as a 2nd track for counter melodies, overdubs etc. The result: two melody tracks, two solo tracks, or one melody and one solo track all at your disposal for any song, without having to resort to an outboard sequencer.

---

**Soloist Maker**

The [Soloist Maker][Edit] button launches the Soloist Editor module where you can make your own or modify an existing Soloist. This feature allows you to define your own Soloists.

---

![Soloist Editor](image-url)
Insert the title of your ‘soloist’ in the Title box, and any memo note you wish to add. (The Num field will be filled in for you.)

For the Memo box, you can put in information like “extra legato, straighter 8th notes, on top of the beat, laid back, etc.

The “Soloist is” box allows you to define what type of notes the Soloist will play (i.e. swing 8th notes, straight 8th notes, 16th notes, etc.)

There are several databases of Solo ideas to choose from. This button will launch an Open File dialog for the 'bb' folder where you can select a database (ST2 or ST3) appropriate for the type of song the Soloist will be playing over (e.g., J_SWING.ST2 for Jazz Swing songs).

Note: If you have an .ST3 database available for the style of soloing you want to generate, you can still choose the .ST2, and the program will automatically substitute the appropriate .ST3 file if, (a) it is available and, (b) you have selected the “Use Large Soloist files” checkbox in the “Select Soloist” dialog.

Press the [Choose] button in the Soloist Editor to select the instrument the Soloist should play (i.e. Tenor Saxophone).

This will set the instrument patch, and the recommended note range for the instrument to solo over. You may over-ride these settings by manually setting the note range in the dialog box after pressing OK.

You may also select an instrument from the “Patch Change” window, but selecting an instrument with the [Choose] button also fills in the specific note range for that instrument.

If you wish to have a harmonized solo, select the harmony type by clicking on the Harmony box and choosing from the drop-down list.

“Change Instrument” allows you to quickly set how the Soloing will “take turns” with other instruments. Use this option to change instruments every chorus, every 4, 8, 16 bars, etc. Press the [Set..] button to choose the instruments you would like to change to, including the appropriate note rang for each instrument.
The Sub-Soloist checkboxes are for use ONLY with add-on hybrid soloists such as the ones found on the SOLOISTPAK for Band-in-a-Box. These checkboxes can be used to “sub” a different instrument and playing style in a Soloist which contains more than one playing style, such as BG_BAND.ST2 found on Soloist Disk Set #5. For more information on additional Soloist Disk Sets and the additional features available with them, contact PG Music.

To Modify (if required) the “Phrase Length,” “Space Length,” and “Outside Range” parameters, simply click in the box you wish to change and type-in the new number.

For example, change the “Legato Boost %” to 10 %. This will add 10% to the duration of the notes.

Adjust the lateness by -5 to have the Soloist play the notes more “on the beat” than other Jazz soloists.

Adjust the 8th Note spacing by -5 to have your Soloist play 8th notes in a more even feel than other Jazz soloists.

The Increase Velocity setting will increase the velocity of each note in the solo by the value entered, or DECREASE the velocity if a negative value is entered.

You can control the maximum number of notes per quarter note that the Soloist will use.

For example, you can set a “Rock Guitar” Soloist to use nothing shorter than 16th notes. This would produce less “guitar hero” solos with bursts of 32nd notes etc. Or you could create a Jazz solo that uses only quarter notes or longer to help with sight-reading or student study.

Use the [Import] button to bring a soloist in from a disk and use the [Export] button to save your Soloist to a disk to share Soloists with your friends.

You can also save your soloist to another Soloist file (*.s1) by pressing the [Save As] button.

Use Copy/Paste to copy all settings from one Soloist to another. Copy to an undefined Soloist # to create a new soloist. Changes are saved to the default file.

Press the [OK] button when you are satisfied with your choices.

**Auto Piano Hand-splitting**

This feature applies to the Piano, Melody, and Soloist tracks. It is found in the Notation Window Options and in both the Melodist and Soloist Utilities submenus.

**Piano Track (Notation Options)**

The Piano part can be displayed on both clefs, using intelligent hand-splitting routines that dynamically split point. This happens automatically.

When you do this, the Piano track (not any other track) will be displayed on both clefs with intelligent hand-splitting. You can print out the Piano track with the hands separated.

**Melody and Soloist Tracks**

You can also manually split a piano part on a Melody or Soloist track using the intelligent hand-splitting routines. The left/right hands display in red/blue on the big piano, and on bass/treble clefs on the notation. Import a piano MIDI file to the Melody track to get a split-hands display and printout!

For example, if you have a MIDI file that is a solo piano piece, File | Open MIDI file will put the music on the Melody track. Then choose Melody | Edit | Utilities | Piano Hand Split. Make sure that Melody | Track Type is set to piano. You will then see the piano part split intelligently into 2 hands.
When this is done, the left hand will be stored on channel 8, and the right hand on channel 9, on the Melody track. You can export the MIDI file to a sequencer, and these 8/9 channel assignments will be preserved.

Automatic Guitar Solos – “The Guitarist”

The Guitarist allows you to generate a guitar chord solo for any melody. Band-in-a-Box will intelligently arrange the melody to a guitar chord solo by inserting real guitar voicings throughout the piece. You can select from among many “Guitarists” in order to create your arrangement. You can also define your own Guitarists; choosing parameters such as strum speed, types of voicings (Pop/Jazz), embellishments, and much more.

Guitar Solos are selected from the Guitar window, which opens with the Guitar button.

Press the [Ch Sol...] button to launch the Generate Guitar Chord Solo function from the Guitar Window.

It is also accessible from the Melody | Edit Melody Track | Generate Chord Solo menu item.
Here are the steps to generate a Guitar Chord Solo:

**Select the Guitarist to use.**

In the main list at the left of the Window, you see the list of the Guitarists that are already defined. For example, you can see that Guitarist #2 is called “Jazz Guitar, single position.” That will create chord solos that stick to a single position on the guitar neck whenever possible.

**Select Melody (or Soloist) track.**

Normally, the Guitar Chord solo is written to the Melody track, but you can also select the Soloist track as the destination.

**Confirm the Guitar Patch selection.**

The Guitarist that you pick (see item #1) will already have chosen the guitar patch to use, but you can override it with this setting.

**Select the Range of the song to use.**

You can either generate a chord solo for the whole song, or just a region of the song. In either case, remember that you need to have an existing melody to work with.

**Select the Main Guitar Position to use.**

The “Auto-Set” feature sets the main guitar position for the solo based on the key signature. For example, in the key of C, Band-in-a-Box will choose the 5th position as the best
position for the chord solo to be played. If you wanted the solo to be in the 12th position, you could de-select the “Auto-Set” and then set the guitar position to 12th position.

You'll then see a dialog box that tells you a solo has been added to the track.

As you listen to the solo, you'll notice the following:
- Some of the notes are left as melody, and some are assigned to chords.
- A wide variety of guitar chords are used, including some advanced chords. All of them are popular chords played by real guitarists – there are no theoretical chords.
- The chords are strummed, to simulate a real guitar player.
- The Track Type for the Melody has been set to Guitar – so the notation shows [Tab], and the MIDI file will be saved with the Guitar Channels (11-16) preserved which preserves the fret positions.
- All of these items can be customized in the Guitarist Editor.

Technical Note: Since some of the guitarists can be assigned to strum the chords in a delayed fashion, if you repeatedly re-generate the solo, the melody will become more and more delayed. The solution(s) for this occurrence would be to choose Edit | Undo Solo prior to regenerating the solo, or picking a Guitarist that doesn't delay the strum. The Strum Delay Status is indicated on the “Info” panel of the Select Guitarist screen.

ONCE YOU HAVE GENERATED A GUITAR CHORD SOLO...

The chord solo is now part of the notation track. You can edit it like any other part, by deleting/inserting notes, etc. You can use the special guitar features discussed in the Guitar Window section to change the guitar voicings or replace a note with a chord and vice versa.

When you have a note or chord highlighted press the [Ch-] or [Ch+] Insert Guitar Chord button on the guitar window (or 7 or 8 on the NUMPAD keypad). Each time you press the [Ch-] or [Ch+], you'll see that the guitar chord changes to a different voicing, cycling through the available 5-10 voicings possible for each chord. Some notes won't have any chord voicings, for example a C# note on a Cmaj7 chord, because it is always a passing tone.

In a similar manner, you can convert a chord to a guitar note, and use the Insert Guitar Note button for this. Pressing the [N+] (or 3 or 4 on the NUMPAD keypad) repeatedly cycles through playing the same note on all 6 strings.

The solo will be saved with the song (.MGU) and exported to a MIDI file with the string positions intact because we use channels 11 to 16 for the Guitar part. You can remove the solo at any time, even after the solo has been saved or reloaded, by choosing Melody | Remove Harmony part menu item.

Guitarists can be customized using the Guitarist Maker, described in the User Programmable Functions chapter of this manual.
Automatic Embellishments – “The Embellisher”

Overview

When musicians see a lead sheet that has a melody written out, they almost never play it exactly as written. They change the timing to add syncopation, change durations to achieve staccato or legato playing, add grace notes, slurs, extra notes, vibrato and other effects. You can have Band-in-a-Box do these automatically using the Embellisher so that you hear a livelier, more realistic Melody - and it's different every time. The Embellisher is only active while the music is playing; it doesn't permanently affect the Melody track. There is an option to make the embellishment permanent, so that if you like a certain embellishment you can add it to the Melody track.

![Embellisher checkbox](image)

The Melody Embellisher feature is turned on and off by the Embellisher checkbox on the main screen. The Embellisher only functions during playback.

You will see the Embellished Melody on the notation as the Melody plays, so you can see the Embellished notes. When [Stop] is pressed, the notation will revert to the original (unembellished) melody. The embellishment changes timing of notes, durations, velocities, legato, as well as adding grace notes, additional notes and turns. Here is a “before and after” example that shows a typical embellishment of a Melody.

Normal (unembellished) Melody…

![Normal Melody notation](image)

Embellished Melody…

![Embellished Melody notation](image)

As you can see in the notation examples, the embellished melody adds an anticipation in bar 9, and in bar 10 adds extra notes, timing changes, and grace notes to “spice up” the melody.

![Disabled Embellisher](image)

If you disable the Embellisher, by de-selecting the Embellisher checkbox, the Melody will function as normal with no changes.

Using The Embellisher

The Embellisher settings are accessed during playback with the Embellisher button in the main screen toolbar, or with the menu item Melody | Embellish Melody Dialog, or with the key strokes Ctrl+Alt+L.

There is a Melody Embellisher dialog that allows you to:
- Customize the settings of the Embellisher, or choose Embellisher presets.
- Make a particular embellishment permanent.

![Live Auto-embellish during every playback](image)

“Live Auto-embellish during every playback” is the same setting that is on the main page checkbox. If enabled, embellishment will occur during every playback. If disabled, embellishment will not occur unless you choose the [Emblish NOW] button in the dialog.
Embellisher Settings
The settings that affect the embellishment can be turned on and off, and given a percentage strength.

Humanize
The velocities, durations (legato), and timing of the notes are humanized. The original velocities etc. of the notes are ignored. The option to only humanize the timing of the music if the timing was “stiff” to begin with allows the Embellisher to leave the timing of human input melodies alone, and humanize only the ones that were entered in step-time.

Adjust Octave
The octave of the Melody is changed to the best octave for the current Melody instrument. For example, if the instrument were a piccolo, the octave would be raised to the best range for a piccolo.

Anticipations
An anticipated note is playing a note early (“ahead of the beat”).

Less Anticipations
This is the opposite of anticipations. This finds notes that are anticipated, and “embellishes” them by playing them later (on the beat).

Grace Notes
The grace notes are brief notes played just before, and a semi-tone below the original note. The grace notes intentionally don’t show on the notation, so that it will remain easily readable. They can be heard.

Doubled Notes
Melody notes are doubled with the same pitch.
Extra Notes
Extra notes are added between melody notes.

Note Turns
With a note turn, a single note is replaced by a group of notes that include the original note and semitone or scale tones above and below the note. In this “before and after” example, the C note is replaced by a turn of 3 notes with a note a scale tone above the C.

Vibrato
Vibrato can be added according to the additional vibrato settings available in the “More” dialog. The vibrato can’t be seen on the notation window, but you can examine the events in the Event list.

The Embellisher is usually referred to as the Melody Embellisher, because you'll usually want to have it on the Melody track. But if you'd like, you can choose to embellish the Soloist track.

If you have done this, and want to restore the original Melody, you can press the [Restore Original Melody] button.
Embellisher Presets

<table>
<thead>
<tr>
<th>Preset</th>
<th>Custom</th>
</tr>
</thead>
</table>

Memo

- Total Notes: 168, Choir: Aahs, Octave adj: 0, avg. pitch: 62 (ideal: 68), Extra Notes: 0, Turns: 0, Doubled Notes: 0, Grace Notes: 4, Anticipated Notes: 2, Reduced Artic.: 5, Vibrato Notes: 12

The presets allow you to quickly choose common combinations of settings for the Embellisher.

The Embellisher Memo describes the current embellishment, with statistics counting the number of embellished notes.

If the song is playing and the Embellisher is enabled, you can update the embellishment by pressing this button. This is useful if you've changed settings, and want to hear what the new embellishment sounds like.

The [Defaults] button reverts to the original Embellisher settings.

There are additional settings, in the Embellisher Additional Settings dialog box. This allows you to set advanced settings for the Embellisher. These include:

- **Vibrato Depth**: The amplitude of the vibrato, in a range from 0-127.
- **Vibrato Speed**: This is the speed of the vibrato (slow-fast) range 0-127.
- **Only use Vibrato if Note is this many ticks**: e.g. If set to 120 ticks (one quarter note), then only notes of duration at least 120 ticks will get vibrato.
- **Start the Vibrato after this many ticks**: For notes that will get vibrato, the vibrato will start after this many ticks.
- **Adjust Octave Method**: If the octave is to be adjusted, it will either only adjust it if the notes are outside the playable range, or always adjust it to the best octave, according to the setting you make here.
- **Dynamic Range**: Refers to the range of velocities used for the humanization. Useful range 30-50.
- **Legato Settings**: Refers to the amount of legato for the notes. Useful range 55 to 75.

This displays the same thing that appears in the Memo field, but will display it even when there is no current embellishment.

You can save/load your own presets for the Embellisher.

When you have made a custom setting in the Embellisher dialog, press the Export button to save the data as an .EMB file.

When you want to recall the saved preset, press the Import button, and load in a previously made .EMB file. You can share your favorite presets with other installations of Band-in-a-Box using the EMB files.

If the song is not currently playing, you can still create an embellishment and have it apply permanently by pressing the [Embellish NOW – Permanent] button. The original melody is not affected permanently unless you have pressed the [Embellish NOW – permanent] button.

Normally the embellishment occurs live when the song is playing, and doesn't affect the melody permanently. But if you like the Embellishment, and want to apply it permanently to the melody, you can choose the “Make Current Embellishment Permanent” option.

You can use the [Undo] button to reverse a permanent embellishment before the song is saved to file.

Use these transport controls for song playback within the Melody Embellisher dialog.
Chapter 10: Working With MIDI

Band-in-a-Box has two built-in MIDI sequencer tracks. They are named the Melody and Soloist tracks, but they can be used to record any MIDI part you like – such as drum overdubs or layered accompaniments. MIDI can be recorded in Band-in-a-Box:

- Live with a MIDI keyboard, MIDI guitar, or MIDI wind controller.
- In step time by entering notes in the Notation window with the mouse.
- Using the Wizard feature to “play” notes with your QWERTY keyboard.
- Importing a pre-recorded Standard MIDI File into the Melody or Soloist.

Recording Live in Real Time

You can punch in/out, do unlimited overdubs, record directly to the tag or the ending, and start recording from any bar. To record live using your MIDI keyboard, guitar, or wind controller click on the [Rec.] button, or type the letter R, or choose the menu option Melody | Record Melody. The Record Melody dialog box will appear.

If you're sure that the settings are correct, just click [Record] or press “R” twice to immediately start recording.

Tip: If you select the “Overdub underlying melody” option in the Record Melody dialog, you will hear the underlying melody while recording.

Pressing this button will launch the MIDI Recording Filter. The Record Filter supports all MIDI controllers including the sustain pedal.

You can record any type of MIDI information to the Melody or Soloist tracks, and use the Record Filter to select what types to include. Choosing Opt. | Filter for recording will also launch the Record Filter dialog.

Press [Record] or the R key again to begin recording.

Stop recording by pressing the Esc key, or the spacebar, or by clicking the [Stop] button. The OK – Keep Take dialog will open.
[OK - Keep Take] (yes/no) saves the take you just recorded. Remember that it’s easy to fix small glitches in the Editable Notation window or in the Event List editor.

[Take Again] lets you quickly reject a take and start the recording again. Press the “A” key to do this with a keystroke.

[Cancel] ends the recording session; nothing is saved. To start again press the [Rec.] button or the [R] key.

Copy 1st chorus to whole song
If you have recorded one chorus of the song, checking this at the end of the recording will copy the same recording to all of the choruses.

Overdub Underlying melody
You have the option to merge the recording with the existing melody. If there is no underlying melody this option will be grayed out.

Retain Melody past last recorded
You have the option to erase any melody after the last recorded melody note, or keep it. Use this feature when you want to punch out at the end of a take.

Count-In and Metronome Options
To set these options, go to the Opt. | Preferences dialog and select the [Count-in/Met.] button.

Recording to an external sequencer
Many people use Band-in-a-Box in live situations. If you are unable to bring your computer with you, a good alternative is a hardware sequencer or a keyboard with a built-in sequencers that reads Standard MIDI Files. To transfer songs to the Sound Brush, follow these simple steps:
- Make a MIDI file of the song by pressing the [button].
- Either save the file directly to a floppy disk or copy it to the floppy from your hard drive.
- The Sound Brush is then able to read the IBM formatted disk with MIDI files on it.

Entering Notes Manually
You can enter melody notes directly to the track in the Notation window in either the Editable Notation Mode or the Staff Roll Mode.
Enter the Editable Notation mode from the Standard Notation screen with a single mouse click on the Editable Notation button. In the Editable Notation mode you can enter, move, and edit notes and rests using standard mouse techniques – point and click, drag and drop, and right click to open the Note Edit dialog box.

Confirmation dialogs prevent accidental entry of a duplicate note (same pitch near same time) and accidental entry of a very high or very low note (large # of ledger lines).

Once you have some melody entered, you can copy and paste chunks of it as you would in a text document. To copy and paste notation, highlight an area of notation by dragging the mouse over the region. Then select Edit | Copy. Click on the place where you want to paste to (by clicking at the time line on top of the notation window) and then choose Edit | Paste. You can specify a precise paste location in the Paste Melody dialog.

Recording with the Wizard Feature

This is a very helpful feature if you don’t have a MIDI keyboard but you want to record with a “live” feel. Use the Wizard to record notes from the computer’s QWERTY keyboard for a track that’s more natural than step time. Here’s how it works:

- Enable the Wizard checkbox.
- Press R key to record.
- As the song plays, play the melody on any keys on the bottom two rows of the QWERTY keyboard, in the rhythm of the melody. The “wizard” notes won’t be the correct melody of course, but don’t worry about that as you record. When you’re finished, look in the Notation window. You’ll see the wrong notes in the right places with the correct durations.
- Drag the notes (with the left mouse button) to the correct place on the staff. You’ll hear the notes play as you drag them, and the names will show in the note name box. For sharps, flats, and naturals, hold down the Shift key, Ctrl key, or Alt key respectively. You’ll end up with a melody that sounds like it was recorded live, without the rigid feel of tracks entered in step time.

Tip: If you have the Wizard “On” the spacebar won’t stop playback. You need to press the Esc key to stop playback when the Wizard is on. This is to prevent stopping the song if you mistakenly hit the spacebar while playing the Wizard.

Melody Wizard

For songs with melodies, there are QWERTY keys (Enter, \, T, 6) that trigger notes from the melody as the song is being played. Other keys trigger 1-4 approach notes from below or above. The notes can be recorded, to humanize a stiff melody with better timing, and approach notes also useful for sight reading, rhythm practice, or to perform. This feature works with harmonies

- Melody notes: T, 6, Enter, \
- Same Melody note: 5
- Approach notes: QWER YUIO
- Octave set: 1, 2, 3
MIDI notes also work (if Preferences [Transpose] is set to “Allow Melody Wizard on THRU part”).
- Octave set: E(40), F(41), G(43)
- Melody notes: F(53), G(55)
- Approach notes: B(47), C, D, E A, B, C, D(62)
To use the Melody Wizard, make sure the Keyboard Wizard is enabled on the main screen. This will also enable the MIDI Wizard on the QWERTY keys.

If you also want to use the Melody Wizard on MIDI notes, go to Preferences [Transpose] and enable “Allow Melody Wizard on THRU part” in the Settings for transposing songs when loaded or “Do it Now” dialog.

![Use Wizard for THRU part](checkbox)
- Allow Melody Wizard on THRU part (F and G below middle C is melody)
- Melody Octave

*.MGU

Then, choose a song that has a Melody track.

Mute the Melody track by right clicking on the Melody track (Alt+9).

Play the song.

ENTER or \ As you play the song, you can use the Enter key or the \ key (or T or 6 above the T) to play Melody notes.

W,E,R,T These will be approach notes up to the melody. You can start on any note.

Q,E,R,T Starting on a Q instead of W will use wider voicings for approach notes.

I,U,Y,T These will be approach notes down to the melody. Start on any note.

O,U,Y,T Starting on an O instead of I will use wider voicings for approach notes.

Using the Wizard with MIDI keyboard input

The Wizard can also be used with a connected MIDI keyboard. The keyboard wizard always plays correct notes, and is a fun way to play along with Band-in-a-Box. The MIDI keyboard also sends volume information (unlike the QWERTY keyboard), so is a better choice if you have a MIDI keyboard connected.

This feature is accessed with the [Transpose] button in the Preferences dialog.

To turn on the Wizard to allow MIDI control, choose “Use Wizard for THRU part.”

Wizard

Make sure that the Wizard checkbox is enabled on the main screen.

Now, when you play notes on the MIDI keyboard (during playback), they will get remapped to chord tones. C/E/G/Bb notes played on a THRU keyboard will be mapped to chord tones, and D/F/A/B will be passing tones. This scale - C D E F G A Bb B - is considered the “Bebop” scale, useful for playing over dominant 7th chords.

The Wizard is useful for entering notation quickly. If you can’t play piano well, play the wizard in the correct rhythm. The pitches will be wrong, but you can fix them in the Editable Notation window later, and the durations, volume, and timing are already correct.

Melody/Soloist Sequencer

There are 2 tracks in Band-in-a-Box to add your own recordings. These are the Melody and Soloist tracks. Normally you would want a single part on each of them. But, since MIDI information can have separate channels, it is possible to store 16 separate parts on each of the Melody and Soloist parts. For the following discussion, we’ll assume that you’re using the Melody track, but the same functions are available for the Soloist. When the Melody track has been set to “Multi(16)-Channel” we refer to this as “Sequencer Mode.”

Also, for this discussion we’ll assume that you have a multi-channel track loaded in. Let’s load a MIDI file, using File | Open MIDI file, and choosing a MIDI file like c:\bb\Violet.MID.

If you want to use the 16 separate parts for the Melody track, you need to set the Melody Track type to “Multi-Channel.”
This is done from the Melody menu, or can be done by pressing the Sequencer button.

Now, when you are in this multi-channel mode, output from the Melody part will be on whatever MIDI channel the information is stored on, and will not be using the Melody MIDI Channel.

You can examine the track to see the channels by looking at the event list, which you can access by pressing the [#] button on the Notation window.

You’ll notice that the information in the event list is color coded by channels for multi-channel tracks. For example, channel 7 is pink, and channel 10 is gold.

<table>
<thead>
<tr>
<th>Time</th>
<th>Event Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:2:000</td>
<td>Note</td>
</tr>
<tr>
<td>1:2:003</td>
<td>Note</td>
</tr>
<tr>
<td>1:2:005</td>
<td>Sustain Pedal</td>
</tr>
<tr>
<td>1:2:083</td>
<td>Note</td>
</tr>
<tr>
<td>1:2:084</td>
<td>Note</td>
</tr>
<tr>
<td>1:2:118</td>
<td>Note</td>
</tr>
<tr>
<td>1:3:000</td>
<td>Note</td>
</tr>
<tr>
<td>1:3:000</td>
<td>Note</td>
</tr>
<tr>
<td>1:3:001</td>
<td>Note</td>
</tr>
</tbody>
</table>

If you click on the Lead Sheet window, you’ll see the entire MIDI file displayed on separate tracks of notation.

Since this represents 6 separate tracks (in the case of violet.MID), this is likely “too much information” for you to read, unless you are a symphony conductor.

To customize the notation display for sequencer mode, press the lead sheet options button, and see the settings for Multi-Channel Tracks.

Press the “CUSTOM channels play/display” buttons to launch the Sequencer window. Then you can customize which channels will play and display.
In the example picture, we have set Channel 2 (Bass) and Channel 4 (Trumpet) to show on the notation, and have set all of the channels to play (to hear them).

For a specific channel, (e.g. channel 3: piano), we see the following information.

Channel 3: Acoustic Piano (this is the patch name found on the track).

There are 842 events in the track, usually every note is an event.

We have customized the piano track so that it can be heard (play=true), but not seen in notation (Show=false).

There is a small button at the right of the track line that allows you to delete/rechannel or merge the channel with another channel.

You can also change the patch (instrument) for that track by using the instrument patch combo box.

So now that we’ve customized the display, we are seeing the bass and trumpet on the notation, and hearing the entire track.

**Removing All Tracks Except Melody From A Midi File**

One use for the Sequencer mode is to load in a MIDI file, and then delete all of the channels except the melody, so that you can allow the Band-in-a-Box rhythm section to provide the accompaniment. To do this, open the Sequencer window, and use the Edit pull down menu to delete all tracks except the melody.

Once you have done this, you don’t need the Melody | Track Type to be multi-channel anymore, so you should set it to be Track Type [Single Channel], so that it will be like any other Band-in-a-Box song, and use the Melody channel for playback.
Recording Your Own Parts To The Melody Sequencer

Normally you would record your parts to the Melody, and not be concerned about what MIDI channel they are using, because Band-in-a-Box uses the Melody channel (usually channel 4) for this.

But if you have set the Track type to be multi-channel, the output on the Melody part will be whatever channel is stored in the tracks.

When you record a Melody part and the track type is set to multi-channel, the “Keep Take” dialog will have a selection for the channel that should be used for the recording.

Also, make sure that you have “Overdub underlying melody” checkbox set, or you won’t hear the other melody parts during the recording.

Example: Recording 4 Separate Counter Melodies On The Melody Track

So if you want to record, for example, 4 separate parts to go along with a Band-in-a-Box song, you should do the following.

1. Set the Melody track to Multi(16)-Channel (Sequencer)

2. Record a Melody part. At the end of the recording, pick a channel for the part that is not already used by Band-in-a-Box. BB uses channels 2-10, so channels 11 to 16 are available for your counter melody parts.

3. Repeat step 2 by recording additional melody parts.

4. Assign patches to the Melody parts using the Sequencer Window.

Import a Band-in-a-Box Song

Easily import part or all of an existing Band-in-a-Box song to your current song, with options to specify source and destination range, type of information to import (chords, melody, lyrics, etc.) and more.

Choose File | Import Song.

In the Import Band-in-a-Box Song dialog, choose the range that you want to import (Import from Bar and # of bars), and the destination bar (Import to Bar). You can also choose which information to import, and the insert mode (insert/overwrite).
Importing MIDI Files

Importing MIDI Files to the Melody or Soloist Tracks

Standard MIDI files can be read into the Melody or Soloist tracks from MIDI files or from the Windows clipboard. You can read in all of a MIDI file, or selected channels and a specific range of bars. Use one of the following two commands:

2. *Melody | Import MIDI File from Clipboard* - when the MIDI data is already copied from another program to the Windows clipboard. The clipboard option will be grayed out if there is no MIDI data in the clipboard.

Once chosen, the **Import MIDI File - Options** dialog box opens.

**Import Which Channel(s)?**
You'll need to know which channel(s) of your MIDI file the melody is on. You then select these channels for Band-in-a-Box to read-in. If you select all of the channels, Band-in-a-Box will read in all of the channels and merge them to the Melody track. You can import and play the complete file on the Melody track if the **Track Type** is set to **Multi (16) - Channel** in the Melody menu.

**# bars to offset from start of MIDI file**
If you want to start reading from the beginning of the MIDI file, select 0 as the offset. If you want to start at bar 32, for example, select an offset of 32 (bars).

**How Many Bars to import?**
Leave this setting at the default of 1000 to read-in the entire file (unless it’s longer than 1000 bars!), or set it to the number of bars that want.

**# blank bars to insert at beginning**
This will insert blank bars into the Melody track. Remember that Band-in-a-Box normally has a 2 bar lead-in count. If your MIDI file has no lead-in, then you'll need to set this to = 2 to compensate for the 2 bars of lead-in.

**Include notes early by (120 PPQ)**
If you’re reading in a MIDI file starting at bar 5, it would be annoying to have a note that was played 1 tick earlier than bar 5 left out of the MIDI file that is read in. To include it, you can set this, and the note will be read in.

**Include continuous controllers and pitch bend / Patch changes / Lyrics**
If you don’t need these items you can save space by not importing them.

**Merge with Existing Data on the track**
You can choose to merge the imported data with your existing Melody track.

**Import to the Melody with the MIDI Chord Wizard**
You can open an entire MIDI file into Band-in-a-Box using the MIDI Chord Wizard. The chords will be auto-interpreted by the Chord Wizard and the MIDI file will play and display on the Melody track. A “silent” style will be loaded so you'll only hear the MIDI file. When the file is saved, the extension will be MGX, allowing you to easily identify the songs that contain entire MIDI files.

The MIDI Chord Wizard is opened from the **File | Import Chords from MIDI File** menu item. In the **Interpret Chords from MIDI file** dialog, select the “Open ENTIRE MIDI File to Melody” radio button, and then click on [INTERPRET CHORDS NOW].

The chords will be interpreted and written to the Band-in-a-Box chordsheet and an “X” will appear in front of the style name, indicating that the style is silent.

Press [Play] to hear the MIDI file play on the Melody track.

**Additional Options for Melody/Soloist Track**
Choose **Melody | Edit Melody Track | Time Shift Melody**. This will move (slide) the melody a certain # ticks. There are 120 ticks per quarter note. For example, to give the song a more laid-back feel, shift the melody about 10 ticks ahead.

In the same submenu, choose **Insert Beats** or **Melody | Delete Beats** to insert or delete beats in the Melody. For example, to insert 2 bars in the melody at bar 5, choose **Melody | Insert Beats**, select bar 5, and select 8 beats (2 bars) to insert.

**Intelligent Humanize of Melody and Soloist Track**
Quantize routines can leave the music sounding stiff and unmusical. Some routines attempt to humanize a part by adding “randomization,” which rarely has the desired effect since humans don't randomly change timing or volume. Band-in-a-Box uses intelligent humanization routines to humanize a melody from one feel to another, from one tempo to another, and vary the amount of swing to 8th notes. The results are very musical, with natural sounding melodies.

Let's look at some of the parameters found under Humanize.

In this example, **Melody | Edit Melody Track | Humanize Melody** was selected. The window for Humanize Soloist is the same.
As you can see, we have broken down the Humanize effect into 5 main categories: tempo, lateness, 8th note spacing, legato, and feel.

The best way to learn how these parameters combine is to try them (you can always press the UNDO button if you don't like the results.)

For example, try changing the tempo of a song to see the changes that this will make to the 8th note spacing and lateness. Press the [Quantize NOW] button to apply your changes to your song.

Tip: Often, when musicians play at faster tempos they play the swing 8th notes closer together and a little later.

We feel that these categories are straightforward and you should have no trouble achieving the desired results. Remember to apply such parameters as Legato and Lateness sparingly, then press the Quantize NOW button to apply your changes to your song.

Editing the Melody Track

Event List Editor

You can edit events including all MIDI events and lyric events using the Event List Editor. It can be launched in several ways.

- In the Melody menu, choose Edit Melody Track | Step Edit Melody.
- In the Soloist menu, choose Edit Soloist Track | Step Edit Soloist Part.
- In the Notation menu, choose Event List Editor...
or in the Notation window by pressing the event list button (#).

Different colors are used for different event types in the event list, to visually distinguish notes, patch changes, etc. The Event list for the notation colors the events differently as follows:

- Notes starting near the beat boundary are dark pink.
- Notes starting on the off-beat are light pink.
- Patch changes are cyan.
- Controller changes are yellow.
- Pitch Bends are grey.

The Event List Editor allows you to modify, insert, and delete notes:

- Double-click on an event to edit it (or press the [Edit] button.)
- [Insert] puts an event before the current event.
- [Append] puts an event at the end of the track.
- [Delete] removes an event.
- [Update] redraws the notation screen.

**Event List Filter**

There is a filter for the Event List Editor, allowing you to quickly spot all patch changes. For example, to examine the patch changes on the Melody track choose “Use Event Filter,” and then press the [Filter…] button.

In the Event List Filter select the type of information you want to display. In this case, it is program changes (patches) only.

The track will then display with the program changes only.
The Event Type to Edit dialog opens when either the [Insert] or [Append] buttons are pressed in the Event List Editor. This dialog allows you to select which type of event to insert or append – note, controller, pitch bend, etc. – and then opens the selected edit dialog.

**Notation Window Editing**

You can often get better results by using the Notation Window to edit notes instead of the Event List window. To do this, open the Notation window in either Editable Notation or Staff Roll Notation mode. In both of these modes, notes can be dragged and dropped with the mouse.

For precise note editing, right mouse click on the note you want to edit and choose “Edit Note” in the contextual menu.

This opens the Note dialog where all of the parameters of the note can be addressed.
**Piano Roll Window Editing**

The Piano Roll window enables precise graphic editing of note timing and duration. You can also graphically edit note velocity, controllers, program changes, channel aftertouch, or pitch bend.

The Piano Roll may be opened as a movable window, which floats above the Band-in-a-Box main window, or opened embedded in the same position as the Chordsheet/Notation panels in the Band-in-a-Box main window.

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**Note Panel**

Horizontal bars represent notes. Notes can be selected, edited, inserted, and deleted. Selected notes are red.
- **Click** on individual notes to select.
- **Shift+click** on individual notes to add to the selection.
- **Ctrl+click** on a note to invert (toggle) its selection.

Overlapping notes are displayed in bold Aqua color, making them easy to identify. Overlapped notes can be eliminated from the right-click menu in this window.

Click on white space and then drag a rectangle around notes to select a group of notes. Only notes that start within the rectangle are selected. If the left edge of a note is not inside the rectangle, it will not be selected.
- **Shift+drag** a rectangle to add another group of notes to the selection.
- **Ctrl+drag** a rectangle to toggle the selection of the notes in the rectangle.

**Splitter Bar**

A Splitter Bar sits between the Note and Graphic Event panels. Drag the splitter bar down to maximize the Note panel and drag it up to maximize the Graphic Event panel.

**Two graphic event mouse editing modes for editing graphic events:**
1. **Add Mode**  
Add/subtract the same amount to all selected events.

2. **Scale Mode**  
Scale the selected events. Select one or more Graphic Events, and move the mouse over one of the events.  
*Shift*-drag vertically, and the events are scaled in a proportional fashion. Large-value events are scaled more than small-value events. This keeps the same shape of a gesture, but makes it bigger or smaller.

**Note Velocity Line Tool**  
- With **Add Mode**, note velocities will exactly match the slope of your drawn line.  
- With **Scale Mode**, the Line Tool will shape the dynamics, but note velocities are scaled to follow the approximate shape of your drawn line. With Scale Mode, you can insert a Velocity fade, or change the velocity of a region, while preserving the Velocity dynamics of the music.

**Edit Events**  

**Edit Event Value**: Move the cursor over the top half of an event. A north-south cursor appears. Click-drag vertically to scale event values. To scale a selected group of events, **Shift**-click-drag vertically on one of the events in the selection.

**Edit Event Time**: Move the cursor over the bottom half of an event. A horizontal arrow cursor appears. Click-drag horizontally to slide the event in time. To slide a selected group of events, Click-drag horizontally on one of the events in the selection.

**Insert Events**  

**Line Tool**: With no modifier keys, the “white space” cursor is a Line Tool. Move the cursor to white space and then click-drag to draw a line. When the mouse button is released, a series of events are inserted which follow the line slope.

To avoid choking the MIDI stream, the maximum event density is one event per 10 ticks. Repeated events of the same value are not inserted. Therefore, long gradual Line Tool fades have a lower density than short extreme Line Tool fades.

**Pencil Tool**: Move the cursor over white space and hold the **Shift+Ctrl** keys. A Pencil Tool appears. **Shift+Ctrl**-drag to freehand-draw a curve. If you don't get the curve quite right on the first pass, just keep holding the mouse button and move the mouse back-and-forth to draw your desired freehand curve.

When the mouse button is released, a series of events are inserted to follow the freehand curve. The maximum event density is one event per 10 ticks. Repeated events of the same value are not inserted. Therefore, many freehand curves have a fairly low density.

**Delete Events**  

Make a selection of events with the Ruler or by clicking on events and tap the **Delete** key. You can also right-click and choose “Delete Selected Events” item in the pop-up menu.

**Eraser tool**  

For quickly deleting individual notes or controllers. **Shift+Ctrl**-click on a note or graphic event. If multiple events have been selected, all selected events will be deleted.

**Graphic Event Panel**  

This panel only shows MIDI events specified in the Chan, View/Edit, and Controller Type controls. When graphically inserting controller and pitch bend events the event density is adjustable from one event per 1 tick up to one event per 30 ticks.

![Graphic Event Panel](image)
With events such as pitch bend or controllers like modulation and sustain, it is important to end a “gesture” with a zero-value event. Otherwise, subsequent notes will be affected, with “hanging” permanent pitch bend, permanent vibrato, or sustain pedal locked down.

**Event Selection**

**Graphic Event Ruler Time Selections:** Selected Events are red. The Graphic Event Ruler will only select non-note events. In addition, it will only select the type of MIDI events specified in the Chan, View/Edit, and Controller Type controls. When you make a Ruler Time selection, ONLY THE VISIBLE events in this time range are selected. Other MIDI events in this time range are not selected.
Chapter 11: Working With Audio

About Band-in-a-Box Audio Files

The File | Open menu command shows and opens all available file types including audio files (WAV, WMA, MP3, and CDA). And it remembers your preference, so you can restrict it to a certain file type.

If MySong.MGU is loaded, and a same named audio file (MySong.WMA, MySong.MP3, MySong.WAV, etc.) is present, Band-in-a-Box will open the audio file to the audio track.

This allows third parties to make audio files with chords in them, by making a MySong.MGU and MySong.MP3 pair of files, which will load into Band-in-a-Box, yet will have the audio compressed to take up little disk space. For example, make a teaching set of trombone files for Band-in-a-Box, with audio trombone track, and Band-in-a-Box file with chords, all fitting in a small file size.

Audio Playback and Audio Rendering

In addition to RealTracks and RealDrums, there are two types of audio features in Band-in-a-Box:

1. The first refers to the Audio track. This is a single 44K mono or stereo track that you can use to record vocals or live instruments. In addition, the most popular types of audio files can be imported to this track and played.

2. The second refers to rendering which is the process of converting a MIDI performance in Band-in-a-Box to a stereo .WAV file or to different compressed audio formats for playback in media players or export to other audio software programs.

Audio Track

The audio track includes only your live recording or the imported audio file, whereas the rendered .WAV file includes everything in the file; MIDI parts plus the audio track.

Try the following with the Audio Track in Band-in-a-Box:

- Press this button and add an audio track to an existing Band-in-a-Box song. Add live vocals, guitar, sax, etc.

- Process an audio track using audio plug-ins - such as reverb, chorus etc. (choose from over 20 plug-ins included).

- Export the audio (and MIDI) track to sequencers such as PowerTracks Pro Audio, Cubase, or Cakewalk for further work.

Audio Playback Settings

Notice the “Audio” label at the top right of the screen, beside the “Thru” part setting. Clicking on the “Audio” label launches the Audio Playback settings dialog.

In this dialog you can mute, solo, or change the volume of the audio track, similar to the control of the other instrument parts in Band-in-Box. Simply click on the “Audio” label on-screen, and choose these options.

There are also Tone and Reverb controls that act on the audio track. The Tone control is a combined Bass/Treble control. The range of settings is from -18 (maximum bass) to +18 (maximum treble). Default is 0.

The Reverb has a range of 0 to 127.
Master Tone and Reverb

Master Reverb and Tone for all parts can be set by clicking the Combo button, and then using the Audio Reverb and Tone controls.

The audio reverb type is settable in the **PG Music Reverb** window.

**PG Music Reverb**

To make your own reverb settings, press the Audio Reverb toolbar button, and adjust the various parameters in the **PG Music Reverb** dialog.

You can enable/disable the audio reverb. If you disable it, this will save some CPU cycles, so this might be advisable on an older/slower machine if you hear that the audio is clicking or not keeping up.

Click on the green **Select a Preset** button to open the list of presets. This list will show only the “Band-in-a-Box Default Reverb” until you save some presets of your own.

As you adjust the settings they will be applied to the current song. The **[Swap “Default”]** button toggles between your current settings and the default settings. This allows you to hear the effect of the changes you make to the settings.

Use the row of “room” buttons to load typical settings for different types of spaces. These buttons are a convenient way to either apply a particular effect or to load settings that you can then tweak to make your own preset.

**Reverb Parameters**

**Pre-Delay** is the time delay of first reflections.

**Decay** is the time it takes for reverb to decay. Reverb time is measured as RT60, the time it takes for reverb to decay to a level -60 dB below the dry signal level.

**LF Roll off** gradually reduces the bass frequencies. If you can’t add enough reverb because the sound gets too muddy, try increasing the LF Roll off slider. It is adjustable between 50 Hz and 500 Hz.
HF Roll off is the rate at which the high frequencies die away as the reverb decays. Rooms with hard surfaces are typically bright, but rooms with soft surfaces are usually darker. It is adjustable between 1 KHz (dark) to 11 KHz (bright).

Density is the density of low-level echoes near the end of the reverb tail. High Density settings add a sheen to the sound.

Mix the proportion of original signal to the reverb signal.

Output adjusts the final level of the plug-in.

Typical Reverb Settings
- A large hall might have long Pre-Delay, long Decay, and moderate Density.
- A hard large space such as a Gymnasium, might have long Pre-Delay, high Density and high HF Roll off.
- A soft large space such as a concert hall with carpet, padded seats, hangings, might have medium Density and low HF Roll off.
- A small hard space such as a tile washroom, might have short Pre-Delay, medium-to-long Decay, high Density, and high HF Roll off.
- A small soft space such as a large living room, might have short Pre-Delay, short Decay, medium-to-low Density, and low HF Roll off.

Saving Settings to Presets
You can save your reverb types as presets, and the current settings will also be saved with the song in a DX Settings/PGReverbSettings.bin file.

To save the current settings to a preset, type in a name for your preset in the “Preset Name” field.

![Preset Name: Bright Room](image)

Then click on the Save Preset arrow and choose a location in the Preset list. You can write over an existing name.

![Save Preset](image)

A prompt will ask you to confirm that you want to save the preset.

Select [Yes] to save the new preset to the chosen location.

Import Audio File to Audio Track
Most types of popular audio files can be opened directly in Band-in-a-Box, but you may want to import an audio track into your Band-in-a-Box song. A Mono or Stereo audio file can be imported to the Audio track, optionally merging or replacing any existing audio track. Most popular types of audio files are supported, including WAV, WMA, MP3, WMV and CD audio.

Choose the menu item Audio | Import Audio (WAV, WMA, MP3, WMV...). You then choose an audio file to import. The Import Audio File dialog is then displayed, which allows selection of the point to insert the audio file, and whether to merge or overwrite existing audio in the range.
Audio files can also be opened from the File menu with the command *Open Audio (WAV, WMA, MP3, WMV)*. Open an MP3/WAV/WMA or audio CD track, and play back at 1/2, 1/4, or 1/8 speed. This is great for transcribing or analyzing audio.

If you load in an audio song (WAV file, MP3), when the song plays you can:
- change the tempo of the audio to slow/speed up the song.
- press *Ctrl+[-]* for half speed, *Ctrl+[=]* for full speed.
- highlight an area of the Audio Edit window and press **[Play Selected Area]**. This will loop the audio.
- use the *Audio | Set Audio Master (Base) Tempo* menu item to insure that tempo stretches are based on correct master tempo.

These features are useful as an aid for transcription.

**Using the Half-Speed Audio feature to help you transcribe a piece of music.**

Once you open the Audio file, open the Audio window and you can see the audio data on the track.

Choose “Half-speed tempo” (**Ctrl+minus** (-) hot key). **Ctrl+equals** (=) returns to normal tempo. (Use the **Play | Tempo** menu for slower speeds like 1/4, 1/8.)

Highlight the range that you want to hear, and then press “Play Selected Area.”

**Audio Offset**

The **Audio Offset** feature allows you to synchronize any point of the audio file with bar 1 of the Band-in-a-Box song – usually to sync the audio file with the rest of the song.
Let’s say you have a home recording of a live performance of one of your songs, saved as a WAV file (or MP3/WMA). File | Open Audio will load the song into Band-in-a-Box.

Now open up the Audio Edit window, and when you hear the point in the file that you would like to be considered bar 1, right click at that point, and answer YES to “would you like this point to be bar 1.”

Then, as the song is playing, use the tap tempo feature (the minus key, pressed 4 times in tempo) to set the tempo of the piece.

Your audio file will then start playing at bar 1 of the Band-in-a-Box song in sync with the audio starting at the place you have marked as bar 1, and the bars will be in sync (approximately in sync, they will drift as the tempo of your live performance varies.) You can put tempo changes on certain bars to keep it perfectly in sync if you want to.

**Record Audio**

Before you begin recording, you'll need to:

**Set the Recording Properties**

This tells your sound card (and Band-in-a-Box) what sources you would record from. You may be recording from a microphone or a line-in plug into your sound card. If so, you need to have those items selected in the recording properties panel for your sound card.

Most sound cards are capable of recording from the following sources:

- **Microphone** – plugged in to the sound card to record vocals or live instruments.
- **Line-In** – from the Line-Out of a mixer or keyboard, or a guitar direct box.
- **CD-ROM player** – to record the audio from an audio CD.
- **Outgoing MIDI** – not used when recording audio tracks, but is used if “rendering” the whole Band-in-a-Box song to Audio. This is an important point to understand when using audio in Band-in-a-Box: the soundcard should be capable of recording the outgoing MIDI that is being sent from your soundcard out to the speakers. When recording an audio track (vocals etc.), you’d almost never want to record the outgoing MIDI as well or it would get mixed in with the audio track. However, when rendering your whole composition to a single .WAV file to distribute on a CD or the Internet you always want to record the outgoing MIDI.

**Technical Note:** This is only true if you are using the sound card for your output MIDI driver. If you have an external MIDI device like the Roland Sound Canvas you'd need to route the Line Out from your Sound Canvas back in to the Line-In of your sound card in order to record (render) the MIDI.

When you press the Recording Properties button, you'll see the Recording control panel of your sound card's mixer.

The panel displayed here is the typical panel that sound cards use. Different makes and models may not look exactly like the example, but the basic layout and operation is the same. From this panel, you can set the recording level for the items you want to record. Let’s take the example of recording live with a microphone.

- We select the check box to record the microphone.
- Then, we set the level of the recording input for the microphone with the aid of the built-in VU meters in Band-in-a-Box.
Audio VU meters

These show the Record and Playback levels for audio, allowing adjustment of microphone and speaker levels. VU Meters can be launched by pressing the VU Meters button on the toolbar.

The VU Meters will also open automatically when the Record Audio dialog is opened.

The VU meters show the average strength of the signal, with a dB scale, and a clip indicator. Clipping indicates that the signal has overloaded, and will sound distorted (clipped).

The green area represents normal levels, while red indicates an overload. Ideally, the sounds should remain in the green and avoid the red altogether. Unlike analog recording, where it's good to get a “hot” high signal, digital recordings need to absolutely avoid high levels since any overload of the signal will result in clipping and a ruined recording.

Press the [R.Aud] button to start recording audio. The Record Audio dialog will open. This dialog displays the mono/stereo status of the recording. If you want to change to/from stereo (to/from mono), press the [Audio Options] button in this dialog. The mono/stereo track status is also indicated on the Title bar at the top of the main screen.
Set the start point for the recording.
You can record from the Start of the song, somewhere in the middle, or punch in by choosing a bar and chorus # to start recording.

**Punch-In Recording**

Punch-in audio recording allows you to punch-in record or overdub a section of audio. You can select a section to punch-in by highlighting it in the Audio Edit window. You can also hear the existing audio part when you are overdubbing. This is automatic.

**Also Record MIDI?**
In most cases you will only be recording audio, so you should set this to “No MIDI recording.” But if you want to record MIDI at the same time (in a situation where you were playing a MIDI piano at the same time as you are singing for example), then you could set this setting to “Also Record MIDI to Melody” (assuming that you wanted the MIDI to get recorded to the Melody track - use the Soloist setting if you want it recorded to the Soloist track).

**Overdub underlying Audio**
If you have previously recorded audio on the track, and want to overdub (to add a harmony for example), then you should select the Overdub underlying Audio. It is not essential to select it at this point, since you’ll get another chance at the end of the recording. Note that the audio track will not play during record, so you’d have to sing the harmony without hearing the original audio part.

**Press [Record].**

Audio recording begins. If you’ve set the “Show VU Meter while recording” option, then the Recording VU Meter will open up and display during recording so you can monitor the VU meters.
Press [Stop] or press the [Esc] key.

You will then see the “Keep Take?” dialog. If you are happy with your recording, you should choose [OK -Keep Take] and the audio will be added to the Audio track. You can listen to the results by pressing [Play].

If you are not happy with the results, you can choose Edit | Undo Keep Audio Take and you will be back to where you were prior to the recording. You can also choose the option to [Take Again], which reopens the Recording dialog.

Options

- Copy 1st chorus to whole song
- Overdub underlying audio
- Retain audio past last recorded

Technical Details: The recorded take is recorded to a temporary wave file called TEMP_REC.WAV. This resides in the bb directory or the directory of the current song. Once you decide to keep the take, the TEMP_REC.WAV is merged with the main wave file for the program, which is usually titled with the same name as the song (e.g. MySong.wav).

Playing the Audio File

You can play the Audio file that you've recorded by pressing [PLAY]. The size of the audio file will be displayed at the top of the screen. If you haven't saved the song yet, your window title will look like this.

In this example, the song is titled NoName.SGU, and there is a 6.1mb .WAV file associated with the file, and that's 1 minute and 9 seconds of audio. The total duration of the song is 3 minutes and 20 seconds. Save the song with the name “My First Song.” Then the window title will look like this...

Once the song is saved, the wave file will be called with the same name as the song, which is MY FIRST SONG.WAV. If you ever need to work with the .WAV file in another program, you can just directly edit the wave file. If you do this, make sure the .WAV stays a 44K mono .WAV file.

Edit the Audio File

In the Audio Edit window you can edit audio data using Copy, Cut, and Paste. Launch the Audio Edit window by the Audio | Audio Edit Window menu item or pressing the Ctrl+Shift+A keys.

You can see the dB (decibel) scale at the left of the Audio Edit window.

To select a region of the Audio Edit window, you can Shift+click on the end point to easily select a large area.

- Click on the starting bar.
- Shift-click on the ending bar.
Audio Edit Window Toolbar

These buttons zoom in and out to the audio window.

The 100% button sets the Audio Window to display about 8 bars per screen.

This button zooms to the sample level so that you can see the actual sine waves present. The [100%] button restores the wave view.

This setting allows you to select audio by snapping to a 16th note (or a triplet in swing styles).

This button plays the selected area, and then stops. The other instruments are all muted; you just hear the audio.

This button selects the whole track, useful for applying one of the built-in audio plug-ins.

Non-Destructive Audio Track Editing

The changes you make to the audio track are non-destructive and only become permanent if you save the file.

If you have a song file called MySong.MGU, the audio track is stored in a MySong.WAV file. If you are editing the audio, the edits are now made to a temporary WAV file called TEMPMAIN.WAV, and not to MySong.WAV. If you save the song, the changes get written to the MySong.WAV audio file, but if you don’t save, the original file is preserved.

Audio Harmonies

You can apply a harmony to the audio part – allowing you to automatically create up to 4-part vocal harmonies from your singing. And don’t worry if your singing is not in perfect tune, Band-in-a-Box can “fix” vocals to the correct pitch - automatically! Simply record your vocal part, choose a harmony, and Band-in-a-Box will generate the vocal harmony part for you using the world-leading TC-Helicon Vocal Technologies engine.

Once you have recorded a vocal part into Band-in-a-Box, you can use this feature in many ways, including:
- Record yourself singing into a Band-in-a-Box file. Create a vocal harmony for part or all of the song by selecting a Band-in-a-Box harmony and choosing the Generate Audio Harmony option. You can now hear yourself singing in perfect harmony!
- Did you hit a few “out-of-tune” notes when you recorded your singing to Band-in-a-Box? Fixing your “out-of-tune” singing is easy, by instructing the program to correct the pitches to the Melody track.
Audio Harmonies Tutorial

Note: All of the demo songs are located in the Tutorial - Audio Harmonies folder in the Band-in-a-Box (C:\bb) folder.

Let’s load in the song “Listen.MGU.”

First off, play the song “Listen” – it has an audio track, so you’ll be hearing a male vocal track lasting about 16 bars (since WAV files are big, we only include a small 16 bar sample of the WAV file).

We’re going to apply some audio harmony to this “Listen” demo.

Since any edits we save to the audio WAV file are permanent, we want to make sure that we keep a copy of the original file around that is unaltered.

Save a copy of the song as “Listen 4 Part Harmony.”

Press the [Save As] button, and choose a name of “Listen 4 part harmony.” We will now be working with this file, so our original Listen file won’t be affected.

Choose menu item Harmony | Audio Harmonies & Pitch Tracking. You’ll see the Generate Audio Harmonies dialog.

In this dialog, there are 3 types of harmony that we can choose from:

1. Melody Pitch Tracking only (this would change the pitch of our singing to the correct pitches found on the MIDI Melody track).
2. Harmonize to the MIDI Melody. This applies a 1-4 part audio harmony – turning your singing track into a harmony singing quartet.
3. Harmonize to the chords of the song. If your song doesn’t have a MIDI melody, you can still create a vocal harmony, based only on the chords of the song.

Let’s harmonize to the MIDI melody, so choose the radio button with that title.

Then select Harmony type “131 Four Freshmen 4 part Vocal Harmony.”

This is a 4 part harmony that includes the melody, and one of the voices is above the melody.

Since we want to harmonize the entire song, choose “Whole Song.” The output can be mono or stereo. Since we’re making a 4-part harmony, and we want to hear the voices panned across our stereo speakers, we choose STEREO here.

We want Band-in-a-Box to play our files directly, and since Band-in-a-Box plays only one WAV file at a time, we won’t be exporting the 4 voices as separate WAV files, and we don’t select the “Output (Export) as separate WAV file” option.

Press OK, and this launches the TC Helicon Harmony dialog, which lets you control the sound of your harmonies.
Let’s examine the various sliders on this dialog, as they apply to our “Listen 4 part Harmony” File.

The “Dry Voice Level” slider is the level of our original voice. We can make the harmony to include more of our original voice by raising this slider. Set it half way up (to 12dB).

The 4 columns labeled Melody, Voice 2, Voice 3, and Voice 4-8va are the 4 part MIDI harmony that will be transformed to an audio harmony using our original voice. The “8va” tells you that Voice 4 will be above the melody.

Each of the voices have sliders for “Level” (loudness) and “Gender.” The “Gender” slider makes the voice sound like a male or female (raise the slider to make it more female). Higher pitches of harmony should have a female gender applied. Make the settings as in the picture above.

The Octave is an important setting that controls the overall octave of ALL the generated harmonies. If the harmony generated is too high, lower the octave setting here.

Try out the preview with the octave on 0, and then again on –1, you’ll hear all of the voices an octave lower on the –1 setting. Leave it at 0 for this demo.

There are 3 Humanization settings (timing, pitch, and portamento) that affect the sounds of the individual voices. Timing controls how “tight” the group sounds, with a setting of zero being perfectly synced start/stop times. Let’s set it to about 20, to give some natural looseness to the group.

Pitch controls how steady the pitch will be. If set to zero the pitch will be exactly the MIDI pitch, if set higher, the pitch will vary up/down with the original WAV file.

Portamento controls how fast the pitch will change from one pitch to another. Settings above zero give smooth transition from one pitch to another.

Pitch Styles
When you generate audio harmonies to your recorded vocal tracks, you can select Pitch Styles to add vibrato and scooping effects to the vocal harmonies. There is a drop down combo list at the bottom of each voice. You can
choose a type of “pitch effect” (combination of vibrato and scooping) called a Pitch Style to be applied to each harmony voice.

In the example screenshot, we have chosen “Crooner,” “Lite Jazz,” “Lounge,” and “Head Voice” – somewhat similar vibrato types, but different for each harmony voice.

The Pitch Styles are especially useful for harmonies generated from MIDI tracks, because these lack any vibrato. Now by applying these pitch effects, you can get a natural sounding vibrato for these harmonies.

Now let’s preview our harmonies! Press the [PREVIEW] button, and after a 5-10 second delay, you’ll hear a 10 second sample of the harmony. Once you hear it, you can tweak the settings, for example:

- make the original voice louder by increasing the Dry Voice Level slider.
- to make the individual harmony voices louder, increase their sliders.
- to change the stereo separation, change the Pan sliders
- to make the group more “loose” sounding, increase the Timing slider
- to make the pitches and pitch-transitions more human, increase the Pitch and Portamento sliders
- change the whole Octave of all of the harmonies with the octave slider.

If you’d like to get more help on-line about the settings, inside the dialog press the Help button and then click anywhere in the dialog.

This launches the Band-in-a-Box Help file with more information.

When you are happy with the settings, press the [GENERATE] button. This generates a harmony for the complete song (takes about 20 seconds for “Listen” depending on your CPU speed).

The dialog then exits, and your song is ready to play in Band-in-a-Box.

Band-in-a-Box gives you a confirmation message that the audio harmony has been created.

Tip: When playing back the harmonies, mute the MIDI melody (right click on Melody part at the top of the screen or Alt+9).

If you want to hear what the harmonies should sound like – we have included a completed version of “Listen 4 part harmony.MP3” and this is included on the “c:\bb\Tutorial - Audio Harmonies” folder.

Melody Pitch Tracking

Now let’s use the Audio Harmonies for a different purpose, to “fix” pitches that may be out of tune, or to change some pitches to more interesting notes.

For this, reload the song Listen.MGU. Now resave it by [Save As] and give it the name “Listen Pitch Tracking.MGU.” Now, we’re going to change some notes of the MIDI melody. Open the notation, and change the pitch of the D note at the end of bar 2 to an E. Also change the ‘B’ at bar 7 to a ‘G’ below it. At bar 10, change the ‘E’ note to a C#.

Now, choose Harmonies – Audio Harmonies, and select “Melody Pitch Tracking” and press OK to again launch the TC-Helicon Harmony Dialog. Now, we’re going to be changing the vocal track into a different vocal track that instead is matching the pitches of the MIDI melody (without any harmony).

So the dialog reflects this, by only showing one of the columns with a track name, and it is “Melody (BB).”

For this one, we should leave the original voice at ZERO (so we don’t hear any of it), and put some humanization settings as shown.

Now try the [PREVIEW] button. You’ll hear that the harmony is ONE OCTAVE TOO HIGH. This is because the MIDI melody is one octave higher than the vocal track (males sing in the bass clef!). No problem, just adjust the Octave setting to –1, and try the preview again.

You’ll hear what sounds like the original voice, except you’ll notice that the pitch is fixed to perfectly in tune, and some of the notes are changed in pitches (the ones we changed above, for example the E note on end of bar 2). Now press [GENERATE] to hear this whole song.

If you want to hear what the pitch tracking final file should sound like – we have included a completed version of “Listen Pitch Tracking.MP3” in the “c:\bb\Tutorial - Audio Harmonies” folder. (Play this file from Explorer by double clicking on it.) Your tutorial example should sound very close to this.
Chordal Harmony

For the last example on “Listen,” we’ll do an example of the “Chordal Harmony.” This is a 4 part harmony based only on the chords, when we don’t have a MIDI melody available.

Load in Listen.MGU. Save the file as “Listen – Chordal Harmony.MGU.” Now erase the Melody (just to convince yourself that the Melody is not going to be used). Melody-Edit-Kill Entire Melody. Now choose Harmony-Audio Harmonies to open the dialog, and then choose Chordal Harmonies.

You’ll see that the only harmony type available will be the Chordal Harmony, because there is no Melody available.

You can choose many different harmony variations, such as Four Above, or Three above etc. Let’s choose Four Above. This will give us 4 harmony voices above our original melody. We want to include the original vocal track as well, so we will mix the “dry voice level” up into the mix. Make the settings as shown in this dialog, and press [PREVIEW], and then [GENERATE].

Playback this demo song, and also play the included “Listen Chordal Harmony.MP3” file – your file should sound similar.

Unison Harmonies

Unison harmonies are available for the Chordal harmony. For example, if you recording a vocal track, and then choose Chordal Harmony (i.e. “Harmonize to the Chords of the Song”), you can then choose a new preset called “1 Unison, 2 Down, 1 Up.”

This will give you 4 harmonies, and one of them will be a unison harmony doubling your voice. You can assign specific vibrato and other settings to the unison voice so that it sounds slightly different than your own, creating a “fattening” effect to your voice.

Choir Effect

In the TC-Helicon dialog, you can select a choir effect, from none/small/medium/large. A “large” choir effect makes each voice sound like 4 people singing, so if you use a 4 voice harmony, you will hear the effect as if 16 people are singing.
Audio Harmonies Pitch Styles (automatic “Vibrato” and “Scooping”)

When you generate audio harmonies to your recorded vocal tracks, you can select Pitch Styles, which adds vibrato and scooping effects to the vocal harmonies. Choose from many vibrato/pitch presets, including “Ballad,” “Broadway,” “Pop Diva” and more!

When you launch the TC-Helicon Audio Harmony dialog, you can see that there is a new drop down combo list at the bottom of each voice. You can choose a type of “pitch effect” (combination of vibrato and scooping) called a Pitch Style to be applied to each harmony voice. In the example screenshot, we have chosen “Natural Vibrato,” “Ballad,” “Broadway,” and “Crooner” – different vibrato types for each harmony voice.

The Pitch Styles are especially useful for harmonies generated from MIDI tracks, because these lack any vibrato. Now by applying these pitch effects, you can get a natural sounding vibrato for these harmonies.

<table>
<thead>
<tr>
<th>Style Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 B Natural Vibrato</td>
<td>This is a very subtle vibrato along with pitch effect that causes the harmony voice to slightly scoop up into some notes, making it seem more distinct from the lead voice.</td>
</tr>
<tr>
<td>2 Ballad Rock Vibrato</td>
<td>A Rock vibrato typically used in slower pieces.</td>
</tr>
<tr>
<td>3 Broadway Vibrato</td>
<td>The classic vibrato of the New York Show-Tune sound.</td>
</tr>
<tr>
<td>4 Classic Rock Vibrato</td>
<td>Classic Rock - A rich and potent sound.</td>
</tr>
<tr>
<td>5 Crooner Vibrato</td>
<td>The classic sound of the Las Vegas entertainers.</td>
</tr>
<tr>
<td>6 Deep Jazz Vibrato</td>
<td>Reminiscent of the great Jazz singers of the 1950s.</td>
</tr>
<tr>
<td>7 Discreet Vibrato</td>
<td>A very light vibrato.</td>
</tr>
<tr>
<td>8 Folk Vibrato</td>
<td>A warm and pleasant vibrato.</td>
</tr>
<tr>
<td>9 Funk Vibrato</td>
<td>An energetic sound from the 70s.</td>
</tr>
<tr>
<td>10 Head Voice Vibrato</td>
<td>A very resonant vibrato, using pitch and amplitude modulation.</td>
</tr>
<tr>
<td>11 Hi Energy Vibrato</td>
<td>A fast vibrato.</td>
</tr>
<tr>
<td>12 Lite Jazz Vibrato</td>
<td>A lighter Jazz sound.</td>
</tr>
<tr>
<td>13 Lounge Vibrato</td>
<td>The bold and big sound of the lounge entertainer.</td>
</tr>
<tr>
<td>14 Mellow Folk Vibrato</td>
<td>A sweet, mellow sound.</td>
</tr>
<tr>
<td>15 Mellow Pop Vibrato</td>
<td>Light accents to a Pop vocal.</td>
</tr>
<tr>
<td>16 Nervous Tremolo Vibrato</td>
<td>A very fast, “nervous,” and choppy vibrato.</td>
</tr>
<tr>
<td>17 Opera Tenor Vibrato</td>
<td>The sound of a Classical Tenor singer.</td>
</tr>
<tr>
<td>18 Tenor Delayed Vibrato</td>
<td>A Classical tenor sound with a delayed onset. Better for slow songs.</td>
</tr>
<tr>
<td>19 Pop Diva Vibrato</td>
<td>The sound heard on many hit Pop recordings.</td>
</tr>
<tr>
<td>20 Pop Diva XT Vibrato</td>
<td>A thicker and fuller Pop Diva vibrato, with a faster onset time.</td>
</tr>
<tr>
<td>21 R&amp;B Vibrato</td>
<td>Vibrato from another Pop music culture - Rhythm and Blues.</td>
</tr>
<tr>
<td>22 Slow Ballad Vibrato</td>
<td>A style typical of slow Pop ballads of the 1970s. Use this on slow songs only because the vibrato isn’t triggered on short notes.</td>
</tr>
<tr>
<td>24 Smooth Pop Vibrato</td>
<td>A smoother Pop vibrato.</td>
</tr>
<tr>
<td>25 Soprano Vibrato</td>
<td>The vibrato sound of a Classical soprano.</td>
</tr>
<tr>
<td>26 Tremolo Vibrato</td>
<td>No pitch modulation, just amplitude modulation.</td>
</tr>
<tr>
<td>27 Warm Vibe Vibrato</td>
<td>A warm and quick vibrato sound.</td>
</tr>
<tr>
<td>28 Memphis Scoop Vibrato</td>
<td>A style typical in ballads of a certain singer from Memphis. Long scoops into some notes, and a strong, slow vibrato.</td>
</tr>
<tr>
<td>29 Changing Scoop Vibrato</td>
<td>A style typical of a certain tambourine man. This one works best on slow songs if you just speak the lyrics without singing them!</td>
</tr>
<tr>
<td>30 Country Scoop Vibrato</td>
<td>A style that mimics that Country “flip” sound on note onsets.</td>
</tr>
<tr>
<td>31 Jungle Vibrato</td>
<td>Special Effect. The sound of the jungle-man.</td>
</tr>
<tr>
<td>32 Landing Vibrato</td>
<td>Special Effect. The sound of a close encounter with a spaceship landing.</td>
</tr>
<tr>
<td>33 Motorbike Vibrato</td>
<td>Special Effect. A motorcycle-like sound.</td>
</tr>
<tr>
<td>34 Nervous Vibrato</td>
<td>Special Effect. An agitated, uneasy sound.</td>
</tr>
<tr>
<td>35 Sheep Vibrato</td>
<td>Special Effect. The likeness of sheep bleating in the field.</td>
</tr>
<tr>
<td>36 Siren Vibrato</td>
<td>Special Effect. The sound of a North American emergency vehicle.</td>
</tr>
<tr>
<td>37 Slicer Vibrato</td>
<td>Special Effect. A choppy alternative to a standard vibrato.</td>
</tr>
<tr>
<td>38 UFO Vibrato</td>
<td>Special Effect. The sound of your science-fiction imagination</td>
</tr>
</tbody>
</table>

### Applying Audio Plug-Ins

When you've recorded audio, you'd likely want to apply some type of effect to the audio recorded. The usual one is reverb. Choose the audio plug-in that you want from the *Audio | Plugin* menu. For reverb, choose the Reverb option. You'll then see a plug-in with its own settings, specific to the type of plug-in.

Inside the plug-in, you can preview the plug-in effect, and if you like it you can then proceed with processing the entire .WAV file. You can undo the affects of any plug-in by choosing *Edit | Undo*. 

#### Direct-X or VST Plug-ins

You can apply your favorite DirectX or VST plug-in to the digital audio track. To process a WAV track with a DirectX or VST plug-in, choose *Audio | Plugin | DirectX Audio plugins.*

**Important!** This feature requires that you have Microsoft DirectX installed. You can download the latest version of Microsoft DirectX from [www.microsoft.com](http://www.microsoft.com).

#### Real time DirectX or VST Audio Plug-ins

You can real time-process the Band-in-a-Box audio track using DirectX or VST Audio plug-ins. This is useful to “non-destructively” apply EQ, Echo, Reverb, Dynamics, and other effects to a Band-in-a-Box audio track.

The advantage of real time processing is that you can set effects today, and if you decide you don’t like the effects tomorrow, the settings can be easily changed, since the real time effects did not permanently affect your audio track on the hard disk.
To use real time DirectX or VST audio plug-ins, open the Band-in-a-Box Audio Settings dialog with the Preferences [Audio] buttons.

Check “Use Realtime DX Audio Plugins” to enable this feature. DX/VST audio plug-ins are not enabled by default, in case an older/slower computer might have trouble with DirectX. If your computer misbehaves with DX/VST audio plug-ins, simply make sure this option is unchecked.

DirectX or VST audio plug-ins and DXi/VSTi synthesizer plug-ins can have playback latency (the delay between when a note is played, and when a note is heard).

Adjust “Audio Latency in mS” to fine-tune for your computer. If you have a fast computer and excellent sound card, the audio latency can be adjusted rather low. However, if you hear audio dropouts, you can set the latency as high as 2000 milliseconds.

Playback timing is equally good with long or short latency. But with longer-than-necessary latency, you have to wait awhile before hearing playback begin, and there is a noticeable delay if you adjust DX plug-in settings during playback.

To edit DX plug-ins, click the [Edit Plugin Settings...] button. The Edit radio buttons let you chose which of the four in-line effects to edit. The Bypass checkboxes let you bypass any of the four effects in a group.

In the above picture, four DX plug-ins are applied to the Band-in-a-Box audio track. First, PG Dynamics to balance input levels, PG Ten Band EQ for tone polishing, PG Reverb to add ambiance, and PG Peak Limit to boost and level the amplitude.

The [Load Group] and [Save Group] buttons let you load and save the effects settings for the currently selected track.
The [Load Preset] and [Save Preset] buttons let you save and load presets for the current effect (such as PG Reverb).

The [Delete Preset] button lets you remove a preset from the list of already saved presets.

The [Options] button brings up DX/VST Options (useful utility functions you may occasionally need).
The **[Edit DX Exclusion List]** button lets you edit the list of plug-ins to include or exclude in the DirectX editor. This is useful if you have plug-ins installed, which are not compatible with Band-in-a-Box. If you edit the exclusion list, you’ll see a dialog box with the left side displaying the included plug-ins and the right side displaying the excluded plug-ins:

![DX Plugin Exclude List](image)

- The `<` button lets you move a plug-in from the excluded list to the included list. The `>` button lets you move a plug-in from the included to the excluded list.
- The **[Scan for New Plugins]** button will re-scan for newly installed plug-ins. Use this option if you have installed a new plug-in since starting Band-in-a-Box.
- The **[Register a New Plugin]** button can register a plug-in with Windows, so that audio applications such as Band-in-a-Box or PowerTracks can use the plug-in. Most DX plug-in installers register themselves, but this option is useful if you have a plug-in that doesn’t automatically register itself.
- The **[Un-Register a Plugin]** button removes a plug-in from Windows so it will no longer be available. Many DX plug-ins have uninstallers that automatically unregister, but this option is useful to remove plug-ins that do not have uninstallers. This function does not delete a plug-in from your hard drive. It only removes it from the Windows registry so that is can’t be used.
- The **[Run DirectX Diagnostic Tool]** button runs the Microsoft **Direct X Diagnostic Tool**. This is a Microsoft program, which checks for problems with DirectX.
- **[Remove VST Plugin (from list)…]** opens a separate list where you can remove VST or VSTi plug-ins.

**NOTE:** The number of real time effects that you can expect to activate at a time without stressing the system depends on the speed of your computer. The more effects you chain together, the more CPU power will be required. For example, only an EQ plug-in will require less CPU power than a chain of four effects such as (Compressor – EQ – Chorus – Reverb). Today, computers are usually fast enough to support full chains of effects on both the Audio Track and the DXi Synthesizer.

**Reading the Audio and MIDI tracks into other programs**

If you have a Band-in-a-Box song that has an audio track as well, and want to export that song to a sequencer like PowerTracks Pro Audio, follow these steps:
- For a song called MYSONG.MGU, the associated .WAV file (audio track) will be called MYSONG.WAV.
- You should make a MIDI file (by pressing the .MID button). Save the .MID in the same folder as the song. Then your sequencer can read the entire file by doing the following inside your sequencer:
  - Open the MIDI file.
  - Import the .WAV file track into the sequence.

**Tip:** PowerTracks Pro Audio recognizes that this is a Band-in-a-Box file with a wave file associated with it, and will offer to read them both in. In earlier versions of PowerTracks Pro and other sequencers you'll need to follow the steps above.
Rendering Audio Files

Rendering WAV Files

Audio rendering means converting a MIDI song to audio format, usually to a WAV file. Press the [.WAV] button on the main Band-in-a-Box screen to launch the Render to Audio File dialog.

This shows the directory where the rendered wave file will be saved. You can use the [Choose] button to specify any folder on any drive for the rendered wave file.

If you have selected a DXi or VSTi synthesizer for your MIDI output in the Opt. | MIDI Driver Setup dialog, one click on [DXi - Direct Render] will quickly convert your song to a .WAV file, normally in a few seconds.

It is not necessary to have a DXi or VSTi synthesizer to render RealTracks.

You can direct render to audio as separate tracks with “One WAV File per Track.” If this option is chosen, separate WAV files get written (mono or stereo) for each track (names MySong_Bass.WAV, MySong_Drums.WAV, etc.) so you can import tracks to your favorite sequencer as audio files.

For direct rendering, you can also choose whether you want the output file to be mono or stereo.

Use the “Normalize” option to normalize individual tracks or the complete arrangement. Normalizing boosts the volume to a maximum level without distortion. Most professional music tracks are normalized.

For Audio track rendering, you can adjust the volume to match it to the other tracks. Reverb is added to the mix if there is reverb set for the audio track.

You can add a dB amount to the whole mix to make it louder or softer. There is automatic “peak-limiting” added, so that the music will not distort if you set it too high.
Batch convert a folder of songs to audio files (MP3, WAV, or WMA).

Do you need to convert an entire folder of Band-in-a-Box songs to audio files? This can be done easily by a single command with an option to name the resultant audio files based either on the original file name or the song title name.

Press the [Batch] button to **Batch create audio files**.

### Batch create audio files (WAV/WMA/MP3) in a given folder

This will create audio files from multiple BB songs (MGU?) in a folder. The files will have _Render_ added to the file name. (e.g. MySong.MGU will be called MySong_Render.WAV)

- **Name audio file based on file name**
- **Name audio file based on song TITLE, max characters**
- **Suffix to add to filenames**

Select the folder that you want to use (e.g. C:\bb\my songs).

Add a suffix for each file name.

- **Suffix to add to filenames**

For example, if the suffix is _Demo, then MySong.MGU will render as MySong_Demo.WAV)

Choose whether you want the filenames to be based on the filename or the song title.

- **Audio File Type**
  - .WAV file
  - .WMA file (Windows Media)
  - .MP3 file

Select the file type for the output file from the “Audio File Type” group box.

When rendering to WMA or MP3 files there is an option to also write WAV files.

**Note:** For rendering MP3 files the program uses whatever MP3 codec and bit rate you already have installed in.
Option added to reset the DXi synth after each render. This insures that no audio (stuck notes etc.) from previous file is retained.

Press the “Go” button to render all of the Band-in-a-Box files in the folder to the selected audio format.

There is a [Cancel] button in the Batch Rendering screen.

### Rendering in Other Audio Formats
Band-in-a-Box has enhanced audio support for saving in Windows Media Player format.

### Saving as Windows Media File
Before you start, select a destination for the finished file. The destination of the file will be the folder that is shown in the “Save the WAV file with this name” field. Click on the [Choose] button to select a different location for the finished WMA file.

Press the [Save in Windows Media format (WMA)…] button to save your Band-in-a-Box song as a Windows Media Audio file. This renders the file to a stereo WAV file, and then prompts for the conversion to WMA.

Click [Yes] to render the file.

If RealTracks are present, they will be generated for the song and then all tracks will be rendered to a WAV file. Next, a progress screen will appear showing the rendering to WMA, followed by a completion message.

```
C:\bb\Realtracks - Demos\_J140_JA Demo [ALL
REALTRACKS - JazzBass,Piano,AltoSax]_Render.WMA
Successfully Rendered!
```

### Saving in Other Compressed Formats (MP3)
Before you start, select a destination for the finished file. The destination of the file will be the folder that is shown in the “Save the WAV file with this name” field. Click on the [Choose] button to select a different location for the finished file.

When you choose this option, Band-in-a-Box will present a prompt screen.
Click [Yes] to render the file.

If RealTracks are present, they will be generated for the song and then all tracks will be rendered to a WAV file. Next, a dialog will open where you select the audio format for your file.

From this dialog, you can choose the type of compression that is appropriate (from the available installed codecs). You can save your settings as named presets by using the [Save As] button.

You will see a progress screen during rendering, followed by a completion message.

Click [OK] to see a report about the rendered file.
Rendering Options

- **Merge in Audio Track**: If this option is checked, the audio track will be merged with the MIDI tracks in the wave file.
- **Adjust Audio Track volume by** a number of dBs to balance the audio track with the level of the rendered MIDI tracks. A setting of 6 dB is double the volume, -6 dB is half the volume.
- **Boost All Files Amplitude by** adds a dB amount to the whole mix, so that the mix will be louder or softer. There is automatic peak-limiting added, so that the music will not distort if you set it too high.
- **Include 2 bar lead-in**: If this is not checked, and there is no Melody track lead-in, the 2 bar lead-in will be skipped in the rendered file.
- **Include Drum Count-in sound**: If this is set, the drum count-in will be included in the rendered WAV file.
- **Delay at start (seconds)** will include enough silence at the start of the rendered wave file for a space between tracks when creating audio CDs.
- **Delay at end (seconds)** will insert extra time at the end of the song.

**Burn your own Audio-CD**

- Press the [Burn to Audio CD] button to launch the MiniBurn program and burn your wave file to a CD, which will then play in a standard CD player.

**Note**: Any CD you create won't be playable in an Audio CD player until the disc is finalized. Therefore, if you choose [Burn CD - No Finalize] make sure that when you burn the CD for the last time the disc is finalized.

If launched from Band-in-a-Box, the current BIAB song has automatically been added to the Burn List. If MiniBurn is running standalone, you must add Wave files to the Burn List.

**Burn List**

- Burn list files are displayed in MiniBurn’s central file list region.
- Column 1 - Track Number
- Column 2 - Path and name of Wave files
- Column 3 - Play time of each Track, formatted in minutes:seconds:frames
Burn Time indicates the sum of all the burn list track times.

Avail Time indicates the time available on the blank CD-R in the CD Burner. If no disc has been inserted, Avail Time reads “No Disc.” If an unwritable disc has been inserted (CD-ROM disc or already-finalized CD-R, CD-RW), Avail Time reads “UnWritable.”

Add Files to the Burn List
Wave files can be added three ways:
1. Use the menu item File/Add Track...
2. Right-click on the Burn List and select “Add Track” from the pop-up menu.
3. Drag wave files into the MiniBurn window from an open Windows folder view.

Note: Only Wave files are accepted, and Wave files must be 16 bit stereo, 44.1 K sample rate (the standard format for Audio CDs).

Remove Files from the Burn List
Files can be removed two ways:
1. Left-click to select a track, then use the menu item File | Remove Selected Track.
2. Left-click to select a track, then right-click on the Burn List and pick “Remove Track” from the pop-up menu.

Clear All Files from the Burn List
The list can be cleared two ways:
1. Use the menu item File | Clear All Tracks From Burn List.
2. Right-click on the Burn List and select “Clear All Tracks” from the pop-up menu.

Change the Order of Tracks in the Burn List
Left-click on the “Trk” column of the file you wish to move, and drag the file to a new location in the list.

Audition Tracks in the Burn List
Left-click to select a track in the Burn List, then right-click and pick “Play Selected File” from the pop-up menu.
To stop playback, right-click the Burn List and pick “Stop” from the pop-up menu. It is not necessary to stop a wave file before playing a new wave file. It is not necessary to stop playback before burning. Playback stops automatically before burning begins.

**Burner Controls**

**Eject:** Open the drive tray using the menu item **CD Recorder | Eject.** Of course you can also press the eject button on the CD drive.

**Close the Drive Tray:** Close the drive tray using the menu item **CD Recorder | Close Tray.** You can also press the eject button on the CD drive, or gently push the drive tray to close it. Some manufacturers advise against closing the tray with a push.

**Select a Burner**

If the computer contains multiple burners, select a drive with the Burner drop-down menu. If a computer doesn’t have any supported drives, the Burner menu will be empty and burning is not possible.

**Set the Burn Rate**

MiniBurn automatically selects the fastest rate reported by your drive. It is typical to use the fastest rate, unless you know from previous experience that your computer doesn’t burn well at high speed. In that case, set a slower burn rate to ensure a good burn.

**Test Mode Checkbox (Simulate Burn)**

To test the CD Burner without actually writing a CD, turn on the Test Mode checkbox. After your PC has “proven itself” with a couple of good burns, routine testing is not necessary.

**Cache Files Checkbox**

If Cache Files is turned ON, MiniBurn writes an encoded temporary file before burning the CD. Unless burn errors are encountered, performance is faster with this option turned OFF. It is not usually necessary to Cache Files, but there are some situations where Caching is helpful:

1. On a very slow PC, the computer may not be fast enough to translate the wave file to CD audio while burning. Caching may be necessary to avoid errors.
2. If Burn List audio files are stored in another PC on your local network, the network transfer delay may cause errors. Caching will pre-fetch the files to your local hard disk before burning the CD.

**Use Burn Proof Checkbox**

Burn Proof is a technology available on many newer CD/DVD burners. With Burn Proof, it is less likely to accidentally make a bad CD. If a burner has the Burn Proof feature, the checkbox is automatically enabled and turned ON. If a burner does not have this feature, the checkbox is grayed-out and cannot be adjusted. Unless Burn Proof seems to be causing unlikely strange problems, always use this feature if it is available.

**Burn CD + Finalize (Make Playable CD)**

Start CD burning. This button is the preferred way to make CDs for use with standalone Audio CD Players. With the other options, ‘Burn CD – No Finalize’ and ‘Finalize Only’, the tracks will typically be readable by computer CDROM drives, but all of your recorded tracks may not be visible to standalone Audio CD Players, even after the disc is finalized.

**Burn CD – No Finalize (allow tracks to be added later)**

Audio CDs must be “finalized” before they can be recognized by the majority of stand-alone audio CD players (stereos, boom boxes, portable CD players, automobile CD Players), or television DVD players. However, many computer CD drives can play “Un-Finalized” audio CDs, so you can play them on your computer until all the songs have been added to the CD.

Use ‘Burn CD – No Finalize’ if you wish to add tracks to an audio CD over more than one session.

**Note:** Be sure to use ‘Burn CD + Finalize’ or ‘Finalize Only’ when you add the final track(s) to a multi-session Audio CD.

When adding tracks to an “Un-Finalized” audio CD, the Available Time field displays the “empty” time remaining on the CDR (the disc currently loaded in your burner).
Example: If you have already recorded 40 minutes to a 74 minute CDR, MiniBurn will display about 34 minutes of Available Time. Take care not to add more tracks than will properly fit on the CD’s remaining empty space. Make sure that the Total Time does not exceed the Available Time!

**Finalize Only (Make Playable CD without adding new tracks)**

Audio CDs must be “Finalized” before they can be recognized by the majority of stand-alone audio CD players (stereos, boom boxes, portable CD players, automobile CD Players), or television DVD players. If you have previously added tracks to a disc with the Burn CD – No Finalize function, you can finalize the disc with the Finalize Only button.

**Stop Burn**

Stop burning before the disc is finished.

**Note:** If you prematurely Stop, the CD will almost certainly be ruined.

**Burning Progress**

While a CD is burning, progress is indicated in the lower-left of the MiniBurn window. Progress messages are also displayed in the Status Bar at the bottom of the window.

- **Read Buffer %** - The computer’s disk read buffer usage. If Burn Proof is not available, you may have burn errors if this drops to zero in mid-burn. In this case, try a slower Burn Rate.
- **Drive Buffer %** - The CD Burner’s write buffer usage. If Burn Proof is not available, you may have burn errors if this ever drops to zero. In this case, try a slower Burn Rate.

If a bona-fide buffer under-run actually occurs, MiniBurn also displays an error dialog at the end of the burn. The two Buffer fields are most useful for diagnosing problems—If the Read Buffer gets too low, it may mean that the Hard Drive (or network connection) is not fast enough. If the Drive Buffer gets too low but the Read Buffer remains adequate, it may mean that background processes are stealing too much CPU time from MiniBurn.

- **Track Written** - Indicate the current track’s progress.
- **Total Written** - Indicate the progress of the entire burn.
Audio Chord Wizard (“Chords from MP3”)

This amazing wizard automatically figures out the chords from any MP3, WAV, or WMA (Windows Media Audio) file and displays them in Band-in-a-Box. Just load an audio file and you’ll instantly see the chords. Using the Audio Chord Wizard is a great way to learn and practice popular songs as you play along and see the chords.

Chordsheet Overview

There’s a Chordsheet window in the Audio Chord Wizard that shows the chords for the whole song on a single screen. This allows you to click on a bar on the chordsheet to jump to that area of the song.

You can mark sections of the song using part markers, and the sections will begin on a new line with a line space between so they are clearly seen. So you can then also learn the form of the song, as you can see the various sections (intro/verse/chorus/break) at a glance, or quickly jump to the any section simply by double clicking on that part of the chordsheet.

For this discussion, open up c:\bb\Tutorial BB2007\Frontier.MP3.

You will now see the song, and the Chordsheet window in the Audio Chord Wizard is visible.

Press the P key to put in a part marker. Pressing P again will change the part marker, and then turn it off.

Now the song is divided into sections, with space between each section, and each section starting on a new line.

If we want to renumber the bars, right click on the waveform timeline at the place that you would like to be bar 1, and choose “Set Bar One.”
To change the # of bars per row, or rows per screen, right click on the chordsheet.

The +/- buttons at the bottom right of the window also change the row height.

Chords may be edited in the Audio Chord Wizard with a right mouse click on the chord. When Edit Chord is selected, a highlight cell opens at the chord location. Type in the name of the new chord using standard Band-in-a-Box chord entry characters and press the Enter key to make the edit.

The edited chord name is blue in color.

Individual edits can be removed with the Remove Chord Edit command, or all edits in the song can be removed with the Remove All Chord Edits command. Part markers, chord symbols, key signature, and tuning setting are saved in Band-in-a-Box, and are passed back and forth to the Chord Wizard.

The Audio Chord Wizard is a great way to learn the chords of songs. You can add section markers and divide the song logically into sections, so it is also a great way to learn the “form” of the song, an essential part of learning popular songs.

As well as the chords of the song, the Audio Chord Wizard also figures out,
- the tempo of the file,
- bar lines throughout the song,
- fine tuning detection (e.g. 5 cents sharp from A440).

Note: Audio Chord Wizard estimates the chord progression of an audio file. It is NOT an Audio-to-MIDI transcriber, which would be a much more elaborate program.

Opening Files

To open your audio file in the Audio Chord Wizard you can click on its toolbar button or use the File menu command to Open Audio w/Chords.

Use the Launch Audio Chord Wizard command if you already have a file with audio loaded in Band-in-a-Box.

When you select a file to open you will see a series of Progress messages.

The Audio Chord Wizard first opens the audio file and makes initial calculations, finding audio beats and estimating a tempo map, and then displays your audio file.
Audio Chord Wizard Window

Primary Program Controls

- **Play**
- **Stop**
- **Tap Barline (F8)**
- **Time Sig:** 4 / 4
- **Avg Tempo:** 120.089
- **Key Sig:** C

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Toggles Play/Pause (Space bar or Play/Pause key).
Stop play, rewind to start with **Esc** key.
Moves nearest bar line to current play position. **F8 or Enter** keys also set bar lines.
Song time signature, 2/4 to 12/8 supported.
Average tempo, right-click for options.
Song key signature.
Use to correct pitch of song if necessary.
Exit and send chords to Band-in-a-Box.
Exit without sending chords to Band-in-a-Box.

**Chord Detection**

Chord Detection accuracy depends on the accuracy of the bar lines. If bar lines are not well-aligned then the Chord Detection can be expected to be rather poor. It is quick and easy to align the bar lines on most songs, once you get the hang of it.

The first task is to locate the beginning of Bar One. Since an audio file could have an arbitrary amount of silence at the beginning of the song, and many songs begin with a pickup partial bar, ACW cannot easily guess the first bar without a hint from you.

The shortcut keys and mouse playback controls make it easy to find Bar One. Tap the space bar to begin play, watch the Location Cursor, and listen for the downbeat. If the Location Cursor passes the downbeat and you were not completely certain of the location, you can tap the W key to rewind to the song beginning and replay the first part of the song, to audition the downbeat as many times as necessary to make sure of its location.

You can also single-click in the Chords panel to jump the playback position. If the rhythm is unusually complicated near the downbeat, you could repeatedly click just a little before the suspected Bar One location, to zero-in on the exact downbeat.

In the following example song, we have discovered the downbeat of Bar One, so we Right Click on that location to Set Bar One.

Now the Bar One bar line is red (shown below). The red Triangle bar indicator indicates that we have edited that bar line. The Red Triangles are called Good Bar Lines (GBL's). The green Triangle bar indicators are bar lines which ACW has automatically inferred from its automatic tempo detection PLUS your edited Good Bar Lines. We call the green automatic bar lines Inferred Bar Lines (IBL's).

On this example song, the initial automatic tempo detection did a pretty good job. Simply setting Bar One has caused the first four bars to be properly aligned to the music. On some songs, Set Bar One is the only action necessary to get good bar alignment for the ENTIRE tune.

As playback continues in this example (below), we notice that ACW has made its first error approaching Bar 5. Audio Chord Wizard has estimated the tempo of Bar 4 too slow. But that is easy to fix. If you prefer real-time control, just tap F8 or the Enter key where the downbeat should actually be.

If you prefer stopped-time editing, you can either mouse-drage Bar 5 to its desired position, or drag the Playback Location Cursor to the desired position and then tap F8 or the Enter key.
When satisfied with the Bar lines and Chords, click the [OK] button to return the Chords and Tempo Map to Band-in-a-Box.

**Chord Edits**

Chords may be edited in the **Audio Chord Wizard** with a right mouse click on the chord. When *Edit Chord* is selected, a highlight cell opens at the chord location. Type in the name of the new chord using standard Band-in-a-Box chord entry characters and press the **Enter** key to make the edit.

Individual edits can be removed with the *Remove Chord Edit* command, or all edits in the song can be removed with the *Remove All Chord Edits* command.

**Keyboard Shortcuts**

Keyboard shortcuts make it easier to navigate the song and tap in barlines without having to work the mouse with start/stop/scroll actions.

**Play/Pause**- SPACE BAR, or MultiMedia keyboard PLAY/PAUSE key or (certain keyboards) PLAY key

**Stop**- ESC key, or PAUSE key, or MultiMedia keyboard STOP key

**Tap Barline**- F8, or ENTER key

**Jump To Song Start**- W key, or HOME key

**Jump To Song End**- END key

**Jump Forward One Bar**- RIGHT ARROW key

**Jump Back One Bar**- LEFT ARROW key
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**Jump Forward Four Bars** - PAGE DOWN key, or DOWN ARROW key, or MultiMedia keyboard NEXT TRACK key

**Jump Back Four Bars** - PAGE UP key, or UP ARROW key, or Multimedia keyboard PREVIOUS TRACK key

**Special Cases**

**Time Signature:**
If a song is not in the default 4/4 time signature, set the Time Signature very early before you do anything else.

**Bad Initial Tempo Estimates**

**Double/Half Tempo:**
Sometimes Audio Chord Wizard will guess double or half of the tempo you might prefer.

**Slightly Wrong:**
Sometimes syncopated songs can have musical anticipations which make ACW guess a tempo slightly too fast or slightly too slow.

**Completely, Horribly Wrong:**
Some songs have rhythms difficult for a computer to understand. Sometimes a song’s rhythmic beats are spaced in such a way that a song with a perfect Tempo of 120, might mathematically BETTER fit the audio beats at some simple (but wrong) related ratio such as 80, 100, 160, or 180 BPM.

If the initial Tempo Estimate is pretty good, the Tap Bar line function will be the easiest way to fix such errors, requiring only a few keyboard taps during playback.

But if the initial tempo estimate happens to be horribly wrong, it helps to make the initial tempo “in the ballpark” BEFORE you tap a few F8’s to make it completely right.

Right-click the Avg Tempo control for some easy automatic fixes.

**Note:** If you want to use the Avg Tempo Menu functions, use the menu very soon after you have opened a song, before you have done much bar editing. If you invoke the Avg Tempo Menu functions after you have laboriously edited a lot of bar lines, the automatic nature of these functions can ruin your previous editing.

In some cases, there is a good reason to initially set the tempo artificially slow by using the “Find Best Half Tempo” function.

For example, if the initial tempo estimate is considerably faster than the tempo that you want to tap in, the Tap Bar line function can mistakenly think that you want a very fast tempo, which fills the remainder of the song with unwanted fast-tempo bars. In that case, if you initially set the tempo very slow, ACW will be unlikely to misinterpret your Tap Bar Lines.

**Set Key Signature**

Once the chords look reasonable, for instance if your song looks like it is probably in the key of F, set the Key Signature control to F for better chord spelling. This only affects the cosmetic display of notes and chords (flats and sharps). The Key Signature control does not currently affect the basic accuracy of Chord Detection.

**Adjust Fine-Tuning**

If a song is significantly mis-tuned from concert pitch, the notes are “in the cracks,” which makes Chord Detection less accurate.

If your Chords look reasonable, there is no need to bother with Tuning. Most songs are recorded pretty close to Concert Pitch.

But if you see numerous Chord errors, it may help to adjust the Fine Tuning control.
If you are playing along with a song on your keyboard, you might decide to make an ear-estimate of how far out-of-tune is the song:

For instance, you could adjust the fine-tuning control on your keyboard until your keyboard matches the song's pitch (according to your ear). Then you could look at your keyboard's tuning readout, and adjust ACW's Fine Tune Control to match. Either click-drag ACW's Fine Tune control (like a slider control), or right-click the Fine Tune control then type in a number.

The Fine Tune Control currently does not change the pitch of playback (though that would be an excellent future feature). Currently ACW's Fine Tune control only improves Chord Detection on mis-tuned songs.

The Fine Tune control is calibrated in cents, 1/100th of a semitone. Therefore, if a song is perfectly in the key of C, but if you set Fine Tune to +100 Cents, ACW would display chords in the key of B. Similarly, if you set Fine Tune to -100 Cents, it would display that song's chords in the key of C#.

That simple use of the Fine Tune control is just a backwards way to transpose the Chords. But if you set Fine-Tune somewhere in the middle, ACW looks for notes that are somewhere “in the cracks” between the piano keys. For instance, if your song SHOULD be in the key of C, but it was unfortunately recorded 50 Cents sharp--

There could be many reasons that a song was recorded off Concert Pitch. Maybe the recording studio had a broken tape recorder. Perhaps the Piano Tuner was smoking Crack, or the singer couldn't quite hit the highest note. Maybe the vinyl record cutter was off-speed, or some Record Executive decided that the song was 10 seconds too long for airplay, and instructed the Mastering Engineer to speed it up a little bit. In such cases ACW can get confused, mis-identifying some pitches too high and other pitches too low, detecting nonsense Chords.

So if your favorite song was unfortunately recorded 50 Cents sharp, you can set the Fine-Tune control to +50 Cents so that ACW will properly display in the 'original' key.

Auto Estimate Tuning

ACW can automatically estimate the tuning, which helps in some cases. Since the estimation is math-intensive, ACW only analyzes one bar of music at a time. Right-click somewhere inside a bar and pick the Estimate Tuning function. After the process is finished, up pops the results dialog.

As advised in the dialog, results can be improved by carefully picking the bar. Bars with relatively long notes are easier to analyze, compared to bars containing flashy fast melodies.

It can be useful to spot-check a few bars. If several spot-checks give similar answers (within a few cents), you have good confidence that the results are actually meaningful, not being randomly affected by out-of-tune melodies or loud drums.

However, if the first estimate reads +43 and the next measurement reads -12, then it probably means that your song is not a good candidate for automatic Tuning Estimation.
Odd Length Bars and Drastic Tempo Changes

If a 4/4 song contains occasional bars of 3/4, 5/4, or whatever, or if there are sections where the music has an extreme ritard or accelerando, sometimes you can just Tap Bar Lines to adjust it.

But it is sometimes more convenient to manually add or delete bar lines. The following example song has an overall Time Signature of 4/4, but Bar 9 should have a time signature of 2/4. If you simply Tap Bar Line on 9:3 to shorten the bar, then ACW will mistakenly decide that you wish to make all the following bar lines double-tempo 4/4.

Solution

First, Right-Click on the beat 9:3, and Insert a bar line.

Now a new barline is added, and three new GBL bar lines are flagged red.

Right-Click on the new shortened Bar 9 and set the Time Signature to 2/4.
Change Bar 10 to its desired duration. Hover the mouse over the red triangle marker at Bar 11, and the mouse cursor becomes a drag cursor. Click and drag the barline to the location marked 11:3.

Now we have edited bar 9 to have its proper 2/4 Time Signature and preserved the song tempo on both sides of the 2/4 bar.

**Notes Display**

The Notes Display looks like a MIDI Piano Roll, but it is not exactly the same as a MIDI Piano Roll. Audio Chord wizard detects the strongest frequencies found in each eighth-note time slot, and displays them in the Notes Display. Sometimes the displayed frequencies REALLY ARE instrument notes played in the audio file. But they could be spurious information, such as the accidental loudest frequency of a drum beat. A midrange frequency note-bar might be showing the sum of harmonics from several instruments, each instrument's harmonics contributing to the strength of that frequency.

The Notes Display information is real and useful, but try not to assume that every displayed note-bar is a real note in the audio.

**Display Controls**

**Horizontal Scroll Bar**

Scroll forward/back in the wave file.

**Plus/Minus Zoom Buttons**

Zoom the display to show more or less detail.
Audio Chord Wizard Utilities Dialog

The **Audio Chord Wizard Utilities** dialog box can be launched at any time from the menu item (File- Audio Chord Wizard Utilities, or Audio – Audio Chord Wizard Utilities).

It is also launched automatically after returning from the Audio Chord Wizard.

**Automatic detection of key signature based on the chords only.** This is useful for a song from the Audio Chord Wizard, where you forgot to set the key signature or for any song without the key signature set.

If you agree with the analysis, you can accept the chord signature recommended for the song, by pressing the “Set the song key signature to …” button.

**Make a Tempo Map**

After an audio song (MP3/WAV/WMA) has been loaded into the AudioChordWizard, there will be bar lines assigned automatically by ACW, and perhaps modified by you. If you would like Band-in-a-Box song file to follow these bar lines, so that the BB file will play in sync with the audio file, press the “MAKE A TEMPO MAP” button.

You will then see red boxes on the BB chordsheet, indicating tempo changes and the presence of a tempo map.

Press “Erase Tempo Map” to remove the Tempo map, and the ‘red boxes’ will disappear around the bar lines.

**Note:** You can always get the tempo map back, by pressing “Make a tempo map” at any time.

This erases the audio track from BB. If you have loaded in an MP3 file, the audio track isn’t the MP3 file, it is the WAV file copy that BB has made of it. So you wouldn’t be erasing your MP3 file! Note that you also have to SAVE the BB file to have the erasure be complete.
If you enable the MIDI style, you’ll be hearing the audio file as well as the BB MIDI style. Otherwise you can mute the BB style by disabling it here.

You can revisit the Audio Chord Wizard by pressing this button (this can also be done from the Audio menu). Revisiting the AudioChordWizard is useful to refine the bar lines.

**Tip: How to preserve chords if you revisit the AudioChordWizard**

If you do revisit the AudioChordWizard, and want to preserve the chords that you may have edited, first select all of the chords, and choose Edit-Copy, and then, after the AudioChordWizard, choose Edit-Paste. Otherwise the AudioChordWizard might re-interpret your chords!

The Help button launched the help file (BBW.CHM file) with a topic describing the dialog, and the AudioChordWizard.

The “Manual” button launches a PDF manual of the Audio Chord Wizard with latest features described. This manual is in BB AudioChordWizard folder.

**MIDI File Chord Interpretation Wizard**

Many MIDI files lack chord symbols, making them difficult to play along with by ear. Now you can open up any MIDI file in Band-in-a-Box, and Band-in-a-Box will automatically figure out the chords of the song for you. The chords are written onto the Band-in-a-Box chordsheet like any other song. You can also read tracks into the Melody and Soloist tracks.
Importing Chords
You can import the chords from a MIDI file. To do this, first blank the chordsheet by choosing File | New. Then select the menu item File | Import Chords from MIDI file to launch the Interpret Chords from MIDI file dialog.

Press the [Open (Change)…] Button to select the MIDI file that you'd like to import.

Once you've selected the file, you can press the [INTERPRET CHORDS NOW] button.

When you do that, the chords will be interpreted from the MIDI file, and written onto the chordsheet. Prior to pressing the [INTERPRET CHORDS NOW] button, you might want to make some custom settings.

When you load in the MIDI file, Band-in-a-Box interprets many things from the MIDI file for you automatically. Normally you'd want this to happen, but if you'd prefer to make the settings yourself, you can set the Auto Interpret settings from MIDI file to false.

Once you have loaded in the MIDI file, and assuming that you have the “Auto Interpret” set to true, you'll see that the dialog displays the settings that the Chord Wizard has found for the key signature, and channels used for the song.

Let's work with an example song called Violet Song.MID. This should be included in your c:\bb directory.

- Start with a blank worksheet by choosing File | New.
- Choose the MIDI File chord Wizard dialog by choosing File | Import Chords from MIDI file.

Press the [Open (Change)…] button to select the MIDI file, and then choose the file that you'd like to import. In this case it is “c:\bb\Violet Song.MID.”

Once you load in the MIDI file, you'll see that the Chord Wizard has analyzed it and made these determinations.

It has automatically determined that the “Violet Song.MID” file
- has 2 bars of lead-in.
- has 103 bars of chords.
- is in the key of F with a 4/4 time signature, and a tempo of 120.
- has the Bass Part on channel 2.
- has the chording (comping) parts on Channels 3, 6 and 7.
- has the Melody on Channel 4.
- has no other parts like the Melody to put on the Soloist track.

Now, after loading in the MIDI files, you'd normally have a look at these settings above, to see if they seem reasonable for your MIDI file. If not, you can change the settings. For example, if you knew that the Melody channel was on channel 3, you could override the Chord Wizard settings.

### Chord Options

When you choose one of these presets, it makes a number of settings in the Chord Options section of the dialog. You can override them in this dialog.

#### Chord Resolution

This is the minimum number of beats for a chord. For example, if you set it to “2 beats” then the Chord Wizard will never attempt to come up with different chords that are only a beat apart. If you have a song that has a short section that does include chords every beat, you can redo that section of the song with a “1 beat” resolution. (Default = 2 beats)

#### Include Slash Chords

If set, the Chord Wizard will include “slash chords” like F7/A or Cm/G.
**Bass Part Type**

You can set this to “Root,” “Root-3-5,” or “Walking Bass.” If you choose “Root,” the chord Wizard will assume that any bass note is the root of the chord. Choosing “Root-3-5” will cause the Chord Wizard to assume that the bass pattern is mainly on the root, 3rd and 5th of the chord. If you choose “Walking bass,” it will assume that the bass notes can be changing and can include many notes beside the root. Setting the Walking bass line will likely result in fewer chords overall than setting the “Root only” option.

**Allow Suspended (Sus) Chords**

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allow Sus chords</td>
<td>If chords like Csus or Bbsus7 will be included.</td>
</tr>
<tr>
<td>Allow 7th chords</td>
<td>Simple Rock songs might not have 7th chords or</td>
</tr>
<tr>
<td></td>
<td>Sus chords.</td>
</tr>
<tr>
<td>Allow no thirds</td>
<td>Allowing chords with no thirds should be set</td>
</tr>
<tr>
<td></td>
<td>in a hard rock song, or similar song with</td>
</tr>
<tr>
<td></td>
<td>“power chords” that might not contain the 3rd of</td>
</tr>
<tr>
<td></td>
<td>the chords.</td>
</tr>
</tbody>
</table>

The setting for “Allow Sus chords” determines if chords like Csus or Bbsus7 will be included. The “Allow 7th chords” specifies if 7th chords like C7 or Bbm7 would be allowed. Simple Rock songs might not have 7th chords or Sus chords. Allowing chords with no thirds should be set in a hard rock song, or similar song with “power chords” that might not contain the 3rd of the chords.

**Delay Lowest Bass Note**

Usually a bass player plays the root of the chord at or near the time when the chord changes. But in solo piano playing or some bass styles, the bass doesn't state the root until later on, and this setting should be set to “delayed” in a solo piano style of this type.

**Primary Style**

Set the primary style of the song to Jazz or Pop using the Lead Sheet Method combo box.

**Using the Chord Options Presets to quickly make settings**

For the song “Violet Song.MID,” we know that this is a Jazz Swing type of song, so we press the Preset Called “Jazz Standard.” By doing this, we see that the chord options have then been set to Chord Resolution of 2 beats, no slash chords, walking bass, sus chords, 7th chords, and Jazz lead sheet. These settings look OK for our Jazz song, if we wanted to customize it (e.g., to allow slash chords) we could do it at this point.

So, to recap, using the Chord Wizard is a 3-step process.

1. We've loaded in the song “Violet Song.MID.”
2. Pressing the preset button called [Jazz Standard], we then looked at the Chord Options settings for the various channels and they looked OK, so we didn't make any changes.
3. We then press [INTERPRET CHORDS NOW] – this gets the Chord Wizard to interpret the chords, and write them onto the Chordsheet.

Once we've pressed the [Interpret Chords Now] button, we can see the results, by looking at the chordsheet. Here are the chords that were interpreted.
So that we can see how well the Chord Wizard did, we can compare it to the “correct chords” of the song, input by a musician listening to the song.

As you can see, by comparing the two sets of chords, the Chord Wizard got almost all of the chords correct in this example. The Chord Wizard purposely avoids chords like “C13.” It will put a simpler “C7” instead, since this is more like a typical lead sheet.

If you've read in the entire MIDI file, you have 103 bars of chords on the Chordsheet. This actually contains 3 choruses of the song. You might want to reduce that to a single chorus by setting the chorus end of the song to bar 36 and then erasing the excess bars (after bar 36) by choosing Edit | Erase.

Examining the song that has been interpreted by the Chord Wizard.

You'll notice that the title (Violet Song), key (F), and tempo (120) have been set to the values found in the file. Part markers are not set; the Chord Wizard doesn't try to guess where part markers might be occurring. You need to put the part markers in yourself. You also need to choose the style to use (a Jazz Swing style in this case). If you examine the Melody track (by opening the Notation window and right clicking on some notes or pressing the Event List (#) button), you'll notice that the Melody track contains notes from Channel 4, which is what we specified in the Chord Wizard dialog.

Importing Part of a MIDI file or re-doing a section of the Chordsheet

(Normally we'd want to import an entire MIDI file worth of chords. But if you only want to import some bars, you can deselect the “Import Complete song” checkbox, and then specify where to start in the MIDI file (i.e. the number of lead-in bars in MIDI file) and what bar to start at in Band-in-a-Box (Insert to BB starting at bar #) and the number of bars to import (How Many Bars to import?).

For example, using the song “Violet Song.MID,” we could redo a section of the song using different settings. (For example, a chord resolution of 1 beat instead of 2 beats.) If we were unhappy with the results at bar 7 and 8, we could redo this by making the settings as follows:

Other Settings for the Chord Wizard

Band-in-a-Box and PowerTracks Pro Audio songs contain special events that write the exact chord names into the MIDI file. So if the Chord Wizard sees these events, it will use them instead of interpreting the chords, since they are likely to be completely accurate. If you'd prefer to ignore these chord events, set the “OK to use PG Music Chord names from MIDI File” to false.
The setting for “Write Chord Summary Notes to Soloist Track” is only used for diagnostic or special purposes. When set, the Soloist track will contain a special track that has a chord written every 2 beats (or whatever the setting for chord resolution is) that contains every note found for the chord. This shows you the type of logic that the Chord Wizard is basing its decisions on. If you encounter a song that gives incorrect results for the chords, you can try this setting and then examine the Soloist track to see the actual notes of the chords. Chord-stepping through the track (using [Ins] and [Del] on the Numpad) allows you to quickly hear the chords.

You can optionally include controllers, pitch bend, patch changes, and lyrics from the MIDI file.

**Practice Window**

The **Practice Window** allows convenient “1-click” access to many Band-in-a-Box features that help you with practicing.

These include the Ear Training dialog, games (Pitch Invasion etc.), Metronome, CopyMe, Sight Reading, 101 Riffs series, and more.

To launch the Practice Window, press the [P] practice button on the toolbar, or choose Window | Practice Window (hot keys **Alt+Shift+L**).

There are several purposes for the Practice Window.

Quick access to your favorite/preferred “practice” folders, so that you can setup load in songs without having to navigate dialogs.

One-click access to many of the education-related features of Band-in-a-Box (play along soloing, Ear Training, games).
Handy buttons for on-screen transposition for non-concert instruments.

One button access to many of the Band-in-a-Box add-ons “101 Riffs” series and “Master Solos.”

One button access to many other PG Music educational programs and lessons.

Most of these items are “add-on” products, available separately, and are not included in the Band-in-a-Box program. If you have these items installed to your hard drive, the Practice Window will find them if they are installed them to the default directories, and if not, you will be able to point the program to the location of the program, which will be remembered in future sessions.

For items that you don’t have, you can choose to display or not display them on-screen using the “Show add ons if N/A (not available)” setting.

More information about all of the add-on programs can be found at www.pgmusic.com/practice.htm

Making and Using Practice Folders

If you are preparing for a performance or a jam session with friends, you likely have a list of songs that you are working on. Let’s say they are in a folder called “c:\Bob’s Tunes”

Click on the Folder icon. You’ll then see a menu that lists a Manage Folders submenu, allowing you to create/remove Practice Folders.

This is list of all Practice Folders defined (there likely won’t be any to start with, so you can add them using the Manage Folders menu command). Add a folder that you use frequently to this list.

Practice Folders are limited to 200 songs, because they display on a menu for quick access. So don’t use this feature for folders with hundreds of songs, use the Song List dialog for that.
Ear Training Tutor

Ear training is an important exercise for all musicians. Now you can practice your ear training with help from Band-in-a-Box. In addition to the common interval exercises (perfect 4th, minor 2nd, etc.), learning to “play-by-ear” for Jazz and Pop music is further enhanced by ear training exercises to recognize common chord types (e.g., Major, Minor, Dominant, etc.).

For example, Band-in-a-Box will play a chord and you will have to identify the correct root and chord type. Your score can be tracked, allowing you to monitor your progress. Clicking on the various chord types lets you instantly hear the differences between various chords. Other options include “types of roots and chords to use,” and “voicing types” (open, closed, etc.) – allowing you to customize the ear training exercises for beginner through to advanced. Interval recognition is also customizable from beginner to advanced, with such options as instrument type, octave range, up/down intervals and more.

Click the on-screen ear training button, or press Ctrl+Shift+J, or go to Window | Ear Training Window to launch the Ear Training Window. There are 2 modules in the Ear Training Window:

1. The Interval Tutor plays note intervals for you to identify.

2. The Chord Tutor plays chords for you to identify.

After the list of Practice Folders, you see a list of “Favorite Folders” – these are the folders that you have visited recently.

Once you have selected a folder, you then press the [Songs] button, and you’ll see a pop-up menu of the file names for that folder, with the current song having a check mark. Load in a song by choosing the menu item.
2. The Chord Tutor plays chords (root + extension) for you to identify.

**Interval Tutor**

Click on the [Interval Tutor] button to launch the Interval Tutor module.

Click on the intervals to hear them. For example, click on “Minor 3” to hear a minor 3rd interval.

Set the interval types to guess. Pressing the [Easy] button will set it to the easiest (within one octave, second note is always higher, etc.).

Start the game by pressing the [Guess Interval] button.

You can control the starting note and the second note in the dialog.

Once the game starts, click on the interval that you think is being played.
Chord Tutor

Click on the [Chord Tutor] button to enter the Chord Tutor module.

Press the [Play Tonic] button to familiarize yourself with the root note of the scale as a reference point.
- Click on any of the other note names to hear that root.
- Click on any of the chord extensions to hear that sound.

Guessing the root

You can test yourself on roots only or root AND extension. Press “Guess a New Root” and you’ll hear a root played.

Press this button to hear the root-to-guess replayed. If you need help, press [Play Tonic – C] to hear the root again.
When you think you know the root, press the root name on the list of note names at the left.

If you guess incorrectly, you'll see a message that says “Wrong Root.” You'll then hear the note that you guessed playing, followed by the root-to-guess note again.

If you guess correctly, you'll see a confirmation of that, and can play again.

Press the [Stop] button to stop the game.

**Guessing the Root and the Extensions**

The Guess a New Chord game works in the same way as the Root game, except that here you are guessing chord extensions. The root is always the same, whatever the setting is at the left. Click on the extension to guess, and [Replay Chord] button to hear the chord again.

In this mode, you need to guess both the Root and the Extension. You can guess them in any order.

Click on the root, and when you get it correct you can move on to the extension.

**Types of Roots to Include**

For the Roots, you can choose which types of roots to include. This can be any of the 12 semitones, or just the scale tones, or just the 1-4-5 of the scale.

**Extension to Include**

For the extensions, you can include all of the extensions listed in the dialog, or just the subset that are common extensions.

**Types of Voicings to Include**

The chord extension will be played using the voicing type that you specify in the voicing types combo box. These can be open, closed, or root position voicings. This setting also applies to the voicing used when you are previewing a chord.

**Show notes on piano during guessing**

If you were an advanced musician, seeing the notes on the piano during the guessing game would be “cheating,” since you'd probably quickly recognize the chord. However, a beginner might benefit from seeing the notes played on the piano screen. If this “show notes on piano during guessing” option is selected, these chords will play on the small piano located on the main program screen.

The score is displayed on the window. You can reset these results to zero by pressing the [Reset] button.

**Ear Training Games**

Learning is best when it’s fun, so we’ve included these exciting games in the Band-in-a-Box Ear Training module for fun times in “the woodshed.”

The programs are available via buttons in the ear training dialog, or by dedicated buttons on the toolbar.

**Pitch Invasion**

Pitch Invasion helps to develop perfect pitch as you shoot down “alien” notes invading from above. You hear the note sound and click on the on-screen piano/MIDI or QWERTY keyboard to shoot it down.
For Pitch Invasion, choose a level that will specify the # of note types that will be invading. The LEVEL determines the speed of the notes.

To shoot the aliens, click on the on-screen keyboard, MIDI keyboard or QWERTY keys.

The program settings allow you to customize the game.

Press the HELP button for more information.

Music Replay

Music Replay develops your pitch, rhythm, and melody recognition by replaying what the program plays, in note, rhythm, or melodic modes.
For Music Replay, choose the MODE of the game.

There are three modes:
1. Note Replay
2. Rhythm Replay
3. Melody Replay

Set the Level to make the game harder.

Press the HELP button for more information.

**Vocal Wizard**

The “Vocal Wizard” displays the best song keys for your vocal range!

This feature helps you choose the best song key for your vocal range. Open the Vocal Wizard, enter your vocal type (baritone, tenor, etc.), or choose a custom range. Then the wizard analyzes the song and recommends the best keys for that song. Options available to “include/exclude falsetto range,” “restrict choices to these keys […]”, and “transpose now.”

Before we enter the Vocal Wizard, we’re going to load in the song Old Folks at Home (present in the c:\bb\Tutorial - BB 2005 folder). The song Old Folks at Home is in the key of F, we’ll use the Vocal Wizard to find the best key for a baritone.

To enter the Vocal Wizard, choose the menu item Window | Vocal Wizard, or press the Vocal Wizard button on the toolbar. This launches the Vocal Wizard.
You can see from the screenshot that the Vocal Wizard has picked the key of D (colored green) as the best key for the song, using the baritone vocal range. Other recommended keys are colored yellow. Un-recommended keys are colored grey, and include the current key of the song (F).

Let’s explore the areas of the Vocal Wizard screen.

There are 4 areas that require your input.

1. Entering your Vocal Range.

   ![Vocal Wizard interface](image)

   Here you enter your “comfortable” vocal range, from lowest note to highest note. If you can sing falsetto, you can also enter the highest falsetto note, and the % of falsetto notes that would be acceptable as falsetto notes.

   You can also select a preset (like Baritone Male or Contralto Female). Or you can select one of 8 “User Preset slots” to enter and save a custom range (if you press the [Save & Name User Preset] button).

2. Selecting the keys that would be “allowable.”

   ![Allowable Keys](image)

   Most musicians have favorite keys, so this area allows selection of keys that would be acceptable for the Vocal Wizard to choose. For example, if we choose “Jazz” keys, we’ll see that the Vocal Wizard now recommends the key of C instead of D.
3. Setting the range of the song to analyze (usually the whole song). Normally you’d want to analyze the whole song, but this allows you to select a partial range.

![Range](image)

4. Selecting the track to analyze. You’d usually pick the Melody track, but can also choose the Soloist track.

![Vocal track on](image)

You can then analyze the Melody by pressing the [Analyze] button. Most functions automatically re-analyze the song, but pressing the [Analyze] button forces a re-analysis of the song. This displays the analysis of the song.

1. A purple area describes the current range of the song, low note to high note, and compares it to your vocal range.

![This melody has a range of 14 semitones](image)

Your vocal range is 21 semitones, from note 43 (G 3) to note 64 (E 5).
With falsetto, your vocal range is 25 semitones from note 43 (G 3) to note 68 (Ab 5).

2. The radio buttons show each of the 12 semitone keys, and show a score for each key. The lowest score is the best. Keys are also colored – green (best key), yellow (good key), and grey (bad key for the song).

![Best Keys for current song](image)

For they key of D, you would transpose the melody down 15 semitones.
The melody range would then be from note 50 (D 4) to note 64 (E 5).
180 total melody notes, 180 in your range, 0 in falsetto, 0 too-many falsetto, 0 too-low, 0 too-high.

In the example Old Folks at Home, you can see that D is the best key (“green”), but any of the keys from G to Db are also good keys in the selected vocal range.

The area in black at the bottom gives an analysis of the vocal range if the song was transposed to the chosen key.
Now that the Vocal Wizard has told us the best key for this song, we can either close the dialog, or transpose it now to the recommended key (or any other key that we have selected with the radio buttons.

The Vocal Wizard can also work in an automatic mode, transposing a song to the best key as soon as it is loaded, without having to visit the Vocal Wizard dialog. This is done by checking the “Auto-transpose” checkbox. By doing this, you can insure that any song you load will be in the best key for your vocalist! And if the key isn’t deemed to be ideal, just visit the Vocal Wizard to see an analysis of the ranges to pick an alternate key.

Reharmonist (Chords for a Melody)

Generate Chords for a Melody

Generate chords for a melody, or an improved chord progression for a melody, with the “Reharmonist” feature. This feature generates a chord progression in the chosen genre, based only on the melody.

The idea of the Reharmonist is to generate a completely new chord progression for a melody, in a genre that you choose (Jazz, Country, etc.). This ignores any existing chords in the song.

There are 2 separate windows for the Reharmonist feature.

1. Reharmonize entire song with a new chord progression.
   -or –

2. See a list of possible reharmonizations for a given area of a song.

Generate a New Progression

To generate an entirely new chord progression for a complete song or a portion of a song:

Press the Reharmonist button (or menu option Window | Auto-Generate Chord Reharmonization).

You will then see the Select Re-Harmonist dialog.

The first thing you should do is set the “Genre” for the reharmonization. For example, if you want “Jazz Swing” genre, choose that in the genre drop down.

<table>
<thead>
<tr>
<th>Genre</th>
<th>EZ listening (Pop)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Style</td>
<td>Jazz swing (Jazz)</td>
</tr>
<tr>
<td></td>
<td>Jazz swing (Jazz)</td>
</tr>
<tr>
<td></td>
<td>Jazz Waltz (Jazz)</td>
</tr>
<tr>
<td></td>
<td>Bouncy (Jazz)</td>
</tr>
<tr>
<td></td>
<td>Bebop (Jazz)</td>
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<tr>
<td></td>
<td>Ballad (Jazz)</td>
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<tr>
<td></td>
<td>Smooth Jazz (Jazz)</td>
</tr>
<tr>
<td></td>
<td>Dixieland (Jazz)</td>
</tr>
<tr>
<td></td>
<td>Old Jazz</td>
</tr>
</tbody>
</table>
You'll then get typical Jazz chords. Verify that the key is correct. Band-in-a-Box analyzes the melody, and gives its best guess as to the best key for the song. If it is different than the current key, Band-in-a-Box will suggest the new key, and you can press the button to set the key to the new key.

Set the region of the song that you want reharmonized. Usually this will be the “Whole Song.”

Press [OK-Reharmonize]. You’ll now get a brand new chord progression for the melody.

See a List of Possible Reharmonizations
Use the feature interactively by displaying a menu of possible chord progressions for a portion of the melody, and audition them to choose the best one using the “Bar Reharmonist.” This allows you to hear some new chord progressions for existing melodies, or brand new progressions for tunes without chords.

To do this, choose Window | Chord Reharmonist Dialog (choose your own). This shows you the current bar in the song (for example, bar 7). It shows a list of suggested chord progressions for the current melody, based on the melody and genre that you choose.

Choose a chord progression, and press [Do-Reharmonize NOW] and the program will insert that progression.

The progressions are sorted in alphabetical order, or from “best to worst” depending on this setting.
Chapter 12: Tutors, Wizards, and Fun

Chord Substitution Wizard

Reharmonizing a song with the Chord Substitution Wizard is a fun and educational way to perform or practice a familiar song in a brand new way. For example, if you had chords such as “Dm7 G7 Cmaj7,” a list of substitutions including the tritone substitution “Dm7 Db7b5 Cmaj7” would be offered to you for use in your song.

There are 2 ways to get chord substitutions:
1. Let Band-in-a-Box show you a list of possible substitutions to pick from yourself by accessing Window | Chord Substitution Dialog menu item.
2. Let Band-in-a-Box pick them automatically by accessing Window | Auto-Generate Chord Substitutions menu item.

Chord Substitution Dialog

This dialog depends on what chords were present at the bar that was currently highlighted. This bar number is shown in the dialog and may be changed.

In the example shown, the chord was an F7 chord, so the substitutions shown are for an F7 chord. The substitutions shown may work for up to 4 bars, depending on the substitution. In the examples above, the substitutions work for 2 bars.

Jazz Substitutions / Pop/ Country

You can control what types of substitutions to see by using these checkboxes. Some substitutions include more chords than the original, and some simplify the progression, and these can be viewed using the checkboxes. You can elect to exclude substitutions that have a chord on each beat.
Chapter 12: Tutors, Wizards, and Fun

**Types of Subs. to include**
This combo box will filter the substitutions to include only the best substitutions or all of them.

**Recompile**
The [Recompile] button is only used if you have edited the CHORDSUB.TXT file to add your own substitutions. This compiles the file and takes about 1 to 2 minutes.

**Do Substitution NOW**
Press this button once you see a substitution that you like so that you can enter it onto the worksheet directly. Double clicking on the substitution line will also accomplish the same. You can then move the current bar to the next part of the song that you need a substitution for and repeat the process.

**Restore / Restore ALL**
You can UNDO the substitution by pressing the [Restore] button, or the [All] button to UNDO all substitutions.

**Auto Chord Substitutions**
You can quickly auto-generate substitutions for an entire song, or portion of a song using the auto-substitution dialog, which is accessed with the menu command Window | Auto Generate Chord Substitutions.

For example, we can generate substitutions for the !Freddie.MGU song. Here is the original chord progression.

![Original Chord Progression]

By using the auto-substitution dialog, we can generate substitutions for the whole song, and we get this result:

![Auto-generated Chord Progression]

You can see that Band-in-a-Box chose the substitutions for about 70% of the chords in the song (that's what we told it to do in the dialog). It began by replacing the F6 chord with an Fmaj7 Gm7 Abdim Am7 progression. Some of the substitutions chosen are even more advanced than that (replacing two bars of Bbmaj7 with Bb6 Ebmaj7 Dm7 Gm7 | Bbmaj7 Cm7 Dbdim Dm7 for example).

Here are the settings in the auto-substitution dialog that produced this result:
If you’d like Band-in-a-Box to only generate chords for a certain range of bars, you should highlight that range of bars in the chordsheet first, and then launch the dialog. The Range will then be set to “Part of Song” and the “Bar” and “# bars” settings will also be set. You can override these settings with manual settings, if necessary.

**Chord Builder**

You can right-click on any chord to instantly hear how it sounds, or use the Chord Builder feature to audition different chords until you find the one that sounds best to you. In other words, you can enter chords “by ear” - without having to know the actual chord names or any music theory. This feature also illustrates the differences between various chord types.

Launch the Builder by pressing the Builder button, or right clicking on the chordsheet and pressing the Builder button, or by choosing the **User | Chord Builder** menu option to open the **Chord Builder** dialog.

The Chord Builder is designed so it fits entirely above the Chordsheet. This means that it can be left open as you work entering chords into Band-in-a-Box. Remember that you can also play chords in from the MIDI keyboard by pressing **Ctrl+Enter** after you’ve played a chord.

You can click on the root of the chord in the “Root” group, and the Extension (Maj7 etc.), and also an alternate “slash-note” root. For example, to make the chord F9/A, you would click on the “F” root, the “9” extension, and the Slash Root of /A. As you click on them, you’ll hear the bass note played on the Bass part, and the extension played on the Piano track.
If you are happy with the sound of the chord, you can press the [Enter Chord] button to enter the chord at the bar and beat specified. If you would like the chord to be inserted automatically when you click on the note/extension names, select the “Enter chord when clicked” option. This will advance the Bar/Beat position. You can change the Bar/Beat settings to move to a different bar.

**Rhythm Guitar Chord Tutor**

Use the Guitar Tutor to analyze any song. This feature will show the chords that are playing on the virtual guitar fretboard, in your choice of a Jazz, Pop, or Folk perspective. The Guitar Tutor is a fun way to learn about new guitar chords while playing along with your favorite Band-in-a-Box tune.

The Rhythm Guitar Chord Tutor is most useful on styles that aren't guitar styles, because the guitar styles already have a guitar part that you can learn from. Using the tutor, you can see (and optionally hear) guitar chords played on the guitar fretboard. This teaches you how to play the chords on guitar.

To turn the Rhythm Guitar Chord Tutor on, launch the Guitar window and press the [Tutor] button.

**Enable Chord Tutor Display**

This setting silently displays the chords on the guitar fretboard.

The **Display Chords EARLY by (120/PPQ)** is an “anticipate” mode that plays the next chord X beats in advance, allowing time for the user to prepare. If set to 120, the tutor chords will appear a full beat early.

**Play Chords through MIDI**

To hear the chords, select the “Play Chords through MIDI” checkbox.

**Tip:** The Tutor uses the MIDI THRU part to playback on. You can control volume, panning, etc. by using the THRU settings on the main Band-in-a-Box screen.

**Guitar Patch**

You can select the patch to use directly from the Tutor dialog.

**Type of chords to display**

The tutor will display Jazz, Pop, and Folk voicings in easy, medium, and advanced forms. The advanced forms use inversions, and changing patterns of chords, while the easier ones just stick to the common “campfire” chords.
Half Note (sax) chords use the advanced Jazz Guitar “highest-4-strings-comping mode.” This usually plays on the 4 highest strings, and it plays several chords over a single chord. For example, for 2 bars of Cmaj7 it might play Cmaj7-Dm7-Ebdim-Em7 all played as half notes.

There are also tutors for the alternate tunings like DADGAD, Open G, etc. They can be selected from this drop-down list.

Show muted high note of 3 note comping
One of the tutors uses 3 note Jazz voicings to simulate the famous Big Band chord guitar comping styles. If you use this, you'll only see 3 notes in the chords of course. Since it sometimes helps to see the entire 4 chord voicing in this case, there is the option to show the muted note as well.

Note: This applies to the guitar tutor. There is also the option to show this for the guitar styles. This option is present in the Guitar Options dialog.

Copy to melody track / Copy to Soloist track
Pressing either one of these buttons will send the chord to the appropriate track.

The Guitar Tutor stays enabled until you change the Guitar track to another track (for example, to change it to the Bass track). You can easily re-enable it by clicking on the [Tutor] button again.

Chord “Breaks”
This feature is great for practicing tempo control.
Select the # of bars, and Band-in-a-Box will play for, say 4 bars (selectable), and then will rest all instruments for the next 4 bars. During the silence, you keep playing (comping, drums, melody, etc.), trying to stay in tempo. Drummers can mute the drum part. When the band comes back in after the 4 bars, you’ll get instant feedback on how well you have maintained the tempo, as indicated by whether the band comes back in time with you or not.

Once set, this feature works automatically with all songs until you turn it off.

MIDI File to Style Wizard
Making styles with the Style Wizard is a process involving:
- Loading a MIDI file into the Style Wizard.
- Listening to the MIDI file by muting channels to identify parts.
− Picking the channels to use for the BB Parts.
− Picking the snapshot bars for the “a” and “b” substyle.
− Pressing the [Generate NEW style...] button.

This section will discuss the various items in the **Style Wizard** dialog and the **Style Wizard Additional Settings**. The Style Wizard is used to generate a Band-in-a-Box Style from a MIDI file. The Style Wizard does this by analyzing the file and creating patterns emulating the notes and rhythms for the style. First off, you'd need to get a MIDI file to use.

**Important:** You should use a MIDI file that you have composed and arranged – if not, you need to first get permission of the composer and arranger before making a style from the MIDI file.

Using the MIDI File to Style Wizard

The Style Wizard converts any MIDI file to a Band-in-a-Box style. In this tutorial, we're going to load in the Violet.MID found in the \bb folder and convert it to a style - which we'll call Violet.STY.

Start with a new song and press the Style Wizard button or choose **Styles | Style Wizard** to launch the Style Wizard. The dialog is largely empty because we haven't chosen a MIDI file yet. Press the [Open] button and load in the file c:\bb\violet.MID. The Style Wizard then does the following automatically:

The chords for the MIDI file are interpreted and written on the Chordsheet. The “part markers” for the file are displayed on the Chordsheet. For Violet.MID, the Style Wizard has found the correct part markers – by looking for drum fills and other signs of a part change – and has assigned substyle “a” to all of them. We'll change some of them to “b” later.
The channels used in the MIDI file are displayed in the dialog, with the patches used and # of notes played on each channel. (For Violet.MID you can see that channels 2, 3, 4, 6, 7, and 10 are used.)

The Style Wizard analyzes the parts and guesses at which Band-in-a-Box part - Bass, Piano, Drums, Guitar, or Strings to use for each track. Band-in-a-Box has correctly assigned 5 instruments - not assigning a part to the Melody.

The Style Wizard suggests which bars (“snapshots”) to include in the style. The suggested bars are bars with all of the “BB Part” instruments.

<table>
<thead>
<tr>
<th>Chn.</th>
<th>BB Part</th>
<th>Patch</th>
<th>#Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Bass</td>
<td>33 Acoustic String Bass</td>
<td>312</td>
</tr>
<tr>
<td>3</td>
<td>Piano</td>
<td>1 Acoustic Piano</td>
<td>842</td>
</tr>
<tr>
<td>4</td>
<td>--------</td>
<td>57 Trumpet</td>
<td>333</td>
</tr>
<tr>
<td>6</td>
<td>Strings</td>
<td>12 Vibes</td>
<td>220</td>
</tr>
<tr>
<td>7</td>
<td>Guitar</td>
<td>25 Nylon String Guitar</td>
<td>1630</td>
</tr>
<tr>
<td>10</td>
<td>Drums</td>
<td>1 Standard Drum Kit</td>
<td>860</td>
</tr>
</tbody>
</table>

Bar Snapshots beginning at bar #’s (eg. 1,3,7)

A Substyle | 9-101
B Substyle | 12,20,28,36,44,52,60,68

Drum Fills (1 bar - A Substyle) | 12,20,28,36,44,52,60,68
Drum Fills (1 bar - B Substyle) | 12,20,28,36,44,52,60,68

Note: The Style Wizard has entered some of these settings automatically - but you'll have to type in the data as shown.

Usually you'll want to customize these snapshot bars to control which bars get included in the “a” or “b” substyle. In the Violet.MID style, the Style Wizard has offered to include Bars 9-101 (inclusive) and wants to put them all on the “a” substyle. Continuing on, we want to make a great sounding style, so it is important that we have the following two items correct:

- The “BB Parts” have to be correct. We can audition the MIDI file by playing a loop and listening to the MIDI file and muting channels by clicking on the “Channel” checkboxes. From that, we can hear the individual parts and assign them correctly, as we would like them in the style. By playing the MIDI file inside the Style Wizard we can tell which bars to use for the “a” and “b” substyles.

Tip to help you choosing which bars to use:

To listen to the MIDI file, you can either exit the Style Wizard dialog and just play the song like any other Band-in-a-Box file, or play a looped section inside the Style Wizard using the [Play], [Stop], and “Loop at Bar” settings.

OK, the Style Wizard has already made the correct settings for the “BB Parts” for us, so we don't need to make any changes there. Let's move to the Snapshots section, and enter the bar numbers that correspond to the substyles that we'd like for the Jazz tune. After listening to the tune, we notice that there is a “2-feel” Jazz section, and a “4-in-the-bar” section. We want those as “a” and “b” substyles, so we enter the bar #s that correspond to these settings.
In the Snapshots area of the Style Wizard:
- Enter “1-20” for the bars for the “A” Substyle.
- Enter “21-37, 38-68” for the “B” Substyle.
- Enter “12, 20” for the “A” Drum Fills.
- Enter “28, 36, 44, 52, 60, and 68” for the “B” Drum Fills.

Note: Of course you don't need to enter this much detail. You could just enter a single range like 1-20 for the “a” substyle and make a quickie style. We're illustrating “advanced” style-generation here.

Press [Generate NEW style…]; choose a name for your style, and the style will be made.

Let's call it Violet.STY. Now to hear your style! You could play the style with any song of course, by loading in a song and then loading in the Violet.STY. It is easily available from the Favorite Styles dialog (Shift+F9).

For this tutorial, load in the song V_TEST.MGU that we made for you. That's a Jazz Swing song using different chords than Violet, and it uses the Violet.STY (So you need to have made that style before you try to play the song or you'll get a “Violet.STY not found” message.)

Save the existing song before loading in the new song. When Band-in-a-Box saves a song that has an entire MIDI file on the Melody or Soloist tracks it gives it a special MGX extension. So you'll be saving the file as Violet.MGX.

Alternatively, if you'd prefer to play the Violet.STY style without loading in another song, you can do it as follows. Since the Violet.MGX file currently has the entire MIDI file on the Melody track the first thing we need to do is Mute the Melody (Alt+9 or right-click on the Melody part at the top of the screen). The next thing is the Enable the Style, by choosing Style | Style is Enabled so that this item has a checkbox.

Auto Endings for Styles without Endings
If you've made a style, and haven't included an ending, a 2-bar ending can be generated automatically, based on the style. This makes it easier to make complete styles using the Style Wizard.
To hear an example, load in the song c:\bb\Tutorial – BB 2005\No Ending.MGU. This song uses NOENDING.STY, a style that doesn’t have an ending. An ending will be generated automatically for this style.

So we've made our first style! In summary, making styles with the Style Wizard is a process involving:
1. Loading a MIDI file into the Style Wizard.
2. Listening to the MIDI file by muting channels to identify parts.
3. Picking the channels to use for the BB Parts.
4. Picking the snapshot bars for the “a” and “b” substyle.
5. Pressing the [Generate NEW style…] button.

Advanced Settings and Preferences
Click on the [More] button to open the Style Wizard Advanced Settings and Preferences.

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There are 2 sections to this dialog, Advanced Instrument Settings and Preferences.

**Advanced Instrument Settings**

The advanced instrument settings allow settings for the instruments (drums / bass / piano / guitar / strings) to be included in the style. The settings are:

- **Drums**
  - **Substyles**: A&B
  - **Voicings**: Auto Select (Live Drums or Grid)

- **Bass**
  - **Substyles**: A&B
  - **Voicings**: Auto-select bass notes

- **Piano**
  - **Substyles**: A&B
  - **Voicings**: Auto Voicings

- **Guitar**
  - **Substyles**: A&B
  - **Voicings**: Auto Voicings

- **Strings**
  - **Substyles**: A&B
  - **Voicings**: Auto Voicings

The “Substyles” determines whether the instrument is included in the “A,” “B,” or both “A&B” substyles. For example, if you want to make a style that only uses the strings on the “B” substyle, set the strings instrument part to “B” only.

The Voicings settings determine, for the various instruments:

- **Drums (“voicings”)**: Whether the patterns will use live or grid style patterns. Default mode is “auto,” which normally uses live patterns, but you can force it to use live or grid style patterns. Live patterns have higher resolution and can use more instruments, so in general are the better choice.

- **Bass (“voicings”)**: Determine if the bass part will use All notes / Scale tones only / Root 3rd, 5th, 7th / Root, 3rd, 5th / Root and 5th / or just the Root. The default is “Auto-select” which usually allows all 12 semitones.
Piano, Guitar, and Strings Voicings determine how the Piano patterns will be voiced. The choices are Auto, Include Full Voicings, Tritones only (3rd/7ths), Power Chords (Root/5th), Chord Mask Half Octave, and Chord Mask Full Octave.

The auto-setting usually uses the “Include full voicings.” If the part uses 2-note chords, you should over-ride this setting to “use tritones” so that the most important notes of the chord (the tritone) will get included. You can also use chord masks so that specific patterns over chords will get added to your style, and they will play exactly as in your MIDI file (just transposed). Set the voicings to use “ChordMask Full Octave” or “ChordMask Half Octave.”

You wouldn’t make a Style Wizard style from scratch using chord masks, because there need to be generic patterns in the style. So you do it as a 2-stage process. First time, make the style using generic patterns (e.g. Voicing type “Auto”) and then change voicings to Chord Mask, and add those to the style. As with other Style Wizard features, it is important that the chords and part markers on the chordsheet be very accurate. So if they aren’t, you should fix them before generating a style.

The Emb. (embellish) checkbox determines if the patterns for Piano, Guitar, and Strings will be embellished. If embellish is selected on a chord like D7 (in the key of C) 13ths, 9ths, and #11 notes might be added to embellish the chord. A Jazz piano style would likely use this.

The “Include Empty patterns Threshold” setting defaults to None. Possible settings are None / 2 beat / 1 bar / 2 bars. If set to none, the instrument will always play in the style, if set to “1 bar” there will be “spaces of silence” up to 1 bar long (perhaps longer if chained together) in the style for that instrument. So if an instrument is used sparsely in a style, set this setting to something higher than none.

The Velocity Adjust will make an instrument louder or softer in the style.

Preferences affect the style itself.

Save settings with songs
The song will be saved as an MGX file, since the Melody track type is Multichannel and contains the MIDI file. If you select this, the Style Wizard settings are all saved with the MGX file.

Leave StyleMaker open after creating style
If set, after generating the style, the StyleMaker is left open for you to examine/edit the style directly.
Auto-interpret MIDI file. (Default = Yes)
When set, the Style Creation Wizard will set the channels, BB Parts, and snapshots for you. Normally this setting should be left on.

Delete existing patterns (when adding to the style). (Default = No)
If this option is set when you create style patterns to add to an existing style, the entire instrument will first be erased in the style for any instrument used in the new style. When you generate a style by adding to an existing style, the StyleMaker is then opened up, allowing you to pick a new name for the style (so you don't overwrite the existing style).

# columns to leave unused in the style. (Default = 0)
If set to zero (the default), the Style Creation Wizard can create the biggest style possible — filling up the rows completely with patterns. But if you set this to a non-zero value it will limit the # of patterns that can be made. Since there are 30 rows in the StyleMaker, you can set this setting from 0 to 29.

Generate new pattern after # duplicates
The Style Creation Wizard won't insert patterns unless they are unique compared to the ones already entered. But (with this setting at the default of 8), after 8 duplicates of the same pattern, a 2nd pattern will get entered that is a duplicate of another pattern. Setting this to zero would mean that every pattern would get entered (regardless of whether it was unique); setting it to a high number like 200 would mean that only truly unique patterns are entered. To maintain the correct balance in the style, since the maximum weight of a pattern in the StyleMaker is 8, this setting should be left at 8 in most situations. If your style is “filling up” all of the available columns, then set this to a higher number.

Allow Pitch Bend in style
If set, pitch bend present on the MIDI file will be included in the style. Make sure that the MIDI file pitch bend range = two semitones.

Allow pushes in style
If set, the style will allow pushes (playing instruments before the beat). This is done by setting the push values in the individual pattern’s options.

Repeats and Endings Wizard

Tutorial
For this tutorial, we'll be using demos from the “Tutorial–Repeats and Endings” folder.
Load in the Song “Miles1 Tutorial (no repeats yet)” from the Tutorial–Repeats and Endings folder. You’ll notice that this is a 1-32 bar form. There are no repeats and endings entered for this song. We’ll be adding them now.
First of all, when you load in a song, you’ll notice some new “Form Marker” features that happen for any Band-in-a-Box song.
Repeat symbols are drawn at the beginning and end of the entire form (bars 1, 32 in this song) and “end” is written on bar 33, which is the ending.

Bars past the end of the song are colored gray.

These form markers are present for every song, unless you disable them by Preferences | Display. These are not the type of repeats/endings we’re referring to here however. The repeats/endings we are talking about now occur during the form, and are the 1st/2nd endings, DS al Coda and other repeat types that you see on a typical lead sheet.

So, in our song “Miles1 Tutorial (no repeats yet),” we can have a look at it and see if there are any repeats/endings.

It appears from looking at the chordsheet that this 32 bar form consists of two 16 bar sections, with a 1st ending at bar 9, and a 2nd ending at bar 25.

So now we’d like Band-in-a-Box to display it like that, with the first and second ending markings.

Since we want to insert the 1st/2nd ending on bar 9, we right click on the chordsheet on bar 9, and select Repeats/Codas/1st-2nd Endings.

We then see the Edit Repeats and Endings dialog.
Click on the 1st/2nd endings radio button, and enter the following.
- Repeat begins at bar 1.
- 1st ending begins at bar 9.
- 1st ending lasts for 8 bars.
- Type of Repeat/Ending = 1st/2nd endings.

By entering this data we’ve defined the complete 1st and 2nd ending. If the 1st ending begins at bar 9 and lasts for 8 bars, the 2nd ending must begin at bar \(17+8=25\) (there’s an 8 bar repeated section from bar 1 to 8).

Now, this was a pre-existing song, and it already has all of the bars laid out. So we make sure that we don’t select the “Generate (insert) new bars” checkbox.

Click on [OK-Make Repeat], and the repeat gets made, and the chordsheet redraws with the 1st/2ndrepeat showing.

Make sure you have Fake Sheet mode selected on the chordsheet.

As you can see there is a 1st ending at bar 9. At bar 16 there is a repeat symbol, indicating that the form goes back to bar 1 for 8 bars, and then will go to the bar after bar 16 for the 2nd ending. The 2nd ending is marked there. The bar \# is 25, because the bars are numbered in linear fashion, and it is the 25th bar of the song as it would be played. Then the song goes to the end which is bar 32.

Now we can see a LINEAR view of the same song, similar to the way it was before we put the 1st/2nd endings on it. To do this, deselect the Fake Sheet checkbox on the main page. You’ll then see the song like this.
This shows all of the 32 bars, including the bars that are part of the repeat – these are highlighted in gray. Exposing these bars shows the linear view of the song, the way the song would be played. It also allows you to enter custom information for any of the bars, including the bars in the “gray area.” For example, if you wanted the chord at bar 21 to be an Em9 instead of an Em7, just type it in, even though it’s in the repeated section leading to the 2nd ending.

You can toggle between the 2 views for the traditional lead sheet view with the Fake Sheet mode, and the “normal” (linear) view with Fake Sheet mode OFF.

The List of Repeats/Endings allows you to manage the repeats/ending that have been entered. Delete/ Append/ Insert a repeat or ending using this list, which opens with the Edit List button in the Edit Repeats and Endings dialog.
Chapter 13: Tools and Utilities

DAW Plug-In Mode

Band-in-a-Box has a “plug-in” mode for your favorite sequencer (RealBand, Sonar, Reaper, ProTools, FL-Studio, Nuendo and more). With the plug-in mode, Band-in-a-Box is open as a small always-on-top window, and acts as a plug-in for your favorite DAW/sequencer, so that you can drag-and-drop MIDI and audio (WAV) tracks from Band-in-a-Box to your favorite sequencer. Work in your favorite sequencer, type a progression in Band-in-a-Box, and then simply drag the track from Band-in-a-Box to your sequencer’s track at the desired track and bar location.

The DAW Plug-in mode is a mode within the regular Band-in-a-Box program. This mode allows you to transfer tracks, or parts of tracks, to other DAW Sequencers easily, by simply dragging the track icons from Band-in-a-Box (BB) to the tracks window of your DAW.

You can enter and exit the plug-in mode easily.

Press the [Plugin] button on the main toolbar and choose the menu item Start DAW Plug-in mode, or go to the Windows menu and choose Plug-in Mode for DAW.

When you do this:
1. The window size of Band-in-a-Box changes to a small size (you can resize it to the size/position that you want, and it will remember that).
2. Band-in-a-Box becomes an always-on-top window, if this is option is set in the Plugin settings dialog.
3. You can now easily drag tracks from BB to your DAW, by mouse clicking on the part at the top (Bass, Piano etc.), and dragging to your DAW’s track.

You can also drag files to other programs, besides DAWs, if they accept a drop of audio files (WAV, WMA) or MIDI files. For example, Windows Explorer allows this. For this documentation, we will use Windows Explorer as an example. The [Drop] button is for DAWs that do not accept a direct drop of tracks that are not yet generated.

For the Drag and Drop to work, you need to have your MIDI driver set to use a DXi or VSTi driver (like Roland VSC DXi/VSTi or Forte).

Dragging Tracks from Band-in-a-Box to Windows Explorer (or a DAW).

1. Run Band-in-a-Box. Enable Plug-in mode as above.
2. Open (or make) a song in Band-in-a-Box. You can then drag all tracks (combo) or single tracks.
3. For a combo (master) track:
   - If you want the entire performance dragged to the DAW, drag the Combo button.
   - It will be dragged as audio, unless you have set it to be dragged as MIDI in Plug-In Options.
   - Normally a single file is dropped with the entire arrangement. But if you want all tracks transferred as separate files, you can enable this option in Plug-in options. Note that your DAW will need to support dropping of multiple files, and will typically put them on consecutive tracks.
4. For a single track:
   - If you want a single track transferred, drag that track name. For example, drag the Bass icon to transfer the bass track. If the track is a RealTrack (green), then it will be transferred as Audio. If it is a MIDI track (yellow), then it will be transferred as MIDI. If you want MIDI tracks transferred as audio, you...
can set this in Plug-in Options.

- Drag Individual MIDI tracks as audio (using VST/DXi)

5. It is also possible to drag and drop selected regions of a track.

If you would like to transfer only a portion of the performance, you can do this by selecting the region in Band-in-a-Box, and then dragging from the instrument part at the top of the screen (don’t drag the selected region). You will then get just the selected region dragged to your DAW.

Tip: If you hold the SHIFT key during the drag, then the file will be dropped as MIDI (if it is a MIDI track), regardless of the setting in Plug-in options.

Tip: If you hold the CONTROL key during the drag, then the file will be dropped as AUDIO (if it is a MIDI track, it will be rendered to audio using the DXi/VST that you have), regardless of the setting in Plugin settings.

Drop Panel

The [Drop] button is used to drag and drop tracks from Band-in-a-Box to Digital Audio Workstations that don’t support direct drag and drop. Many DAWs will allow you to do this directly, but, if your sequencer does not support the direct drop of a track that is not yet generated, you can drag from a radio button (Combo, Bass, Piano, etc.) to the Drop panel. When the button turns bright green the track has been generated and is ready to drag from the [Drop] button to you DAW.

Plug-In Options

To get to the DAW Plugin settings dialog, press the [Plugin] button, and choose the menu item Options for DAW Plug-in, or go to the Preferences dialog and click on the [DAW Plugin] button.
You will then see the plug-in options. Many of them have been explained above.

**Allow Drag n Drop (Default=true).** If disabled, the Drag Drop feature will not work. There shouldn’t be a reason to disable this.

**“Drag Individual MIDI tracks as audio (using VST/DXi)” (default=false).** When enabled, the chosen MIDI tracks get converted to audio, using your currently selected VST/DXi (e.g. Roland VSC, or Forte)

**Drag Combo track as audio (using VST/DXi) (default=true).** When enabled, the entire arrangement gets converted to audio using your currently selected VST/DXi (e.g. Roland VSC, or Forte). If not selected, the MIDI tracks in the arrangement get transferred as MIDI, in a single file.

**Drag Combo as separate tracks (default=false).** If set to true, when dragging the Combo radio button, the drop will result in multiple files, one for each track.

**Drag Audio as WAV/WMA.** If set to WAV, the audio gets dropped as WAV. If set to WMA, the audio gets dropped as WMA. Note that most sequencers will want WAV files.

**Always on Top.** If set, the plug-in window will be always-on-top. Note that if you change this in the dialog, it won’t take effect until you exit the dialog.

**Preserve dragged files permanently in folder. (default=false)** When you drag a file, Band-in-a-Box makes a copy of it and puts it in the c:\bb\DragDrop folder. This is a temp folder. Most DAWs (and Windows Explorer) take the dropped file, and make their own copy of it to incorporate into their file structure, but some don’t (e.g. “pure” wav editors like SoundForge). So if you are dropping the files to a DAW that works with dropped files and doesn’t make a local copy of them (like CoolEdit or SoundForge), then you should set the “Preserve dragged files permanently in folder c:\bb\DragDrop” to true. Otherwise, Band-in-a-Box will recycle (trash) the files in the DragDrop folder on boot up. You can retrieve these files from the trash if needed.

You can use a **Custom Drag n Drop Folder** for the temp files if you prefer, inside your DAW’s folder for example. Then the dragged files will also be in Explorer in a folder near your DAW’s audio project.

**Find File**

So many files, so little time? This feature is a “Swiss Army Knife” that allows you to find a Band-in-a-Box song (or any file that Band-in-a-Box can open), including filtering by words found in the file name or any text in the file.
Example uses:
You can:
- Get a listing of all BB songs on your PC with the word “Blues” in the title.
- Get a listing of all BB songs in the BB folder with the word “Reggae” in them. This produces a list of over 50 songs in the MegaPak. So you can quickly choose from them and know that, if you’re a reggae lover, you haven’t missed out on any BB songs/styles with Reggae. A similar listing for “Blues” reports 454 files.
The listing stays between sessions, so you can then take your time to explore all the songs that Band-in-a-Box offers that match your find term.

**Roland VSC3 Virtual Sound Canvas**

An important part of Band-in-a-Box is the band that you actually hear. This is determined by the MIDI driver that you use for output. The Roland Virtual Sound Canvas (VSC) is a top-quality software synthesizer.

You should install both the Roland VSC and VSC DXi, which are separate installations from the Band-in-a-Box program. When you install the VSC, you’ll see a “Roland VSC” MIDI Output driver listed in the Band-in-a-Box MIDI Driver Setup dialog (Opt. | MIDI driver setup...).

Use the Roland VSC3 with Band-in-a-Box and any other MIDI program that supports MIDI Drivers (almost all of them do). To use the Roland VSC3 for your output sounds, choose Opt. | MIDI driver setup... and select the “Roland VSC” as the MIDI Output Driver.

The VSC3 has a latency of 430ms, which means that it takes 430 milliseconds for the VSC3 to produce the sound after instructed to do so by Band-in-a-Box. Set the latency to 430ms in the MIDI Driver setup dialog. Band-in-a-Box will likely do this for you.

To use the superior quality of the Roland VSC DXi synthesizer, check the “Use DXi Synth” box in the MIDI Driver setup dialog and then select the VSC DXi under the Synth tab in the DirectX Plugins window. The latency for the VSC DXi is set automatically by Band-in-a-Box.

In addition to using the Roland VSC DXi for output, it is the default choice for direct rendering of Band-in-a-Box songs to audio wave files.

**TranzPort® Support - Wireless Remote Control**

TranzPort Support - Wireless Remote Control support for Band-in-a-Box

The Frontier Design TranzPort® is a wireless remote control hardware unit (Electronic Musician Editors’ Choice 2006) that now allows you to control Band-in-a-Box through walls from 30 feet away!

The backlit LCD provides a two-line readout, and buttons and a wheel allow control of many Band-in-a-Box features. Select songs and play/stop/pause/loop. Select/mute/solo tracks and volume/tempo changes are all supported. And best of all, when the song is playing, the chords of the song are displayed in time on the backlit LCD screen.

You can, for example, put the TranzPort unit on your piano at home (or your music stand on a gig) and load/play/control and view chords for songs, all while far away from your computer – all wirelessly up to 30 feet – even through walls! Selectable transpose lets the TranzPort show chords in a non-concert key (e.g. Eb Alto) while the computer shows concert -great for jam sessions! Or display the scrolling lyrics of the song on the TranzPort for...
Using TranzPort with Band-in-a-Box.

First, you need to purchase a TranzPort unit, and install it. Now, make sure that the TranzPort is installed and working. You can determine that it is installed and working by running Band-in-a-Box, and looking at the list of MIDI Drivers (Options-MIDI Drivers). If “TranzPort” appears on the list of MIDI-IN and MIDI-OUT drivers, then the TranzPort is installed correctly.

Important: DO NOT SELECT the TranzPort drivers, since it is not a sound module. Band-in-a-Box will automatically find the TranzPort unit to send/receive data.

To start using the TranzPort
- While Band-in-a-Box is running, “wake up” the TranzPort by pressing a key on the TranzPort (STOP key for example).
- The TranzPort display will show “Title of BB song” <tempo> <Current Track> <track volume> <patch #/name>
- For example, the screen might say
  - “My Tune”
  - 120  Mel v 122  p1 Acoustic Piano
- Track < and Track> buttons change the current track Bass/Drums/Piano/Guitar/Strings/Melody/Soloist/Thru

Controlling Patches/Tempo/Volume
- The WHEEL changes the tempo.
- Shift-WHEEL changes the volume of the ALL TRACKS.
- [Prev] [WHEEL] changes the volume of the current track.
- [ADD] [WHEEL] changes the patch of the current track using Favorite Patches.
- [NEXT] [WHEEL] changes the patch of the current track, cycling through all patches.
- MUTE AND SOLO mutes or solos the current track.
- [SHIFT] MUTE, will mute/un-mute ALL tracks.

Loading Songs
- [IN] button opens the “Favorite Songs” dialog. The LCD screen of the TranzPort displays the current song, and the WHEEL cycles through the various songs. When you’ve found the song that you want, press PLAY to load and play the song (or “Solo” to function like the OK button in the Favorite Songs dialog, note if “Play song when chosen” is set or not in that dialog). Press UNDO to cancel the dialog.
- [OUT] button functions in a similar manner, except it uses the Song List dialog.
- [Shift]- [IN] loads the previous song in alphabetical order, by filename, in the same folder.
- [Shift]- [OUT loads the next song in alphabetical order, by filename, in the same folder.

Playing Songs
- PLAY button plays the song.
- [RED button beside play] pauses the song.
- STOP button stops the song.
- [<<<] and [>>>] buttons jump to the previous or next section of the song. You can define custom sections of the song (using the Conductor in Band-in-a-Box), but if you haven’t, the sections default to lead-in, intro, first chorus, middle chorus, last chorus, ending.
- LOOP button will loop the current section
- SHIFT LOOP button loops 4 bars
- UNDO is panic button (turn MIDI notes off)

**Playback Display**

During playback, you will see the chords (and/or lyrics) to the song, scrolling along in time to the music. For example, you might see this…

```
5| D        | D7          |
7| G        | Gm
```

The * marks the current bar (bar 5), which is a D chord. The screen always scrolls to show you 2 bars ahead of the current time.

**TranzPort Dialog**

There is a [TranzPort Settings](#) dialog inside Band-in-a-Box with additional settings.

- Transpose the display
- Show Note-based lyrics during playback
- Show Line-based lyrics during playback

- [REC] has no action.
- [PUNCH] has no action
- [Footswitch] has no action

**Guitar/Bass Tuner**

The Tuner is optimized for guitar and bass, though it may be useful with other instruments. Connect an electric guitar or bass to your computer’s sound card Line-In, or tune an acoustic instrument using a microphone connected to the sound card Mic input. Play a pitch and the tuner will auto-range to determine the nearest note, and display the intonation of your instrument.

Press the on-screen Tuner button or select the **GM | Guitar Tuner** menu item to launch the Tuner Window.

*Tip:* There are detailed Guitar Tuner instructions in the online Help topic [Connecting an Instrument](#).
The Guitar Tuner must be able to receive audio from your instrument via the line-in or microphone input of your sound card. Please make sure that either the Microphone In or Line-In is enabled in the Recording Properties of the Windows Mixer (or the appropriate Mixer application for your sound card).

**Master Tuning**

This function allows you to tune your sound card or module to another instrument, as well as adding a testing function to see if your sound card supports Master Tuning. This is useful if you're playing along with an instrument or recording that can't easily be re-tuned like an acoustic piano. A setting of 0 is the default A = 440.

Select the GM | Master Tuning menu item to launch the Master Tune dialog.

![Master Tune Dialog](image)

**Tip:** Not all sound cards/modules support the Master Tuning feature. To see if your sound card supports Master Tuning, press the TEST button.

**Dynamic 3D Drum Kit Window**

This sizeable drum window is an animated 3D display of a complete MIDI drum kit with all 61 drum sounds displayed on their respective instruments. Watch the drums being played or play-along/record by using QWERTY keys or a mouse.

To launch the Drums window, click the Drums button in the View Panel. You can do several things with the Drums Window:

- Watch the Drum part being played on the Drums window in real time.
- Play along with the drums in real time by mouse clicking on the drum instruments, or using the QWERTY keys. The computer keyboard, the piano key number, and sound names can all (optionally) be made visible on the hint line by moving your mouse cursor over a given instrument.
- Record a drum part into Band-in-a-Box.

**Drum Display**

All the General MIDI percussion instruments are shown. Some percussion instruments are triggered by multiple MIDI notes. When a sound is controlled by more than one MIDI note, a percussion instrument will show different behavior in response to the different notes. For instance, the Hi-Hat responds differently to Close Hat, Pedal Hat, and Open Hat MIDI notes.
The Drum Kit window can be resized to tile or fit with other windows of interest, or the drums can be moved off-screen. The window looks best if your computer display is in High Color (16 bit) or True Color (32 bit) video mode.

The onscreen instruments may be played by mouse clicking or by pressing the appropriate computer keys. There is an option to display all the QWERTY names on the drums at the same time, so that you can see what keys to hit without having to mouse over the instrument. When playing by mouse click or computer keys, the Shift key can be used to switch the velocity between two user-specified levels (i.e. loud=100 and soft=50).

The drums that you play show up in green; the computer played drums are red.

The multi-note instruments send different MIDI notes to your sound source, depending on where you “click” on the instrument. For instance, the Kick Drum can send three different notes: Ac. Bass Drum (MIDI note 35), Bass Drum 1 (MIDI note 36), and Square Kick (MIDI Note 32).

Tip: The hint line at the top of the window describes the current control under the mouse cursor. Use the hint line to learn the mouse-responsive areas of each drum instrument.

Control Buttons:
- Record: Puts Band-in-a-Box in Record mode so drums can be recorded.
- Play: Starts song playback.
- Rewind: Stop and return to song start.
- Stop: Stops song playback.
- Size Buttons 1/1 - 1/2 - 1/4: Clicking on these buttons changes the size of the drums window to full size, half size, or quarter-size. (You can also resize the drums window to any size by dragging a window border.)
- Settings: Adjusts program behavior. See settings window section below.
- Help: To launch the drum Help File, press F1.
Press computer keys to play drums.

Drums are grouped on the computer keyboard by category. The kick, snare, and hi-hat sounds are on the lowest keyboard row. The lower-middle row contains toms and cymbals. The upper-middle row contains Latin drums, and the top row contains Latin hand percussion. The Numpad keys contain the rest of the Latin hand percussion plus the electronic tones.

**Multi-Note Instruments**

Kick Drum - Ac. Bass Drum, Bass Drum 1, Square Kick
Snare - Acoustic Snare, Side Stick
Hi-Hat - Closed, Pedal, Open
Floor Tom - Low, High
Electronic Pad - Multi-zoned for Hi-Q, Slap, Electric Snare
High Conga - Mute, Open
Surdo - Mute, Open
Cuica - Mute, Open
Metronome - Bell, Click
Whistle - Long, Short
Triangle - Mute, Open
Guiro - Long, Short
Scratch - Push, Pull

**Settings Dialog**

Press the Settings button (to the left of Rewind button), to adjust the various Drum Kit Settings.
Drum window is always on top
Use this checkbox to keep the Drums window on top of other program windows.

Note Velocity
When playing drums with a mouse or computer keys, the shift key toggles between two levels of note velocity. The two velocity levels can be set any way desired. For instance, if you want the shift key to send quieter notes you can set the shift velocity lower than the non-shift velocity.

Randomize
Use this checkbox to enable the program to send random velocity levels when playing the drums. This is handy when using non-velocity sensitive devices. “Range” controls the amount of velocity randomization. Usually a small range works best, around 10% to 30%. For example, if velocity is set to 127, and the random range is set to 20%, notes would randomly vary between a maximum velocity of 127 and a minimum velocity of 102.

Instrument Hints
Customize the appearance of the Hint line.
- Show Note Name
- Show MIDI Note Number
- Show Computer Key

Show
“Show All Instruments” shows all instruments in the drum window.
“Show Used Instruments” displays the basic trap kit, but does not display any extra instruments unless they are used in a song.

The drum window is cleared each time Play or Stop is pressed.

MIDI Monitor
MIDI Monitor displays a listing of data received from computer MIDI Input and/or Band-in-a-Box output, useful for educational or diagnostic purposes.

The MIDI Monitor opens with the [MIDI] button on the main screen toolbar, or with the menu command Window | MIDI Monitor.
The MIDI Monitor has options for 1-based patch numbering and patch name display. Quick View Filter presets (such as “Notes Only,” “Controllers Only,” “Program Changes Only,” “Programs including Bank Changes”).

**MIDI Monitor - Main Window**

**MIDI Display Controls**
- **Event**: The current event number since the display was last cleared.
- **Clear**: Clears MIDI Display, Event counter, and Channel Activity panel.
- **Save Text**: Save a tab-delimited text file of the data in the MIDI display. The file can be opened with a word processor or spreadsheet program, for printing or further study. Various Save Text options can be adjusted in the Settings window.
- **Settings**: Open the Settings dialog, to adjust display behavior. The display can be modified to suit the task at hand.
- **Filter**: Open the Filter dialog, where receive settings can be adjusted.

**Sequencer Control**
- The [Play], [Rewind], and [Stop] buttons control song playback without the need to return to the main Band-in-a-Box screen.

**Timer**
A millisecond timer useful for viewing timing relationships between messages. To use Band-in-a-Box to measure in milliseconds- set Band-in-a-Box PPQN to 480, and Band-in-a-Box tempo to 125 BPM. With this special resolution and tempo, tick values in the Event List window will correspond to milliseconds.

**Current Time** - The millisecond count since the timer was last started. Click anywhere in the Timer area to clear the Current time, setting it to zero.
Channel Activity Panel
This panel has an array of “LEDs” to show which channels are active.

MIDI Display Area
The MIDI Display area at the bottom of the main window, displays the data generated by Band-in-a-Box and/or data received at the computer MIDI input. Each row is a single MIDI event.

Evt #  Event number, starting from when the display was last cleared.
Time (mS)  The time in milliseconds of the event, from when the timer was last cleared.
Source  Int means the event was generated by Band-in-a-Box, and Ext means the event was generated by an external MIDI Device attached to the computer MIDI In port.
Raw  The raw bytes representing each MIDI message. Most MIDI Message types contain three bytes, but some messages contain one or two bytes. Sysex messages can contain an arbitrary number of bytes. This field is blank in the case of Sysex messages. With Sysex messages, up to 16 “Raw” bytes are displayed in the Data fields. Long SysEx messages are displayed on multiple lines, 16 bytes per line.
Status  Text name of the Event type.
Chan  MIDI channel of the Event. This field is blank for System messages (values from $F0 to $FF). System messages do not have an associated channel.
Data 1  Text name for the meaning of the first data byte of the MIDI message. For some messages such as Pitch Bend or Song Position Pointer, the value of both data bytes 1 and 2 are calculated and displayed in Data 1.
Data 2  Text name for the second data byte of a MIDI Message.

Note: Some MIDI messages, such as Program Change or Channel Pressure, have only a single Data byte, and the Data 2 field will be blank. Also, some MIDI Messages have no data bytes, in which case both Data fields will be blank.

Display Filter
The Display Filter dialog allows you to select what MIDI events will be recognized by the MIDI Monitor program.

Display Filter dialog: 
- Channels: X 1, X 2, ..., X 16
- Events: Note Off ($90), Note On ($98), Poly Pressure ($77), Control Change ($B0), Program Change ($7C), Channel Pressure ($7D), Pitch Bend ($7E), Sysex Start ($F0), MTC Quarter Frame ($F1), Song Position Pointer ($F2), Song Select ($F3), Undefined ($F4), Undefined ($F5), Tune Request ($FE), Sysex EOX ($F7), MIDITiming Clock ($F8)
- Controllers: #0 Bank Select MSB, #1 Mod Wheel MSB, #2 Breath Control MSB, #3 Undefined, #4 Foot Ctrl MSB, #5 Portamento Time MSB, #6 Data Entry MSB, #7 Main Volume MSB, #8 Balance MSB, #9 Undefined, #10 Pan MSB, #11 Expression MSB, #12 Undefined, #13 Undefined, #14 Undefined, #15 Undefined

Filter button

MIDI Monitor – Display Filter dialog.
Tip: Virtually any combination of display events can be selected in the filter. It is therefore possible to select combinations that do not display any MIDI events at all. The MIDI Monitor will warn you about the more obvious “nil” combinations, but if you find that you are not receiving what you expected, carefully re-examine these filter settings.

Sound Blaster Support

There is direct support for the Sound Blaster series of sound cards. This includes a built-in *AWE Editor*, allowing you to edit the synthesizer sounds on the AWE 32/64 series and to directly load Sound Fonts. There are also on-screen buttons to launch the Sound Blaster applets that control the MIDI Synthesizer (*AWE Control*) and *Mixer* on the Sound Blaster card.

Press the [SB] button at the right of the main screen toolbar, or select GM | Run Other Program to run the AWE 32 Applet.

Example: Install the GS Sound Font on the Sound Blaster. This will install the “Drum Brushes” sounds that Band-in-a-Box styles use on some Jazz Styles. Once you launch this applet, click on the Synthesizer Panel, and then select GS from the Available Synths, and press the [Apply] button.

Tip: If pressing these buttons doesn't result in the AWE Control Panel or the Mixer being launched, it means that either you don't have a SB card capable of loading Sound Fonts (e.g. a SB16/128 has no Sound Font capability) or there is an error in the text file c:\windows\sbwin.ini

AWE 32/64 editor

Edit Sound Blaster AWE 32/64 synthesizer sounds directly using this built in editor. Save/Load files with new sounds. The AWE Editor is a patch editor for the Creative AWE32 and AWE64 sound cards’ EMU 8000 synthesizer chip. AWE Editor also works with the Creative Sound Blaster Live sound card.

Event List Editor

You can edit events including all MIDI events and lyric events using the Event List Editor. It can be launched in several ways.
- In the *Melody* menu, choose *Edit Melody Track | Step Edit Melody.*
- In the *Soloist* menu, choose *Edit Soloist Track | Step Edit Soloist Part.*
- In the *Notation* menu, choose *Event List Editor*...

or in the Notation window by pressing the event list button (#).

Different colors are used for different event types in the event list, to visually distinguish notes, patch changes, etc. The Event list for the notation colors the events differently as follows:
- Notes starting near the beat boundary are dark pink.
- Notes starting on the off-beat are light pink.
- Patch changes are cyan.
- Controller changes are yellow.
- Pitch Bends are grey.

The Event List Editor allows you to modify, insert, and delete notes:
- Double-click on an event to edit it (or press the [Edit] button.)
- [Insert] puts an event before the current event.
- [Append] puts an event at the end of the track.
- [Delete] removes an event.
- [Update] redraws the notation screen.
Event List Filter

There is a filter for the Event List Editor, allowing you to, for example, quickly spot all patch changes. For example, to examine all of the patch changes on the Melody track.

Choose “Use Event Filter,” and then press the [Filter…] button.

In the Event List Filter select the type of information you want to display. In this case, it is program changes (patches) only.

The track will then display with the program changes only.
The *Event Type to Edit* dialog opens when either the [Insert] or [Append] buttons are pressed in the Event List Editor. This dialog allows you to select which type of event to insert or append - note, controller, pitch bend, etc. – and then opens the selected edit dialog.

**PG Vinyl DirectX Plug-In**

Remove clicks and pops from your old vinyl record collection with the new PG Vinyl plug-in. If you no longer have a phono preamp, just attach your turntable to your mixer console. PG Vinyl can provide RIAA equalization for better tone. PG Vinyl can reduce broadband noise, and remove clicks on digital audio tracks. Though PG Vinyl was not designed as a distortion remover, in some cases it can reduce clipping distortion on digital audio tracks which were recorded too loud.

**PG Vinyl Tool Features**

**Enable Plug-in Checkbox**

Toggle the checkbox to compare the original recording to the plug-in output. This helps avoid excessive settings. PG Vinyl Tool uses look-ahead buffering, so if you bypass the plug-in, the output will “jump in time.” This is expected, because there is some added delay when PG Vinyl Tool is enabled.

**RIAA EQ Checkbox**

If you recorded from a stereo tuner or other gadget with a phono input jack, DO NOT enable the RIAA EQ section. The RIAA EQ option is for folks who do not have a turntable preamp, having recorded with an ordinary mixer. RIAA EQ was designed to overcome the shortcomings of vinyl. RIAA pre-emphasis is applied when vinyl discs are mastered. High frequencies get boosted, and low frequencies get cut. This makes high frequencies compete better.
against the inevitable vinyl pops, clicks, and surface noise. Pre-emphasis also prevents low frequency signals from bouncing the stylus out of the groove.

When you play a record, the preamp's RIAA de-emphasis will reverse the EQ. High frequencies are cut, and low frequencies are boosted. If you do not apply RIAA de-emphasis, either with a phono preamp or in the software, vinyl will sound too bright and shallow.

**HF Boost**

If you recorded the disc with a mixer which has high-impedance inputs (preferably 1 MegOhm or better), set HF Boost to zero, for “pure” RIAA de-emphasis.

Most audio mixer instrument/line inputs have impedance in the 10 KOhm to 100 KOhm range. A turntable's magnetic cartridge will be “loaded” by the lower-than-expected mixer impedance. This won't damage the turntable, but will affect the frequency balance. A 10 KOhm mixer input could cut the highs quite a bit, and even a 100 KOhm mixer input could cut the highs a perceptible amount.

There is no way to predict the characteristics of your turntable cartridge and the input impedance of your mixer. Adjust HF Boost by ear until the frequency balance sounds right. You may not get the frequency response as precisely as the mastering engineer intended, but if you are happy with the result, who cares?

Some PG Vinyl Tool options can cut highs. If a record is damaged so much that subsequent PG Vinyl Tools cut high frequencies along with the noise, you could increase the HF Boost by ear, to make up the loss.

**Rumble Filter Checkbox**

Cheap or worn-out turntable platters can make subsonic vibrations. Slightly warped records can also make undesirable low-frequency noise. Use the Rumble Filter to block unwanted low frequencies.

The Rumble Filter is a 24 dB per Octave Butterworth High Pass filter, which attenuates undesirable low frequencies. In most situations, it will do no harm to always enable the Rumble Filter.

**Rumble Filter Frequency**

At the default of 40 Hz, signals below 40 Hz are attenuated, and signals above 40 Hz are unaffected.

Vinyl mastering engineers typically avoided frequencies lower than 40 Hz. It is difficult to make vinyl cleanly reproduce very low frequencies. Also, most consumers, even audiophiles with expensive stereos, did not have speakers capable of reproducing lower than 40 Hz.

Unless you are dubbing classical organ records, it is doubtful that there is anything of interest below 30 or 40 Hz. While adjusting PG Vinyl Tool, you can experimentally toggle the Rumble Filter on/off to make sure the filter is not removing important audio features.

**DeCrackle Checkbox**

Enable the DeCrackle section. PG Vinyl Tool defines crackle as high frequency defects in the range of 2000 Hz to 20,000 Hz.

A single microscopic speck of dust, or a tiny static discharge, can cause an isolated “tick” which is too short to be considered a “click.” The DeCrackle section removes these isolated ticks. Crackle is a cluster of high-frequency ticks. If there are multiple close-spaced ticks, the ticks are perceived as a crackling sound.

First disable the DeClick Checkbox, and adjust DeCrackle. On a clean record in good condition, DeCrackle may be the only necessary section. Normally you would only enable the DeClick section if DeCrackle can't adequately clean up the mess.

**DeCrackle Amount**

This adjusts the sensitivity of what PG Vinyl Tool considers to be a tick/crackle. At zero, nothing is removed. As the DeCrackle Amount is increased, PG Vinyl Tool will mute additional “tick suspects.” If the control is set too extreme, PG Vinyl Tool will partially mute musical features, such as hand percussion or high-hat notes. Only set the control high enough to remove ticks and crackles. If longer clicks remain, enable the DeClick section for additional cleaning.

**DeCrackle Activity**

This displays the percentage of audio which is muted. Except for very worn records, adjust the DeCrackle Amount so that the DeCrackle Activity reads no higher than a few percent. On very good discs, one might get “perfect” results with less than one percent of DeCrackle Activity. Strive to mute only the minimum necessary to clean your record.
NOTE: If DeCrackle is set outrageously high, the DeCrackle Activity reading can exceed 100 percent. This is not a bug. The DeCrackle section does three processing passes in progressively lower frequency bands. It might happen that the first pass will “heal” a click, but subsequent bands will “heal” the left-over residue of that click.

Sometimes a bad click might be repaired in multiple processing stages, until the defect can no longer be detected. With absurdly high DeCrackle settings, the DeCrackle Activity can exceed 100 percent, because several stages incrementally repair the same bad clicks.

**DeCrackle Fill Gaps**

When a tick is detected, it is smoothly “snipped out” of the high-frequencies, without affecting the lower frequencies. High-frequency ticks last less than one millisecond. Each muted section is very short, only a few samples.

If Fill Gaps is set to zero, this tiny high-frequency-muted region is replaced by nothing. It behaves like a very brief high-frequency dropout. On a clean record, occasional muted ticks are never noticed. But on a dirty scratched disc, if many snips are made, it will sound like a reduction in high frequencies.

As you increase the Fill Gaps knob, PG Vinyl Tool will extrapolate the signal in the vicinity of the click, synthesizing a “guess” at what the signal might have been in the tiny muted region. If you set Fill Gaps to 100, it will insert this extrapolated guess at the same level as the original signal. This allows many ticks to be snipped from a dirty record, without reducing the high frequency content.

One might encounter a badly damaged record where the audio is so damaged that the guesses are not good enough. In these problem cases, try setting Fill Gaps to 70, or 50, filling the gaps with lower-amplitude guesses, which may sound less obnoxious.

Set Fill Gaps to 100, unless it sounds bad.

**DeClick Checkbox**

Enable the DeClick section. PG Vinyl Tool defines clicks as midrange frequency defects, in the range of 500 Hz to 2000 Hz.

**DeClick Amount**

Adjust the sensitivity of what PG Vinyl Tool considers to be a click. At zero, nothing is removed. As the DeClick Amount is increased, PG Vinyl Tool will mute more “click suspects.” If the control is set too high, it can partially mute musical features, like snare drum hits. Adjust this control only high enough to remove clicks.

**Note:** A long-duration defect (longer than a couple of milliseconds) might sound like a click or pop until the high and mid frequency defects have been fixed. On long-duration defects, the left-over defect might sound like a “thump.”

**DeClick Activity**

This displays the percentage of audio which is being muted. Except for very worn records, it is advisable to adjust the DeClick Amount so that the DeClick Activity reads no higher than a few percent. On very good discs, one might get “perfect” results with much less than one percent of DeClick Activity. Strive to mute only the minimum necessary to clean your record.

**NOTE:** If DeClick is set outrageously high, the DeClick Activity reading can exceed 100 percent. This is not a bug. The DeClick section makes two processing passes, in different frequency bands. It can happen that the first pass will “heal” a bad click, but the next pass will “heal” the left-over residue of the click.

Sometimes a bad click will be repaired in multiple processing stages, until the defect can no longer be detected as a tick or click. With absurdly high DeClick settings, the DeClick Activity can exceed 100 percent, because both stages incrementally repair the same bad clicks.

**DeClick Fill Gaps**

When a click is detected, it is smoothly “snipped out” of the midrange spectrum, without affecting the lower-frequencies at that point. A typical click might last 0.5 to 2 milliseconds. Each muted section is very short.

If Fill Gaps is set to zero, this small muted region is replaced by nothing. It behaves like a very brief mid-frequency dropout. On a clean record, occasional muted clicks are never noticed. But on a dirty scratched disc, if many snips are made, it can sound like a reduction in high and mid frequencies.

As you increase the Fill Gaps knob, PG Vinyl Tool extrapolates the midrange signal in the vicinity of the click, synthesizing a guess of what the signal might have been in the tiny muted region. If you set Fill Gaps to 100, it will insert this extrapolated guess at the same level as the original signal. This allows many clicks to be snipped from a dirty record, without reducing the mid-frequency content.
On many recordings, the extrapolated guesses are quite good. Frequent clicks can often be removed without audible side-effects.

One might encounter a badly damaged record where the audio is so damaged that the guesses are not good enough to be completely transparent.

In these problem cases, you could try setting Fill Gaps to 70, or 50, filling the gaps with lower-amplitude guesses, which may sound less obnoxious.

Set Fill Gaps to 100, unless it sounds bad.

**Smoothing**

Some badly damaged records (particularly worn-out 45's and 78's) have high frequency noise approaching “crackle on steroids.” The surface noise sounds like bacon frying. Crackle atop crackle, atop even more crackle.

The Smoothing section could be useful with severe surface noise. The Smoothing section is a very gentle Gaussian low pass filter with 6 selectable intensities.

Gaussian low pass filters are “about as good as it gets” for attenuating random noise while having minimal effect on music transients.

However, a Gaussian filter is still a low pass filter. All low pass filters reduce high frequencies along with surface noise. You should only enable the Smoothing section if it is necessary for a badly damaged record. Experiment with the Smoothing Level to find an acceptable tradeoff between reduction in surface noise versus reduction of musical high frequencies.

**DeNoise Checkbox**

PG Vinyl Tool DeNoise is a “hiss gate.” It gradually attenuates quiet High Frequencies below the Denoise Threshold. Think of it as a sliding high frequency dynamics expander.

Many vinyl discs were made from reel-to-reel tape masters. The best quality reel-to-reel tape recorders of yesteryear had more hiss than modern digital recorders. A vinyl disc in excellent condition could contain an accurate copy of the original tape hiss. In some cases, carefully adjusted DeNoise may give a perceived improvement over the original noise level.

DeNoising may also be beneficial on low level disc surface noise (slightly worn discs). If you have low level “frying bacon” surface noise, DeNoise might work better than Smoothing.

With loud “frying bacon” surface noise, you could try a judicious combination of Smoothing and DeNoise.

**DeNoise Amount**

This control sets the DeNoise threshold, in dB.

For instance, if you set it to -40 dB, high frequencies louder than -40 dB are passed unaltered. High frequencies quieter than -46 dB are completely silenced. Levels between -40 and -46 dB are gradually faded down to complete silence.

If the audio level at 8000 Hz happens to be below threshold, but the audio level at 4000 Hz happens to be above threshold, the 8000 Hz signal would be muted but the 4000 Hz signal would pass un-altered. This is “Multi Band Single-Ended Noise Reduction.”

The DeNoise section can slide the filter all the way down to 500 Hz; so on “silent” sections of a record, the DeNoise silence can be pretty silent.

Carefully adjust the Denoise Amount so that desirable high frequencies in the music are minimally affected, but hiss in the quiet sections of the music is removed. Even a 1 dB difference can be easy to hear when tweaking the Denoise Amount. Many high fidelity vinyl records didn't have much information higher than 10 KHz (another common mastering decision in the good old days). On many records, frequencies above 10 KHz can be squelched most of the time without noticeably affecting the sound.

A suggestion for tweaking the DeNoise Amount; first increase the setting until the music is obviously losing high frequencies. Then gradually reduce the level until the music is unaffected. This can ensure that any noise below the minimum music level is exterminated. Be sure to check the DeNoise Amount against the quietest parts of the recording, because the quiet locations are most likely to be affected if the DeNoise Amount has been set too high.

**Conclusion**

PG Vinyl Tool offers many tools which can clean vinyl records.
But there is a limit what can be done for severely damaged discs (without investing in very expensive tools). On very damaged records, you may be forced to decide between a “natural” sound which contains a few residual defects, versus a more heavily processed sound which has collected new annoying artifacts to replace the old annoying defects.

**PG RTA DirectX Plug-In**

The PG RTA Real Time Analyzer plug-in displays a third-octave frequency graph of a single track or the entire mix, to find proper equalization settings.

The PG Real Time Analyzer is ONLY a frequency measurement tool. PG RTA never modifies the audio.

**Control Descriptions**

**Enable Plug-in Checkbox**

Toggle the checkbox to turn the RTA ON or OFF.

PG RTA only does processing when:

1. The plug-in is enabled.
2. The plug-in is visible.

If PG RTA is not enabled or it is not visible, it does not add to the computer load during playback.

It does no harm to leave several instances of the plug-in assigned to various Tracks, Aux Returns, or Masters.

When you don’t have the plug-in visible on-screen, it will not load down the computer.

**Frequency Resolution**

The Octave button displays ten bands, representing the level of each octave in the audio. The Third-Octave button displays 28 bands, representing the level of each third of an octave in the audio.

There may be situations where it is more useful to have a ‘general’ overview at octave resolution, but the main reason you might prefer Octave resolution is to reduce the CPU load. Compared to third-octave resolution, Octave resolution only presents one third of the computer load.

**Channel View**

Channel View is only meaningful when metering a stereo track, or Aux/Master inserts (which are almost always stereo). The Channel View setting has no effect on a mono track.

If metering a stereo insert, select the Left+Right button to view the summed frequency response of both the Left and Right channels. Select the Left or Right buttons to view only one of the channels.

**Zoom In/Out** (Adjust the vertical amplitude resolution in dB.)

If a track has wide dynamics, zoom out to see all the bands without scrolling. If zoomed out too far, it can be difficult to visually judge frequency levels. All the bands may appear about the same level.
Zoom In to see the best amplitude resolution. For instance, in the screenshot above, the display was zoomed to 3 dB per ruler line, which emphasizes the differences between loud and quiet frequency bands.

**View Range Scroll**
Adjust the Scrollbar to center the display to taste. When zoomed-in on a quiet track (as in the screenshot above), you would scroll down to get a good view of the frequency distribution.

**PG Vocal Remover Plug-In**

The PG Vocal Remover plug-in can reduce the level of lead vocals on many recordings. You can fine-tune the vocal removal frequency range, and optionally reduce the level of residual vocal reverb.

PG Vocal Remover exploits a common mixing technique; the lead vocal is often center-panned (i.e., the left and right stereo channels have identical vocal loudness). Typically the bass and kick drum is centered, and often snare drum is centered. However, most accompaniment instrumental tracks and backup harmony vocals are side-panned (louder on one side than the other).

On typical recordings, we can subtract one stereo channel from the other, which removes “common mode” lead vocal, but leaves side-panned accompaniment tracks relatively unaffected.

**Operation**

**Enable Plug-in Checkbox**
Toggle the checkbox to compare the sound with/without the Vocal Remover activated.

**Balance Slider**
Fine-tune with the Balance slider. The center position is typically as good as it gets, but some recordings have accidentally mismatched Left-Right balance. This is common with vinyl or cassette recordings, or CD-reissues of Oldies. You may get improved vocal cancellation by twiddling the Pan slider to find a “sweet spot.”

**Lo Limit and Hi Limit Sliders**
Adjust these sliders to fit the nature of the vocal. The default settings are fine for many tunes. Frequencies below the Lo Limit and above the Hi Limit are not processed, preserving fidelity except in the vocal midrange. Set the Lo Limit slider just low enough to attenuate low vocal notes. Set the Hi Limit slider just high enough to attenuate high vocal harmonics.

Obviously the best settings are different for a Baritone, Tenor, Alto, or Soprano voice. They are best set by ear. Some sopranos have warm low tone, but some Baritones have very bright tone, so the mid-frequency vocal range may be wider than expected.

**Reduce Reverb Checkbox**
Toggle the checkbox to compare with/without Reverb Reduction.

**Reduce Reverb Amount Slider**
Reverb Reduction behaves like a dynamics compressor, but the loudness of the center channel affects the loudness of the side channels. Move the slider to the right to increase the effect. The effect compares the relative level between center and side channels, so no processing takes place unless there is a significant difference between the loudness of the center versus side channels.

Vocal is not the only sound which can trigger the compressor. Any loud midrange center instrument could trigger the compressor, so if you crank the Amount too high, snare drum or other loud center instruments may unpleasantly “pump” the side channels.

**Reduce Reverb Attack Slider**
Works like a compressor Attack control. Move the slider to the left for faster response to sudden increase in loudness (when the vocalist starts a phrase). Move to the right for a slower response to sudden increase in loudness.

**Reduce Reverb Release Slider**
Works like a compressor Release control. Move to the left for faster recovery after the loudness diminishes (when the vocalist ends a phrase). Move right for slower recovery.
**Adjusting Reverb Reduction**

Experiment to get a feel for what works. There may be some songs where the reverb can't be improved, and in those cases just disable the Reduce Reverb Checkbox.

Some vocals have short pre-delay and reverb tails. Short attack and release would make sense.

Some songs (especially ballads) have loud “balloon” reverb tails with long pre-delay. Since the reverb comes in after the vocal phrase begins, and lasts a long time after the vocal phrase ends, longer attack and release would make sense. Adjust the Attack so that the compression kicks in about the same time as the pre-delay reverb, and adjust the release long enough to hold back the reverb after a vocal line is finished.

Don't expect miracles. You can reduce the reverb level, but will rarely completely eliminate vocal reverb. Judiciously use just enough compression to avoid ruining the overall fidelity.

Compare the dry sound against the processed sound. The maximum vocal reduction setting could be extreme enough to ruin the instrumental quality. Sometimes it is better to allow some vocal leakage to achieve the best-sounding instrumental quality. Is it better to allow some low voice leakage to improve the bass response? Is it better to allow some high voice leakage to improve the cymbals and acoustic guitar?

After the PG Vocal Remover is adjusted as good as it gets, try inserting an Equalizer plug-in downstream. Notch some frequencies to improve the effect.

If the output amplitude is inconsistent, try inserting a compressor or peak limiter plug-in downstream.
Chapter 14: User Programmable Functions

The StyleMaker™

The StyleMaker is the section of the program that allows you to create brand new styles or edit existing styles. This is done by recording patterns for each of the drums, bass, piano, guitar and strings parts, or by entering these parts in the StyleMaker Pattern Editor notation window. If you don't want an instrument in a style you don't need to record any patterns for it. The StyleMaker window is accessed from the Styles menu by choosing any one of:

- **New** – Make a New Style to create an entirely new style from a blank template.
- **Edit a Style** (Alt+F9 keys) to open any style for editing.
- **Edit Current Style** (Ctrl+Shift+F9 keys) to open the current style in use for editing.

StyleMaker Pull-Down Menus

The StyleMaker has a separate pull-down menu to the main program. Many of the menu commands can be accessed directly with the on-screen buttons in the StyleMaker window.

**File**

- **Save Style** (F2) Saves the style, using the current style name. This will overwrite a previous style!
- **Save Style As** (Alt+F2) This saves the style, allowing you to rename the style if desired.
- **Exit** (Alt+F4) Exits the StyleMaker, prompting you to Save the Style. If you don't save the style upon exit you will lose any changes that you've made.

**Edit**

- **Cut Pattern** Cuts whichever pattern is highlighted in a row.
- **Copy Pattern** Copies a pattern to the clipboard.
- **Paste** Pastes a single pattern from the clipboard. Can paste between styles by opening and closing styles and copying and pasting.
- **Delete Pattern** (Delete) Erases a Pattern. Can also delete a Pattern by typing a weight of 0.
- **Cut from Notation** Highlight and cut notes from a pattern.
- **Copy from Notation** Highlight and copy notes in a pattern.
- **Paste from Notation** Paste notes into a pattern.

**Pattern**

- **Play Pattern** (F4) Plays the pattern using the currently selected style. Loops after 2 bars. If you want to play the song while the StyleMaker is open, you need to press the PLAY button on the Main screen, as the F4 key will not play the song, it will play the StyleMaker pattern.
- **Play Pattern on Chord** This plays back a pattern as it would sound in a song on a certain chord. This is useful to
see the effects of smooth voice leading or macro notes in a pattern.

**Record Pattern**
(F3) Records a pattern. For drums it enters the STEP EDIT Drum Editor. For the other instruments, it starts a real time record (2 bar lead in then record 2 bar pattern).

**Options**
(F10) Allows you to set or change options (masks) for a specific pattern. This same dialog box also appears at the end of recording a pattern.

**Quantize Pattern**
(Alt+Q) Quantifies a pattern to a given resolution. You can apply a percentage setting to adjust the “strength” of the quantization.

**Slide Pattern**
This time shifts the pattern X ticks (120 ticks per beat).

**Volume adjust (this row)**
(Pattern | Volume adjust (this row)) sets the volume of all patterns in the selected row.

**Volume Adjust (all patterns)**
(Alt+J) You can quickly set the volume for an entire instrument by using the Pattern | Volume Adjust (all patterns) command. For example, if the strings are too loud, turn the [Strings] button “on,” select Volume Adjust (all patterns), then type a number from 0 to 127 lower than the number that is currently displayed.

**Legato Adjust**
This adjusts the legato of each note. Units are 120 ticks/beat. Legato is the length of each note. Useful if you find a pattern that’s too percussive or too legato.

**Transpose Pattern**
This transposes the pattern X semitones. For example, +12 would transpose the pattern one octave up.

**Trim Pattern**
This deletes notes from the end of a Pattern.

**Velocity Adjust**
This function adds or reduces the velocity of a single pattern, row of patterns, or all patterns in an instrument. Choose the menu items for 1 pattern, 1 row, or the whole instrument and input the velocity change to make for the pattern(s). This will add or subtract a certain velocity value to the patterns, useful for reducing or increasing the volume of an entire instrument or fine-tuning the velocities in a style.

*When adjusting velocities, use a single note only.* When this menu item is selected, only the MIDI note number that is specified will have its velocity adjusted, unless a note number of 0 is entered. If the note number is entered as 0 then all notes in the pattern(s) will have their velocity adjusted.

**Import Pattern**
- from MIDI File
- from Clipboard
- from Melody
This allows you to import pattern(s) from the Melody track, MIDI file, or MIDI data on the clipboard. The dialog box that appears allows you to select the # of patterns you want to import. Normally this will be one. If it is more than one (say, 4), then 4 consecutive patterns would be imported on to the current row of the StyleMaker.

**Style**

**Patch Assignments**
Assign patches to a style. See Patch Assignment dialog box.

**Misc. Settings**
Assign miscellaneous settings to a style. See Misc. Settings dialog box.

**Import Instr. from Style**
(Alt+F3) Import an instrument from one style into another. See Import Instrument dialog box.

**Import Drums from**
Since you can define a custom drum kit for the grid editor, this function allows you to use
**.MID to Drum Kit**

The instruments that are found in a MIDI file. A quick way of building up a kit. For example, if you are making a Latin style called “mambo” you could load in a Mambo MIDI file that you made, and then the StyleMaker's “Style | Import notes from .MID to Drum Grid...” menu command would extract the drum notes from the MIDI file, and put them on the drum grid.

**Define a Custom Drum Kit**

Since the Drum Grid Editor uses 19 instruments, this allows you to define which instruments will be used, and create a custom drum kit.

**Copy all “a” substyle patterns to “b”**

Copies all “a” substyle patterns to “b” slots. This feature is handy when only a volume increase tweaking is required for the “b” substyle.

**Copy Current Row to Row ___**

Copies an entire row of patterns to the new row specified.

**Delete all Patterns in this Row**

Deletes all of the patterns in the selected row.

**Style Checker**

Analogous to a “Spell Checker,” this function analyzes your style-in-progress and identifies possible problems.

The Style Checker results are output to a text window, allowing you to examine the patterns and fix them if required. It identifies patterns that might be “too busy” or incorrect macro notes etc. in a text report about the style, listing possible problems with the style. Here is a sample printout.

-----Start of style checking -----JAZQUINT.STY

Drums: Row 1, Column 1 First pattern of instrument shouldn't contain masks in it. It should be generic.

Bass: Row 1, Column 1 First pattern of instrument shouldn't contain masks in it. It should be generic.

Piano: Row 1, Column 3 Non Chord tones found (other than C, E, G, Bb) and pattern is not set to a chord mask, riff based or MACRO ...

---etc., etc.

-----end of style checking -----  

**Style Summary**

This displays a text window summary of the style, including lots of information about the style such as # patterns, # patterns for each substyle, patches, pushes, volume changes, guitar patterns, and more.

**Add required 8 beat and blank patterns**

Styles must have some 8-beat patterns and at least one “a” substyle pattern if “b” substyle patterns are present. This will create them by duplicating lower rows.

**Flip current instrument**

Swaps the “a” substyle and “b” substyle patterns for the current instrument.

**Flip entire style**

Swaps the “a” substyle and “b” substyle patterns for the entire style.

**Set embellish ... current instrument**

Opens options for embellishing the currently selected instrument part. Embellish does not apply to bass and drums.

**Set embellish ...all Piano/Guitar/Strings**

Opens options for embellishing all Piano, Guitar, and Strings parts. Embellish does not apply to bass and drums.

**Reduce style (to 16th notes)**

For styles that you want to reduce from 8th notes to 16th notes, e.g., an 8th note style at a tempo of 260 to a 16th note style at a tempo of 130.

**Expand style (to 8th notes)**

To expand a 16th note style to 8th notes, e.g., a 16th note style at a tempo of 130 into an 8th note style at a tempo of 260.
Help
These menu items are quick links to the main Help, and to StyleMaker topics in particular.

Index (F1)
Topic Search (Ctrl+F1)
StyleMaker Overview
Tutorial 5 Editing an Existing Style
Tutorial 6 Making a New Style
Drum Patterns
Bass Patterns
Piano/Guitar/String Patterns
How To (Shift+F1)

StyleMaker Toolbar Buttons
These options are also available from the StyleMaker window pull-down menus.

Save
Saves and overwrites existing style using current name.

Save As
Saves the style, but allows you to rename it first.

Play
Plays the current pattern.

Stop
Stops the playback of the current pattern.

Chord
Plays the current pattern over a specific chord.

( Drum Grid Editor)
Allows creation or editing of a drum grid pattern.

(Record)
Begins live recording of a Bass/Piano/Guitar/Strings pattern after a 2-bar intro.

(Notation)
Displays current pattern in notation, allowing editing of pattern in notation.

(Options)
Change the volume of the selected pattern.

(Q)
Increases or decreases note durations for the pattern.

(V)
Assign instruments to the style.

(L)
Overall style settings including master volumes.

(Patch)
Assign instruments to the style.

(Miscellaneous)
Miscellaneous settings for the style.

Song
Plays the current song using the new style you're making.

Exit
Exits the StyleMaker and closes the window.

A right-mouse menu has options to Play Pattern, Play Pattern on Chord, or Mute Pattern.
Exploring the StyleMaker

To become familiar with the StyleMaker it is easiest to begin with an existing style and examine its makeup. This example uses ZZLITROK.STY, a basic Light Rock style. Patterns are played back from the main StyleMaker screen:

- Drums (0)
- Bass (36)
- Piano (5)
- Guitar (49)
- Strings (28)

The StyleMaker displays current patch numbers for the parts on the main window.

The StyleMaker always opens to the Drums window, as indicated by the highlighted button to the left of Drums. Other parts are selected by clicking on their buttons, just as in the main Band-in-a-Box screen.

The rows of cells are for the musical patterns that have been recorded for the style. Each numbered cell is a pattern; the blank cells are for new patterns. The numbers are the weights assigned to the pattern, a higher number, or weight, means that a pattern will be played more often. The average weight is 5.

In the example above, you will notice that there are 4 rows of drum patterns.
- A pattern is the row to record drum patterns for the A substyle.
- B pattern is the row to record for the B substyle.
- drum fills are recorded on the drum fills row
- end drums are ending patterns (2 consecutive patterns of 1 bar)

This style shown has nine drum patterns for its “a” substyle, and eight more for the “b” substyle variation. It also has eight drum fills and four ending patterns.

What’s a pattern?
A pattern is one musical figure, a single element of a musical style. When Band-in-a-Box combines the various note patterns into arrangements we hear what the different instrumentalists would play for a song in that style.

Drum Patterns

In our example, the drum patterns are what the drummer plays for a Light Rock song.

You can view any drum pattern in the row if you click on the box and then on the drum grid button to open the Drum Pattern Editor.

The Drum Pattern Editor grid shows which drums in an 18-piece kit are being played on what beats and with what velocity (force) they are being hit. Each group of columns separated by a vertical line represents one beat in a four-beat bar, sub-divided into 16th notes. If there was a number in each cell across the row for any instrument, that instrument would play sixteenth notes for the whole bar.

In a swing style each beat would be sub-divided into eighth-note triplets, with three columns to a beat.

Let’s examine the pattern in detail.

The highlighted cell shows that the Bass Drum is being played on beat 1 at a velocity of 83. (The loudest possible note has a velocity of 127, while 0 is silent.) Moving to the right, you will see that the Bass Drum plays again on the second eighth note of beat 2 with a velocity of 73, and then on beat 3 with a velocity of 93, the familiar “boom-ba-boom” Pop/ Bossa Nova beat.

The Closed High Hat plays straight eighth notes at different velocities.

The Snare Drum plays on beats 2 and 4 in a typical Light Rock backbeat.
You can easily create new patterns of your own by selecting an empty box in a row of patterns and then clicking the [Rec] button to open a blank Drum Pattern Editor grid. To hear the pattern you have made click on the [Play] button. Click on the [Help] button for more tips and details.

Defining a Custom Drum Kit

To set up a custom drum kit, select the menu item Style | Define Custom Drum Kit in the StyleMaker window to launch the Define Custom Drum Kit dialog. You can choose the 18 drum instruments to be used on the drum grid. Any of the GM instruments may be chosen. Kits may be saved and loaded to disk.
In defining a custom drum kit in the StyleMaker, you can use the drum notes found in a MIDI file. For example, if you are making a Latin style called “mambo,” you could load in a Mambo MIDI file that you made, and then the [Import notes from .MID...] function would extract the drum notes from the MIDI file, and put them on the drum grid.

**Drum Screen Alternate Notes**

**What are alternate notes?**

Alternate notes can be entered for any note. This tells Band-in-a-Box to randomly choose a different note to the one specified. For example:
- you might want a note to be a closed high hat 80% of the time, and an open high hat 20% of the time.
- you might want a note to be high conga 60% and low conga 40% of the time.
- or high tom 30% of the time and NO note the other 70%

This allows one drum pattern to sound like many, because it will be played different ways depending on which of the notes are picked.

**How To Put In An Alternate Note**

Click on the cell in the Drum Pattern Editor where you want to add an alternate note. Then press the [Alt.] button or press the F5 key to open the Alternate Drum Note dialog box.

Type in the #s as you see here.

- The Alternate will play 50% of the time.
- The Alternate note #4 is Open High Hat (you will see the list of note #s at the side of the screen.
- The Alternate note will play at a velocity of 90.

Check the “Double note (32nd note)” checkbox to have the alternate note play as a doubled 32nd note. “Omit first note” works together with the Double note feature to play only the second 32nd note.

When you exit the dialog box you will see that the note cell now has a red border indicating that an alternate note is located there.

**Tip:** All Band-in-a-Box styles must have at least one drum pattern, even if there are no drums in the style. In that case, open the Drum Grid Editor and enter a value of 0 on beat 1 of the pattern for any drum and then save the pattern.

Click on the [Exit] button to return to the Drum window.

The Drum Options dialog will open, click on [OK] and it will close.

These options determine how and when an individual drum pattern gets played.

**Relative Weight (Usual Setting = 5)**

Relative Weight is the number that you assign to the pattern from 1-9. Numbers from 1-8 indicate how often you want the pattern to be played in relation to the other patterns on the same row. A weight of 9 is a special setting that ensures that the pattern will ALWAYS be played. Patterns assigned a weight of 9 usually have other options set which instruct the pattern to only be played at certain times (bar after a drum fill for example).
Playback Bar Mask (Usual Setting = 0)
Playback Bar Mask determines on what bars of the song the pattern will play. The bar #s are counted relative to the last part marker. Bar 1 is the first bar after a part marker for example. A bar mask setting of 0 is the default. This lets the pattern be played at any time.

Other bar mask settings:
- Bar 1 of 4
- Bar 2 of 4
- Bar 3 of 4
- Bar 4 of 4
- Bar 5 of 8
- Bar 6 of 8
- Bar 7 of 8
- Bar 8 of 8
- pre-fill - refers to the bar before a fill
- fill - refers to the bar of a fill. This is not applicable to drums because there is a special row for drum fills.
- post-fill - refers to the bar after a fill, which is the same as the first bar after a part marker.

Drum Fill On Substyle (Usual Setting = 0)
This setting is only relevant on the Drum Fills line. It lets you specify if you want the drum fill to be used on the “a” substyle, the “b” substyle, or either. The default setting is “either.”

Late Triplets (Usual Setting = 0)
This is only relevant in drum patterns with time base = 12 (triplet feel). If you want the 3rd triplet to be played late, as is usually done in slow Jazz styles, then set a number from 0-10. The default is 0 = not late at all. A typical setting for a slow triplet style is triplets late = 5 where one unit is 120/beat.

This type of pattern is found in earlier Band-in-a-Box styles. Later styles use live MIDI drums, which are edited as notation. The same options are used.

Editing Live Drums Patterns (or patterns imported from a MIDI file)
Live drum patterns are recorded in real time from a MIDI controller - either MIDI drum pads or a velocity sensitive MIDI keyboard. You can also import MIDI patterns from any standard MIDI file with the StyleMaker’s Pattern | Import Pattern from MIDI file command.

To edit these patterns, press the notation button in the StyleMaker toolbar to open a special StyleMaker Pattern Editor notation window. Edit the drum notes in the Editable Notation or Staff Roll view, just as you would edit regular notation.

RealDrums Styles
RealDrums are actual recordings of studio drummers, pieced together by Band-in-a-Box to create a unique “real” drum track that is played along with the MIDI tracks created by Band-in-a-Box styles.
It is possible to assign RealDrums (audio drums) to a particular Band-in-a-Box style in the Misc. Style Settings dialog.

RealDrums Settings (Audio Drums, instead of MIDI drums)
Enable “Style uses RealDrums (audio drums)” in order to designate a RealDrums style, then press the [RD] button to select your RealDrums style. Whenever the current style is played, it will use your RealDrums style provided that RealDrums are enabled in the RealDrums Settings dialog. There are also additional volume controls here.

To make your overall dB setting a bit higher or lower for this particular Band-in-a-Box style you can enter a setting here. There are also fields for adjusting the ‘a’ or ‘b’ subsection volumes only.

If you remove the check mark from either “Allow ‘a’ substyle RealDrums” or “Allow ‘b’ substyle RealDrums” the one with the checkmark remaining will be used for the entire song, regardless of what substyle is currently called for in the song.

See the following tutorial on Making RealDrums Styles.

Bass Patterns
Click on the button to the left of Bass to open the bass pattern window. Notice that the status bar gives the Row and Column number for the current pattern.

You’ll see that this window is different from the Drums window, it has rows for different lengths of patterns – 8 beat, 4 beat, 2 beat and 1 beat – for both the A and B substyles, and a row for endings.

To see a bass pattern, select any numbered box and click on the notation button. The StyleMaker Pattern Editor will open, showing the selected pattern as notation.

Click on the [N] button to enter the Editable Notation mode. In this mode notes can be edited, added, or deleted as in the regular notation.

A new pattern can be created by selecting an empty cell in the StyleMaker grid and then opening the StyleMaker Pattern Editor window to enter notes with your mouse. A quicker way to make a new pattern is to record it live from a MIDI keyboard or any other MIDI controller that is connected to your computer.
Recording a New Pattern

New patterns are recorded by playing them live in real time as the StyleMaker plays an accompaniment on the drums and other instrument parts for the style. If you don’t want to hear other parts - say you just want to play along to the drums – any part can be muted with a right mouse click on the instrument name in the Band-in-a-Box main screen.

Go to the correct row for the length of the pattern you want to record (8 beat, 4 beat, etc.) and click on an empty cell. Recording is started with the [Rec] button. When it is clicked, the drums and any other parts that are present will start to play but recording has not begun.

The StyleMaker gives you a 2-bar intro to get ready to record the new pattern, so you can play along with the intro for a “flying start” or just use the 2 bars to count yourself in. Recording then begins and continues for another 2 bars, no matter what length of pattern you are recording. If you are just recording a 4 beat pattern you will still hear the 2-bar intro and then another 2 bars of accompaniment while the pattern records. You would just play your 4 beat pattern and then wait until recording stops.

Tip: Remember that patterns can be edited in the StyleMaker Pattern Editor, so you don’t have to redo an otherwise good take because of a small mistake.

When recording stops, a Record Options dialog opens. The options determine how and when each individual Bass pattern gets played. They can always be changed after the style has been saved.

Click on OK to save the pattern with the default options. Click Cancel to erase the take and record the pattern again.

To hear the pattern you have just recorded click on the [Play] button or, better yet, click on the [Chord] button in the StyleMaker toolbar to hear how it sounds playing different chords.

### Bass Pattern Options

#### Relative Weight (Usual Setting = 5)

Set this # higher/lower if you want the pattern to be played more/less often than the other patterns on the same row. This number is also displayed on the main StyleMaker screen. A setting of 9 (always) is a special setting that instructs the pattern to always be played instead of the other patterns on the same row. These patterns always have other options set which specify the times that this pattern would be eligible to be played.

#### Playback Bar Mask (Usual Setting = 0)

Playback Bar Mask determines on what bars of the song the pattern will play. The bar #s are counted relative to the last part marker, and range from 1-8. Bar 1 is the first bar after a part marker for example.

Other bar mask settings:
- Bar 1 of 4
- Bar 2 of 4
- Bar 3 of 4
- Bar 4 of 4
Special Bar Masks
- pre-fill - refers to the bar before a fill
- fill - refers to the bar of a fill (this allows you to put in “bass fills” for example)
- post-fill - refers to the bar after a fill, which is the same as the first bar after a part marker.

Playback Beat Mask (Usual Setting = 0)
Set the beat mask to a beat from 1-4 if you want the pattern to only be played on certain beat #s.  1= Beat 1, 2= Beat 2, 3= Beat 3, 4= Beat 4.

Roman Numeral Mask (Usual Setting = 0)
If you have a pattern that should only be played on the I chord or the IV chord (of the key), you can use these Roman Numeral Masks.  This setting is rarely used.

Chord Type (Usual Setting = Any)
This setting is very useful.  This allows you to record patterns that will only work on certain types of chords.  For example you can record a specific riff that will only work on a minor 7th chord.  You then play the pattern on a Cmin 7 ( not a C7 ).  There are chord types for most types of chords.

Interval To Next (Usual Setting = Any Interval)
This setting allows you to restrict the pattern to be played only if the next chord is a certain interval away.  For example you can record a bass pattern that is walking up a fourth and then assign a Interval of Up 4th so that the pattern would only be played if you're going up a 4th.

Half Octave range (Usual Setting = Full Octave)
This is a new setting in the StyleMaker.  Usually a pattern will be picked on any of the 12 roots.  You can select a smaller range , either A to D , or Eb to Ab .  In this case the pattern would only be picked if the chord in the song is in that range.

Play Pattern Pushed how often (Usual Setting = 0 %)
# Ticks to Push Pattern (Usual Setting = 0)
Pushed patterns are patterns that are played before the chord begins.  Jazz styles typically use pushed patterns for the piano.  Patterns are recorded in the normal way (non pushed) and then you assign the % of time and amount (in ticks, 120 ticks = 1 beat) to push the pattern.  The pattern only plays pushed in the song, not when played in the StyleMaker window.

OK to use Macro Notes (Bass Usual Setting = No)
Bass macros are special notes that you record.  When they are played back they are replaced by a function.

List of Bass Macro Notes
Note# 72 (C):  Pop Walking Note(s).  Playback with the [F8] key and note #72 will be replaced by up to 4 intelligent notes per pattern walking in a Pop/Country mode to the next chord.
Note# 76 (E):  Note a semitone below root of next chord.
Note# 77 (F):  Root of next chord.
Note # 78 (F#):  Note a semitone ABOVE root of next chord.
Note # 79 (G):  Best fifth (a fifth above or below the root depending on how high the root is.  Stays on the root if in a slash chord (C7 /E).  

Remember that to get Bass Macros working you must:
- Hit the right note # (you may be out by an octave).
- Set “OK to use macros” to “Yes.”
- Playback the Pattern with [F8] key or [CHORD] button.  The [F4] playback key gives you a literal playback with strange sounding high macro notes.
Chord Selection Dialog Box

This section is accessed by the [Chord] button, the F8 key or by choosing Pattern | Play Pattern on Chord from the pull-down menu.

This plays back a pattern on a specific chord that you choose in either the key of C or the key of F. You can hear what patterns will sound like in a style by “trying them out” on certain songs. Macro notes recorded in a pattern will play their corresponding chords, smooth voice leading is demonstrated etc.

Just choose a chord and press OK.

Note: Does not apply to drum patterns, since drum patterns don't play any differently on different chords.

Assign Instruments to Style Dialog Box

The [Pat.] button opens the Assign Instruments to Style dialog. When the song is played back using the style, these patch changes will be sent to your synthesizer.

General MIDI instrument patch numbers are used, and if your synthesizer or sound card supports GM2 patches they can be selected by clicking on the [+ ] button.

Check “Use separate patches for ‘a’ and ‘b’ substyle” to have the patches change when the substyle changes. This example shows patches for the ‘a’ substyle.

If you don't require a specific instrument for the style, select (No Patch Change).

The patch changes take effect immediately in the style, so that when you are recording bass parts for example, you will hear the bass patch that you have selected.

Thru Patch

If you set the Thru Patch to other than 0 the instrument that the user plays along to your style will be the Thru patch that you set. If you're making a “Heavy Rock” style, you might want to set the Thru patch to be Overdrive Guitar if you expected that the user would want to play along on a rock guitar patch.

Melody Patch

If set to other than 0 all melodies will be played on the specified instrument. If you're making a “Grover W” style for example, you might want any melodies to be automatically set to saxophone.

Misc. Style Settings Dialog Box

This dialog box allows you to set some miscellaneous settings for the style.

Style Name

You can give a full 60-character name to the style.
Waltz?
If you want to make a waltz with the StyleMaker, check the “Waltz?” checkbox in the Misc. Style Settings dialog. Then the StyleMaker will record, and play patterns in 3/4 time. The “8 beat row” will record “6 beat” (2 bar patterns), the “4 beat” will record 3 beat (1 bar) patterns. The “2 beat” and “1 beat” still record 2 and 1 beat patterns. The new style is made as a waltz, and will play with a 3/4 lead in. There is no need to put a 3/4 time signature change in bar 1.

Jazz Style?
This lets Band-in-a-Box know if the style you've made is a Jazz style or not. If it’s a Jazz style it will use the Jazz Snare/Bass Drum instead of the Pop Snare/Bass Drum, and also makes some other decisions based on this setting.

Tempo
This allows you to set the default tempo for the Style. This is stored with the style. You can also change this tempo by the tempo button on the StyleMaker main screen. Tempos can also be changed by the [ and ] keys.

Resolution
Styles can either have Triplet (swing eighth notes) Straight (even eighth or sixteenth notes) resolution.

Use Latin Drum Kit
Check to use a Latin drum kit in this style with instruments like maracas, casaba, and agog.

Velocity Boost of pushes
Pushes can get a velocity boost, so that they are played louder than other patterns. A usual setting would be 10.

# ticks to push
Styles can be pushed with the StyleMaker. This will cause the patterns to be played a little ahead of the beat, a certain % of time, which gives your arrangement a more human (musical) feel.
Band-in-a-Box uses a resolution of 120 PPQ, i.e., 120 ticks to a quarter note.
- 30 ticks = sixteenth note
- 40 ticks = triplet eighth note (Swing)
- 60 ticks = eighth note
Choose the number of ticks for each push to use.

Substyle Pushes
The % of notes that are pushed can be set separately for each instrument part and for the “a” and “b” substyles. In this example, the Bass part patterns will get pushed (randomly) 10% of the time in the “a” substyle and 20% of the time in the “b” substyle.

<table>
<thead>
<tr>
<th>Substyle Pushes</th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bass</td>
<td>10</td>
<td>20%</td>
</tr>
</tbody>
</table>

Allow Volume Changes with Style (Usually = No)
Usually you don't want specific volume changes in a style. But if you decide to change the volume of instruments, you can do it by setting this to YES and then entering the Volumes you want in the settings below. (A better way to change the volume of a part is to use Pattern | Volume Adjust (Alt+W) to set the volume of each pattern individually.)
Chapter 14: User Programmable Functions

‘Riff’ voicing type uses chord tones

This is an option for piano, guitar, and string patterns. If selected, voicing modifies to match the chord and scale. Deselect for a simple transpose ignoring chord type.

Press the [More..] button for the additional Settings for Rests, Pushes dialog.

Since rests can be “shots” that play a chord on beat 1, the style can define what instrument to use for this, and at what volume.

Similarly, each push is accompanied by a drum stab, and the style can define what instrument to use and at what volume.
The **Lowest Bass Note** setting defaults to the low E on the bass guitar or acoustic bass. It can be changed to match the range of other bass instruments, such as a tuba, or to extend the range of the bass for keyboards or 5-string and 6-string basses.

**Guitar Macros**

These settings determine what type of guitar chords will be used, and only apply if the patterns are recorded using the guitar macro notes, and if the pattern is set to use guitar macro notes.

**Allow Late Notes**

This opens the **Settings for Making Late notes quieter** dialog. Notes played near the end of a pattern will usually conflict with the next chord. So it’s best to prevent notes near the end of a pattern from playing. There is a global setting for this in **Opt. | Preferences | Prefs2.**

**RealDrums Settings (Audio Drums, instead of MIDI drums)**

It is also possible to assign RealDrums (audio drums) to a particular Band-in-a-Box style.

Enable “Style uses RealDrums (audio drums)” in order to designate a RealDrums style, then press the [RD] button to select your RealDrums style. Whenever the current style is played, it will use your RealDrums style provided that RealDrums are enabled in the **RealDrums Settings** dialog. There are also additional volume controls here.

To make your overall dB setting a bit higher or lower for this particular Band-in-a-Box style you can enter a setting here. There are also fields for adjusting the ‘a’ or ‘b’ subsection volumes only.

If you remove the check mark from either “Allow ‘a’ substyle RealDrums” or “Allow ‘b’ substyle RealDrums” the one with the checkmark remaining will be used for the entire song, regardless of what substyle is currently called for in the song.

**Piano, Guitar, and String Patterns**

Piano, Guitar and String patterns are recorded in the same way as live Drums or Bass patterns, but with added features and options. Guitar styles can be created with authentic strumming and rhythm patterns using correct fret positions.

**Piano/Guitar String Pattern Options dialog box.**

The StyleMaker shows summary information about non-default settings in a pattern at the top title bar, so they are easy to spot.

---

**Relative Weight (Usual Setting = 5)**

Set this # higher/lower if you want the pattern to be played more/less often than the other patterns on the same row. This number is also displayed on the main StyleMaker screen. A setting of 9 (always) is a special setting that
instructs the pattern to always be played instead of the other patterns on the same row. These patterns always have other options set which specify the times that this pattern would be eligible to be played.

**Playback Bar Mask (Usual Setting = 0)**

Playback Bar Mask determines on what bars of the song the pattern will play. The bar #s are counted relative to the last part marker, and range from 1-8. Bar 1 is the first bar after a part marker for example.

Other bar mask settings:
- Bar 1 of 4
- Bar 2 of 4
- Bar 3 of 4
- Bar 4 of 4
- Bar 5 of 8
- Bar 6 of 8
- Bar 7 of 8
- Bar 8 of 8

**Special Bar Masks**
- pre-fill - refers to the bar before a fill
- fill - refers to the bar of a fill (this allows you to put in “bass fills” for example)
- post-fill - refers to the bar after a fill, which is the same as the first bar after a part marker.

**Playback Beat Mask (Usual Setting=0)**

Set the beat mask to a beat from 1-4 if you want the pattern to only be played on certain beat #s. 1 = Beat 1 , 2 = Beat 2 , 3 = Beat 3 , 4 = Beat 4.

**Roman Numeral Mask (Usual Setting = 0)**

If you have a pattern that should only be played on the I chord or the IV chord (of the key), you can use these Roman Numeral Masks. This setting is rarely used.

**Chord Type (Usual Setting = Any)**

This setting is very useful because it allows you to record patterns that will only work on certain types of chords. For example you can record a specific riff that will only work on a minor 7th chord. You then play the pattern on a Cmin 7, not a C7. There are chord types for most types of chords.

**Interval To Next Chord (Usual Setting = Any Interval)**

This setting allows you to restrict the pattern to be played only if the next chord is a certain interval away. For example you can record a bass pattern that is walking up a fourth and then assign a Interval of Up 4th so that the pattern would only be played if you're going up a 4th.

**Half Octave Range (Usual Setting = Full Octave)**

Usually a pattern will be picked on any of the 12 roots. You can select a smaller range, either A to D or Eb to Ab . In this case the pattern would only be picked if the chord in the song is in that range.

**Play Pattern Pushed – how often (Usual Setting = 0 %)**

# Ticks to push pattern (Usual Setting = 0)

Pushed patterns are patterns that are played before the chord begins. Jazz styles typically use pushed patterns for the piano. Patterns are recorded in the normal way (non pushed) and then you assign the % of time and amount (in ticks, 120 ticks = 1 beat) to push the pattern. The pattern only plays pushed in the song, not when played in the StyleMaker window.

**OK to use Macro Notes (Usual Setting = No)**

Piano Macros are special notes that you record. When they are played back they are replaced by a function, as listed below.

**List of Piano Macro Notes (same as Guitar/String macro notes)**

MIDI Note # 83 B  Pop Chord Diatonic Below
MIDI Note # 84 C  Pop Chord
Chapter 14: User Programmable Functions

MIDI Note # 85 C#  Pop Chord Diatonic Above
MIDI Note # 88 E  Jazz Chord Chromatic Below
MIDI Note # 89 F  Jazz Chord
MIDI Note # 90 F#  Jazz Chord Chromatic Above

Remember that to get macro notes working you must:
- Hit the right note # (you may be out by an octave).
- Set OK to use macros to Yes.
- Playback the pattern with [F8] key or [CHORD] button. The [F4] playback key gives you a literal playback with strange sounding high macro notes.

Check “Use Guitar Macros” to enable guitar macro notes for this pattern.

Click the [Guitar Options..] button to specify guitar macro note parameters.

Transposing Root Pattern (Usual Setting = No)
This is a rarely used setting. It only is relevant when voice leading is set to smooth. It determines where the center of the pattern is considered to be. If set to “Yes,” the center of the pattern will be moved to the key of the song.

Embellish Pattern (Usual Setting = None)
If set to “embellish 1” the pattern will be embellished. This is useful in Jazz styles. “Embellish 1” embellishes the chord once in the pattern, whereas “embellish 2” changes the embellishment during the pattern.

Transpose Down Limit (Usual Setting = 6)
This setting is quite useful. It controls the range that the pattern will be played over. For example, if the transpose down range is set to =2 the pattern (recorded in C) will be transposed a maximum of 2 semitones down, and therefore up to 10 semitones up to play all 12 possible roots of the chords.

Voice Leading (Usual Setting=Transpose)
The easiest type of voice leading is transpose only. If the notes C-E-G-Bb were played as a C7 pattern, then Band-in-a-Box would transpose that voicing to an F7 chord as F-A-C-Eb, which is fine but not very smooth.

A more pleasant setting would be “smooth” voice leading. Then the F7 would be voiced automatically as C-Eb-F-A.

“Riff based” voicing is used when you have recorded a pattern with a melodic riff in it. This setting ensures that Band-in-a-Box will not try to transform any of the notes into chord tones.

Guitar Styles with the StyleMaker
Guitar Styles with incredible authenticity are possible in the StyleMaker. You can use new macro notes to be played back as a Jazz, Folk, or Pop guitar chord using correct fret positions for accurate guitar-friendly chords.

Playing back Guitar Styles
Guitar Styles are identified by the exclamation point (!) in the style name. This is not a requirement, but is usually present in the style name. For the typical user who is just using the styles for playback and isn't making their own styles there's not much that you need to know about the styles, since they play normally like other Band-in-a-Box styles.

You can see which tracks have intelligent guitar parts by looking at the title window of the Guitar fretboard, when the track is highlighted. If it is a Guitar Style track, it will say [Guitar Voicings] after the name of the track. The usual track that has the intelligent guitar styles is of course the Guitar Part. Some of the styles have more than 1 guitar, so the piano and/or strings part might also have an intelligent guitar part. In these cases, you can also view the guitar on those tracks.

The styles can be set to use different types of voicings for guitar. For example, there are Jazz, Pop, and Folk (open position) voicings. Also, some of the styles allow the guitar to play advanced chords and inversions. Some of the styles play chord patterns, so the chord in the song might be F7, but the guitar plays a “walking-chord” pattern of F7,Cm7/G, Abdim, F7/A on each beat. There can be fingerpicking styles that have a lowest note alternate between root and 5th.
Guitar Parts use channels 11 to 16 for the notes, corresponding to strings 1 to 6 of the guitar. When you make a MIDI file, the notes will all get written on a single guitar channel. Sequencers like PowerTracks Pro Audio will recognize guitar parts on all 6 channels, so if you want to write the MIDI file from an intelligent guitar style, you can set Band-in-a-Box to do this from the Opt | Preferences... | Write Guitar part on 6 channels option.

To make a Guitar Style:

Press the [Misc] button to enter the Misc. Style Settings window, and then press the [Guitar Macros] button to launch the Settings for Guitar chord macros dialog.

Note: A macro is a single note that triggers a preset chord pattern.

In the Settings for Guitar chord macros dialog choose the tracks that you want to put guitar parts on. Use the Piano and Strings to layer multiple guitar parts. In the dropdown “Guitar Chord Types to Use” combo box, set the type of chords to use: Jazz, Pop, Folk, Half Note (sax), Ukulele, Mandolin, 5-string Banjo or alternate guitar tunings.
Set the complexity of the chords to use. These can be single chords, chords with variations, inversions, and chord “walking” patterns. If you want a simple guitar style, set the first one to 100%, and the rest to 0%.

<table>
<thead>
<tr>
<th>Chord Type</th>
<th>Complexity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Chord: CHD1</td>
<td>100%</td>
</tr>
<tr>
<td>Single Chord - slight variation. CHD2</td>
<td>0%</td>
</tr>
<tr>
<td>Chord with 5th in bass (inversion). INV0</td>
<td>30%</td>
</tr>
<tr>
<td>Chord with inversion later in pattern. INV1</td>
<td>20%</td>
</tr>
<tr>
<td>Starting on Chord Inversion. INV2</td>
<td>10%</td>
</tr>
<tr>
<td>Single Chord w/ some Chromatic movement. WK1</td>
<td>0%</td>
</tr>
<tr>
<td>&quot;Walking&quot; pattern of chords. WALK2</td>
<td>0%</td>
</tr>
<tr>
<td>Starting on chord substitution. WALK3</td>
<td>0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strum Speed [ms]</th>
<th>Lowest Fret</th>
<th>Faster Strum Speed [ms]</th>
<th>Highest Fret</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>2</td>
<td>30</td>
<td>8</td>
</tr>
</tbody>
</table>

Set the strum speed and fret range that should be played on the guitar.

- **Only include first chord of pattern**
  - The Guitar styles have an option to keep the same chord for the whole pattern when using databases that have changing chords within the pattern. If set, databases that have changing chords like the “Half Note (sax)” chords will only use the first chord in the pattern.

Exit the dialog and record a guitar pattern using Guitar Macro notes.

- **OK to use Macros**
  - When the recording of the pattern finishes, set “OK to use Macros” and “Guitar Macros” to Yes.

- **Use Guitar Macros**
  - Save the style, using the convention of putting an exclamation (!) somewhere in the name (e.g., as the first character in the filename) to indicate that it is an intelligent guitar style.

**Guitar Macro Notes**

- A6 = Full chord, back strum- half step above
- C6 = Full chord, back strum
- F6 = Full chord, back strum- half step below
- F6= Plays a full chord (like note C6), but omits the root
- G6 = Full chord. Faster strum
- C6 = Full chord, slower strum

**Macro Notes Below Play a Single String**

- G5 = high E string.
- F5 = play & string if no available high E.
- E5 = B string
- C5 = G string
- G4 = D string
- E4 = Plays the 5th or 3rd above the root for fingerpicking
- D4 = This plays the root of the Chord for the NEXT BEAT of the pattern.
- C4= plays a note a chromatic above the root
- C4 = root
- B4 = plays a note a chromatic below the root
- C3 = 5th of chord

**Tip:** Middle C is C5 or note number 60

Chapter 14: User Programmable Functions
The main Guitar Macro notes to use are:

**Strummed Chords**
- C6 note: Plays a guitar chord, with a slow strum.
- D6: Plays a guitar chord, with a faster strum.

For example, if you want a simple 4-in-the-bar pattern that plays a slow-fast-slow-fast strumming pattern, play the notes C6 D6 C6 D6 for the pattern.

Additional strumming macros are:
- F#6: Back strum, chromatic below.
- G6: Back strum.
- G#6: Back strum, chromatic above.
- A6: Back strum, chromatic above, fast strum.

**Single Strings in chord**
- C4: Plays a single string that is the low root of the chord.
- G4, C5, E5: Plays single string (D string, G string, B string).
- G5: Plays high E string.
- F5: Plays high E string, but if none available will play G string.

**Additional notes for fingerpicking, not part of chord**
- G3: Fifth below the low root of the chord for fingerpicking.
- E4: Fifth or 3rd above the low root for fingerpicking.

You don't need to set any Guitar Style Options, unless you want to override the settings already made in the Misc. Style Settings dialog, for this pattern only. In the StyleMaker window, press the [Opt] button and then the [Guitar Options..] button to see the options for the current pattern.

### OverRide Guitar Style Options for this pattern only

- **Over ride Guitar Settings for this pattern only**
  - Guitar Chord Types to Use: Jazz Chords
  - Single Chords CHD1: 100%
  - Single Chord - slight variation CHD2: 0%
  - Chord with 5th in bass (inversion) INV0: 0%
  - Chord with inversion later in pattern INV1: 0%
  - Starting on Chord Inversion INV2: 0%
  - Chord with some Chromatic movement WK1: 0%
  - Walking pattern of chords WALK2: 0%
  - Starting on chord substitution WALK3: 0%
  - Strum Speed (ms): 50
  - Faster Strum Speed (ms): 30
  - Lowest Fret: 2
  - Highest Fret: 8
  - Include Highest Note in Strummed Chord
  - Embellish pattern OK (Sax db)
  - Only include first chord of pattern

Check the “Over-ride Guitar Settings for this pattern only” checkbox to set new parameters for this pattern only.

**Guitar Chord Types to Use**
Use this feature to set the type of guitar chords to use for this pattern from the list, which includes alternate tunings.
Chapter 14: User Programmable Functions

Single Chords
The Single Chords feature will play the chord as intended in the pattern for the percentage value entered.

Single Chord - slight variation
This will play a slight variation of the specified chord for the percentage value entered.

Chord with 5th in bass (inversion)
This feature will play your chord with a 5th in the bass.

Chord with inversion later in pattern
This feature will play your chord with inversion later in the pattern.

Starting on Chord Inversion
This feature will play your pattern starting on chord inversion.

Single Chord w/ some Chromatic movement
This feature will play single chord with some chromatic movement.

‘Walking’ pattern of chords
Walking pattern of chords.

Starting on chord substitution
Walking pattern starting on chord substitution.

Strum Speed (ms)
This setting in milliseconds (ms) affects the rate in which the guitar chord is strummed.

Faster Strum Speed (ms)
The Faster Strum Speed setting affect the rate in which the guitar chord is strummed. Note that a lower setting in ms equals a faster strum.

Include Highest Note in Strummed Chord
Check to include the highest note (for Strummed Macros) when played as a macro.

Include Highest Note in Finger Picking
Check to include the highest note (for Single String Macros) when played as a macro.

Only include first chord of pattern
Check to play the first chord only.

Lowest Fret
The Lowest Fret feature will limit the notes not to be played beneath the fret specified.

Highest Fret
The Highest Fret feature will limit the notes not to be played above the fret specified.

Embellish pattern OK (Sax db)
This allows embellishment of the pattern from the Sax patterns database.

[Zeros]
Click this button to reset all percentage fields to zero.

[100s]
Click this button to set all percentage fields to 100.

Miscellaneous Style Settings
This dialog box allows you to set some miscellaneous settings for the style. They are:

LongName (32 chars)
A long style name can be stored in the style (up to 32 characters), and this will appear on screen and in StylePicker.

Waltz?
If you want to make a waltz with the StyleMaker, check the “Waltz?” checkbox in the Misc. Style Settings dialog. Then the StyleMaker will record, and play patterns in 3/4 time. The “8 beat row” will record “6 beat” (2 bar patterns), the “4 beat” will record 3 beat (1 bar patterns). The “2 beat” and “1 beat” still record 2 and 1 beat patterns. The new style is made as a waltz, and will play with a 3/4 lead in. There is no need to put a 3/4 time signature change in bar 1.
**Jazz Style?**
This lets Band-in-a-Box know if the style you've made is a Jazz style or not. If it’s a Jazz style it will use the Jazz Snare/Bass Drum instead of the Pop Snare/Bass Drum, and also makes some other decisions based on this setting.

**Tempo**
This allows you to set the default tempo for the Style. This is stored with the style. You can also change this tempo by the tempo button on the StyleMaker main screen. Tempos can also be changed by the [ and ] keys. When creating a new song the tempo will be set to the default tempo for the style.

**Resolution**
Styles can either have Triplet (swing eighth notes) Straight (even eighth or sixteenth notes) resolution.

**Use Latin Drum Kit**
Check to use a Latin drum kit in this style with instruments like maracas, cabasa, and agogo.

**Velocity Boost of pushes**
Pushes can get a velocity boost, so that they are played louder than other patterns. A usual setting would be 10.

**# ticks to push**
Styles can be pushed with the StyleMaker. This will cause the patterns to be played a little ahead of the beat, a certain % of time, which gives your arrangement a more human (musical) feel.
Band-in-a-Box uses a resolution of 120 PPQ, i.e., 120 ticks to a quarter note.
- 30 ticks = sixteenth note
- 40 ticks = triplet eighth note (Swing)
- 60 ticks = eighth note
Choose the number of ticks for each push to use.

Substyle Pushes
The % of notes that are pushed can be set separately for each instrument part and for the “a” and “b” substyles.
In this example, the Bass part patterns will get pushed (randomly) 10% of the time in the “a” substyle and 20% of the time in the “b” substyle.

<table>
<thead>
<tr>
<th>Substyle Pushes</th>
<th>A</th>
<th>B</th>
</tr>
</thead>
</table>
| Bass            | 10| 20|%

Allow Volume Changes with Style (Usually = No)
Usually you don't want specific volume changes in a style. But if you decide to change the volume of instruments, you can do it by setting this to YES and then entering the Volumes you want in the settings below. (A better way to change the volume of a part is to use Pattern | Volume Adjust (Alt+W) to set the volume of each pattern individually.)

‘Riff’ voicing type uses chord tones
This is an option for piano, guitar, and string patterns. If selected, voicing modifies to match the chord and scale. Deselect for a simple transpose ignoring chord type.

More Settings (for Rests, Pushes, RealTracks)
Press the [More..] button for the More Settings (for Rests, Pushes, RealTracks) dialog.

![More Settings dialog]

- Drum Rest Instrument: 2 Snare Drum
- Drum Rest Velocity (shots/ held chords): 100
- Drum Push Instrument: 7 Ride Cymbal
- Drum Push Velocity: 110
- Lowest Bass Note (E2=default): E 2
- Assign Soloist (MIDI) or RealTracks (audio) to style: Bass
- Soloist/RealTracks to use: 443 Bass, Ac, Jazz Sw 140
- dB offset (RealTracks) or Volume offset (MIDI tracks): 0
  
  Note: +6 dB change is about a +32 change of MIDI volume
- Timing offset (RealTracks or MIDI) in ticks (120 per beat): 0
- TimeEase: Normal Time

Chapter 14: User Programmable Functions
Since rests can be “shots” that play a chord on beat 1, the style can define what instrument to use for this, and at what volume.

Similarly, each push is accompanied by a drum stab, and the style can define what instrument to use and at what volume.

The **Lowest Bass Note** setting defaults to the low E on the bass guitar or acoustic bass. It can be changed to match the range of other bass instruments, such as a tuba, or to extend the range of the bass for keyboards or 5-string and 6-string basses.

**Assign Soloist (MIDI) or RealTracks (audio) to style**

Styles can contain RealTracks and RealDrums or MIDI soloists.

To assign RealTracks to a style set the “Instrument” to use, and the RealTracks #. In the following example, we are using RealGuitar for the Guitar track.

<table>
<thead>
<tr>
<th>Assign Soloist (MIDI) or RealTracks (audio) to style</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Instrument</strong>: Guitar</td>
</tr>
<tr>
<td><strong>Soloist/RealTracks to use</strong>: 362 Guitar Ac, Strumming Ev 85</td>
</tr>
<tr>
<td><strong>dB offset (RealTracks) or Volume offset (MIDI tracks)</strong>: 0</td>
</tr>
<tr>
<td><strong>Timing offset (RealTracks or MIDI) in ticks (120 per beat)</strong>: 0</td>
</tr>
<tr>
<td><strong>Timebase</strong>: Normal Time</td>
</tr>
</tbody>
</table>

Styles can have multiple RealTracks. For example, you could have a Real Guitar and Real Bass - and also RealDrums for the drum track.

Styles can also use MIDI soloists. For example, make a style with a banjo part that has the same quality as the Band-in-a-Box Banjo Soloist. Here we are assigning an Earl Scruggs Bluegrass solo to the Strings part.

<table>
<thead>
<tr>
<th>Assign Soloist (MIDI) or RealTracks (audio) to style</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Instrument</strong>: Strings</td>
</tr>
<tr>
<td><strong>Soloist/RealTracks to use</strong>: 137 Bluegrass, Earl Scruggs Band</td>
</tr>
</tbody>
</table>

Use the **dB offset** to match the level of your RealTracks audio or MIDI soloist to the rest of the style.

The **Timing offset** can be used to offset the selected track by a certain number of ticks, either plus or minus. A minus number will give the style a laid back feel, a plus number will “push” the part.

**Timebase** allows styles to use Half-Time and Double-Time RealTracks. We include some of these styles.

| Timebase | Double Time |

**Guitar Macros**

These settings determine what type of guitar chords will be used, and only apply if the patterns are recorded using the guitar macro notes, and if the pattern is set to use guitar macro notes.

**Allow Late Notes**

This opens the **Settings for Making Late notes quieter** dialog. Notes played near the end of a pattern will usually conflict with the next chord.

So it’s best to prevent notes near the end of a pattern from playing. In the **Arrangement Options** dialog under *Opt. | Preference* [Arrange] button there a global setting for “Allow late notes in pattern, just before chord change” and a percentage setting for how often they will be allowed.
RealDrums Settings (Audio Drums, instead of MIDI drums)

It is also possible to assign RealDrums (audio drums) to a particular Band-in-a-Box style.

Enable “Style uses RealDrums (audio drums)” in order to designate a RealDrums style, then press the [RD] button to select your RealDrums style. Whenever the current style is played, it will use your RealDrums style provided that RealDrums are enabled in the RealDrums Settings dialog. There are also additional volume controls here.

Note: There is a hot key combination to turn RealDrums on/off (Ctrl+Shift+F6). This also works while the song is playing.

To make your overall dB setting a bit higher or lower for this particular Band-in-a-Box style you can enter a setting here. There are also fields for adjusting the ‘a’ or ‘b’ subsection volumes only.

If you remove the check mark from either “Allow ‘a’ substyle RealDrums” or “Allow ‘b’ substyle RealDrums” the one with the checkmark remaining will be used for the entire song, regardless of what substyle is currently called for in the song.

Choose “Vary ^ styles with each play” to hear a different variation each time [Play] is pressed, so the song sounds fresh each time. One time you’ll hear it with brushes, the next time with sticks and ride cymbals, etc.

Assign Instruments to Style Dialog Box

Select the [Pat.] button in the StyleMaker tool bar to open the Assign Instruments to Style dialog.

This dialog box allows you to assign instruments to a style. When the song is played back using the style, these patch changes will be sent to your synthesizer. Remember, these are General MIDI Instrument numbers, not the...
patch numbers of your synth (unless you have a General MIDI synth).

If you don't require a specific instrument for the style, leave the setting at 0 < No Patch Change >.

Styles can have different instruments (patches) for the “a” and “b” substyle. For example, you can have drum brushes on the “a” substyle, and sticks on the “b” substyle, or acoustic piano for the “a” and electric piano for the bridge.

The patch changes take effect immediately in the style, so that when you are recording Bass parts for example, you will hear the bass patch that you have selected.

**Melody Patch/Soloist Patch**

If set to other than 0 < No Patch Change >, all Melodies/Soloists will be played on the specified instrument. If you're making a “Grover Washington” style for example, you might want any melodies to be automatically set to saxophone.

**Thru Patch**

If you set the Thru patch to other than 0 < No Patch Change >, the instrument that the user plays along to your style will be the patch that you set. If you're making a “Heavy Rock” style, you might want to set the Thru patch to be Rock Guitar if you expected that the user would want to always play along on Rock Guitar.

**Advanced Editing Of Patterns**

Patterns can be “tweaked” with the other advanced features in the StyleMaker - Trim Pattern, Late Notes, and the Event List Editor.

**Trim Pattern**

The Trim Pattern routine deletes notes past the end of a pattern, or (optionally) a specified distance from the end of a pattern. This can be accessed from the Pattern | Trim Pattern(s), row(s) command.

![Trim Pattern dialog](image)

In the dialog displayed, we are trimming 50 ticks from an 8 beat pattern. This means that all of the information past 8 beats (less 50 ticks) will be deleted. This feature is useful to erase “busy playing” that is present near the end of a pattern, and also delete notes that are just taking up space in the style.

**Pattern Velocity Adjust**

This function adds or reduces the velocity of a single pattern, row of patterns, or all patterns in an instrument. It is useful for reducing or increasing the volume of an entire instrument, or fine-tuning the velocities in a style. Choose the StyleMaker menu item Pattern | Velocity Adjust for 1 pattern, 1 row or all patterns, and input the velocity change to make for the pattern(s). This adds or subtracts a certain velocity value to the patterns.

**Tip:** There is another velocity command, “Volume adjust,” but it works differently. It will change the velocities to a certain value, useful for “smoothing out” velocities.

**Late Notes**

The [Late Note] button is found inside the StyleMaker’s Misc. Style Settings dialog. It opens a dialog with “Settings for Making Late notes quieter.” There are settings for allowing or not allowing late notes, and for how late the notes can be.
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The global setting for late notes in Opt. | Preferences [Arrange] will reduce the volume of the late notes for a smoother transition from one chord to another.

**Event List Editor**

The [#] button in the StyleMaker Pattern Editor notation window opens an event list for editing, inserting, or deleting notes in the patterns.

**Style Log Options**

For people making styles, the Style Log text file shows exactly which pattern was used in the song generation for every instrument and bar/beat. This is useful in fixing errant patterns.

To set a style log, choose the StyleMaker Style | Write BBStyleLog##.txt file menu option Display BB StyleLog##.txt” in Notepad with each play.
Then, a file called BBStyleLog##.txt will be displayed. Here is a sample:

Bass: Bar 1 Beat=1, Row= 1, Col=12, Location=13, Chord= C
Piano , Bar 1 Beat=1, Row= 1, Col=17, Location=140, Chord= C
Guitar , Bar 1 Beat=1, Row= 5, Col=8, Location=287, Chord= C
Strings, Bar 1 Beat=1, Row= 5, Col=23, Location=274, Chord= C

This tells you that when the song was generated, for the bass track, at bar 1 the pattern found in row 1, column 12 of the StyleMaker was chosen.

Alternatives to Recording Patterns

It’s not always necessary to record every pattern for a style, or any patterns, for that matter. The import features in the StyleMaker make it possible to assemble an entirely new style from existing styles, or to import patterns from favorite MIDI files.

Hybrid Styles

The “Hybrid Styles” feature allows you to play and create a style that has instruments from up to five different styles! You can, for example, play a song with a Reggae bass, Rock drums, Salsa piano, or any combination of up to five styles that you want. Create a name for your hybrid style and you can save it with the song so that it will play that way in the future.

To use the Hybrid Styles feature, choose Styles | Make a Hybrid style or click on the hybrid [STY] button in the toolbar. You’ll then see the Make a Hybrid style dialog.

Your hybrid style can be up to five instruments, each from a different style. For example, you can have a Latin drum part, with a Zydeco bass, and Jazz guitar part, and strings from a Classical style!

Select the instrument (e.g. Bass), and then select a style by pressing the [.STY] button. Repeat for up to five instruments.

When you’re ready to generate the Style, press [OK- (re) Generate style with name ---], and choose a name for your style.

Remember that style names in Band-in-a-Box can be a maximum of eight characters, with no spaces! (This is to insure compatibility with Macintosh and previous versions of Band-in-a-Box.)

Press [Play] in Band-in-a-Box and you can hear the results. You can revisit the Make a Hybrid style dialog to make any changes.

Editing a Hybrid Style

You can edit a hybrid style just like any other style. Open the StyleMaker to view the patterns.
Importing Instruments from Other Styles

This is a great way to have fun with the StyleMaker, and to create great new styles in no time. The dialog is accessed from the Style | Import Instrument menu item.

Choose the instrument you want to import and select the desired options. Click on [OK] and a standard Windows Open dialog will be launched so you can select any style on your computer as the source for the instrument. Mix and match instruments from different styles to create fresh new arrangements.

Notice the selector box to choose an instrument to import and the destination instrument in “Import to this instrument.”

For example, to add a second guitar to your style, you could import it to the Strings part if it is empty (or if you want to replace the strings with another guitar).

Note that Piano/Guitar/Strings can be interchanged here, but Bass can only be imported from Bass, and Drums from Drums.

Try some instruments from dissimilar styles for fun and surprises! You can also add parts that were not present in the original style this way.

Importing Patterns from a MIDI file

You can use any MIDI file as a source for new StyleMaker patterns by accessing Pattern | Import Pattern from MIDI file menu item.

Use the options to specify the channels and the exact bars to import, and also to include or exclude controllers.

The import # patterns option allows you to import more than one at a time.

In the StyleMaker, when you choose Pattern | Import from a MIDI File (or clipboard or Melody track) the dialog shows a further option at the bottom.

For example, if you import 8 patterns, the 8 patterns will be inserted in the first available 8 positions on the current row. They will be offset by the # of beats present on the current row. For example, if you are on the “4 beat” row, the patterns will get inserted offset by 4 beats, so you’d get patterns for each bar in the 8 bars imported.
Convert Track to C7 chord
Choose Melody | Edit Melody Track | Map Melody track to C7 chord. The purpose of this function is to allow you to quickly import any MIDI file track into the StyleMaker and make a style from it.

Once you choose the option, you select whether it is a bass track to import, or a piano track (actually any part other than bass or drums). A bass track uses notes below C4 (MIDI note #48) and above the lowest note you select in the dialog.

If you select piano track the notes will all be mapped to a C7 chord, it is not important that the chords on the spreadsheet are correct. However, if you are importing a bass track, it is important that the chords are correct. You can select options to allow patterns that are anticipations, and also convert chords to “macro notes.” Force mapping to “tritones” is useful for guitar or string parts that you might only want 2 notes for.

Once you have mapped the track to the notes, you can examine the Melody track to make sure the results are what you want, and then use the Pattern | Import From Melody track command, and set the # of patterns to import, etc. This function allows you to read in any track of music from a MIDI file that you’ve created, and quickly convert it to patterns in the StyleMaker. Since the StyleMaker requires all patterns based on a C7 chord, this function automatically maps the entire track to notes on a C7 chord. You can then import any # of patterns (using the function to choose the number of patterns to import).
Editing Patterns

Slide Pattern X ticks

This is another option available on the StyleMaker menu. This allows a pattern to be time shifted any number of ticks, based on a PPQ setting of 120.

The StyleMaker screen displays the number of patterns, which combined with the map to C7 function, allows you to quickly import any MIDI file track into the StyleMaker and make a style from it.

There are other additional StyleMaker features such as definable instruments on the drum grid, 32nd notes on the drum grid, “live” drums, the ability to load-in patterns from MIDI file to the drum grid or live drums, etc. to facilitate importing patterns from MIDI files.

Velocity Adjust

This function adds or reduces the velocity of a single pattern, row of patterns, or all patterns in an instrument. It is useful for reducing or increasing the volume of an entire instrument, or fine-tuning the velocities in a style.

Choose the menu items Pattern-Velocity Adjust (for 1 pattern, 1 row, or whole instrument) and input the velocity change to make for the pattern(s). This will add or subtract a certain velocity value to the patterns.

Style Checker

Analogous to a “Spell Checker,” this function analyzes your style-in-progress and identifies possible problems. The results are output to a text window, allowing you to examine the patterns and fix them if required. It identifies patterns that might be “too busy” or incorrect macro notes etc.

To access the Style Checker, open up the StyleMaker (Ctrl+F9), and choose Style | Style Checker. You'll then get a text report about the style, listing possible problems with the style. Here is a sample printout:

-----Start of style checking ------JAZQUINT.STY

Drums: Row 1, Column 1 First pattern of instrument shouldn't contain masks in it. It should be generic.
Piano: Row 1, Column 3 Non Chord tones found (other than C, E, G, Bb) and pattern is not set to a chord mask, riff based, or MACRO.

Style Summary

This displays a text window summary of the style, including lots of information about the style such as # patterns, # patterns for each substyle, patches, pushes, volume changes, guitar patterns, and more. To access the style summary, from the StyleMaker, choose Style | Style Summary. You'll then see a detailed text summary of the Style.

Using the MIDI File to Style Wizard

The Style Wizard converts any MIDI file to a Band-in-a-Box style. In this tutorial, we're going to load in the Violet.MID found in the 'bb' folder and convert it to a style - which we'll call Violet.STY.

Press the [Open] button and load in the file c:\bb\violet.MID. The Style Wizard then does the following automatically:

The chords for the MIDI file are interpreted and written on the Chordsheet.
The “part markers” for the file are displayed on the Chordsheet. For Violet.MID, the Style Wizard has found the correct part markers – by looking for drum fills and other signs of a part change – and has assigned substyle “a” to all of them. We’ll change some of them to “b” later.

The channels used in the MIDI file are displayed in the dialog, with the patches used and # of notes played on each channel. (For Violet.MID you can see that channels 2, 3, 4, 6, 7, and 10 are used.)

The Style Wizard analyzes the parts and guesses at which Band-in-a-Box part - Bass, Piano, Drums, Guitar, or Strings to use for each track. Band-in-a-Box has correctly assigned 5 instruments – not assigning a part to the Melody.

The Style Wizard suggests which bars (“snapshots”) to include in the style. The suggested bars are bars with all of the “BB Part” instruments.

Usually you'll want to customize these snapshot bars to control which bars get included in the “a” or “b” substyle. In the Violet.MID style, the Style Wizard has offered to include Bars 9-101 (inclusive) and wants to put them all on the “a” substyle. Continuing on, we want to make a great sounding style, so it is important that we have the following two items correct:

- The “BB Parts” have to be correct. We can audition the MIDI file by playing a loop and listening to the MIDI file and muting channels by clicking on the “Channel” checkboxes. From that, we can hear the individual parts and assign them correctly, as we would like them in the style. By playing the MIDI file inside the Style Wizard we can tell which bars to use for the “a” and “b” substyles.

- The “BB Parts” have to be correct. We can audition the MIDI file by playing a loop and listening to the MIDI file and muting channels by clicking on the “Channel” checkboxes. From that, we can hear the individual parts and assign them correctly, as we would like them in the style. By playing the MIDI file inside the Style Wizard we can tell which bars to use for the “a” and “b” substyles.

**Note:** The Style Wizard has entered some of these settings automatically – but you’ll have to type in the data as shown.

The Snapshot Bars should be correct for the “a” and “b” substyle. You need to tell the program what bars to use for the “a”-substyle and for the “b”-substyle. The program makes an attempt to guess at this, but since MIDI files can contain many different substyles (and a Band-in-a-Box style allows only 2), you'll likely want control over these snapshots yourself.

**Tip to help you choosing which bars to use:**

To listen to the MIDI file, you can either exit the Style Wizard dialog and just play the song like any other Band-in-a-Box file, or play a looped section inside the Style Wizard using the [Play], [Stop], and “Loop at Bar” settings.

OK, the Style Wizard has already made the correct settings for the “BB Parts” for us, so we don't need to make any changes there. Let's move to the Snapshots section, and enter the bar numbers that correspond to the substyles that we'd like for the Jazz tune. After listening to the tune, we notice that there is a “2-feel” Jazz section, and a “4-in-the-bar” section. We want those as “a” and “b” substyles, so we enter the bar #s that correspond to these settings.
In the Snapshots area of the Style Wizard:

- Enter “1-20” for the bars for the “A” Substyle.
- Enter “21-28, 37-68” for the “B” Substyle.
- Enter “12, 20” for the “A” Drum Fills.
- Enter “28, 36, 44, 52, 60, and 68” for the “B” Drum Fills.

Note: Of course you don’t need to enter this much detail. You could just enter a single range like 1-20 for the “a” substyle and make a quickie style. We’re illustrating “advanced” style-generation here.

Press [Generate NEW style…]; choose a name for your style, and the style will be made.

Let’s call it Violet.STY. Now to hear your style! You could play the style with any song of course, by loading in a song and then loading in the Violet.STY. It is easily available from the Favorite Styles dialog (Shift+F9).

For this tutorial, load in the song V_TEST.MGU that we made for you. That’s a Jazz Swing song using different chords than Violet, and it uses the Violet.STY (So you need to have made that style before you try to play the song or you’ll get a “Violet.STY not found” message.)

Save the existing song before loading in the new song. When Band-in-a-Box saves a song that has an entire MIDI file on the Melody or Soloist tracks it gives it a special MGX extension. So you’ll be saving the file as Violet.MGX.

Alternatively, if you'd prefer to play the Violet.STY style without loading in another song, you can do it as follows. Since the Violet.MGX file currently has the entire MIDI file on the Melody track the first thing we need to do is Mute the Melody (Alt+9 or right-click on the Melody part at the top of the screen). The next thing is the Enable the Style, by choosing Style | Style is Enabled so that this item has a checkbox.

Auto Endings for Styles without Endings

If you’ve made a style, and haven’t included an ending, a 2-bar ending can be generated automatically, based on the style. This makes it easier to make complete styles using the Style Wizard.

To hear an example, load in the song c:\bb\Tutorial – BB 2005\No Ending.MGU. This song uses NOENDING.STY, a style that doesn’t have an ending. An ending will be generated automatically for this style.

So we’ve made our first style! In summary, making styles with the Style Wizard is a process involving:

7. Listening to the MIDI file by muting channels to identify parts.
8. Picking the channels to use for the BB Parts.
9. Picking the snapshot bars for the “a” and “b” substyle.
10. Pressing the [Generate NEW style…] button.

Advanced Settings and Preferences

Click on the [More] button to open the Style Wizard Advanced Settings and Preferences.
There are 2 sections to this dialog, Advanced Instrument Settings and Preferences.

**Advanced Instrument Settings**

The advanced instrument settings allow settings for the instruments (drums / bass / piano / guitar / strings) to be included in the style. The settings are:

- **Substyles** determines whether the instrument is included in the “A,” “B,” or both “A&B” substyles. For example, if you want to make a style that only uses the strings on the “B” substyle, set the strings instrument part to “B” only.

- **Voicings** settings determine, for the various instruments:
  - **Drums (“voicings”):** Whether the patterns will use live or grid style patterns. Default mode is “auto,” which normally uses live patterns, but you can force it to use live or grid style patterns. Live patterns have higher resolution and can use more instruments, so in general are the better choice.
  - **Bass (“voicings”):** Determine if the bass part will use All notes / Scale tones only / Root 3rd, 5th, 7th / Root, 3rd, 5th / Root and 5th / or just the Root. The default is “Auto-select” which usually allows all 12 semitones.
Piano, Guitar, and Strings Voicings determine how the Piano patterns will be voiced. The choices are Auto, Include Full Voicings, Tritones only (3rd/7ths), Power Chords (Root/5th), Chord Mask Half Octave, and Chord Mask Full Octave.

The auto-setting usually uses the “Include full voicings.” If the part uses 2-note chords, you should over-ride this setting to “use tritones” so that the most important notes of the chord (the tritone) will get included. You can also use chord masks so that specific patterns over chords will get added to your style, and they will play exactly as in your MIDI file (just transposed). Set the voicings to use “ChordMask Full Octave” or “ChordMask Half Octave.”

You wouldn’t make a Style Wizard style from scratch using chord masks, because there need to be generic patterns in the style. So you do it as a 2-stage process. First time, make the style using generic patterns (e.g. Voicing type “Auto”) and then change voicings to Chord Mask, and add those to the style. As with other Style Wizard features, it is important that the chords and part markers on the chordsheet be very accurate. So if they aren’t, you should fix them before generating a style.

The Emb. (embellish) checkbox determines if the patterns for Piano, Guitar, and Strings will be embellished. If embellished on a chord like D7 (in the key of C) 13ths, 9ths, and #11 notes might be added to embellish the chord. A Jazz piano style would likely use this.

The “Include Empty patterns Threshold” setting defaults to None. Possible settings are None / 2 beat / 1 bar / 2 bars. If set to none, the instrument will always play in the style, if set to “1 bar” there will be “spaces of silence” up to 1 bar long (perhaps longer if chained together) in the style for that instrument. So if an instrument is used sparsely in a style, set this setting to something higher than none.

The Velocity Adjust will make an instrument louder or softer in the style.

Preferences
Preferences affect the style itself.

Save settings with songs
The song will be saved as an MGX file, since the Melody track type is Multichannel and contains the MIDI file. If you select this, the Style Wizard settings are all saved with the MGX file.

Leave StyleMaker open after creating style
If set, after generating the style, the StyleMaker is left open for you to examine/edit the style directly.
**Auto-interpret MIDI file.**  (Default = Yes)
When set, the Style Creation Wizard will set the channels, BB Parts, and snapshots for you. Normally this setting should be left on.

**Delete existing patterns (when adding to the style).**  (Default = No)
If this option is set when you create style patterns to add to an existing style, the entire instrument will first be erased in the style for any instrument used in the new style. When you generate a style by adding to an existing style, the StyleMaker is then opened up, allowing you to pick a new name for the style (so you don't overwrite the existing style).

**# columns to leave unused in the style.**  (Default = 0)
If set to zero (the default), the Style Creation Wizard can create the biggest style possible — filling up the rows completely with patterns. But if you set this to a non-zero value it will limit the # of patterns that can be made. Since there are 30 rows in the StyleMaker, you can set this setting from 0 to 29.

**Generate new pattern after # duplicates**
The Style Creation Wizard won't insert patterns unless they are unique compared to the ones already entered. But (with this setting at the default of 8), after 8 duplicates of the same pattern, a 2nd pattern will get entered that is a duplicate of another pattern. Setting this to zero would mean that every pattern would get entered (regardless of whether it was unique); setting it to a high number like 200 would mean that only truly unique patterns are entered. To maintain the correct balance in the style, since the maximum weight of a pattern in the StyleMaker is 8, this setting should be left at 8 in most situations. If your style is “filling up” all of the available columns, then set this to a higher number.

**Allow Pitch Bend in style**
If set, pitch bend present on the MIDI file will be included in the style. Make sure that the MIDI file pitch bend range = two semitones.

**Allow pushes in style**
If set, the style will allow pushes (playing instruments before the beat). This is done by setting the push values in the individual pattern’s options.

### Making RealDrums Styles

**Introduction to RealDrums**
RealDrums are actual recordings of studio drummers, pieced together by Band-in-a-Box to create a unique “real” drum track that is played along with the MIDI tracks created by Band-in-a-Box styles. You can combine any RealDrums style with any Band-in-a-Box style, so the potential combinations are endless!

A RealDrums style consists of a wave file containing various bars of drum patterns, and a text file with instructions on how Band-in-a-Box should interpret the wave file. In order for the style to work, the text file needs to be located in the main Band-in-a-Box directory in the “Drums” folder, and then in a sub-directory that is the name of the style group. The file-name needs to be the same as the style group, followed by an underscore (_) and a three digit number representing the tempo. Additionally, “_Style” has to be in the filename after the tempo.

For example, for a “JazzBrushes” style that is 120 beats-per-minute, this text file needs to be present:

```
C:\bb\Drums\JazzBrushes\JazzBrushes_120_Style.txt
```

The wave file also needs to be in a subdirectory of the “Drums” folder. It is usually located in the same place as the text file:

```
C:\bb\Drums\JazzBrushes\JazzBrushes_120_Style.wav
```

However it can be in a different directory, and there are some instances where this is necessary (see “Reduced Styles” below).

“RealDrums style groups” are multiple RealDrums styles that have the same basic feel, but were recorded at different tempos. In the example above, “JazzBrushes” is the group, and “JazzBrushes_120_Style” is the style. In that particular example, the JazzBrushes group contains 10 RealDrums styles:
The easiest way to make a style is to use a text-file template.

Making A RealDrums Style Using An Existing Template


The information given below is all you need to create a RealDrums style using any of several provided templates.

For a more in-depth look at the intricate details of creating styles, please read on to the following topics under Elements of RealDrums Styles.

Recording your wave file

For the wave file that will be used for your RealDrums style, you can either record a drummer, or you can piece together a wave file using drum loops. If you use drum loops, just make sure you have the necessary permission from the original artists and/or publishers of the loops.

Regardless of the method that you choose for creating your drum wave file, you need to have it conform to one of these descriptions in order to have it match the accompanying template:

1. 32_bars_of_drumming.txt
2. 32_bars_of_drumming_with_shots.txt
3. 32_bars_of_drumming_with_shots_two_endings.txt
4. 64_bars_of_drumming.txt
5. 64_bars_of_drumming_with_shots.txt
6. 64_bars_of_drumming_with_shots_two_endings.txt

1. 32_bars_of_drumming.txt

bar# 1-2 – count-in for two bars (i.e., “one, two, one-two-three-four”)

Bars 3-18 will use the same basic groove:

3 – PostFill (usually a bar of playing with a cymbal shot at the downbeat, or some kind of bar that would sound good after a fill)
4-9 – normal playing
10 – Fill
11 – PostFill
12-17 – normal playing
18 – Fill

Bars 19-34 will use a slightly different groove (‘B’ section) than 3-18

19 – PostFill
20-25 – normal playing
26 – Fill
27 – PostFill
28-33 – normal playing
34 – Fill

35-36 – ending, lasting two bars (usually the second bar ends on the downbeat, with a cymbal decaying)

2. 32_bars_of_drumming_with_shots.txt

This is exactly the same as 1, with these bars added:
37 – single drum hit, which will be used for “shots” in Band-in-a-Box
38 – single drum hit, which will be used for “pushes” in Band-in-a-Box

3. 32_bars_of_drumming_with_shots_two_endings.txt

bar# 1-2 – count-in for two bars (i.e., “one, two, one-two-three-four”)
Bars 3-20 will use the same basic groove:

3 – PostFill (usually a bar of playing with a cymbal shot at the downbeat, or some kind of bar that
would sound good after a fill)
4-9 – normal playing
10 – Fill
11 – PostFill
12-17 – normal playing
18 – Fill
19-20 – two bar ending

Bars 21-36 will use a slightly different groove (‘B’ section) than 3-20

21 – PostFill
22-27 – normal playing
28 – Fill
29 – PostFill
30-35 – normal playing
36 – Fill

37-38 – ending, lasting two bars (usually the second bar ends on the downbeat, with a cymbal decaying)
39 – single drum hit, which will be used for “shots” in Band-in-a-Box
40 – single drum hit, which will be used for “pushes” in Band-in-a-Box

4. 64_bars_of_drumming.txt

bar# 1-2 – count-in for two bars (i.e., “one, two, one-two-three-four”)
Bars 3-34 will use the same basic groove:

3 – PostFill (usually a bar of playing with a cymbal shot at the downbeat, or some kind of bar that
would sound good after a fill)
4-9 – normal playing
10 – Fill
11 – PostFill
12-17 – normal playing
18 – Fill
19 – PostFill
20-25 – normal playing
26 – Fill
27 – PostFill
28-33 – normal playing
34 – Fill

Bars 35-66 will use a slightly different groove (‘B’ section) than 3-18

35 – PostFill
36-41 – normal playing
42 – Fill
43 – PostFill
44-49 – normal playing
50 – Fill
51 – PostFill
52-57 – normal playing
58 – Fill
59 – PostFill
60-65 – normal playing
66 – Fill
67-68 – ending, lasting two bars (usually the second bar ends on the downbeat, with a cymbal decaying)

5. 64_bars_of_drumming_with_shots.txt
This is exactly the same as 5, with these bars added:

69 – single drum hit, which will be used for “shots” in Band-in-a-Box
70 – single drum hit, which will be used for “pushes” in Band-in-a-Box

6. 64_bars_of_drumming_with_shots_two_endings.txt
bar# 1-2 – count-in for two bars (i.e., “one, two, one-two-three-four”)
Bars 3-36 will use the same basic groove:

3 – PostFill (usually a bar of playing with a cymbal shot at the downbeat, or some kind of bar that would sound good after a fill)
4-9 – normal playing
10 – Fill
11 – PostFill
12-17 – normal playing
18 – Fill
19 – PostFill
20-25 – normal playing
26 – Fill
27 – PostFill
28-33 – normal playing
34 – Fill
35-36 – 2 bar ending

Bars 37-70 will use a slightly different groove (‘B’ section) than 3-18

37 – PostFill
38-43 – normal playing
44 – Fill
45 – PostFill
46-51 – normal playing
52 – Fill
53 – PostFill
54-59 – normal playing
60 – Fill
61 – PostFill
62-67 – normal playing
68 – Fill
69-70 – 2 bar ending

71 – single drum hit, which will be used for “shots” in Band-in-a-Box
72 – single drum hit, which will be used for “pushes” in Band-in-a-Box

Editing the text file
For the most part, the text files are ready-to-go. There are, however, a few small essential changes that you need to make to the text file, and some other small changes you can make to improve your style.

Essential Changes
The first thing you need to do is change the filename of the wave-file and the text file to match the RealDrums style group to which to which you want your style to belong. For example, if you want your style group to be called “MyFunkyStyle”, and the style you recorded was at 70 beats per minute, your wave file would have to be called “MyFunkyStyle_070_Style.wav” and your text file would have to be called “MyFunkyStyle_070_Style.txt”. Both files would have to be placed in your main Band-in-a-Box directory (usually C:\BB) in the “Drums” folder, and from there in a folder that is named for the style group. In this case, it would be C:\BB\Drums\MyFunkyStyle\.
The second thing you have to do is to change the first line of the text file so that it has the same name as the wave file. In this case, you would change “wavename=mystyle.wav” to “wavename=MyFunkyStyle_070_Style.wav”
The last thing you would need to do would be that if your style were a waltz (3:4) style, you would need to change “TimeSig=4” to “TimeSig=3”. If, however, you are making a 4:4 style, your style is ready to be used!

Additional Changes

There are a few additional changes that could be made to fine-tune your style. The first is to enter a different value in the “Offset=” line. Drummers often hit a drum a few milliseconds before the beat, because the actual sound of the drum tends to peak a few milliseconds after it is hit. Because of this, you want Band-in-a-Box to “grab” a bar of drums a few ticks (1 beat = 120 ticks) early to compensate for this. The amount entered in the template is –5 (ticks), but if you are finding that the drum hits at the beginning of bars are not starting properly, you can experiment by setting a different offset value. –6 or lower (since it’s a negative number “lower” means –7, –8, –9, etc.) will mean the bar is “grabbed” earlier, and a higher number (–4, –3, –2, –1, 0, etc.) means that it will be “grabbed” closer to the bar line.

Another thing you can change is the volume. If you are finding your style is too loud in Band-in-a-Box, you can reduce this by entering lower numbers in the “dbAdjust=” line. The default is 0, but if you enter –1, –2, –3, etc., the drum volume will be lowered.

For the patterns and the shots, all of the patterns that are entered in the templates will match your wave file, provided that the wave file was recorded to the specifications listed above. You can make changes to the patterns and shots, but it is a good idea to read further into the specific meaning of all of the elements of these lines. This can be done in the complete RealDrums style making documentation.

Testing your RealDrums style

Once you have made your RealDrums style, you can test it in Band-in-a-Box by loading a song and setting the tempo near to the tempo of the style you just created. You would then go into the RealDrums Settings dialog (either by selecting Opt. | Preferences | RealDrums or by pressing the RealDrums toolbar button) and make sure RealDrums are enabled. Put a checkmark beside “For this song only, use this RealDrum style”, and then select your style from the “RD” button. When you close the dialog and play your song, your RealDrums style should be playing as well. To make sure that it is playing, you can look at the Band-in-a-Box title bar. If your style is “MyFunkyStyle_070_Style”, you should see [RealDrums=MyFunkyStyle_070].

Elements of RealDrums Styles

For an in-depth explanation of all elements of creating a RealDrums style, please read below.

Elements of the Wave File

The wave file must contain a two bar count-in. This can be a metronome sound, a drummer actually counting in, or even a two-bar drum fill. These two bars will always be played at the beginning of a Band-in-a-Box song, unless the count-in is disabled in the preferences. It is important to note that the beginning of the wave file should not contain a bar of drum playing that is intended to be used in the middle of a song. If this bar were to chosen, there would likely be an audible gap of silence at the beginning of the bar when playing in Band-in-a-Box (this is due to the “ms offset” which will be discussed later).

The majority of the wave file can then contain any number of bars of drumming, keeping in mind that there are two “substyles” available in Band-in-a-Box. This means that the basic groove should be the same throughout the first
half of the drum bars, and then the groove can change and should remain basically the same through to the end. Keep in mind also when you either record or piece together your wave file, that in each “substyle”, there need to be examples of fill, normal bars, and post-fills (bars specifically designed to come after fills, often containing a crash cymbal which completes a fill). You also need at least one 2-bar ending.

After the bars of drumming should be a short section of single drum hits. These will be used to mix in with the bars of drumming to emulate pushing and shots.

Example 1 shows an entire RealDrums style wave file. You can see that the first two bars contain the count-in, then the majority of the file is taken up by regular drumming (you can see that halfway through the pattern is different – this represents the ‘B’ subsection), then at the end there are 4 “shots” (single drum hits).

Elements of the Text File

The text file contains three main portions, global settings, pattern definition, and shots definition. We’ll examine each one separately.

Global Settings

Wavename=x.wav

The first line of the text file must be “wavename=x.wav”, where “x” is the name of the filename. For example, the first line of the JazzBrushes_120 text file is “wavename=JazzBrushes_120_Style.wav”. This file usually is in the same directory as the text file, but does not have to be. For example, you could make an alternate style that used JazzBrushes_120_Style.wav called JazzBrushesAlternate. The text file would have to reside in C:\bb\Drums\JazzBrushesAlternate\JazzBrushesAlternate_120_Style.txt, but the first line would still be “wavename=JazzBrushes_120_Style.wav”.

ForceWavTempo=x

This is only used if the tempo of the style in question is different from the tempo that is in the filename of the wave file being used. These are called “reduced” or “expanded” styles, and will be discussed further below.

TimeSig=3

This would be used if you are making a waltz style. The line can simply be omitted when making 4:4 styles.

OFFSET=x

Often a drummer will hit a drum or cymbal slightly before a beat so that the actual peak of the sound occurs on the beat itself. The offset determines how many ticks (1 beat =120 ticks) before the downbeat a bar of drums will be taken from the style wave file, which is intended to compensate for any occurrence of this early playing on the drum track. It is important to note that if a bar is taken 10 ticks early from the style wave file, it is also placed 10 ticks early on the Band-in-a-Box drum track, so there will be no shifting of the actual groove.

If no offset amount is entered, the program defaults to an offset of 0.

To determine a good offset amount for a particular wave file, you can use an audio editor (such as Powertracks Pro Audio) to zoom in on the downbeats of all (or a sampling) of the bars. You can then measure the number of ticks
between the start of the drum hits and the actual bar line. The highest example would be entered as the offset amount.

In example 2, the beginning of the drum hit at bar 15 occurs at 14:04:118, or 2 ticks before the downbeat of bar 15. If all other bars were similar, you would enter an offset of –2.

**Example 2:** The left edge of the highlighted area represents the beginning of the drum hit that occurs at bar 15, and the right edge of the highlighted area represents the actual downbeat of bar 15.

**dbadjust=x**

If a value is entered here, when the RealDrums track is played in Band-in-a-Box, the volume will be raised (or lowered if a negative value is entered) by the amount entered. This is used to balance the RealDrums against the other DXi instruments. This amount can be fine-tuned once the style is completed and it is possible to test it in Band-in-a-Box.

If no dbadjust amount is entered, the program defaults to an adjust of 0.

**dbadjustA=x**

**dbadjustB=y**

You can adjust the volume of the A section and B section patterns separately in the same manner as “dbadjust” using “dbadjustA=” and “dbadjustB=”.

The total volume adjust for the A section would be (-5)+(-2)= -7. The total volume adjust for the B section would be (-5)+3= -2.

**Note:** The dbadjustA and dbadjustB features have not yet been implemented as of Band-in-a-Box version 2007 build 227, but are planned to be added in a future release. However, these lines of text can be added without causing any problems in the style, they will simply have no effect until the feature is implemented.

**MultibarPatternPercent=x**

When Band-in-a-Box is choosing a RealDrums pattern (see “patterns” below) for a particular bar in a song, it randomly selects from all possible patterns that fit based on their relative weight. If, however, a percentage is entered here, then before this step it determines whether the current bar will be use a multi-bar pattern based on the percentage. If this occurs, Band-in-a-Box eliminates all 1-bar patterns as possibilities for the current bar of music.
For example, if “MultibarPatternPercent=20” is entered, then every time Band-in-a-Box searches for a pattern, there is a 20% chance that it will eliminate 1-bar patterns as possibilities. If “MultibarPatternPercent=80” is entered, then every time there will be an 80% chance that 1-bar patterns will be eliminated as possibilities. If such an instance occurs, but no multi-bar patterns will fit in the Band-in-a-Box bar in question, a 1-bar pattern will be allowed.

If no amount is entered here, then Band-in-a-Box simply always picks between all possible patterns based on their relative weights.

**PushAmount8=x**

**PushAmount16=x**

When pushes are entered in Band-in-a-Box (with either “~” for an 8th note push or “~~” for a 16th note push, entered before a chord”), the RealDrums mix single drum hits with the bars of regular playing to emphasize the push. These settings determine how many ticks prior to a beat the pushes are played.

Mathematically, since 1 quarter-note is 120 ticks, in a straight 8th style the 8th-note will be 60 ticks and the 16th-note will be 30 ticks, and in a swing 8th style the 8th-note will be 40 ticks. However, since drummers (thankfully!) do not play mathematically, these numbers will vary based on their individual style, and the amount of “swing” in their playing. A good amount to enter for these values can be determined by closely examining the drummers playing in an audio editor and measuring the number of ticks between a few 8th-notes prior to beats.

In this straight-8ths style (example 3), this eighth note played prior to the downbeat of bar 6 is played at 5:04:058, or 62 ticks before the downbeat. The rest of the file could be examined in a similar fashion (or random samplings), but based on this example you would enter PushAmount8=62.

Example 3: The left edge of the highlighted area represents the eighth note before the downbeat of bar 6, and the right edge of the highlighted area represents the downbeat of bar 6.

If no amount is entered for these values, Band-in-a-Box determines the amount based on whether or not the Band-in-a-Box style being used is a swing or straight 8th style.

**ASubstyleAllowed=NO**

**BSubstyleAllowed=NO**

Using either one of these lines blocks all patterns for the specified substyle, and then uses the patterns of the remaining substyle for the entire song, regardless of the substyle selected in Band-in-a-Box.

This can be useful for altering an existing style. For example, if you have a style made that uses brushes at the A section and sticks at the B section, but you want to change it so that it only uses sticks, you can enter the line “AsubstyleAllowed=NO” into the text file. All of the B section patterns will be used for both A section parts and B section parts in Band-in-a-Box. This is also a useful tool in making “Alternate” styles (see “Alternate Styles and Expanded/Reduced Styles” below).

It is important, however, to not enter both of these lines. If you do this, Band-in-a-Box will not be able to find any patterns at all, and you will get an error message.
MSSlide=x
This shifts the entire drum part either forwards or backwards by x number of milliseconds in relation to the MIDI parts. A negative amount will make it play slightly before the MIDI parts, while a positive amount will make it play slightly after the MIDI parts. This can be used to make slight changes to the overall feel of the drummer. Entering a negative amount will simulate a drummer playing slightly ahead of the beat, while entering a positive amount will simulate a drummer playing slightly behind the beat. Either scenario can be musically effective in its own way.

Note: The MSSlide feature has not yet been implemented as of Band-in-a-Box version 2007 build 227, but is planned to be added in a future release. However, this line of text can be added without causing any problems in the style, it will simply have no effect until the feature is implemented.

Pattern Definition
All patterns are defined in the text file using lines of text containing seven elements, with each of the seven elements separated by a comma. The seven elements are: 1) the text “pattern”, 2) type of pattern, 3) section definition (A, B or all), 4) weight (how often the pattern will be played), 5) Mask (restrictions on where the pattern can be played), 6) duration of the pattern in bars, 7) the location of the pattern in the style wave file.

Here are some examples of defined patterns:

```
pattern,Normal,A,2,1,2,75
pattern,Fill,A,1,0,1,58
pattern,PostFill,B,8,0,8,3
pattern,Ending,0,6,0,2,114
pattern,Count-in,0,5,0,2,-1
```

As you can see, each example here starts with the text “pattern”. This simply lets Band-in-a-Box know that the line contains information regarding drum parts that will be inserted into the RealDrums track. The next element is the type of pattern, and here we have examples of “normal”, “fill”, “PostFill”, “Ending” and “Count-in” types of patterns. The next element is the section definition, and we have examples of “A” section patterns, “B” section patterns and “0” patterns, for which sections are not applicable. The next element is the weight. In these examples we have weights of 2, 1, 8, 6 and 5. The higher the weight, the more frequently the pattern will be chosen. The next element is the mask. There are examples here of “0” masks, which impose no additional restrictions on where the pattern can be played and a “1” mask, which does impose certain restrictions. The next element is the duration in bars, and we have examples here of patterns that last 1, 2 or 8 bars long. The final element is the location of the pattern in the style wave file. These numbers represent bars, however you’ll notice that one of the examples has a location of –1. This is because Band-in-a-Box uses a –1 based numbering system for bars of music in a song, which will be explained in more detail below.

The six elements that come after the text “pattern” are explained here in further detail:

1. Type of pattern
   There are 5 different types of patterns, “Fill”, “PostFill”, “PreFill”, “Normal”, “Ending” and “Count-in”.

Fills
Fills always occur in the bar immediately prior to part markers. In Band-in-a-Box songs, part markers (A or B) are used to delineate musical phrases. Since drum fills are also used to conclude musical phrases, drum fills always occur in the last bar before a part marker. Unlike other patterns, fills can only be 1 bar long.

Here are some examples of Fill patterns defined:

```
pattern,Fill,A,1,0,1,8
pattern,Fill,B,6,0,1,32
pattern,Fill,B,5,0,1,58
```

PostFills
As the name implies, PostFills bars occur after Fills. That means that PostFill bars always occur in bars in which there are part markers. Typically, PostFill bars are generally bars that have a cymbal crash on the downbeat, which is intended as a completion to the fill that occurred in the previous bar. PostFills can be any number of bars long.

Here are some examples of PostFill patterns defined:
• pattern, PostFill, A, 8, 0, 8, 1
• pattern, PostFill, A, 5, 0, 1, 9
• pattern, PostFill, B, 4, 0, 2, 17

PreFills
PreFill bars occur immediately before Fills. PreFills are not essential for a style to work, but can be useful in situations where a drummer begins an elaborate fill a bar early. When Band-in-a-Box picks patterns for bars that precede fills, it picks from among the pool of normal and prefill patterns. PreFills can either be 1 or 2 bars long. Prefills can be 1 or 2 bars long, with the 2-bar prefill containing the actual fill as well. Here are some examples of PreFill patterns defined:
• pattern, PreFill, A, 4, 0, 2, 7
• pattern, PreFill, B, 7, 0, 1, 57

Normal patterns
Normal patterns generally make up the bulk of a Band-in-a-Box song. Any bar that is not immediately before or after a part marker, and is not a count-in or ending, will be taken from the pool of normal patterns.

Example 4: All of the highlighted bars in this example are “normal” bars.

Here are some examples of Normal patterns defined:
• pattern, Normal, A, 2, 0, 1, 3
• pattern, Normal, A, 5, 3, 2, 11
• pattern, Normal, B, 5, 1, 2, 75
• pattern, Normal, B, 2, 5, 2, 64

Endings
Endings are always 2 bars long, and generally have characteristics of fills for the first bar, but then end with a drum hit on the 2nd bar, sometimes with a cymbal on the downbeat, but also often with a particular rhythmic figure. You should check the ending in the Band-in-a-Box style that you will be using the RealDrum style with to see what kind of rhythm should be used in the drums to match up. Endings can only be 2 bars long, and you need to have at least one ending defined for a style to work.

Example 5: The two highlighted bars show where an ending is played in Band-in-a-Box.

Count-ins
Count-ins are always 2 bars long, and always occur at the beginning of a song (unless the count-in is disabled in settings). Count-ins are usually sidestick tapping “one…two…one, two, three, four”, but you can put anything in these two bars. You can have a person actually counting in, or you can have 2 bars of drum fills as your count-in, etc.

2. Section Definition
Band-in-a-Box styles and RealDrums styles have two “subsections”, an ‘A’ subsection and a ‘B’ subsection. When defining patterns, you need to specify whether the pattern is intended to be played during ‘A’ section or the ‘B’ section. For patterns to which the section is not applicable, you can fill this space with a “0”. These include the count-in and the ending. You can make an exception for the ending, if you want to specifically designate an ending to occur only when the preceding bar is ‘A’ or ‘B’. Instead of “0”, you would enter “Aending” or “Bending”. Just remember that if you do this, you need to cover both eventualities. If you enter a “0” ending, this on it’s own covers both cases.

Here are some examples of ‘A’ patterns:
• pattern, Fill, A, 1, 0, 1, 8
• pattern, PostFill, A, 8, 0, 8, 1
• pattern,PostFill,A,5,0,1,9
• pattern,PreFill,A,4,0,2,7
• pattern,Normal,A,2,0,1,3
• pattern,Normal,A,5,3,2,11

Here are some examples of ‘B’ patterns:
• pattern,Fill,B,6,0,1,32
• pattern,Fill,B,5,0,1,58
• pattern,PostFill,B,4,0,2,17
• pattern,PreFill,B,7,0,1,57
• pattern,Normal,B,5,1,2,75
• pattern,Normal,B,2,5,2,64

Here are some examples of ‘0’ patterns:
• pattern,Count-in,0,5,0,2,-1
• pattern,ending,0,1,0,1,33

Here are some examples of special-case endings:
• pattern,ending,Aending,5,0,2,37
• pattern,ending,Bending,5,0,2,77

3. Weight

Every time that Band-in-a-Box needs to find a RealDrums pattern to insert into a Band-in-a-Box bar, it first finds all possible patterns that would fit (based on the type of pattern, the section definition, the mask and the length), and then it picks randomly from those patterns based on the weight assigned.

The weight is a number between 1 and 8 (there are special cases where you can use 0 or 9 which we will examine at the end of this section). When Band-in-a-Box has amassed the list of possible patterns, it then adds up the weights of all of these patterns, and then the chances that each pattern will be selected is based upon a percentage determined by the weight of the pattern divided by the total.

For example, if Band-in-a-Box is finding a “normal” pattern for bar 3 of the song, and it has determined that these four patterns are the only possibilities:
• pattern,Normal,A,5,1,4,11
• pattern,Normal,A,1,0,2,17
• pattern,Normal,A,7,3,2,13
• pattern,Normal,A,2,1,1,20

The first thing it would do would be to add up all of the weights. In this case, 5+1+7+2=15. The chance that each pattern will be picked in this instance is determined by its own weight divided into the sum. Here then, are the chances for each pattern to be picked in this instance:
• pattern,Normal,A,5,1,4,11: 5/15=0.333 or 33%
• pattern,Normal,A,1,0,2,17: 1/15=0.066 or 7%
• pattern,Normal,A,7,3,2,13: 7/15=0.466 or 47%
• pattern,Normal,A,2,1,1,20: 2/15=0.133 or 13%

When 9 is entered as a weight, the program treats it slightly differently. A 9 weight means that any possible patterns that have a weight of 8 or less are completely eliminated as possibilities.

With the previous example, if you changed the weight of the first two patterns to 9, but left the last two as 7 & 2, then the last two would be eliminated as possibilities, and the percentages would change to:
• pattern,Normal,A,9,1,4,11: 50%
• pattern,Normal,A,9,0,2,17: 50%
• pattern,Normal,A,7,3,2,13: 0%
• pattern,Normal,A,2,1,1,20: 0%

It is therefore important that you are very careful when using a weight of 9. It is usually used in conjunction with a mask (masks will be explained in greater detail below). For example, if you had a mask that stated that a normal pattern could only be played 7 bars after a part marker, if you then gave it a weight of 9, any time Band-in-a-Box needed to find a pattern 7 bars after a part marker it would always use that pattern. However, it would not affect any other bars.
The other special case is a 0 weight. This is only used for fills. When Band-in-a-Box finds possible patterns, if a particular pattern is going to end where a fill is required due to the part-marker placement, then the pattern will only be included as a possibility if that bar in the style wave file has been designated as a fill at some point in the text file. Likewise, a pattern that ends with a fill will not be considered a possibility if the fill doesn’t match up in the Band-in-a-Box song.

For example, let’s say that Band-in-a-Box is searching for a pattern to place at bar 5, where bar 6 will need to be a fill:

Example 6: Pattern needed for bar 5.

It will be looking for a normal pattern, and it can use a normal pattern that is 1 or 2 bars long. However, if it picks a 2 bar pattern, it needs to make sure that in the style wave file, the second bar is designated as a fill.

Let’s assume that this pattern is entered in the text file:

- Normal,A,5,0,2,15

This is a 2-bar normal pattern beginning on bar 15 of the style wave file. This pattern could only be picked in this instance if there was another line somewhere in the text file defining bar 16 of the style wave file as a fill:

- Fill,A,5,0,1,16

However, it may be that this fill would not work well as a stand-alone bar (perhaps there is a cymbal decay that crosses over bars 15 & 16 that you do not wish to break up – see “Duration” for more information on this). In this case, you would still want to define the bar as a Fill, so that multi-bar patterns ending in this fill would be used at the right place, but you would never want the fill to be picked on it’s own. In this case, you could give it a weight of 0:

- Fill,A,0,0,1,16

4. Mask

A Mask can be used to specify that a pattern should only be used a certain number of bars after a part marker. It only applies to Normal patterns, and all other patterns should be given a weight of 0 (0 means no mask).

Here is a list of the possible masks, and what effect they will have:

- 0 – No mask: This pattern can be used anywhere
- 1 – Odd bars only: 3, 5, 7, 9, 11, 13, etc. bars after a part marker
- 2 – Even bars only: 2, 4, 6, 8, 10, 12, etc. bars after a part marker
- 3 – 3, 7, 11, 15, etc. bars after a part marker
- 4 – 4, 8, 12, 16, etc. bars after a part marker
- 5 – 5, 13, 21, etc. bars after a part marker
- 6 – 6, 14, 22, etc. bars after a part marker
- 7 – 7, 15, 23, etc. bars after a part marker
- 8 – 8, 16, 24, etc. bars after a part marker
- etc.

Many drum beats use 2-bar rhythms that then repeat, so it’s very common for the “1” and “2” masks to be used. If you have assigned a “1” mask to several Normal patterns, and a “2” mask to several others, you will always be sure that the 2-bar grouping remains consistent. Just remember that you have to make sure that there are enough patterns to cover all possibilities. If you have only patterns with “1” masks, and no patterns with “2” masks, then Band-in-a-Box will not be able to find any patterns for even bars. The safest thing to do is to use a mask of “0”, but this may not be the most musical approach. A mask of 4 is often used for more subtle fills that would highlight 4 bar phrases. Masks higher than 8 are not commonly used, as it would mean that the pattern would be played very rarely.

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Example 7: Normal pattern needed for bar 13.

In example 7, if Band-in-a-Box is trying to find a normal pattern for bar 13, it will look for patterns with a mask of 0, 1 (because it is an even number of bars from the part marker) or 5. If it were trying to find a normal pattern for bar 14, it would look for patterns with a mask of 0, 2, or 6.

5. Duration

PostFill and Normal patterns can be any number of bars long, however there is a practical range that is commonly used. Other patterns are restricted to a certain number or range of bars. Here is a list of the pattern types, and the ranges of durations:

- **Fills** – 1 bar long only
- **PostFills** - 1 bar or higher, generally no higher than 8 bars
- **PreFills** – 1 or 2 bars long only
- **Normal** – 1 bar or higher, generally no higher than 8 bars
- **Endings** – 2 bars long only
- **Count-ins** – 2 bars long only

The difference between favouring short patterns and long patterns is a balance between consistency and variation. Long patterns may sound more consistent, because you will be hearing large portions of raw audio, exactly as the drummer played it. On the other hand, with short patterns, there will be more variety in the phrases, because there will be many more possible combinations when single bars are mixed and matched together. Many people will favour a combination of long and short patterns. Also, while it is possible to have very long patterns, it is important to remember that patterns will not cross part markers, so if you designate 16 bar patterns, but in your Band-in-a-Box songs you have part markers every 8 bars, those 16 bar patterns will never be played.

Example 8: Normal pattern needed for bar 5.

In example 8, if Band-in-a-Box is trying to find a Normal pattern for bar 5, it can pick a 1, 2, or 3 bar pattern, or a 4 bar pattern that ends with a fill. It can not pick a pattern that is more than 4 bars long.

Another thing to keep in mind is that for any given bar in the style wave file, you can have as many different patterns defined as you like. So, for example, you can define a 1 bar pattern that starts at bar 5, you can then also define a 2 bar pattern that starts at bar 5, a 4 bar pattern, 8, etc.

In deciding what lengths of phrases will work well, an important thing to consider is whether or not certain bar lines make good cut-off points. For example, let’s assume that in a style wave file, at the 4th beat of bar 15 there is a crash cymbal that decays into bar 16, but fades out before the end of bar 16. Bar 15 would likely not be very good as a 1 bar pattern, because you would have situations where bar 15 would be used, and would then go directly to a different random bar that likely does not have a cymbal decay, so you would hear an abrupt cut-off which would greatly reduce the musicality of the drum part. In situations like these, you would then make sure that other patterns did not end with bar 15 as well. For example, a pattern at bar 14 would not be good as a 2 bar pattern, because it would cut off in the same place, but it would be good as a 3 bar pattern. Conversely, bar 16 would not likely make a good pattern at all, because it will start with a cymbal decay that had no start to it. This doesn’t mean that bar 16 will never be used, it will just never be the start of a pattern.

A good rule to follow is to try and have at least one 1-bar PostFill, Normal, and Fill patterns for each subsection, just to make sure that all possible circumstances will be covered. Once you have that, you can determine what other patterns will work well based on the phrasing of the drummer.

6. Location

The final element in pattern definition is the location of the pattern in the style wave file. This number represents the bar number in the wave file, but it is important to remember that this is a –1 based numbering system. The first two bars of the wave file are reserved for the count-in, which are considered to be bars –1 and 0. The drumming starts at the third actual bar of the wave file, but is referred to as bar 1. So, if you are viewing bars in an audio editor, remember that when you reference these bars in your text file, you need to subtract 2 before you enter them in the patterns.
If this is confusing to you, there are two ways you can simplify this. Some audio editors allow you to designate bar “1” at any point in a wave file. Simply go to bar 3 and designate that as bar 1. Then, any bar number you see will directly match what needs to be entered into the text file. The other thing you can do is that while you are actually working on the style, you can cut the 2 count-in bars, which will shift the rest of the track back by 2 bars, and any bars you see will be the same bar numbers you need to enter into the text file. Once you have finished the text file, you can then paste the count-in back in to the beginning of the file.

**Shots Definition**

In Band-in-a-Box, shots and holds are entered by putting either 2 or 3 periods after a chord (2 periods for a shot, 3 for a hold). With RealDrums, when a shot or hold is entered, the drums stop for the duration of the chord, and a single drum hit is played in place of the drum beat. Pushes are entered by typing either 1 or 2 caret symbols (“^”) before the chord in question (1 caret for an 8th-note push, and 2 caret for a 16th-note push). With RealDrums, when a push is entered, the regular drum beat continues throughout, but a single drum hit is added to the mix to emphasize the push.

**Example 9:** Bar 1 shows a shot, bar 3 shows a hold, bar 4 shows an 8th-note push, and bar 7 shows a 16th-note push. The single drum hits are generally recorded at the end of the wave file, after the main drum groove, but they do not have to be.

Like patterns, shots are also defined in the text file using lines of text containing several elements: 1) the text “shot”, 2) type of shot (0 for shot or hold, 1 for pushes), 3) the bar number of the shot in the style wave file, 4) the number of ticks (1 beat = 120 ticks) before or after the bar number the shot occurs, 5) the duration of the shot in ticks, 6) weight, 7) volume of the shot.

Here are some examples of defined shots:

- Shot,1,82,-2,455,1,100
- Shot,0,83,5,360,1,90
- Shot,1,171,240,200,1,80

The six elements that come after the text “shot” are explained here in further detail:

1. **Type of shot**

The type of shot needs to be either 0 or 1. If 0 is entered, the shot will be used when chords are entered with two periods (shot) or three periods (hold). If 1 is entered, the shot will be used when chords are entered with two or three caret symbols before them (8th & 16th note pushes).

2. **Bar number in style wave file**

Like with patterns, you need to remember that RealDrums styles use –1 based numbering, so you need to subtract 2 from the bar number as you see it in your audio editor. More than one shot can be played in a single bar, and you would use the tick adjust amount to distinguish between the two.

3. **Tick adjust**

The shots do not necessarily have to occur at the bar lines, and the tick adjust can be used to tell Band-in-a-Box exactly where the shot starts. Simply measure the number of ticks from the downbeat of the bar number entered to the start of the shot, and that is the number that should be entered here. If the shot starts before the bar number that was entered, a negative number should be entered here.

For example, if a shot is recorded at bar 82, but on closer examination it appears that the shot was played two ticks early, it would be entered as such:

- Shot,1,82,-2,455,1,100

In another example (see example 10 below), a shot is played at the third beat of bar 171. In this case you need to use the tick adjust to indicate that it a full two beats after bar 171. Since one beat is 120 ticks, two beats would be 240 ticks, and it would therefore be entered as such:

- Shot,1,171,240,200,1,80
Example 10: Here the shot begins at bar 171 (173-2), at the third beat, or 240 ticks into the bar.

4. Duration
Unlike patterns, which use numbers of bars for durations, the shots use ticks for durations. So, for example, if a shot lasts for three beats, you would enter 360 (3 beats * 120 ticks per beat).

Here is an example of a shot that lasts for three beats:
• Shot,0,83,5,360,1,90
For the best effect, the sound of the shots should decay naturally, and the entire length of the shot including the decay should be entered in the text file. This is especially important when all other instruments are silent, and all you hear is the decaying sound of the drum hit.

5. Weight
The weight for shots works exactly the same as the weight for patterns, except that there is no need for the use of 0 or 9 weights. This number should be between 1 and 8, with higher numbers representing a greater chance that the shot will be selected each time.

6. Volume
The volume of the shots is represented by a number between 1 and 127. If 90 is entered, the volume will not be adjusted at all. If a number between 1 and 89 is entered, the volume will be lowered accordingly, and if a number between 91 and 127 is entered, the volume will be raised accordingly. It is generally easiest to test the volume amounts once the style has been completed.

Additional Entries in the Text File
Bars Blocked
During the testing of your style, you may come across instances where a particular bar from the style wave file simply does not sound good going into another specific bar from the style wave file. When this happens, you can enter a “BarsBlocked” line into your text file to ensure that these bars are never played back-to-back.

When “BarsBlocked” is typed into the text file, followed by bar numbers separated by commas, Band-in-a-Box takes the first number, and all of the bar numbers that follow are “blocked” from ever following the initial number. So, for example, if this line is entered:
• BarsBlocked,24,35,41
then bar 24 can never be followed by bars 35 or 41.
However, when using this feature you need to be very careful that you are not creating situations where Band-in-a-Box will not be able to find a possible match for a bar. When you block a bar, you need to make sure that there are patterns defined starting on other bars that would also work.

Comments
When you create your style, you may want to add comments into the text file as reference points, or as reminders about certain aspects of the style. This can be done in two ways: 1) semicolon comments 2) Pascal-style comments
If you type a semicolon into the text file, whether it’s at the beginning of a line, or at the end of a pattern definition, and text that is typed after the semicolon is ignored, which allows you to type comments. For example:

- this entire line will be ignored by Band-in-a-Box
- pattern,normal,A,5,0,4,15; this text will also be ignored by Band-in-a-Box

Pascal-style comments are comments that are enclosed by { and } characters. Any text enclosed by these characters will also be ignored by Band-in-a-Box. Unlike the semicolons, these comments can occur in the middle of a pattern definition, and the line can continue after the comment. For example:

- {this entire line will be ignored by Band-in-a-Box}
- pattern,normal,{this text will be ignored}A,5,0,4,15

Alternate Styles & Expanded/Reduced Styles

Alternate Styles

It is possible for a wave file to be used for more than one style. For example, you may want to duplicate a style, but omit certain fills, or assign different weights to certain patterns.

In this case, you still need to create a new RealDrums style group by creating a new sub-directory in the “Drums” folder, and the text file for the style needs to be present. The only difference is that in the text file you would have the name of the wave file you are using, and that name will be different from the text file name.

For example, if you have a “MyFunkyStyle” style at 90 bpm, these files would be present:

C:\BB\Drums\MyFunkyStyle\MyFunkyStyle_090_Style.txt
C:\BB\Drums\MyFunkyStyle\MyFunkyStyle_090_Style.wav

To make an alternate style, you could create this file:

C:\BB\Drums\MyFunkyStyleALT\MyFunkyStyleALT_090_Style.txt

The first line of this text file would be:

wavename=MyFunkyStyle_090_Style.wav

Expanded/Reduced Styles

Often you will find examples of drum grooves where the pulse can be treated as 8th notes or 16th notes. For example, different musicians may disagree on whether a groove is 90 bpm with a 16th note pulse, or 180 bpm with an 8th note pulse. In Band-in-a-Box, some styles are treated as 8th note styles and others are treated as 16th note styles, and you may find examples where a drum beat that is intended for 8th note styles may work equally well on 16th note styles at half the tempo. In these cases, you can create two separate styles that both point to the same wave file, and treat it as two different tempos. The same method as described in “Alternate Styles” above could be used, with one addition. For the style in which the tempo is different in the text file then it is in the wave file filename, you would need to add the “ForceWavTempo=” line to the text file.

For example, if you have a “MyFunkyStyle_90” Style, the following files would be present:

C:\BB\Drums\MyFunkyStyle\MyFunkyStyle_090_Style.txt
C:\BB\Drums\MyFunkyStyle\MyFunkyStyle_090_Style.wav

For an expanded style, you could create this file:

C:\BB\Drums\MyFunkyStyleEXP\MyFunkyStyleEXP_180_Style.txt

The first line of this text file would be:

wavename=MyFunkyStyle_090_Style.wav

And an additional line would be needed:

ForceWavTempo=180

There some additional points in making expanded and reduced styles. First of all there is the issue of bars correctly matching up. If the number of bars in a particular group of bars in the higher tempo version are an odd number, this can throw off the slower tempo version. For example, if your high tempo version has an A Postfill, an A Normal, and an A Fill, then a B Post, this will mean that in the slower tempo version, the A Postfill and A Normal will become a single PostFill bar, which is fine, but the A Fill and the B Post will also become a single bar, which will not work. This could then mess up everything that came after. It would have been better if the high tempo version had an A Postfill, an A Normal, another A normal, then the A Fill, and then the B Post. For this reason, if you know a drum part is going to be used at two tempos, it is quite a bit easier to record or piece together the drum part with the slow tempo version in mind first, and this can then be expanded.
The other things you need to take into account are the count-in and endings. The count-in will be different for the two tempos, so it’s best to record two completely different count-ins. The alternate one can be pasted onto the end of the file if necessary. For endings, it’s also good to simply record two versions of them, which also can be at the end of your file.

**Testing Your RealDrums Style**

Once you have made your RealDrums style (or, depending on the level of completion, even during the making of it) you can listen to it and test it in Band-in-a-Box. If your text file is named with the convention detailed in the introduction, and is located in the correct directory, it should automatically appear in Band-in-a-Box. The easiest way to select your RealDrums style is to enter the RealDrums Settings Dialog in Band-in-a-Box (Opt. | Preferences | RealDrums), or simply pressing the RealDrums toolbar button). Make sure RealDrums are enabled, and then put a checkmark beside “For this song only, use this RealDrums style.” If you then click on the RD button, a list of all available RealDrums should appear, and your style should be among them. When you exit this dialog and play your song, you should be hearing your RealDrums style.

You can make and save changes to the text file, and when you press play again in Band-in-a-Box, any changes in the text file will take effect. If, however, you make any changes to the wave file, the wave file needs to be reloaded for the changes to take effect. To do this, simply select a song that uses different RealDrums, press play. Then stop and reload the song you were working on.

**Adjusting volume levels**

If the balance between the RealDrums and the MIDI instruments needs to be adjusted, you can do this by simply adjusting the dbadjust= setting in your text file, saving it, and pressing play again in Band-in-a-Box. You can continue to do this until you have found a good balance.

For the volume levels of the shots and pushes, the best way to test this is by testing one at a time. If you have more than one shot or push, you can “comment-out” all but one, then you will always be hearing only that shot or push. For example, let’s assume you have three shots entered:

- Shot,0,82,120,547,1,110
- Shot,0,83,188,1151,1,90
- Shot,0,85,380,1058,3,90

To test the first one, add a semicolon to the beginning of the 2nd and 3rd lines:

- Shot,0,82,120,547,1,110
- ;Shot,0,83,188,1151,1,90
- ;Shot,0,85,380,1058,3,90

Band-in-a-Box will therefore ignore those lines, and you will only hear the first shot. You can then adjust the volume level until you have it right, then do the same with the second shot, etc.

**Developer Mode**

It is also extremely useful when testing RealDrums styles to use “Developer mode.” This is a checkbox in the RealDrums settings. When it is turned on, Band-in-a-Box does two things. First of all it spell-checks your text file when you play a song. If it finds an error, it reports the error to you before beginning the song. When Developer mode is off, if there are typos in the text file, the entire pattern definition is simply ignored. For example, if you misspell “pattern” as “pattrn”, you will see an error message when you start that will tell you the typo as well as the line number where you can find it in the text file. When you press OK, the song resumes.

The other thing that developer mode does is generate a “DrumAudioResults.txt” text file every time you press play. This text file tells you exactly what patterns from your text file were picked for every Band-in-a-Box bar. The file also has other global and statistical information. This information can be extremely valuable as you fine-tune your style.

**Developer mode for RealDrums enhanced.** (Note: This feature is only for those people developing their own RealDrums files). If the file c:\bb\NumberedDeveloperFiles.txt exists, the DrumAudioResults.txt with information get numbered and written to c:\bb\Results folder (Note: you need to create a c:\bb\Results folder first).

**DrumAudioResults.txt file**

The first information that the DrumAudioResults.txt file gives you is global information about the style and song. It tells you the wave file that was used, the song tempo, the total number of bars, and the total number of times you’ve played the song in the current session.
The next information it displays is a separate line for every bar of the song. The first item for every bar is the actual bar number in the song, but the type of information that is displayed after that depends on whether the bar represents the start of a pattern, or a subsequent bar in a multi-bar pattern.

If the file c:\bbNumberedDeveloperFiles.txt exists, the DrumAudioResults.txt file with information gets numbered and written to c:\bb\Results folder

Note: You need to create a c:\bb\Results folder first.

Here is an example of a bar where a pattern begins:

- Bar# 12, relbar=4, MaxBars=5, Chose pat#21, line #26
  Normal,a sub.,mask=2, dur#bars=2, wrote 2,WavBar=14, Candidates=11 , time=0:26

Here is an example of a bar where a pattern is continuing:

- Bar #13  WavBar=15 , time=0:28

For bars where patterns begin, here are the items that follow the bar number:

1. relbar=x
   This number represents the number of bars since the last part marker. This number therefore determines whether or not Normal patterns with masks assigned can be used. For example, if relbar=4, a normal pattern with a mask of 0, 2 or 4 could be chosen, but patterns with masks of 1, 3, 5, 6, etc. could not be chosen.

2. MaxBars=x
   This number represents the number of bars to the next part marker. Since patterns cannot cross part markers, any patterns that have a duration greater than the MaxBars= amount cannot be chosen.

3. Chose pat#x, line #y
   This is the actual pattern selected, shown in two different ways so that it’s easy to identify in the text file. If you count down from the first pattern in the text file, pat#x will show you how many patterns to count to find the one that was used, and does not take the global info at the beginning of the file into account. Line #y shows you the actual line of the text file, which would include lines for the global settings and any comment lines. If your text editor has line numbers, this is the easiest way to find the pattern that was chosen.

4. Type, subsection, and mask
   The next information is the type (Normal, PostFill, etc.), subsection (A or B) and mask of the pattern chosen.

5. dur#bars=x, wrote y
   The dur#bars= amount tells you the number of bars in the pattern, and the “wrote y” amount tells you the actual amount of bars written. In most cases, this number should be the same, because Band-in-a-Box will always try and keep the defined patterns intact. Sometimes, however, multi-bar patterns may need to be cut short, for example if it needs a 1 bar pattern but you have only designated 2 bar patterns.

6. WavBar=x
   This tells you the bar of the actual style wave file that was used for the current Band-in-a-Box bar. Remember that this is using -1 based numbering.

7. Candidates=x
   This tells you how many possible patterns there were for Band-in-a-Box to choose from for the current bar. If there were 3 or less possible candidates, this line appears instead as “FEWCandidates=” . This lets you know that perhaps there are not enough of a certain type of pattern. As long as there is at least 1, you will not get any actual errors, but for the sake of variety, the more possibilities the better. If there are no possible candidates, you will get an error message “******* Unable to pick a drum audio bar for bar #x”. In this case, you need to examine your text file to see why this is occurring. It could be because there are simply not enough patterns defined, but it could also be because of the overuse of the “barblocked” feature.

8. time=
   This tells you the time in minutes and seconds where the bar is located. This is useful if you have rendered a file, and you are listening to the rendered audio file for problems.

For bars where patterns are continuing, the only items shown are “WavBar=x” and “time=“ . The one exception is where Fills are concerned, in which case you may see one of two messages tagged on to the end of the line. “BB song has fill, WAV is at end of multi bar pattern. WAV file has a fill also” means that a Fill was designated in the
text file, and the current pattern is ending with that Fill. The other message you may see is “*** BB song has no fill, but WAV has a fill *** (Could be Error2 if mask0)” This means that Band-in-a-Box has recognized that a bar that is designated as a Fill occurred within the pattern, but not at a place where a Fill is required. Fills often sound good 4 bars into phrases, even if no fill has been designated, so in these cases, this could be fine. If, however, the Fill sounds out-of-place, you made need to examine this further in your text file.

At the end of the DrumAudioResults.txt file there is statistical information about the song you just played. Because of the random nature of styles, this information will likely be different every time you play the same song, however you may see some patterns develop that can help you fine tune your style.

The total bars will always be the same for the same song, but the number of patterns written will be different depending on how many short or long patterns were randomly selected. The average bars per pattern gives you an overview of the length of patterns selected. Long patterns are desirable because they generally sound more consistent, while short patterns are desirable because they lend themselves to greater variation. It’s therefore good to get a balance between the two, and a good average is between 2 and 4 bars.

It’s also good to have a high average candidates amount, as this is also a sign that your style will have good variation. If any Band-in-a-Box bars had 3 or less patterns to choose from, they were flagged as “FEWCandidates”, and the total number is listed at the bottom. This lets you know if you need to define more patterns.

“MultiBarPatternPercent=” simply lets you know the setting you have entered in your text file.

Using your RealDrums style in Band-in-a-Box

As we have shown above, you can select your RealDrums style for a particular song in the RealDrums Settings. It is also possible to assign your RealDrums style to a particular Band-in-a-Box style. This is done in the StyleMaker. If you have either a new or existing Band-in-a-Box style open in the StyleMaker, simply select “Style | Misc. Settings” or press Ctrl+F10. This opens the Misc Style Settings dialog. At the bottom of this is the RealDrums Settings.

You can enable “Style uses RealDrums” in order to designate a RealDrums style. If your style is in the correct directory, it should appear when you press the “RD” button. You can then select your RealDrums style, and whenever the current style is played, it will use your RealDrums style (provided that RealDrums are enabled). There are also additional volume controls here. If you have your dB setting exactly where you want it in your style file, but with this particular Band-in-a-Box style you want it a bit higher or lower, you can enter a setting here. There are also fields for adjusting the ‘A’ or ‘B’ subsection volumes only.

You can also remove the check mark from either “Allow ‘a’ substyle RealDrums” or “Allow ‘b’ substyle RealDrums”, which means that for this style, the one with the checkmark remaining will be used for the entire song, regardless of what substyle is currently called for in the song.

The Harmony Maker

The Harmony Maker allows you to create or edit your own or existing harmonies. This can be used in the program to harmonize melodies or for live playing on the Thru channel. Sophisticated options control usage of passing harmonies (diatonic, dominant approach and chromatic), drop octave voicings (e.g., drop 2), octave doubling, patch selection, and more.
You’ll see the voices down the left side of the dialog box.

Voice

- **1**: Voice 1 is the melody
- **2**: Voice 2 is a chord tone below the melody
- **3**: Voice 3 is 2 chord tones below the melody
- **4**: Voice 4 is 3 chord tones below the melody
- **5**: Voice 5 (rarely used) is an additional chord tone usually the 9th or 11th in the scale

These voices are used to double the melody

**Mel.Doub**

The LH Chord feature is not implemented in this version.

Each harmony can use up to 3 channels.
Harmony Channel A, B, and C. If your harmony only has one instrument, then you will use Channel A for all the voices. If your harmony uses Flute and Bass, then you could use Flute on Channel A and Bass on Channel B.

Tip: When you want to hear the harmony as you are developing it, have a song with a melody playing before you enter the Harmony Maker. After you have made changes to the harmony, hear the changes by pressing the [Update] button.

Settings For Each Voice

<table>
<thead>
<tr>
<th>Voice</th>
<th>Chan.</th>
<th>Octave</th>
<th>Low</th>
<th>High</th>
<th>O. Double</th>
<th>V. Boost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>0</td>
<td>0</td>
<td>127</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Chan. A 1-instrument harmony will use Channel A only. Additional instruments can use Channel B and C.
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Tip: These channels are set to numbers in the Harmony Channels Dialog box, accessible by selecting the [Harmony] button under the Opt | MIDI Channels, options… menu.

**Octave** This allows the harmony to “drop-down” or “go up” by a number of octaves. This octave change will only happen in a certain range, as chosen in the LOW, HIGH settings.

**Tip:** There is also an Overall Harmony Octave setting that changes the octave of the entire harmony setting (accessible by pressing the [More] button).

**O. Double (Octave Double) This** setting lets you double any voice. Usually you want to do this by doubling an octave below (i.e. octave = -1), but you can set the octave from -2 to +2. The doubling will always be on the same channel, if you want a different instrument to double the voice, and then use the Melody Doubling Voices.

**V. Boost (Velocity Boost)** This allows you to increase or decrease the velocity (loudness) of each voice, to make the voice stand out more or less in the harmony. Default = 0.

The Patches setting at the bottom allows you to assign a patch to the harmony. If you set “No patch,” the harmony won't change the patch. This is a useful setting for making a generic harmony that doesn't change the patch of the Melody or Thru channel, for example.

Changes that you make to the harmony settings won't take effect until you press the [Update] button.

You may Copy a Harmony to the clipboard, and then move to a new harmony and Paste the harmony to the new location.

Because the harmony is saved automatically for you, you won’t need to ever press these buttons.

All of the 256 harmonies are saved in a single .har file called DEFAULT.HAR. If you have run out of harmonies, you can start a new harmony file by pressing the [Save As] button. For example, if you make a 3rd party disk of add-on harmonies, save it as your name MYNAME.HAR. Then you can load in your bank of harmonies (from the Harmonies | Edit a Harmonies File) without disrupting the existing DEFAULT.HAR file.

Each .har file has 256 harmonies, so you probably need only 1 DEFAULT.HAR for all your harmonies. However, if you've made a great harmony and want to give it to a friend, you can export a single harmony as an .h1 file. Your friend can then import this harmony into their own .har file.

The best way to develop a harmony is to hear it as it’s playing. The preferred way to do this is to have a song playing that has a melody in it. Any changes to the harmony will be heard on the melody as soon as you press the [Update] button.

You can also play along as the song is playing, and hear the new harmony on the Thru channel.

If you don’t want to have a song playing, and want to hear the harmony, then set the [Test Chord] to a certain chord. If set to CMAJ7, then you can play on the MIDI keyboard (with no song playing) and hear your harmony. This allows you to examine exactly what notes the program is using to make your harmony.
**Additional Harmony Options**

Press the [More…] button to launch the Additional Harmony Options dialog.

---

**Use Close Harmony**
This only applies to 2 and 3 part harmonies.
If set to = 0 it will use only close harmonies, mainly 3rds for 2 part harmonies.
If set to = 1 it will use mostly 3rds, with some 6ths for 2 part harmonies.
If set to = 99 it will use mostly 6ths, with some 3rds for 2 part harmonies.
If set to = 100 it will use only wide harmonies, mainly 6ths for 2 part harmonies.
If set to > 2 < 98 it will vary between close and open harmonies.

**Use Passing Chords (melody)**  **DEFAULT = 100 %**
Band-in-a-Box will sort out when to use passing harmonies, based on factors like the duration of the note, the next note, the chord tone, the velocity, previous notes, and other factors. You can visually see when the harmony is using a passing chord. The harmony display is usually blue, but when there is a passing chord, it displays as RED. If you don't want passing chords set this value to 0.

**Lowest Harmony Note**
You can set a lowest note for the harmony to play. When the melody is low, harmonies begin to sound “muddy,” so you can avoid the harmony being played below a certain note.

**Overall Harmony Octave**
This sets the overall octave of the harmony. For example, in the 5-part Trumpets harmony the harmony is always be played an octave higher than the recorded melody. This is because the 5-part harmony is spread over 2 octaves.

**No Harmony if duration less than nn milliseconds**
You can specify a harmony to only occur for notes longer than a given duration. If every note is harmonized unrealistic harmonies result, since a piano player doesn't harmonize notes of a short duration. You can specify a harmony to only occur for notes longer than a given duration. Notes shorter than that will not be harmonized. There are also options for how the program “fixes” the harmony when chord changes occur during a sustained note harmony.

**OK to make new harmony with new chord**
Most harmonies have a feature that changes the pitch of the harmony voices under the Melody note when the chord changes if the underlying voice wouldn't be a chord tone. For some harmonies it would be unrealistic for the instruments to change the inner voicings in this manner. Deselect this option and the voices that conflict with the new chord stop playing instead of changing to new notes.
Use Guitar Harmony Voicings
Harmony Maker will use real guitar chord voicings that display correctly on the guitar fretboard. Selecting this checkbox means that guitar chord voicings will be used, instead of any other voicings specified in the Harmony Maker. Check out Harmony #32 (J Pass) for an example of this.

Use voicings in 4ths

Modern Jazz harmonies often voice chords in 4ths. For example, a C chord with C melody might be voiced C, G, D, A, E. You can select 4ths voicings easily in Band-in-a-Box to harmonize the Melody, Soloist, or Thru parts using 3, 4, or 5 part voicings in 4ths. We’ve added presets for these harmonies, so you can easily select them. Use these sophisticated 4ths harmonies on your existing melodies to create a new sound.

Tip: To quickly hear what some of the 4ths harmonies sound like, look in the c:\bb\ Tutorial - BB 2005 demos folder for pre-made songs with 4ths harmonies.

To use the harmonies with any song, choose harmonies in the range 213 to 219. Each of these is a harmony using 4ths. For example, Harmony 218 uses 4 trombones in 4ths.

To make your own harmony using 4ths for the harmonies, enter the Harmony Maker, press the [More] button, and select the “Use Voicing in 4ths” checkbox.

The Soloist Maker

This module allows you to define your own soloists. For example, let’s say you want to create a soloist in a style similar to John Coltrane - the legendary jazz saxophonist. The Soloist Maker allows you to define the parameters essential to the particular soloist’s playing, such as instrument range (i.e. tenor saxophone), extra legato playing, playing more on top of the beat than most Jazz musicians, and playing straighter 8th notes than usual swing 8th notes.

In addition, you can set phrasing options, such as how long the phrase should be, and how much “space” to leave between phrases. You can also set how “outside” the playing should be. (For Coltrane it would be set to maximum!)

Access the Soloist Maker by pressing the Soloist Maker [Edit] button within the Select Soloist dialog.

Tip: To share Soloists with your friends, use the [Export] button to save your Soloist to a disk, and use the [Import] button to bring in a soloist from a disk. You can save your soloist to another Soloist file (*.s1) by pressing the [Save As] button.
Insert the title of your 'soloist' in the Title box, and any memo note you wish to add. (The Num field will be filled in for you.)

<table>
<thead>
<tr>
<th>Num</th>
<th>1 Bebop Saxophone</th>
<th>Title</th>
<th>Bebop Saxophone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memo</td>
<td>Basic bebop Sax solo, will work with most swing styles. Check 'Double Time?' if tempo is slower</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For the Memo box, you can put in information like "extra legato, straighter 8th notes, on top of the beat, laid back, etc.

The “Soloist is” box allows you to define what type of notes the Soloist will play (i.e. swing 8th notes, straight 8th notes, 16th notes, etc.)

<table>
<thead>
<tr>
<th>Soloist is</th>
<th>Swing 8th notes</th>
</tr>
</thead>
</table>

There are several databases of Solo ideas to choose from. Select the database (*.ST2 or ST3) appropriate for the type of song the Soloist will be playing over (e.g., J_SWING.ST2 for Jazz Swing songs) by pressing the [*ST2] button.

**Note:** If you have an .ST3 database available for the style of soloing you want to generate, you can still choose the .ST2, and the program will automatically substitute the appropriate .ST3 file if, (a) it is available and, (b) you have selected the "Use Large Soloist files" checkbox in the "Select Soloist" dialog.

Press the [Choose] button in the Soloist Editor to select the instrument the Soloist should play (i.e. Tenor Saxophone).
You may also select an instrument from the “Patch Change” window, but selecting an instrument with the [Choose] button also fills in the specific note range for that instrument.

If you wish to have a harmonized solo, select the harmony type by clicking on the Harmony box and choosing from the drop-down list.

To Modify (if required) the “Phrase Length,” “Space Length,” and “Outside Range” parameters, simply click in the box you wish to change and type-in the new number.

For example, change the “Legato Boost %” to 10 %. This will add 10% to the duration of the notes.

Adjust the lateness by -5 to have the Soloist play the notes more “on the beat” than other Jazz soloists. Adjust the 8th Note spacing by -5 to have your Soloist play 8th notes in a more even feel than other jazz soloists.

“Change Instrument” allows you to quickly set how the Soloing will “take turns” with other instruments. Use this option to change instruments every chorus, every 4, 8, 16 bars, etc. Press the [Set..] button to choose the instruments you would like to change to, including the appropriate note range for each instrument.

The Sub-Soloist checkboxes are for use ONLY with add-on hybrid soloists such as the ones found on the SOLOISTPAK for Band-in-a-Box. These checkboxes can be used to “sub” a different instrument and playing style in a Soloist which contains more than one playing style, such as BG_BAND.ST2 found on Soloist Disk Set #5. For more information on additional Soloist Disk Sets and the additional features available with them, contact PG Music.

You can also save your soloist to another Soloist file (*.s1) by pressing the [Save As] button and use the [Export] button to save your Soloist to a disk to share Soloists with your friends.

Press the [OK] button when you are satisfied with your choices.

You can control the maximum number of notes per quarter note that the Soloist will use.
For example, you can set a “Rock Guitar” Soloist to use nothing shorter than 16\textsuperscript{th} notes. This would produce less “guitar hero” solos with bursts of 32\textsuperscript{nd} notes etc. Or you could create a Jazz solo that uses only quarter notes or longer to help with sight-reading or student study.

\textbf{10 easy steps to make a Soloist}

1. Bring up the Soloist window by pressing the [Soloist] Button.
2. Select a blank spot in your list of soloists and press the [Edit] button.
3. Insert the title of your soloist and any memo note you wish to add. The Num field will be filled in for you. Call this one \textit{Bebop Saxophone}. The memo might say, “extra legato, straighter 8th notes, on top of the beat.”
4. Choose the type of soloist (i.e. swing 8th notes, straight 8th notes, 16th notes, etc.) This should be set to Swing 8ths.
5. Press the [Choose] button to select the instrument the soloist should play (i.e. Tenor Saxophone).

\textbf{Tip:} You may also select an instrument from the Patch Change window, but selecting an instrument with the [Choose] button will also fill in the note range information specific to that instrument. You'll notice that the correct range for tenor saxophone has been filled in to the Note Range settings.

6. Modify (if required) the phrase length, space length, and outside range parameters.
7. Change the Legato Boost to 10\%. This will add 10\% to the duration of the notes. Press the [Help] button in the Soloist Editor window if you require additional details.
8. Adjust the Lateyness by -5. This will play the notes more “on the beat” than other Jazz soloists.
9. Adjust the 8th Note Spacing by -5. This will play the 8th notes in a more even feel than other Jazz soloists.
10. Press [OK], and you're done. Then, give the program a few moments to load its “knowledge base” of solo ideas and new parameters, and a few moments more to analyze the chords. Playback will begin automatically as soon as the Soloist has performed the operations mentioned above.

\textbf{Custom Solo Generation}

It is possible to generate and regenerate \textit{parts} of the solo, so that you can redo any part of the solo that you don't like! This dialog allows you to set the range that you'd like for the solo:

\textbf{OK to solo for an extra beat}

Usually, Soloists end a little after a bar's end – they play a couple of extra notes, spilling over to the next bar. Selecting this option gives Band-in-a-Box soloist this ability also.

\textbf{Overwrite existing solo in range}

If you want to “overdub” a solo and have multiple solo tracks going at once, deselect this checkbox, and avoid getting a little messy.

\textbf{Generate Solo Now}

Once you press this button, the portion of the solo that you have selected will be generated. The song will start playing two bars before the new part, so you can quickly hear the new solo. Remember that the custom solo
generation can be used with different soloists, so you can use a “tenor sax jazz” soloist for a few bars, and then insert a custom “bluegrass banjo” soloist for four bars and so on.

**Tip:** Band-in-a-Box even solos over the “slash chords.” The Band-in-a-Box Soloist feature analyzes slash chords like C/Bb to determine the best scale type to use (e.g. Bb Lydian). There's nothing you need to do, as this happens automatically!

### The Melodist Maker

In addition to the Melodists supplied with the program, this module lets you define or edit your own Melodists. You can choose the parameters to control the type of chords, melody and intro to be generated, as well as a number of settings controlling song form, theme continuity, endings type, anticipations, feel, style, harmony, soloist, patch changes and more.

Press the Melodist Maker [Edit] button from the Select Melodist dialog to launch the Melodist Editor.

#### Melodist Editor

The **Num** selection box allows you to select the Melodist that you’d like to edit. The top area of the Melodist Maker screen also allows you to set the **Title** of the Melodist and supply a **Memo**.

**Choose ST2 Database**

Select the associated ST2 database for the Melodist. Some ST2 Melodist databases are MEL1.ST2=Jazz Swing (8th notes), MELPOP1.ST2 (Pop Ballads, 16th notes), MELWLZ1.ST2 (Waltzes, 8th notes), and MELROK1.ST2 (Rock, 8th notes).

**Tip:** Soloist databases also have extensions of ST2, but they are not compatible with Melodists. Melodist databases are easily identified, they all begin with MEL.
The **Patch Change** area allows you to select an instrument and **Harmony**, and to set **Change Instrument** setting for when you would like to change to a new Melody patch (e.g. Each Chorus).

In the **Change Style to** .. window you can choose a style for the Melodist, and specify the feel for the style in the **.STY is** box.

**Legato Boost %** changes the legato (length) of the notes generated. Instruments like Saxophone have longer legato phrasing.

**Increase lateness by (/120ppq)** refers to how much after the beat the notes are played. This is normally left at zero for Melodists.

**Increase 8th note spacing by (/120ppq)** is usually left at zero (0). If set to a nonzero value, the 8th notes will be farther apart (based on units of 120 PPQ).

The rest of the settings in the Melodist Maker allow you to select options that control what type of melody will be generated.

### Unique Themes
This is normally left at 100%. But if you want to force the Melodist to stick with the same theme throughout the song, set this to a lower value (say 80%). It shouldn't be set much lower than 80. Default = 100.

### Unusual Placed Phrasing
The Melodist tries to make phrases that are appropriate for the position in the song. For example, the first 2 bars of the melody are appropriate for “opening phrases.” But if you want to experiment with phrases that don't follow these rules, set the Unusual Placed Phrasing to a value higher than 0%. Default = 0.

### Simple 1st and 2nd Endings
This setting only applies to Melodists that are using the Jazz Swing (MEL1.ST2) or Waltz (MELWLZ1.ST2) databases. This determines the % of time that endings of the A sections (in AABA forms) will be simple endings (1 or 2 notes) instead of complete phrases. Usually AABA tunes end with simple phrases at the end of the A section, so this option is normally left at 80% or higher. Default = 80%.

### Choose Unusual Chord Progressions
If set to a value other than zero, the Melodist will generate atypical chord progressions. For example, instead of a Dm7 | G7 | Cmaj7, the Melodist might generate Dm7 | Db7 | Cmaj7 Am7. Default = 0.

### Force Long Phrases
This determines the % of time that the Melodist will try to generate long phrases (4 bars or more). The downside to setting it higher than 20 will be a loss of uniqueness in the phrases generated. The setting shouldn't be set much higher than 20. Default = 20.

### Mix Minor and Major Chord Progressions
Typical major key chord progressions have progressions like (in the key of C) Dm7 | G7 | Cmaj7, whereas in the key of Am, they would be |Bm7b5| E7 |Am6. This setting determines how much the two types of progressions should be mixed in a single song. Default = 0.

### Chord Substitutions Throughout the Form
Normally an AABA song has identical chords for each A section. If this setting is greater than zero, the Melodist will generate chord substitutions throughout the various A sections, while preserving the identical melodies! Default = 0.
Number of Variations to Choose From
As the Melodist is determining what type of phrase to generate, it will narrow the possibilities to the number of variations set in this variable. Setting a higher number results in more interesting melodies, but the chord progressions are more unusual. Default = 15.

Tempo Range / Auto Tempo
The Tempo Range setting determines the tempo range that the tune will be created with (it will be a random tempo in the range). The Auto Tempo setting must be set on the Melodist Selection screen for the tempo range to work. Default from 110 to 180 bpm.

Transpose A2 Section
In songs with an AABA form, it is common for the second “A” section to be transposed. For example, the first “A” section might be in the key of Eb, and the second would be transposed up to the key of Gb. Melodists store these settings, and some Melodists are set to transpose the A2 sections. This setting determines the % chance that the song will be generated with a transpose. The transpose will be usually 2, 3 or 4 semitones. The song will only get transposed if the A2 transpose setting isn't set to “none” on the Melodist selection screen. Default = 30.

Anticipations in Phrases
Melodic phrases often begin a little before the beat. This is referred to as anticipation. This setting determines what % of the phrases will be anticipated. Default = 20.

Always Use this Soloist
Since Melodists can also generate Solos, a specific Soloist can be set in this setting. If set to “0 - no Soloist” the program will intelligently make a selection from all of the Soloists in the list.

Melodists can be copied and pasted to make new Melodists that are variations of each other.

You can export (save) and import (load) individual as Melodists.M1 files. This would be useful if you wanted to send a Melodist to a friend, for example.

The entire Melodist file, with up to 256 Melodists, can be saved to a .MEL file. The usual file is DEFAULT.MEL.
The DEFAULT.MEL file is saved every time the OK button is pressed, so you don't need to explicitly save this file by the [Save As] button unless you want to save alternate .MEL files and go beyond 256 Melodists.

The Guitarist Maker
Band-in-a-Box will intelligently arrange any melody to a guitar chord solo by inserting real guitar voicings throughout the piece. There are many preloaded Guitarists to choose from, or you can customize existing Guitarists’ settings or make your own Guitarists from scratch in the Guitarist Maker.

The Guitarist Maker is accessed from the Guitarist window. Click on the [Ch Sol…] button to open the Generate Guitar Chord Solo dialog, and then press the Guitarist Maker [Edit…] button to launch the Guitarist Editor.

Num Select the Guitarist from this field.
Title Title the Guitarist.
Memo This field allows a 100-character memo about the Guitarist.
Guitar Patch Select the guitar patch in this field.
Frets To Move If set to zero, the guitar chord solo will be limited to chords that can be played within the current position. If set to 5 (for example), the chords will be limited to chords that can be played within the current position and up to 5 frets away from the current position.
Force Open Position

This option forces all of the guitar voicings to the open position. The exception is when the Melody notes are so high that they can’t be played using open position voicings. If the Melody is in a high range, and you want a “forced open position” you should likely transpose the Melody to a lower octave prior to generating the solo.

The settings for Note Duration thresholds to get a chord refer to how long a note must be before a chord will be generated. (Quarter note = 120 ticks.)

Looking at the settings above these would be interpreted as follows:
- If a note occurs and it is the “First Note of a New Chord” and the note is not followed by another note for at least 50 ticks (120 ticks = 1 quarter note), then a chord will get voiced 90% of the time.
- If a note occurs (not the first note of a chord), that is on “Beat 1 of a bar,” and the note is not followed by another note for at least 50 ticks (120 ticks = 1 quarter note) then a chord will get voiced 90% of the time.

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- Similar interpretations for notes occurring on “Beat 2, 3 and 4.” You can see that the threshold is higher for notes on beat 2 and 4, which is how a guitar player makes chord solos.
- “Passing notes” are defined as short duration notes that aren't on the beat, and are followed by a note that is on the beat. In this example, passing notes will never be voiced as chords since the tick threshold is set to zero.

<table>
<thead>
<tr>
<th>Time threshold to get a chord (ms)</th>
<th>100 ms</th>
<th>Time Previous Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time to the next note</td>
<td>80 ms</td>
<td>Time to the next note</td>
</tr>
</tbody>
</table>

A further threshold is applied to the possibility that a note is voiced to a chord. These are defined as durations in milliseconds. In the settings shown, if the note occurs less than 100ms (Time to Previous Note) after the previous note, the note will not be voiced as a chord. If the note is followed by another note within 80ms (Time to the next note), the note will not be voiced as a chord.

**Strumming Settings**
If the Guitar Chord is all played at the same time, it will sound as if it was plucked. Guitar playing is more typically a strum.

**Speed of the strum**

<table>
<thead>
<tr>
<th>Strumming</th>
<th>Speed of Strummed Chords</th>
<th>5 ms</th>
<th>Plucked</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delay start time of strum by %</td>
<td>0 %</td>
<td>Strummed</td>
<td></td>
</tr>
</tbody>
</table>

If the setting is 80ms, then the guitar chord will be “strummed” over a period of 80 milliseconds.

**Delay start time of strum by %**
If the Delay start time is left at zero, the strum will end at the original time of the melody note. If you set it to 50% delay, the strum will be in its midpoint at the original start time of the Melody note, while if it’s set to 100%, the strum won’t start till the time of the original note. The most musical setting is about 50% delay. A delay of 0% also sounds good, and has the added advantage that it doesn't shift the actual time of the Melody note (relevant if you keep regenerating the solo on the Melody track).

**Plucked / Strummed**
Pressing these buttons will set the settings to preset values.

**Chord Types to Include**

<table>
<thead>
<tr>
<th>Chord Types to Include</th>
<th>0 %</th>
<th>100 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best Chords</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Best Chords if nothing else</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Good Chords</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advanced Chords</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unusual Chords</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barre Chords</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lenny B. Chds</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Include Open Strings</td>
<td>Never</td>
<td></td>
</tr>
</tbody>
</table>

You can decide which types of chords should be included in the chord solo.

**Best Chords** The most commonly played chords by pro guitarists.
**Good chords** Popular alternate chords.
**Advanced chords** Chords that are difficult to play, advanced voicings.
**Unusual chords** Voicings that should be avoided in most cases but have some uses.
**Barre chords** Chords that require the index finger to be played in a Barre position.
**Include Open Strings**  
If set to Never, no chords that require and open string will be played.  
(Never/ Sometimes/ Favor)  
If set to Favor, it will play open strings whenever possible.  
Sometimes is a “middle ground” setting.

**Include Chords with this # of Notes**  
You can select the # of notes for chords to be included in the chord solo. In the example above, chords with 2-6 notes will be included.

**Embellish Chords**

**Embellish how often:** Allows you to specify the frequency of embellishment.

**Embellishment type:** Allows setting of the types of embellishments to do.

<table>
<thead>
<tr>
<th>Embellish Chords</th>
<th>Embellish how often</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Embellish types</td>
<td>7ths, 9ths (jazz)</td>
<td></td>
</tr>
</tbody>
</table>

- Pop Guitarists should be set to use 9ths only. This will change C7 chords to C9 and Cm7 to Cm9.
- The “7ths/9ths” setting should be used for Jazz. This adds the embellishments of C to Cmaj7 and Cm to Cm7.
- The “7/9/11/13” embellishment should be used for “Advanced Jazz” Guitarists add 11ths and 13ths voicings.

If you make changes to the Guitarist settings, you need to manually save them by pressing the [Save As] button and then finding the `bb` home directory and saving the file as DEFAULT.GIT.

Individual Guitarists can be copied, pasted, exported, or imported to/from disk.
Chapter 15: Reference

Band-in-a-Box Menu Descriptions
This chapter gives line-by-line descriptions for all Band-in-a-Box menus.

File Menu

<table>
<thead>
<tr>
<th>Command</th>
<th>Shortcut</th>
</tr>
</thead>
<tbody>
<tr>
<td>New</td>
<td>F3</td>
</tr>
<tr>
<td>Open...</td>
<td>F7</td>
</tr>
<tr>
<td>Open MIDI file...</td>
<td>Ctrl+Shift+F7</td>
</tr>
<tr>
<td>Open Audio (WAV, WMA, MP3, WMV, CDA)...</td>
<td>F7</td>
</tr>
<tr>
<td>Find File...</td>
<td>Ctrl+F7</td>
</tr>
<tr>
<td>Open Audio w/ Chords(WAV, WMA, MP3, WMV, CDA)...</td>
<td>Ctrl+F7</td>
</tr>
<tr>
<td>Launch Audio Chord Wizard...</td>
<td>Ctrl+F7</td>
</tr>
<tr>
<td>Audio Chord Wizard Utilities...</td>
<td>Ctrl+F7</td>
</tr>
<tr>
<td>Import Chords from MIDI file...</td>
<td>Ctrl+Alt+I</td>
</tr>
<tr>
<td>Open Karaoke (KAR) File...</td>
<td>Ctrl+Shift+F7</td>
</tr>
<tr>
<td>Import MGU Song...</td>
<td>Ctrl+Shift+F7</td>
</tr>
<tr>
<td>Medley Maker...</td>
<td>Ctrl+Shift+F7</td>
</tr>
<tr>
<td>Open Special...</td>
<td>Ctrl+Shift+F7</td>
</tr>
<tr>
<td>Save song</td>
<td>F2 or Ctrl+S</td>
</tr>
<tr>
<td>Save song As...</td>
<td>Alt+F2</td>
</tr>
<tr>
<td>Save Song with Patches &amp; Harmony</td>
<td>Alt+F2</td>
</tr>
<tr>
<td>Favorite Folders...</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>File utilities...</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Make a Standard MIDI File...</td>
<td>F6</td>
</tr>
<tr>
<td>Print Song - Chords/ Melody...</td>
<td>Ctrl+P</td>
</tr>
<tr>
<td>Print Multiple Songs...</td>
<td>Ctrl+Shift+C</td>
</tr>
<tr>
<td>Make Song Titles...</td>
<td>Ctrl+F6</td>
</tr>
<tr>
<td>Load User Style</td>
<td>F9</td>
</tr>
<tr>
<td>Exit</td>
<td>Alt+F4</td>
</tr>
</tbody>
</table>

New is used to blank the chordsheet and start a new song.

Open shows and opens all available file types (MGU, WAV, WMA, MP3, MID, KAR, CDG, and CDA). And it remembers your preference, so you can restrict it to a certain file type.

Open MIDI file loads a MIDI file into Band-in-a-Box and the MIDI file will play with the chords intelligently interpreted on-screen. MIDI files read in Section Markers and show them as part markers.

Open Audio (WAV, WMA, MP3, WMV, CDA) will open an audio file in WAV, MP3, Windows Media Player (WMA, WMV) or CD Audio (CDA) format. Play back at 1/2, 1/4, or 1/8 speed for transcribing or analyzing.

Find File finds a Band-in-a-Box song (or any file that Band-in-a-Box can open), including filtering by words found in the file name or any text in the file.

Open Audio w/Chords (WAV, WMA, MP3, WMV, CDA) command will open a WAV, WMA, MP3, WMV, or CD Audio file and also figure out the chords and bar lines.
Launch Audio Chord Wizard… (WAV, WMA, MP3, WMV, CDA) will open the Audio Chord Wizard to analyze chords in an existing Band-in-a-Box song (that has a WAV file on the audio track).

Audio Chord Wizard Utilities opens a dialog with handy options to
- Make/Remove tempo map in Band-in-a-Box
- Remove audio file from song.
- Auto-set Key signature, with button present in the Audio Chord Wizard.
- Enable/disable the BB MIDI style.

Import Chords from MIDI File uses the MIDI File Chord Wizard to interpret chords from any MIDI file, and also import tracks to the Melody and Soloist tracks.

Open Karaoke (KAR) File opens Karaoke files directly in Band-in-a-Box, displaying the lyrics and chord symbols for the song.

Import MGU Song imports part or all of an existing Band-in-a-Box song to your current song, with options to specify source and destination range, type of information to import (chords, melody, lyrics, etc.), and more.

Medley Maker opens the Medley Maker, allowing you automatically make a medley of Band-in-a-Box songs.

Open Special opens a submenu with more options for opening songs.

<table>
<thead>
<tr>
<th>Option</th>
<th>Shortcut</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open (Using Custom Dialog)</td>
<td>Ctrl+Shift+F3</td>
</tr>
<tr>
<td>Open (Using Standard Dialog)</td>
<td>Alt+Shift+F3</td>
</tr>
<tr>
<td>Open with Melodies…</td>
<td>Alt+F3</td>
</tr>
<tr>
<td>Open Song by Title</td>
<td>Ctrl+F3</td>
</tr>
<tr>
<td>Open Favorite Songs</td>
<td>Shift+F3</td>
</tr>
<tr>
<td>Open Filtered by Built-in Style</td>
<td>Shift+F6</td>
</tr>
<tr>
<td>Open Previous Song</td>
<td>Ctrl+Shift+F8</td>
</tr>
<tr>
<td>Import Chords from PG Music MIDI file</td>
<td></td>
</tr>
<tr>
<td>Import Chords from PG Music MIDI file on CLIPBOARD</td>
<td></td>
</tr>
</tbody>
</table>

Open (Using Custom Dialog) uses the custom dialog that allows long-file-names, font selection, and even remembers its settings (unlike the standard windows 95/98 dialogs).

Open Using Standard Dialog uses the standard windows 95/98 dialog.

Open with Melodies lists only song files that have melodies (*.mg?).

Open Song by Title allows selection of songs by displaying the full title of the song (not 8 character file name).
A search function allows you to search the title list for a word or phrase to quickly find a title. For example, type in “Oldfolks” and the search will find the song title “Old Folks at Home,” as well as any other songs with “Oldfolks” in the title.

Open Favorite Songs opens the dialog that shows the last 150 songs played.

Open Filtered by Style loads only song in current style.

Open Next Song and Open Previous Song will open the next/previous song in alphabetical order. If the song loaded has a file name of “Paul,” choosing load-next-file will find the next file in alphabetical order after Paul, maybe it would be “Peter.” Shift+F8 and Ctrl+Shift+F8 are the hot keys for this.

Import Chords from PG Music MIDI file will read in the chord symbols from PG Music MIDI files made by programs like Band-in-a-Box or PowerTracks Pro Audio. Note that it won’t read in the chords from a MIDI file that doesn't have special chord symbols typed in to it, i.e., it doesn't interpret chords.

If you want to interpret chords from any midi file, use the File | Import Chords From MIDI File option instead.

Tip: If you’re working with a lot of Band-in-a-Box songs doing editing etc., remember the “Open Next Song” commands – they will save you a lot of time!

Save song saves current song under original title.
Save song As… is to save songs (*.G?).

Save Song with Patches & Harmony. All settings are normally saved with Band-in-a-Box files. If you would like to save certain patches with a song, then type in the number of the patch (instrument) that you would like. Leave the other instruments at zero (0) for No Patch change. Remember that - as with all other Band-in-a-Box functions - you use the General MIDI number for the instrument, regardless of the synth you are using. You can also freeze selected tracks in this dialog.
**Favorite Folders**… opens a list of recently used folders for quick access. **File utilities**… opens a sub-directory of file utilities.

<table>
<thead>
<tr>
<th>Command</th>
<th>Shortcut</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change Directory (Path)</td>
<td>Ctrl D</td>
</tr>
<tr>
<td>Run Explorer in Current Directory</td>
<td>Ctrl Alt F3</td>
</tr>
<tr>
<td>Run Explorer (choose folder) …</td>
<td></td>
</tr>
<tr>
<td>Auto-rename song files to Long File Names…</td>
<td></td>
</tr>
<tr>
<td>Rename Any BB File on disk…</td>
<td></td>
</tr>
<tr>
<td>Rename CURRENT song filename…</td>
<td></td>
</tr>
<tr>
<td>Delete File from disk…</td>
<td></td>
</tr>
<tr>
<td>“Nuke It!” (Delete CURRENT song file from disk).</td>
<td></td>
</tr>
<tr>
<td>Associate File types (songs, styles) with Windows…</td>
<td></td>
</tr>
<tr>
<td>Remove File Associations (songs, styles) with Windows…</td>
<td></td>
</tr>
<tr>
<td>Batch create MIDI files…</td>
<td></td>
</tr>
<tr>
<td>Change all songs in current folder to a specific TEMPO…</td>
<td></td>
</tr>
<tr>
<td>Change all songs in current folder to a specific STYLE name</td>
<td></td>
</tr>
</tbody>
</table>

**Change Directory (Path)** opens the Browse Folder window where a new directory can be selected. **Run Explorer in Current Directory** launches Explorer. Pressing **Ctrl+Shift+F3** is the usual way to get to this item, and will quickly open Explorer. Once Explorer is open, you could double click on a song or style to load it in. (Assuming that there is a file association for Band-in-a-Box songs and styles made in Explorer.) **Auto-rename song files to Long File Names** will rename all song files in the current directory to long file names, using the song title as the name. **Rename Any File on disk**… or **Rename CURRENT song filename** allows you to rename files. **Delete File from disk**… deletes a song file without exiting the program **“Nuke It!” (Delete CURRENT song file from list).** deletes the current song. **Associate File types (songs, styles) with Windows**… **Remove File Associations (songs, styles) with Windows**… will associate (or remove associations for) the file types for Band-in-a-Box songs and styles in Explorer. Once set, this means that you can double click on a song or style in Explorer and Band-in-a-Box will open up with that song or style. **Batch create MIDI files** convert an entire folder of BB songs to MIDI files. You can choose the file names to be based either on the original file name or song title name. This feature is also accessed with the **[Batch mode…]** button in the MIDI file dialog. **Change all songs in current folder to a specific TEMPO** **Change all songs in current folder to a specific STYLE name** **Make Standard MIDI File** makes a standard midi file. You can save in Type 1 (multi-tracks) or Type 0 (single track) files. Karaoke MIDI files are also supported. To save a MIDI file as a Type 0, 1, or Karaoke file, press the MIDI file button, and choose the desired MIDI file type.
There is also an option to save Drums on separate tracks. This is a special type 1 MIDI file with each individual drum instrument - such as kick drum, snare, and hi-hat - on its own separate track. When you load this type of MIDI file into a sequencer, like PowerTracks Pro Audio, it’s easy to fine-tune the level of each percussion instrument in the drum kit.

This button saves a MIDI File to Disk. You can then load the MIDI File into your sequencer for further editing.

This button copies the MIDI File to the Windows Clipboard. Then you can clipboard-paste Band-in-a-Box MIDI data to PowerTracks Pro Audio, Cakewalk, etc.

The [Options] button opens the **MIDI file options** dialog box to control how the Melody, Solo, and Harmony are written to a MIDI file.

Normally the MIDI file would get made for the whole song, but if you want to specify a range press this button.

The “Batch create MIDI files” function allows you to generate multiple MIDI files in one step, one MIDI file for each Band-in-a-Box song in a folder.

**Print Song - Chords/Melody** opens the Print Options dialog.

**Print Multiple Songs…** prints all songs, or just selected songs, in a song directory.

**Make Song Titles** allows you to assign long, full titles to song filenames.

**Load User Style** allows you to choose a user style. (See Selecting Styles.)

**Exit** to exit completely from the Band-in-a-Box program.

The last five files opened are listed at the bottom of the menu, numbered 0 through 4.
## Edit Menu

<table>
<thead>
<tr>
<th>Command</th>
<th>Shortcut</th>
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</tr>
<tr>
<td>Redo</td>
<td>Shift Ctrl Z</td>
</tr>
<tr>
<td>Cut</td>
<td>Ctrl X</td>
</tr>
<tr>
<td>Copy</td>
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<tr>
<td>Paste</td>
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<tr>
<td>Copy From ... To ...</td>
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<td>Copy/Move Tracks...</td>
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<tr>
<td>Erase From ... To ...</td>
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<tr>
<td>Intro Bars-AutoGenerate (or Remove)...</td>
<td></td>
</tr>
<tr>
<td>Insert Bar(s)...</td>
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<td>Delete Bar(s)...</td>
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<td>Nudge Chords/Melody...</td>
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</tr>
<tr>
<td>Repeats/codas/st-2nd endings...</td>
<td></td>
</tr>
<tr>
<td>Reduce (durations of chords by 1/2)</td>
<td></td>
</tr>
<tr>
<td>Expand (durations of chords by 2)</td>
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<tr>
<td>Unfold (convert to 1 BIG chorus)</td>
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<tr>
<td>Fold (convert 1 chorus to multiple)</td>
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<td>Set Time Signature (range of bars)...</td>
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<td>Song Menu...</td>
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<td>Auto-Generate Song Title</td>
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<tr>
<td>Search/Replace Chords...</td>
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<tr>
<td>Chord Settings...</td>
<td>Alt F5</td>
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<tr>
<td>Settings for Current Bar...</td>
<td>F5</td>
</tr>
<tr>
<td>Settings (for This Song)...</td>
<td>Ctrl-N</td>
</tr>
</tbody>
</table>

**Edit | Undo** and **Edit | Redo** allow you to undo or redo most operations.

**Edit | Cut** functions like a delete command to remove bars from a song.

**Edit | Copy** and **Edit | Paste** are to copy chords. Copying a section of chords can be done in the same manner as copying text in a Windows word processor.

**Note:** If you select (highlight) a region by dragging the mouse and then choose one of the **Edit** menu commands the dialog box will automatically adjust to the correct values, based on the region that you’ve highlighted.

### Copying Chords to the Windows Clipboard

Select the region to copy.

Place the mouse cursor at the bar to begin the selection. Then, holding down the left mouse button, drag the mouse over the region. As you do this you will see that the region will be inverted (i.e. looks dark).

When you have selected the desired region of chords to copy, release the mouse button.

Copy the selected region to the clipboard with the on-screen copy button, the keystrokes Ctrl+C, or select the **Edit | Copy** menu item.
Pasting Chords from the Windows Clipboard

Assuming you have already copied some chords to the clipboard, you are then ready to paste the copied chords into another part of your chordsheet. Move the highlight cell to the bar to begin the paste of chords. Copy the chords at the highlighted bar with the on-screen paste, the keystrokes Ctrl+V, or choose the Edit | Paste menu item.

Tip: The copied section remains in the clipboard and can be used repeatedly. If your song is in the form verse-verse-bridge-verse, you can simply copy the first verse to the clipboard, and then paste in the other verses. The clipboard contents remain even if you load in a new song, so you can copy and paste between songs.

Copy From…To… / Copy Rests / Erase From… To…

One of the best ways to copy chords is the Copy From…To… command in the Edit menu, or pressing Alt+C, which launches the Copy Chords and/or melody dialog. The Edit | Copy Rest command will similarly bring up the Copy Rests dialog to allow copying of rests. The Edit | Erase From…To… command launches the Erase Chords and/or melody dialog. These dialogs allow you to specify the number of bars to copy or erase, the location to copy to, and the option to copy or erase the Chords, Melody, Soloist, and/or Lyrics.

The Copy/Move Tracks command in the Edit menu opens the Track-to-Track Copy/Move/Delete dialog, which allows copying from one track to another.
Inside the dialog, you should choose the “Source Track” and the destination track to copy/move selected channels to.

Source track can be any of the Band-in-a-Box tracks – Bass, Drums, Piano, Guitar, Strings, Melody, or Soloist. The track to “Copy/Move selected channels to” can be Melody or Soloist (since these are the only tracks that are editable in Band-in-a-Box).

For copying from Melody or Soloist track, you can also specify which channels to include in the copy, or delete or move certain channels.

There is also an option to “merge with existing data...” on the destination track.

**Intro Bars - Auto Generate (or Remove)**

This command will launch the Generate Intro dialog where you can specify the characteristics of the intro you wish to generate. For more information on this feature please refer to the Automatic Intro section.

**Insert Bar(s)** inserts a certain # of bars into the chordsheet.

**Delete Bar(s)** removes a certain # of bars from the chordsheet.

**Nudge Chords/Melody** feature allows moving a range of chords by any number of bars and beats.

**Repeats/codas/1"-2" endings**

You can add repeats and endings so that the Lead Sheet window will display and print using 1st/2nd endings. You can add your own repeats and endings by choosing this menu command to open the Edit Repeats and Endings dialog.
Reduce (durations of chords by 1/2) cuts chord durations by 50% (e.g., 4beats>>2beats; 2beats>>1beat).

Expand (durations of chords by 2) doubles the durations of chords (e.g., 1beat>>2beats; 2beats>>4beats).

Unfold (convert to 1 BIG chorus)
Choose this command to unfold a multi-chorus song into one BIG chorus. When selected, Band-in-a-Box will display all choruses and verses of a song without loops or repeats. It is useful, for instance, when you have a song with 3 choruses and want to convert it to a single large chorus, or to customize a song with the “Edit Settings for Current Bar” feature to change meter, tempo, patches, styles, and/or harmonies and generate a MIDI file for export.

$1 - 32 \times 3$ becomes $1 - 96 \times 1$

Fold (convert 1 chorus to multiple) converts a song with a single big chorus to multiple smaller choruses based on the information you enter in the Fold Song dialog (chorus begins, chorus ends, tag etc.).

If you have imported a MIDI file, you might have a file that is 96 bars long, but really consists of 3 choruses of 32 bars each. You can convert this to a 32-bar song by using the Edit | Fold song option, including inserting tag endings, and 2-bar endings.

$1 - 96 \times 1$ becomes $1 - 32 \times 3$
Set Time Signature (range of bars)

In *Edit | Set Time Signature (range of bars)* you can assign a specific time signature at any bar and apply it to a range of bars, as often as you want. For example, to have one 5/4 bar, bar 13, select this menu item, and toggle the 5/4 button. Then, type in the bar beginning (13) and number of bars (1) in the space provided.

Time signature changes are printed on the Notation and Lead Sheet.

Transposing:

- **Transpose From .. To ..** launches the Transpose dialog for transposing a particular section of the song. The bar values can be typed in manually or you can transpose a portion of a song by highlighting the region you wish to have transposed, selecting this menu item, and typing in the new key you wish to transpose to.

- **Transpose DOWN or UP 1 semitone** transposes the entire song. This can be done while the song is playing. Band-in-a-Box will pause briefly, and then resume playing in the new key at the same place in the song.

- **Transpose # of semitones** opens a dialog where you can type in the number of semitones to transpose the song.
A song memo of up to 2000 characters may be added. When a song has a memo associated with it the word Memo highlights in blue.

Clicking on the [Memo] button launches the Song Memo dialog, where you can type or edit a memo about the song and select an “Auto-open” option that will show the memo each time the song is loaded.

The Song Memo has an option to close automatically during playback. When this option is set, the Memo button will close when play is pressed, and not reopen when stop is pressed. This setting, in combination with the “Auto-open” setting, ensures that the memo opens when the song opens, but closes during playback.

The Song memo has a “summary” checkbox. If selected, you’ll see an additional window that automatically displays a full summary of the song (title/tempo/patches used in the song), as well as other special features, like substyle patch changes or harmonies.

The font for the song memo is size selectable.

Auto-Generate Song Title allows you to generate a title for a song. There is also a button on the main screen for this.

‘Jazz Up’ The chords
This Edit menu command will “Jazz Up” the chords by changing chords like C and Cmaj to 7th and 6th chords. Song embellishment will be turned on for the song. Select the type of 7ths from the list box, and then click on the [OK – Jazz UP] button.

‘Jazz Down’ The chords
This will “Jazz Down” the chords by changing chords with 7ths (e.g. C7) to triads (e.g. C) and 9ths and 13ths to 7th chords. Song embellishment is turned off. Press [OK – Jazz Down] to proceed.

Search/Replace Chords will search and replace chords, including support for asterisks (*) as wildcards.
Chapter 15: Reference

The “Jazz Up” and “Jazz Down” functions are also available from the dialog. Pressing this button will help to normalize a chord progression to the nine most popular chords for Pop or Jazz. RealTracks play better with these “normal” chords.

The “Simpler Jazz” option will simplify chords like C13#11#5 to simply C9.

Chord Settings…
This launches the Chord Options dialog box, where you can put in rests and pushes. You can launch the Preview, Chord Builder, or Chord-Substitution Functions from this window.

The Chord Options dialog box can also be opened with the chord options button, with the keystrokes Alt+F5 or with a right mouse button click on the chordsheet.

Settings for Current Bar…
This command opens the Edit Settings for Current Bar dialog where you can change meter, tempo, volume, patches, styles, RealDrums styles, and/or harmonies at the current bar. This dialog is covered in detail elsewhere in this manual and in the online Help. You can specify the changes to happen for every chorus and/or a specific chorus.

Settings (for This Song)…
The Song Settings dialog can also be accessed by pressing the [S] settings button on the main screen under the song title. These settings are fully explained in the Making Songs chapter.

Styles Menu

StyleMaker

Make a Hybrid style…
Style Wizard… (Auto-Create Style from MIDI file)

Style is Enabled

Ok to load style with songs

Open a User Style from disk… F9
Browse Styles with info… Ctrl F9
Select Favorite Styles… Shift F9
Load Style demo for current style

Load Previous Style Ctrl Alt Shift F8
Load Next Style Alt Shift F8

StyleAliases

Choose from 24 ‘Built-in’ Styles
StyleMaker
This opens a submenu with three StyleMaker options.

New - Make a New Style
This function allows you to begin to create a new style, using the StyleMaker feature. See online Tutorial #6: StyleMaker - Making a New Style.

Edit a Style
This allows you to edit an existing style (*.STY) from disk. The resulting style can then be saved with the same name or a different name. This function uses the StyleMaker. See online Tutorial #5: StyleMaker – Editing Styles.

Edit Current Style
This allows you to quickly get into the StyleMaker to edit the current style. The current style is the style that is displayed in the Style Box on the main screen.

OK to load style with songs
This allows you to keep a style in memory. This way, all subsequent songs that are loaded will not change the style (even if they have a different associated style), so you can easily play songs in the same style. If you've found a new favorite style, you can try it out in all kinds of songs without having to reload the style each time.

For example, let's say we've discovered the GARNER style, and want to try it out on many different songs. Select Styles | OK to load styles with songs to ensure the item is NOT checked. Then when you load a song the saved style associated with the song doesn’t load and the song will play in GARNER.STY.

You can over-ride this style by loading in another style using the [STY] button or the Styles menu. The new style loaded will stay in until you choose another one, or until you turn off the forced styles option and load a song that uses a different style.

Open a User Style from disk...
Styles can be selected and loaded with Long File Name dialogs.

Browse Styles with info...
Opens the StylePicker window with complete style information.

Select Favorite Styles...
Opens the Favorite Styles dialog, which contains a list of the most recent 150 styles used. Since these are ordered based upon how often they are used, we call this the “favorite styles” list. Since you can also store user-definable favorite lists, we also refer to them as Set Lists.

Load Style demo for current style loads the demo song for the currently loaded style. This feature is also available with a click on the name of the style on the main screen. The menu that displays will include the option to “Load Song Demo” for the current style.

Open a User Style from disk...
Styles can be selected and loaded with Long File Name dialogs.

Browse Styles with info...
Opens the StylePicker window with complete style information.

Select Favorite Styles...
Opens the Favorite Styles dialog, which contains a list of the most recent 150 styles used. Since these are ordered based upon how often they are used, we call this the “favorite styles” list. Since you can also store user-definable favorite lists, we also refer to them as Set Lists.

Load Style demo for current style loads the demo song for the currently loaded style. This feature is also available with a click on the name of the style on the main screen. The menu that displays will include the option to “Load Song Demo” for the current style.

Load Previous Style, Load Next Style.
This function, like the Load Next Song function, loads in the previous (or next) style in alphabetical order of the file name. These functions are in the Styles menu, and accessible with the hot keys Ctrl+Alt+Shift+F8 (or Alt+Shift+F8).
### Style Aliases

You can create an alias so that when Band-in-a-Box looks for a style, it will load its alias instead, so when you have found a new favorite style just change the alias and you don’t have to change all of your songs.

- To create a new alias, click on an empty spot in the Alias list, or click on the alias you wish to edit if you wish to change an existing alias.
- Press the [Choose] button below the Original Style box and select the style you wish to be replaced.
- Press the [Choose] button below the Substitution box and select the replacement style (alias).
- If you want to type in a style name use the [Custom] button.

When you have successfully made an alias, you will notice that there will be a small arrow in the Styles box on the main screen indicating that you have an alias loaded.

### Tip:
You can temporarily totally disable the Aliases feature by disabling the Allow Any Style Aliases checkbox found in the dialog. You can also have confirmation of alias substitutions by enabling the Confirm Substitution checkbox.

### Choose from 24 “Built-in” Styles

Use this list as a convenient way to make a quick pick from the list of 24 original Band-in-a-Box styles. Once you load a style, the song will be played back using your chosen style and you can change the style any time.

### Opt. Menu

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<td>Use/Set ALTERNATE MIDI output driver for session...</td>
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- Return to Factory Settings...
- What add-ons do I have?...

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| Preferences... |

**MIDI/Audio Driver setup...**
Select MIDI Input and MIDI Output drivers and choose a Synthesizer / Sound Card patch map. Select the [Run Driver Wizard] button for help with your selection. Click on the [Audio Settings] button if you need to set up audio drivers, such as ASIO drivers. This topic is discussed in detail in the MIDI and Audio Setup instructions.

**Use/Set ALTERNATE MIDI output driver for session**
The Opt. menu item Use/Set Alternate MIDI Driver for session, allows you to set a temporary MIDI Driver for a session, useful when your main MIDI Driver is “in-use” by another application.

**Return to Factory Settings**
Choosing this command will reset all settings to the default at the time of shipping. Return to Factory Settings also offers to nuke the drum kit and MIDI Driver choice, making the return to factory settings complete.
If you choose MOST settings, the patch map and drum kit will be left intact, and not reset.

If you choose ALL settings, all settings will be reset to factory.

What add-ons do I have?...
An intelligent dialog, also accessible from the Help menu that will search your directory to tell you which add-ons you have and which you don’t.

Utilities

Edit Chord Shortcuts file (shortcut.txt)...  Refresh Chord Shortcuts...

Save Default Configuration (Mysetup.DK file)
Save alternate Drum/Patch File .DK...
Load alternate Drum/Patch File .DK...

Display General MIDI Patch Numbers...
Send a Sys-Ex file (*.SYX)
Choose Patch from General MIDI Patches...
Choose Patch from Higher bank...

Make an Advanced Patch map

Edit Chord Shortcuts file (shortcut.txt)... / Refresh Chord Shortcuts...
If you have found a chord that Band-in-a-Box doesn’t recognize, you can add your own shortcuts in a text file that you make yourself called c:\bb\shortcut.txt and Band-in-a-Box will allow you to type in that chord in the future. Click on this menu command to open or create your own chord shortcuts file. Make sure to save the file after editing. Changes won’t take effect until you choose Edit | Refresh Chord Shortcuts...

The text file \bb\shortcut.txt allows you to add new chord shortcuts. If you find a chord that Band-in-a-Box won’t accept, like Csus2 when it expects C2 instead, you can enter this on a single line (without the quotes) “Csus2@C2.” Then Band-in-a-Box will enter the chord C2 whenever you type in Csus 2. You can also use it for shortcuts. For example, if you entered j@maj7 Band-in-a-Box would let you type Cj for CMaj7.

Save Default Configuration (Mysetup.DK file)
This will rewrite the Band-in-a-Box configuration file mysetup.dk with your current settings. This file contains:
- MIDI Channels/Patches/Volumes/Reverb/Chorus/Bank
- Patch Map
- Favorite Patches, Favorite Combos settings
- Drum Kit

Save / Load alternate Drum/Patch File .DK
Allows you to save different custom drum kits or load preset or custom kits.

Display General MIDI Patch Numbers
This opens the General MIDI Patch List for reference.

Send a SysEx file (*.SYX) is a command that sends SysEx information to your MIDI device.
Whether you want to load different patches (or ones you have “tweaked” with a patch editor/librarian such as the
SC-Pro Editor/Librarian) into your MIDI device or whether you have a synth that requires a SysEx to set it to a
certain mode, you can easily send SysEx files with a configurable delay (the default is 100 ms).

If you would like to send a SysEx file to your MIDI device automatically at the start of each session, you need to
make a file called STARTUP.SYX, and put it in your c:\bb directory. Then, each time the program is started, it will
send the appropriate SysEx commands contained in this file to your MIDI device.

If you need to send a SysEx file at any time during a session, choose the Opt. | Utilities | Send a Sys-Ex File (*.SYX)
option. This launches a window from which you can choose a file to send. Since some MIDI devices require a
delay time between parts of a SysEx message, there is a default delay value of 100 ms between each part of the
message.

If you need to change the default delay, go to the Options | Utilities | Make an Advanced Patch map menu item and
enter the Sys-Ex Delay to a value in milliseconds (ms). If it is set to 0 ms, the program will revert to the default of
100ms. The smallest delay setting is 1(ms).

Technical Notes:
SysEx files are files that can be made with programs such as PG Music's PowerTracks Pro Audio or SC-Pro
Editor/Librarian. They begin with a F0(hex) byte and end with a F7 byte.

Examples where you might want to use a SysEx file with Band-in-a-Box are:
- Employing a custom setting or patch you have made with the SC-Pro Editor /Librarian.
- Sending a General MIDI mode ON message automatically when Band-in-a-Box boots up.

Choose Patch from General MIDI Patches... allows you to select a patch for the currently selected instrument
from an organized list of GM patches.

Choose Patch from Higher Bank... allows you to select a patch using the advanced search and higher bank/patch
support capabilities.

Make an Advanced Patch map
Patch maps contain information for mapping the patches and drum notes to your synthesizer as well as Velocity
offset, Octave offset, bank Controller 0 setting, bank Controller 32 setting, etc. There are also advanced options like
sending a SysEx file by loading the .DK file.

Edit these settings in the Opt. | Utilities submenu by choosing Make an Advanced Patch map.
These options are useful either if you have a newer synthesizer that supports bank changes and has nice patches in
higher banks or if you have an older synth that requires custom mapping of sounds. To access these features tick the
Enable Advanced Settings checkbox. Then, type in the values you would like to change. Say, for example, you
have some great string sounds on your synth on Bank 4, Controller 32. With this feature you can save them as part of your Band-in-a-Box setup by clicking the [Save] button. This will append your MYSETUP.DK file to include all of the patches you like to use, regardless of where they are on your synth.

Some basic soundcards don't have volume responsive drums. The result of this limitation can be rather unpleasant, since the drums might be too loud and there is no way of lowering the volume. Band-in-a-Box overcomes this so that you can boost or reduce the velocity of the drums on virtually any sound source.

To adjust the drum velocity, access Opt | Utilities | Make an Advanced Patch map and tick the option to “Enable Advanced Settings.” Then, enter a Number from -127 (quietest) to +127 (loudest) in the “Drum Velocity Boost” box.

Whether you want to load different patches (or ones you have “tweaked” with a patch editor/librarian such as the SC-Pro Editor/Librarian) into your MIDI device or whether you have a synth that requires a SysEx to set it to a certain mode, you can easily send SysEx files with a configurable delay (the default is 100 ms).

If you would like to send a SysEx file to your MIDI device automatically at the start of each session, you need to make a file called STARTUP.SYX, and put it in your c:\bb directory. Then, each time the program is started, it will send the appropriate SysEx commands contained in this file to your MIDI device.

If you need to send a SysEx file at any time during a session, choose the Opt. | Utilities | Send a Sys-Ex File (*.SYX) option. This launches a window from which you can choose a file to send. Since some MIDI devices require a delay time between parts of a SysEx message, there is a default delay value of 100 ms between each part of the message.

If you need to change the default delay, go to the Options | Utilities | Make an Advanced Patch map menu item and enter the Sys-Ex Delay to a value in milliseconds (ms). If it is set to 0 ms, the program will revert to the default of 100ms. The smallest delay setting is 1(ms).

Language Selection
This item in the Opt. menu allows you to change language from English to another language for display. If there are other languages supported by your version of Band-in-a-Box, then they will be displayed in this dialog box. International language versions are available for download from www.band-in-a-box.com.

Preferences…
The Preferences dialog box allows you to set various settings that are saved in the Band-in-a-Box for Windows configuration file called INTRFACE.BBW.

Custom Preferences
You can save and load custom preferences files with your current settings saved and restored. For example, you can have a preference that remembers a certain group of songs, notation transpositions, etc.

The Opt. | Return to Factory Settings menu command saves preferences to disk, so that the settings can be restored at any time.

Choose the menu item Opt. | Save Preferences As, or Options | Open Preferences.
**Note:** Items that were previously found in the Preferences (2) dialog are now included in the **Preferences** dialog (Opt. | Preferences). Other Preferences (2) settings are now found in dialogs such as the MIDI Options Dialog, Arrangement Options Dialog, and Display Options Dialog.

### Keystroke Shortcuts

You can open the dialogs with keystrokes by typing the underlined letter shown on the tabs. For example, you can open the “Arrange” Prefs tab by the keystrokes

- **Ctrl+E** to open the Prefs dialog, then
- **A** to open the Arrangement Options.

### Environment Options

**OK to Save/Load Reverb, Vol etc. w/Songs**
Select this checkbox in the Preferences dialog if you wish to embed Reverb, Volume, Pan, Chorus, and Bank information with songs for later recall, or if you wish to enable any such embedded information with songs that are loaded. The last settings that are in effect on the main screen instrument panel when you save the song will be recorded. Individual settings can be enabled/disabled in the **File | Save Song w/Patches and Harmony** menu item.

**OK to Prompt to Reduce/Expand Song**
If a style is changed with a different feel (16th notes instead of 8th notes), Band-in-a-Box will automatically offer to expand or reduce the duration of the chords, and change the tempo to accommodate the new style.

**StylePicker defaults to current style**
Since the StylePicker can now default to the current style, this option is available. If you want the StylePicker to stay at the style that you left it, de-select this item

**Use custom filename dialog**
When selected, the [Open] button, or the menu command **File | Open**, or the **F3** key will launch the custom **Open File** dialog. The custom **Open File** dialog has several advantages over the traditional Windows dialogs:

- The window is much bigger than the traditional one, allowing more room.
- There is a selectable font size and typeface.
- You can adjust the widths of the various columns.
- The Window remembers your settings.
- There are tabs at the top that allow sorting by name, date etc.

**OK to “beep” with messages**
Now that people have their sound cards hooked up to big speaker systems, a simple “beep” issued by Windows when an incorrect key is pressed can seem loud enough to “wake your neighbors.” Setting the “silent beep” option
allows Band-in-a-Box to visually flash the window title bar to get your attention, instead of generating an audible “beep.”

**Always save songs with “U” extension**
Older Band-in-a-Box songs had additional extensions for last letter (1-9, A-O) to indicate style type. Setting this will resave those old songs with a “U” extension, MGU or SGU (if no melody is present).

**At program boot up…**
On session start, you can elect to automatically load the last song or style that was used. Or not.

**Boot up in directory of the last session**
On program boot up, the current directory will get set to the last directory used in the previous session.

**Reduce other part volumes when clicking past 127**
If this is checked, on the main Band-in-a-Box screen when the volume of a part is at maximum (127) further increases will decrease the volume of all other parts.

**When opening BB song, open MP3/WMA file same name**
If MySong.MGU is loaded, and a same named audio file (MySong.WMA, MySong.MP3, MySong.WAV, etc.) is present, Band-in-a-Box will open the audio file to the audio track. This allows third parties to make audio files with chords in them, by making a MySong.MGU and MySong.MP3 pair of files, which will load into Band-in-a-Box, yet will have the audio compressed to take up little disk space.

**Number of levels of Undo** for the *Edit|Undo* command can be as high as 999. The default is 99.

**Keystroke Options**

**Enter Key Advances Highlight Bar**
The *Enter* key advances the highlight bar on the chordsheet. This speeds up the entry of songs for people who prefer to use the *Enter* key. When you enter a chord on the chord worksheet, press the *Enter* key to place your chord in the highlighted cell. The highlighted region will then move automatically to the next cell. The right arrow key can also be used to move the highlight cell.

**SPACEBAR Key**
There are three options for spacebar operation.
- Enters no chord (deletes current chord)
- Plays from current position (Ctrl + Space from start)
- Plays from start (Ctrl + Space from current pos.)
The default setting is to play from current position and stop the song.

**Simulate NUMPAD keys (for notebook users)**
Notebook users often don't have a number pad so they can't use the Band-in-a-Box looping features (Ctrl+NUMPAD 1-6 keys). With this option the regular numbers can be used to trigger the looping feature. For example, pressing Ctrl+2 will start playback of looped choruses.

**Pause Play until MIDI or Key received**
This allows playback to be started by a MIDI note received at the MIDI In port, or by pressing a key on the computer keyboard. Band-in-a-Box generates its arrangement, and then “stands by” for your start command.

**Text Hints**
Choose to enable or disable the fly-by text hints, the comprehensive program hints, and/or the dialog box hints. Set the time delay in ms before the hint pops up, and the length of time it will display.

**Preferences Buttons**
Most program settings and options can be accessed from the rows of buttons at the top of the Preferences dialog.

**Display Options**

**Windows Themes**
Band-in-a-Box supports for Windows “Themes.” It will use the current them that you have selected in Windows Control Panel to use for windows and dialogs.
**Toolbars**

**Toolbar mode** settings are for the main toolbar. The Normal mode shows toolbar icons with text labels. Options are Text only, Icons only, or No toolbar.

**Show on-screen piano** shows or hides the on-screen piano.

**Floating Toolbars Always Show Text** toggles floating toolbar text off or on.

**Song Title area font** allows the selection of any installed font for the song title.

---

**Chordsheet**

**Enable display of Repeats/Endings** allows repeats signs and 1st/2nd ending markers to be shown on the chordsheet.

**Display bars higher than end of song in gray** will "gray out" the bars on the chordsheet after the end of the song.

**Show chords with push/rest characters**

The push character is the caret symbol (^). So a C chord with a push is displayed as ^C. The rest character is a period (.) so a C chord with a rest is displayed as C. (C period). If you prefer to not see these characters displayed, then set this to false. These characters won’t show up on the printout regardless of this setting.

**Show chords with pushes/rests in color**

If set to YES, pushes are displayed in GREEN and rests are displayed in RED. This only applies to the Chordsheet, not the notation.

**Chord display**

Use this setting to change the chord display from normal to Roman Numeral, Nashville, Solfeggio, or Fixed Do.

**Display ‘C9sus’ as ‘C11’**
This option allows display of “9sus” chords as “11” (e.g., Bb11 instead of Bb9sus). This only affects how the chord is displayed, not how it is stored. And you can type either C11 or C9sus to enter the same chord.

For Roman Numerals of Chords in minor keys, use relative major
For minor keys, base roman numerals on the relative major. For example in key of Am, Am is either the Im chord or the VIm chord.

Chordsheet Font
You can choose the font to use for the chordsheet.

- **Custom**
  - If you choose a Custom font, you can choose the size as well. If you choose one of the preset fonts, the size is set automatically to fit into the height of the chordsheet row.

- **Jazz Symbols**
  - If you click on the [Jazz Symbols] button then “Jazz Chord Symbols” will be selected and you will see shorthand Jazz chord symbols on the chordsheet.

- **Default font**
  - The Default font button selects Comic Sans MS as the chordsheet font.

To revert to the classic style that used a small System font and lots of rows, you can choose that as the type of font “Small font (system).”

**Number of rows**
The number of rows displayed on the chordsheet screen can be selected manually to best match your screen size and resolution. There is also an option to make this adjustment automatically.

If “Auto-adjust # rows” is set, when songs are loaded the number of rows will change depending on the number of bars in the song, and the number of rows will vary within the supplied “Range:” of rows.

**New line for every section (part marker)**
When “New line for every section (part marker)” is set, most part markers will start a new line on the chordsheet. This makes the sections more readable. A section can be as little as 2 bars. It can be disabled for a song using **Edit | Settings (for This Song)**.

**Extra line space between sections (pixels =)** is the amount of space to add on a new line when there is a part marker.

**Transpose**
This will visually transpose the chordsheet and notation display by a number of semi-tones for concert or non-concert instruments, either by typing in a number or choosing a preset.

If a Chordsheet or Notation window transpose setting is in effect, a yellow hint message opens on bootup as a reminder.

**Arrangement Options**

- **Arrange**
  - The [Arrange] button opens the **Arrangement Options** dialog.

**Boost Velocity of pushes by**
The pushes in Band-in-a-Box are the chords that get played before the beat. Typically pushes are played a little louder than other patterns. You can leave this setting at 0, or set it to between 0 and 10.

**Boost shots by**
Shots can be accented with this setting.

**Boost ‘Holds’ by**
Use this setting to boost the velocity of held chords.
**Allow Any Rests**
You can disable the rests feature. You might want to do this if you’ve got a song with a lot of rests in it, and are then having difficulty recording a melody because you don’t hear the drums providing the beat (due to the drums resting). If so, you can temporarily disable the rests so that you can record and listen to the drums.

**Allow Any Pushes**
If for some reason you don’t want a style or a song to have pushes, you can set this to no.

**Allow Style Pushes**
If for some reason you don’t want a style to have pushes, you can set this to no.

**OK To Load Style With Songs**
This loads the style that is saved with the Band-in-a-Box song. Set it to NO if you don’t want the saved styles to load, perhaps to audition a new style with several different songs.

**Concert Pitch Adjust**
This is useful for non-concert instruments such as Saxophone or Trumpet. The output is transposed so that you see the music in one key, and it plays in another.

Trumpet players and other Bb instruments should set Concert Pitch Adjust to –2.
Altosax and other Eb instruments should set Concert Pitch adjust to +3.

**Allow Any Endings**
You can disable the endings from all the songs by using this setting.

**Lowest Bass Note**
Styles will normally play bass notes (down to the low E) if the pattern won’t go below a low E note. This happens with all styles automatically, but there is also an option to set the lowest note that the bass can go real low (so you can get a low C if you want to!).

**Prevent “too low” guitar notes**
For styles using a guitar patch on the Guitar, Piano, or Strings part this will prevent any note from being lower than the low E on a guitar.

**Allow late notes in pattern, just before chord change**
Styles will normally play notes near the end of a pattern, before a chord change. Sometimes this makes the style sound “too busy.” If you set this to, say 70%, then 30% of the time, the note at the end of the pattern will play quieter, typically at half the volume.
Drum Brushes
Most GM modules have brushes available on patch 41 on the drums. On some Sound Blasters you need to load a GS sound font for this to occur, and you need to use the Sound Blaster software to do this (AWE Control Panel). On the Yamaha XG, you likely need to send a “GS mode on” message from the GM menu in Band-in-a-Box. But if your module just doesn't have brushes available, then you can set this option, and the style will remap the notes to different drum instruments that don't have brushes.

First bar of first chorus of song gets a drum cymbal crash
If selected, the first bar of the song (following the intro) might get a cymbal crash. Usually this is left unselected, since most drummers wouldn’t play a crash cymbal on bar 1 of the song.

Normalize MIDI velocities to
If performing live, or at a jam session, it helps to have the volume of all of the songs be similar. With the “Normalize MIDI velocities” feature, you can level the volumes to a setting you enter. For example, you can set all volumes to be 70 and the program will make each song play within those levels.

When you have set the normalize to “on” the title window at the top of the screen reports that Normalization is set to 70, and that the velocity of the currently playing song has been increased from 49 to 70.

Including Melody, Soloist
The normalization will affect bass, drums, piano, guitar and strings. If you select the “Including Melody, Soloist” option, the normalization will also affect the Melody and Soloist parts.

When a song is loaded, but the required style is not found
In this group of settings you can control the behavior of the program when a required style is not found. Text files like c:\bb\A_PGMUSIC.NA list the substitute styles to use.
You can make your own *.NA file, but call it something like MYSTYLES.NA. Don’t edit the A_PGMUSIC.NA file.

OK to substitute with a similar style
If set, this will enable the substitution of styles using the c:\bb\A_PGMUSIC.NA text file and any other *.NA files supplied by third-party styles developers.

If nothing similar found, use this style
This is the style that will be substituted if no better substitute is found in the A_PGMUSIC.NA text file or any other *.NA files.

Message if no style or substitution found
If no substitute style is found, what type of message (if any) should be displayed?

Message if substitution style found
When a substitute style is found, what type of message (if any) should be displayed?

Insert Breaks (silence) in arrangement
This feature is great for practicing tempo control. Select the # of bars, and Band-in-a-Box will play for, say 4 bars (selectable), and then will rest all instruments for the next 4 bars. Once set, this feature works automatically with all songs until you turn it off.

Count-in and Metronome Options
This Preferences button opens the Count-in and Metronome Options dialog.

Drum Lead-in options
Allow Lead-In Bars
People who use Band-in-a-Box for soloing practice will likely turn the lead-in off to allow endless looping uninterrupted by the lead-in count. To eliminate the lead-in count, select Allow Lead-In Bars to = NO, this will start the song from bar 1 with no lead in.

1 bar lead-in
If this is set, the count-in will be a single bar instead of 2 bars.
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Play Lead-In Even If Intro Present
If a song has an intro, it’s usually not necessary to play the 2 bar lead-in count. There's a new option to always OMIT the lead-in if an intro is present.

Lead-in type
This can be drum patterns instead of “1-2-1234.” You can specify to play two bars of drum patterns instead of the count-in. You may prefer hearing the drum beat to a simple count-in, since it provides more information about the upcoming groove. If you’re playing with Band-in-a-Box live on a “dance floor,” this setting will avoid “dead air” between songs, and keep the drumbeat going. Includes options to have “a” or “b” drum fills or patterns play for the two bars.

Audible Lead-In/Volume
Enables audible count-in. If you would like the lead-in bars to be played, but just want the drum lead-in quieter (or silent) set the Drum Volume to = 0 (for silent).

Instrument/Pattern
You can select any drum instrument for the count-in. You can choose different count-in rhythms, e.g., tap on 2 and 4 instead of 1-2-3-4. There's a new “smart lead-in” option to silence the drum count-in if a melody lead-in has begun.

Smart Lead-in
A smart lead-in avoids playing the count-in drum sound during a Melody pickup.

Lead-in drum count if drums muted/disabled
Previously, when the drum track was muted (or disabled in a song), the count-in drum click wouldn't play. This option can play the drum count-in in all circumstances. Drummers who play along with BB by muting the drum track should find this feature useful. To set this option, choose Opt. | Preferences and set “Lead-in drum count if drums muted or disabled” to true (default is true).

Metronome Options
Visible Metronome
You can display a visible metronome on-screen during the entire song (or just the lead-in). Choose the screen position (top-right or center), and the size (up to near full screen size). Also choose the visual metronome pattern.
(1234, 1-3, 1-4, or –2-4). Seeing a metronome on-screen is a great way for a student to learn to keep on the beat, and with a settable size, students can view this from across the room.

### Audible Metronome
The three settings for the audible metronome are None, During Record, or During Record and Play.

### MIDI File Options
The Preferences [MIDI File] button opens the MIDI file options dialog.

**MIDI File Options**

- **Include Patch Changes in MIDI files**
- **Include Part Marker text markers**
- **Include 2 bar lead-in in MIDI file**
- **Write Lyrics in** [General MIDI format]
- **Write Section Text as Text Events**
- **Include Volume/Reverb/Chorus/Panning**
- **Include Forced Channel Meta Event**
- **Include Guitar Position Controller**
- **Write Soloist part on channel 5**
- **Write Harmony to MIDI file**
- **MIDI File Harmony on separate tracks**
- **Write Guitar part on 6 channels**
- **For partial range MIDI files, chop off sustaining notes at end**

If song has RealDrums:

- **Also generate MIDI Drums in the MIDI file**
- **Also generate RealDrums in xxxxx_RealDrums.WAV file**

**Include Patch Changes in MIDI files** will include the patch (instrument) changes.

**Include Part Marker text markers** will write descriptive text markers to the MIDI file, such as “bar 23, part A.” Text markers are also read in from MIDI files, and displayed as Section Markers on the Notation.

**Include 2 bar lead-in in MIDI file** is selected if you don’t want to create a MIDI file containing the first 2 bars of the 1—2—1-2-3-4 count-in. If there is a Melody pickup, then the 2 bar lead-in will remain in the file.

**Write Lyrics in General MIDI or PG Music format**
The GM specification has agreed upon specific requirements for writing lyrics in MIDI files, which are now supported, so that lyrics that you save in Band-in-a-Box should show up identically in other MIDI programs. To set this option, choose either General MIDI format or PG Music format. We recommend the GM format.

**Write Section Text as Text Events**
Your section text can be included in the MIDI file as text events.

**Include Volume/Reverb/Chorus/Panning**
This will include the volume, reverb, chorus, and panning settings that you have made in the Band-in-a-Box synth window in your MIDI file.
Include Forced Channel Meta Event
This will include the forced channel META event. It is recognized by PowerTracks Pro Audio and other PG Music Inc. programs only.

Include Guitar Position Controller
This will insert a controller 84 which PG Music uses to indicate the fret position. Since some synths also use this for Portamento Control, you should use this setting with caution.

Write Soloist Part On Channel 5
Normally the program writes the Soloist part on channel 8. Since that could also mean the left hand of a piano track using the convention of channel 8/9 for piano, this option allows you to write it on channel 5 instead.

Write Harmony To MIDI File
If set to YES, the harmony will be written to the MIDI file. If not, just the melody will be written to the MIDI file.

MIDI File Harmony on separate tracks
If set to YES, the harmony will be written to the MIDI file on separate tracks for each voice. You could use this to print out individual parts to your printer for example.

Write Guitar part on 6 channels
If set to YES, the styles that are Intelligent Guitar Styles will result in a MIDI file that has the Guitar part written on 6 channels (11-16). Then, when you read it in PowerTracks, or another sequencer that uses the convention of 11-16 for guitar strings, the guitar part will display correctly.

For partial range MIDI files, chop of sustaining notes at end
If you have made a MIDI file for part of the song this setting controls whether the notes will sustain at the end of the range in the MIDI file or be cut off.

If song has RealDrums
- Also generate MIDI drums in the MIDI file - If your song uses RealDrums for the drum track you may want to uncheck this option.
- Also generate RealDrums in xxxx_RealDrums.WAV file - saves RealDrums audio track as a separate wave file so it can be imported into another program for editing.

MIDI Driver Setup
The [MIDI Driver] button launches the MIDI/Audio Drivers Setup.

MIDI Input Driver
Select the Driver that you would like to use for input from a MIDI keyboard. If you don't have a MIDI keyboard, you can select <No MIDI/sound Input>.

MIDI Output Driver
Select a Driver For MIDI Output. This also includes Sound Card output (like Sound Blaster).

Perhaps the easiest way to configure Band-in-a-Box is to press the [Run Driver Wizard...] button. This launches the MIDI Output Driver Wizard.

The MIDI Output Driver Wizard dialog will take you step-by-step through the process of auditioning and selecting an appropriate driver. This assumes that the appropriate Windows sound drivers are installed and correctly configured.

Synthesizer / Sound Card
Every sound card or General MIDI sound module can chose “General MIDI Instrument Miscellaneous.” Only older non-GM external modules require a custom patch. Selecting the type of synth allows Band-in-a-Box to automatically load in the appropriate Drum/Patch kit file (*.DK). If you leave this as <synth card not listed> it will automatically default to the General MIDI patch list.

Get Patch/Drum Kit Info
This contains information on setting up custom patch/drum kits.

Use VST/DXi Synth
Check the “Use VST/DXi Synth” checkbox to enable VSTi or DXi playback.
To use this option, you must have a polyphonic VSTi or DXi synthesizer installed on your computer, such as the Roland/Edirol VSC DXi or VSTi, or the Coyote ForteDXi. It will also be most convenient if your VSTi/DXi synthesizer can use General MIDI or GM2 patches.

**Route MIDI Thru to MIDI Driver**
If this is unchecked, MIDI Thru (live playing) will be routed to the DXi synth rather than the MIDI Thru drive while the song is playing. (Applies with MME audio drivers only.)

**DXi Synth Settings**
To select the DXi synthesizer, click the [DXi Synth Settings] button, which will open the DirectX Plugins window. Select your DXi synth and apply real time DirectX effects.

**Driver Latency**
Software synths (like the Roland VSC) have a specific timing issue associated with them; “latency.” This means that it takes about 430ms from the time Band-in-a-Box sends the MIDI information to the Virtual Synthesizer to generate and hear the sound. To keep everything (i.e. the notation display, etc.) “in sync,” you should set this latency option. In most cases, Band-in-a-Box will prompt you to do this. If you are using a regular sound card or MIDI module you should not encounter any latency, so you should set the latency option to zero (0) if it's not already set this way.

Latency is set automatically for DXi/VSTi software synths. Click [Latency Adjust] to manually offset the latency of your driver with the Soft Synth Latency Adjust routine.

**GM2 support**
The type of GM2 support is set here. The choices are:
- General MIDI 2 support: If you're using the Roland VSC3, or a newer Sound Canvas (i.e. newer than 1999, or newer than the Roland SC88), then choose this GM2 support.
- Roland GS (older Modules): “Older” Sound Canvases (SC55/SC88) support GS, but not GM2. The good news is that they have the same patches available, just at different locations. So if you choose this option,
Band-in-a-Box will find the patches at the “GS” locations instead of the “GM2” locations. If you have a newer GS module like the SC8820, it supports both GM2 and GS - you should likely choose GM2.

- No GM2 support: Most sound cards (Sound Blasters etc.) don't have GM2 support yet, so just support the 128 sounds. Band-in-a-Box will use the closest instrument in these cases.

The [Audio Settings] button opens the Audio Settings dialog to set up audio drivers.

## MIDI Options

This Preferences button opens the MIDI Options dialog.

### Send GM Mode On at startup / Send XG Mode On at startup

You can elect to have Band-in-a-Box automatically send a GM or XG Mode On command every time the program is started. Toggle this option ON if you have a GM or XG unit to ensure that it is always set to the appropriate mode.

### Local ON (Ext. Keyboard): If you are hearing the information played on your keyboard played twice (an echo effect) then set Local ON to “No.” If you can't hear what you are playing at all, set Local ON to “Yes.”

### Turn External Keyboard's Local On at end of session

If you have set the Keyboard Local to Off (usually to eliminate MIDI echo) this setting turns it back on at the end of your Band-in-a-Box session.

### MIDI Thru: Set to “No” if you don't want the information played on your MIDI keyboard to be sent through Band-in-a-Box to the output driver.

### Controllers Thru: Guitar synthesizers and wind controllers contain large amounts of additional MIDI data which may not be required for Band-in-a-Box and may only serve to hinder the system performance of your computer. To prevent this information from being sent Thru, set this option to “No.”

### Use Thru Channel: Band-in-a-Box uses the Thru channel as a part, just like the Bass/Drums/Piano, etc. The Thru Channel is re-channeled to the Thru channel as assigned in the MIDI settings dialog. If you would prefer to set the Thru channel yourself from your MIDI controller, set this to “No.”

### Boost THRU Velocity by

When playing along on a keyboard to the Band-in-a-Box “band,” if the sound of your keyboard is too quiet and increasing the THRU Volume doesn't help enough, use this option to boost the THRU velocity and make your THRU playing louder.

### Output Sync/Start info: Syncs Band-in-a-Box with an external sequencer.

### Send Extra Note Offs: Leave this option set to “No” unless you are having trouble with “Stuck Notes” when you press [Stop]. If you set this option to “Yes” the program will send a “global sweep” of all notes off in addition to the selected notes off that are playing when you press the [Stop] button.
Allow Any Patch Changes: Set to “No” to disable All Patch changes.

Song Patch Changes: Songs can be saved with patch changes. If you want to prevent specific instruments loading for a given song, set this option to “No.”

Style Patch Changes: Styles contain patch change information for the instruments that were used when the Style was created. To use your own instrument selection, not the original instruments, change this setting to “No.”

Drum Patch Changes: To disable patch changes in Drums, set to NO.

Drum Bank Changes: This should usually be left unchecked since most synths don’t use bank changes on drums. But, if you require drum bank changes then select this option.

Allow Volume Changes: To prevent any volume changes set to “No.”

Style Volume Changes: To stop embedded style volume changes set to “No.”

MIDI Settings

The [Channels] button opens the MIDI Settings dialog.

<table>
<thead>
<tr>
<th>Channel</th>
<th>Octave</th>
<th>Patch</th>
<th>Reverb</th>
<th>Chorus</th>
<th>Pan</th>
<th>LSBO(32)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bass</td>
<td>-1</td>
<td>33</td>
<td>90</td>
<td>40</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Piano</td>
<td>3</td>
<td>0</td>
<td>90</td>
<td>40</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Drums</td>
<td>10</td>
<td>1</td>
<td>90</td>
<td>40</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Guitar</td>
<td>7</td>
<td>0</td>
<td>25</td>
<td>90</td>
<td>40</td>
<td>0</td>
</tr>
<tr>
<td>Strings</td>
<td>6</td>
<td>0</td>
<td>49</td>
<td>90</td>
<td>40</td>
<td>0</td>
</tr>
<tr>
<td>Melody</td>
<td>4</td>
<td>0</td>
<td>25</td>
<td>90</td>
<td>40</td>
<td>0</td>
</tr>
<tr>
<td>Soloist</td>
<td>8</td>
<td>0</td>
<td>1</td>
<td>90</td>
<td>40</td>
<td>0</td>
</tr>
<tr>
<td>Thru Chn</td>
<td>5</td>
<td>0</td>
<td>25</td>
<td>90</td>
<td>40</td>
<td>0</td>
</tr>
</tbody>
</table>

MIDI Channels: Range 0 to 16. If set to 0 the part will be Off/Disabled, which is not the same as muted.

Octave: Adjusts the octave of the part. Range (-2 to +2). Usually set to 0. (Bass is usually set to -1 for most General MIDI (GM) instruments.)

Patch: Range 0 to 128. These are General MIDI patch numbers.

Volume: Range 0 to 127. Average volume setting is = 90. This can also be set from the main screen.

Note: Only General MIDI, XG, and GS instruments respond to Reverb, Chorus, and Bank changes.

Reverb: Range 0 to 127. Default setting = 40.

Chorus: Range of 0 to 127. Default setting = 0.

Panning: Panning refers to the stereo placement (i.e. Left to Right) of a given part's sound. The range of this parameter is -63 to +63. A setting of 0 is centered in the middle of the stereo field.

Bank0 and LSB(32): Many General MIDI instruments have extra instruments available on higher banks. Usually set to 0. Other settings are multiples of 8 (0, 8, 16 etc.).
These can use either Controller 0 (Bank 0), which is also know as MSB for Most Significant Byte, or Controller 32, also called LSB for Least Significant Byte, or combinations of the two controllers.

**Harmony**

The [Harmony] button opens the Harmony Channels and Settings dialog where settings for the harmonies are made.

**Harmony Settings**

**OK to Load Harmonies With Songs**

If set to YES, the harmony settings for each song will be loaded and saved with each song. If set to NO, the harmony setting won’t be saved or leaded with the songs. If you are using a certain harmony, you should set this setting to NO, otherwise you’ll have to keep re-selecting the harmony when you load in new songs.

**Change Harmony With New Chords**

Example: If a harmony is played on bar 1 on a C chord, and then the note is held as the chord changes to a Fm7 chord, (if this setting is set to YES) the harmony notes will change so that they will be still be playing chord tones. If they don’t the harmony sounds dissonant. Leave this setting to YES, unless you have a specific reason to disable it. The harmony is changed by moving the voices to the nearest chord tone.

**Overall Harmony Volume Adjust**

Sets a level for the overall harmony in a range of -128 to 128, with 0 leaving the settings as programmed in the Harmony file.

**Harmony Channels and Settings**

<table>
<thead>
<tr>
<th>Harmony Channels and Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Harmony Settings</strong></td>
</tr>
<tr>
<td>☑ OK to Load Harmonies With Songs</td>
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<tr>
<td>☑ Change Harmony With New Chords</td>
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<tr>
<td>Overall Harmony Volume Adjust</td>
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<tr>
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<tr>
<td>Melody Harmony B</td>
</tr>
<tr>
<td>Melody Harmony C</td>
</tr>
<tr>
<td>Thru Harmony B</td>
</tr>
<tr>
<td>Thru Harmony C</td>
</tr>
</tbody>
</table>

**Harmony Channels**

Band-in-a-Box already uses 7 channels (Bass, Drums, Piano, Guitar, Strings, Melody and Thru channels). Adding these 4 harmony channels produces potentially 11 channels of information.

**Soloist**

The [Soloist] button launches the More Soloist & Melodist Settings dialog.
Set “Use MIDI Volume for Soloing Wizard” to true if you want MIDI velocity information sent to the Soloing Wizard. If you have a velocity sensitive MIDI device attached to your computer and you want to control the dynamics of the Soloist, you should enable this feature.

Set the “Trigger Playback Early” to true to enable song playback to start before the Soloist has actually completed composing a solo. Otherwise, Band-in-a-Box will completely compose a solo before song playback begins.

**Soloist – Prefer Long Phrases**
Set this checkbox to “True” (enabled) if you would like the Soloist to use the longest musical phrases it “knows.” This setting is normally used in conjunction with the Use Large Soloist files setting.

*Note:* This option may also increase Soloist creation times. Disable this feature if you are using a slower or low-memory equipped computer.

**Soloist/Melody Velocity Adjust**
This box allows you to quickly boost or reduce the volume of the Soloist part relative to the other instrument parts. For a realistic mix the soloist instrument is set slightly louder than the other instruments/parts in a song. The default is 5.

**Improved solo (but slower creation)**
- Use large soloist files (ST3) uses larger databases with improved phrases when checked.
- Create Long Phrases, when set to “True” (enabled) instructs the Soloist to use the longest musical phrases it “knows.” Normally used in conjunction with the “Use large soloist files” setting.

**OK to treat the V Major triad as a V7**
If set, all Jazz MIDI soloist and some Jazz and Country RealSoloists will treat the V chord as V7.

**Colors**
The [Colors] button in the Preferences dialog opens the Color Selection dialog.

You can choose from several color sets using the 256-color palette in Windows. Choose from pre-made color schemes or make your own. This is like changing the Windows color scheme in the control panel.

To select a pre-made color scheme, press the [Import..] button and choose from the list of schemes. Select [OK] to make the changes permanent. Use the [Export..] button to save and share your customized color schemes.

To make your own color scheme, click on the name of the element you wish to change (Chord Area, List Box, etc.), then click on the [Choose...] button to bring up the Windows Color palette and click on the color you desire. Or you can enter the appropriate Red, Green, and Blue values in the boxes provided.
Patch Map

This opens the **General MIDI Patch Edit** dialog, where you can make a customized General MIDI patch map.
Type in the patch number that your synth uses for each instrument listed. For example, if your sound source has its Acoustic Piano at patch location 41, select the box to the left of Acoustic Piano and type 41. Do the same for all of the instruments in the General MIDI patch list. If your synth doesn't have an exact match, use a close sounding patch that it does have. Once you have made a patch map in this way, whenever Band-in-a-Box encounters Acoustic Piano (which is General MIDI instrument #1), it will look up this Patch Map Location and then send out Patch 41 to your synth/sound module.

**Drum Kit**

If you have been unable to find a preset drum map that matches your synth's drum notes, then you may need to type in the drum notes that your sound source uses. To do this, you need to hook your MIDI controller up to play the drum sounds from the keyboard. Play up and down the keyboard to hear all the drum sounds.

**Here's a way to figure out where the MIDI note numbers are on your synth.**

We took this screen shot while playing MIDI note 36 on a MIDI controller. If you have MIDI In hooked up, you can play various “C” notes until it matches the location shown (below the word Bass). Then you can mark that note on your controller as note 36. The notes are then numbered (chromatically) 36, 37(C♯), 38(D) etc. (Some people call note 36 C3; others call it C2.) This is note 36 (C3) played on a MIDI controller.

![MIDI note 36 on a MIDI controller](image)

Type the MIDI note numbers for the various instruments as you find them on your drum machine or keyboard. Press the [Save] button to save the kit as MYSETUP.DK. If you are making a kit to save under a different name then save the kit under Opt. | Utilities | Save Alternate Patch/Drum Kit.

**Customize the Relative Volumes of the Drum Kit Instruments.**

Perhaps when you listen to Band-in-a-Box you feel that the crash cymbal is too loud or the kick drum is too quiet.

The [Set Drum Volumes] button allows you to make the crash cymbal 10% quieter, boost the kick-drum by 15%, and turn off the “tambourine” entirely. Changes apply to any song when this feature is enabled, and playback and written MIDI files will reflect the changes.
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The default settings are to change the volumes by 0 %, which would leave them as they are. If there were a drum note with a velocity of 50, it would be affected as follows:
+40% would change it from 50 to 50+(40%\times50)=70
-40% would change it from 50 to 50-(40%\times50)=30

The current settings for your drum velocities are saved in the intrface.bbw configuration file.

**Favorite Instruments**

This button opens the **Favorite Instruments** dialog.

For each of the Band-in-a-Box parts you can assign up to 10 “favorite” General MIDI instruments.

**Note:** If you use a custom patch map it will convert your synth’s non-GM patch numbers, always enter GM patch numbers for the favorite instruments.
The [Patch List] button displays the **General MIDI Patch List** of instrument names and patch numbers.

The [Combos] button opens the **Favorite Combos** dialog.

The **Favorite Combos** dialog box allows you to save up to 10 of your favorite instrument combos. For example, you could setup Combo #1 to be an Acoustic Jazz combo which would send out patches like Acoustic Bass, Acoustic Piano, Acoustic Guitar, Flute, etc. After you have finished typing in the instrument patch numbers select the [Save] button.

### Output Chords on Channel

The **Preferences [OutputCh.]** button opens the **Output Chords on Channel** dialog. Some external music hardware devices require chords played in root position to drive them in real time.

An example of this is the TC-Helicon Voice Live, which lets you sing into a microphone and harmonize your voice according to the chords that are input to the device.

Band-in-a-Box has the capability of outputting a separate channel with the chords in root position to support such external devices automatically.
Transposing

The Preferences [Transpose] button opens the Settings for transposing songs when loaded or “Do it Now” dialog.

Settings for transposing songs when loaded or “Do it Now”

- Transpose by
  - 0 Semitones and
  - 0 Octaves
- Each time a song is loaded
  - No transpose to the key of C
  - Do it now

Each Chorus that a song is playing, transpose by
- 0 Semitones.
- Random # semitones

- Auto-transpose to best VOCAL key when a song is loaded
- Use Wizard for THRU part
  - Allow Melody Wizard on THRU part (F and G below middle C is melody)
- Melody Octave
  - 0

OK Cancel Help Defaults

When playing along on your MIDI keyboard, you can set the Thru transpose to transpose semitones or octaves. You can define a “favorite key” and Band-in-a-Box will optionally transpose any and all loaded songs to that key. This is a great feature for practicing in a certain key.

You can also set the THRU transpose to the favorite key to transpose the THRU part so that you can always play along in your favorite key (regardless of the actual key of the song). To activate this feature by key strokes press Ctrl+Shift+K.

To practice a song in different keys, have it transpose by a specified number of semitones each chorus, or let Band-in-a-Box transpose it a random number of semitones for more of a challenge.

This launches the Vocal Wizard, which shows the best keys given a singer’s vocal range.

When “Auto-transpose to best VOCAL key when a song is loaded” is checked the song will automatically transpose to the best key for a vocalist, depending on the settings in the Vocal Wizard.

If you have an external keyboard, enable the “Use Wizard for Thru part” option and also the Wizard checkbox on the main screen. Band-in-a-Box will make sure you never hit a wrong note when playing live!

When “Allow Melody Wizard on THRU part (F and G below middle C is melody)” is set, the F and G below middle C on a connected MIDI keyboard will play melody notes, assuming a Melody track exists. A, B, C, D, and E are approach notes from below. F# = repeat note. D, C, B, and A are approach notes from above. Low E, F, and G change the melody octave.

Record Filter

The Preferences [Rec. Filter] button opens the Record Filter dialog.
Record Filter supports all MIDI controllers and sustain pedal. You can record any type of MIDI information to the melody or soloist tracks by using the Record Filter feature to select which types to include.

With this window you can choose what types of MIDI information Band-in-a-Box will record.

Notation
The [Notation] button opens the Notation Window Options. If the Notation window is not open the program will launch it.

Lead Sheet Options
The [Leadsheet] button opens the Lead Sheet Options dialog. If the Lead Sheet window is not open the program will open it.
These settings are described in the Notation chapter and in the online Help.

Audio Settings

The Preferences [Audio] button opens the Audio Settings dialog.

Audio Driver Type

You'll see the following options for Audio Driver Type: MME or ASIO. MME is the default audio driver type that is used in Windows. MME is good, but there is latency (delay) associated with MME drivers.
For this reason, Steinberg developed a faster type of audio driver system, called **ASIO**. It allows for much lower latency than ordinary MME drivers do.

**Note:** Most low-end sound cards do not include an ASIO driver, so you may not have an ASIO driver yet. In this case, you’ll need to get an ASIO driver from the Internet.

### ASIO Audio Driver

When you select ASIO the **ASIO Audio Drivers** dialog will open.

This ASIO driver dialog lets you choose an ASIO driver. You can arrive at this dialog in 3 different ways:

1. If you haven’t used ASIO drivers, but Band-in-a-Box detected them, and you answered “Yes” when Band-in-a-Box asked if you want to use an ASIO driver.
2. If, within the Audio Preferences, you change the Audio Driver Type from MME to ASIO.
3. If the Audio Driver Type is already set to ASIO, but you later press the [Audio Drivers...] button in the Audio Preferences.

The “Select one ASIO Driver” list box lets you select an ASIO driver to use. You can only select one ASIO driver at a time.

![ASIO Audio Drivers Dialog](image)

Once you have selected an ASIO driver, you will see the Input Port and Output Port list boxes filled with your driver’s input and output ports. By default, the first of each will be selected. You are allowed to select different ports (but only one input and one output port at a time can be selected). The ports you selected will be available for
output within Band-in-a-Box. If you do not hear input or output, then you may need to try different ports than the
defaults. You may need to read your sound card’s instructions to determine the correct ports to use.

The ASIO Driver’s Control Panel button launches the Control Panel for your driver. This usually lets you adjust the
latency by letting you choose different buffer sizes in milliseconds. Some drivers might let you choose the buffer
size in samples, which is less convenient than milliseconds. The smaller the buffer size, the lower the latency, and
the faster the response. Smaller buffers require more CPU power and if you hear dropouts or artifacts, you may
need to increase the buffer size.

Since many ASIO drivers do not support multiple sample rates, Band-in-a-Box has a built-in resampler which lets
you play and record songs that have a different sampling rate than the rate(s) directly supported by your ASIO
driver. For example, if the driver does not support 44.1K sampling rate, but supports 48K, then Band-in-a-Box will
use the resampler to convert to 48K when playing back, and to convert FROM 48K when recording. The
Resampler Quality combo lets you choose Fast, Good, Better, or Best. Fast is the quickest, but is the lowest of the
four levels of quality. Best is the slowest (uses more CPU time), but the most transparent and accurate quality.

The ASIO Driver’s Control Panel button launches a settings dialog specifically provided by your driver
manufacturer. This usually lets you adjust the latency, and usually you will have a choice between buffer sizes in
milliseconds.

Show Warning for Untested Soundcard Formats can be unchecked if you do not want to see the warning
message for ASIO drivers that have not been tested in Band-in-a-Box.

The Driver Info field shows various characteristics of your driver.
The Name is the driver’s name.
The Version is the version number of your driver.

Input Channels is the total number of mono input channels that your sound card has. (Note: Band-in-a-Box groups
each into a stereo pair.)

Output Channels is the total number of mono output channels that your sound card has. (Note: Band-in-a-Box
groups each port into a stereo pair.)

The Allowed Sample Rates field shows the sample rates allowed by your sound card’s ASIO driver. Band-in-a-
Box has a built-in resampler which lets you play and record files that aren’t directly supported by your ASIO driver.

The Buffer Sizes In Samples shows the range of allowed buffer sizes. The “Pref” is the preferred size, and this is
the size that Band-in-a-Box uses. Your driver may alter the preferred size if you’ve launched the ASIO Driver
Control Panel and have selected a new buffer size from within the driver’s Control Panel. If your driver changes the
preferred size, then Band-in-a-Box will be aware of the new preferred size.

MME Audio Drivers

If your PC has multiple sound cards, the [Audio Drivers] button lets you choose which one to use. Most people
have a single sound card, so don’t require this feature. But if you have added an audio device (such as a USB Audio
Adapter), you would have multiple audio devices, and are now able to choose which one to use.

Choose MME as the “Audio Driver Type” and click on the [Audio Drivers] button to select which audio driver to use. This launches the Audio Drivers dialog.
The DMA Size and DMA Offset settings are set automatically by the auto-testing of the sound card. This test can be repeated by pressing the [Get from sound card…] button. The default value for all of these settings is 0 (zero). You can override these settings if required, but it is usually not necessary.

The Offset in mS is not a setting that gets set automatically. It defaults to zero. This allows you to adjust the timing that the sound card plays audio in relation to MIDI. Normally you’d leave this at zero, but if you need to fine tune the synchronization of audio to MIDI you could try changing this setting.

Audio Latency in mS
DirectX audio plug-ins and DXi synthesizer plug-ins can have playback latency (the delay between when a note is played, and when it is heard). Adjust “Audio Latency in mS” to fine-tune for your computer. If you have a fast computer and excellent sound card, the audio latency can be adjusted rather low. However, if you hear audio dropouts, you can set the latency as high as 2000 milliseconds.

Audio Track Type for THIS song
You can choose between mono and stereo for the audio track. Tracks can be edited in either format, and converted from stereo to mono or vice versa.

<table>
<thead>
<tr>
<th>Audio Track Type for THIS song</th>
<th>Stereo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preferred default track type for new songs</td>
<td>Stereo</td>
</tr>
<tr>
<td></td>
<td>Mono</td>
</tr>
</tbody>
</table>

You can change a project from mono to stereo at any time. For example, if you have already recorded a mono track, changing the setting will convert the track to stereo for you.

Note: The built-in audio plug-ins work for either mono or stereo tracks.

Preferred default track type for new songs.
This setting (mono/stereo) sets the default recording type for new songs that you record. For example, if you have a stereo microphone, you should likely record in stereo.

When opening songs, show message if WAV file not found
A Band-in-a-Box song called “My Song.MGU” will have the associated wave file called “My Song.wav.” If Band-in-a-Box loads this song file and it can't find its associated file, it will put up a message to that effect. If the warning message is distracting, and for some reason you don't have the wave files that were recorded with the songs then you can disable that message with this option box (disable).

Peak Limit Enable
Check the “Peak Limit Enable” checkbox to restrict excessive levels from being recorded (Filter).

Mixer requires keystrokes to open Record Panel (Windows 95 only)
If you are running Windows 95, check this box to allow access to the Record Panel from Band-in-a-Box. Do not check if using Windows 98 or greater.

Use Realtime DX Audio Plugins
The advantage of real time processing is that you can set effects today, and if you decide you don’t like the effects tomorrow, the settings can be easily changed, since the real time effects did not permanently affect your audio track on the hard disk. Check “Use Realtime DX Audio Plugins” in the Preferences [Audio] settings to enable real time DirectX audio plug-ins.

Correct RealDrums Sync for ASIO with hardware modules
Some systems have a sync problem when using RealDrums with hardware modules (zero latency). If this is set, the sync problem is fixed as the song starts to play (bar 1).

Guitar Settings
The Preferences [Guitar] button opens the Guitar Settings dialog.
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**Guitar Settings**

The **Guitar Settings** dialog allows you the ability to adjust various parameters on the virtual guitar fretboard so that music can be displayed effectively (and easily) on this window, regardless of the original instrument intended for the track data. It also offers the ability to enter notation using the virtual guitar and play back track data in specific fretboard positions for educational and sight-reading purposes.

Click on the [Help] button for detailed online descriptions.

**Big Piano Settings**

This **Preferences** button opens the **Big Piano Settings** dialog.

This dialog allows you to set various options on the Big Piano.
- You can set a specific range for the Big Piano, a starting note and a number of octaves, by over-riding the “auto” settings.
- “Show out-of-range notes” ensures that all notes will be displayed.
- If the “Send Notes to Notation Window” checkbox is enabled, clicking a virtual key on the big piano will insert a note to the notation track. (Note: The Notation window must be opened and set to editable notation mode.)
If “Note Guides” is selected guide notes will be shown on the keyboard. The guide notes can be scale tones, chord tones, or roots only.
- Note Names and Note Colors can be used as in the Notation settings.
- There is an option to Show Out-of-Scale notes in Yellow.
- The size of the piano keyboard can be entered in pixels, or set with the preset buttons, or set by dragging the bottom border of the window.

**Lyric Window Options**

The [BigLyrics] button opens the **Lyric Window Options**.

Individual color elements can be picked, or choose one of the presets.

**Display Chord Symbols** will interleave the chord symbols with the lyrics.

**Show chord symbols above the lyrics** will show the chords on a separate line.

With the **Scroll lyrics a page at a time** option selected the Big Lyrics scroll a page at a time. When the lyric cursor reaches the next-to-last line of the lyrics it will scroll to the top of the page, allowing uninterrupted reading of lyrics.

**Auto-open lyrics window for songs with lyrics** automatically opens the Big Lyrics window when a song with lyrics is opened in Band-in-a-Box.

**Karaoke CDG Window Settings**

To open a Karaoke CDG file use *File | Open*, and find a WAV, MP3, or WMA file that has a same named CDG file in the same folder. With “Load CDG file when opening audio file” selected the Karaoke window will open and display the lyrics.

You can choose to have a background to the window, either a moving one, or fixed picture. These pictures are in the `c:\bb\KaraokeBMP` folder, and you can add your own BMP or JPG image to that folder.
The [Print] button opens the Print Options dialog.

These options are described in the Notation chapter and in the online Help.

Overrides

**Global Song overrides** allow you to set the overall song looping (always OFF, always ON, or as set in the song).

For example, if you want every song loaded to have looping set to on, then set “Always set loop to ON.”

But if you are going out on a playing job, and don’t want any songs to loop, then set it to “Always set loop to OFF.”

If you want the settings to work the same way they did in previous versions, use the “As set in the song” setting, or press the [Defaults] button.

If this is not selected, notation symbols (slurs, staccato, crescendos) will not be loaded from the song.

The “Defaults for new songs” are settings from the Song Settings dialog.
When “Vary Style in Middle Choruses” is selected (default) the song will play in substyle B throughout the middle choruses, playing substyle A for the first and last choruses only. If this setting is not selected the substyle changes will follow the part markers entered on the chordsheet.

When “Allow Embellishment of Chords” is selected (default) Jazz styles can play embellished chords. For example, C7 might play as C13 or C7b9 for a more authentic sound.

The [Pop/Country] preset button turns both of these settings off for a typical Pop or County arrangement that follows part markers and does not embellish chords.

The [Jazz] preset button turns both of these settings on for a typical Jazz arrangement to support soloing over the middle choruses and allow Jazz chord embellishments.

Similar overrides are available to see which other information gets loaded from a file, such as patches, harmonies, volume/reverb/chorus/panning/banks. For example, you can set every song to load with looping ON, and don’t load any reverb settings from songs.

**RealDrums**

The RealDrums button opens the RealDrums Settings dialog.

Select the “Enable RealDrums” checkbox to hear RealDrums.

**Tip:** Try turning off the RealDrums by de-selecting “Enable RealDrums.” You can do this even while the song is playing. When you do, you will then hear the MIDI drums – this is a good A/B comparison test to hear the differences.
There are several ways to hear RealDrums with your Band-in-a-Box songs.

Styles (.STY) can have RealDrums (e.g. “–ZZJAZZ.STY”). This is in the StyleMaker’s Misc. Style Settings dialog.

We provide many styles that already have RealDrums. These styles can be identified by the style name beginning with a minus sign. For example “–ZZJAZZ.STY” is a version of the ZZJAZZ.STY that uses RealDrums.

You can set the RealDrum style inside the StyleMaker, by pressing the MISC button, and then typing the name of the RealDrum style.

The StylePicker has a special category that lists the many RealDrum styles that are included with the program.

RealDrums can be substituted for MIDI drums on existing styles.

This will substitute RealDrums for MIDI styles. You can change the setting from 1 to 5. If set to 1, almost all MIDI drums will get substituted by RealDrums. If set to 5, only RealDrum styles that match the style perfectly will get substituted.

This will replace the RealDrums that you don’t have with ones that you do have.

Songs can have RealDrums added to them.

To do this, set the desired style in this dialog, or the “File-Save With Patches etc.” dialog. This will let the current song use the specific RealDrums style.
When “Enable RealDrum changes at any bar” is checked the RealDrum style can be changed at any bar by choosing a new style in the Edit Settings for Bar dialog (F5 function key).

**RealTracks**

The RealTracks Settings dialog lets you control the RealTracks.

### RealTracks Settings

- **Enable RealTracks**
- **Global Volume Adjust**
- **Allow Soloing to Crescendo**
- **Allow Auto-RealTracks substitution based on tempo**
- **Show message when better RT are available at this tempo**
- **Speed up generation of realtracks**
- **Use 4 bar endings for songs with Realtracks**
- **Add Reverb to RealTracks**
- **Allow RealTracks Shots, Holds and Puches**
- **On Jazz Realtracks, JazzUp Triads to S7enachs**
- **Save RealCharts in MIDI files**
- **Save RealCharts in EDB songs (MGU)**
- **Use a custom folder location for the RealTracks**

**RealCharts (notation from some RealTracks)**

Most RealTracks now display notation, i.e. RealCharts, showing the notes that are being played. Some Guitar RealTracks also show tablature and an accurate on-screen fretboard guitar display to show what is being played on guitar.

To see which instruments have RealCharts, visit the Assign RealTracks to Tracks dialog and sort column 11, “Chart.” Instruments with an “N” or “Gt” in this column have RealCharts.

- Instruments with “Gt” in the Chart column have RealCharts with accurate guitar tab and on-screen guitar fretboard display.
- If the instrument is Acoustic Piano and there is an “N” in the Chart column, the instrument has a Jazz piano RealChart. RealTracks piano parts that are on the piano track will appear with the right and left hands split in notation. There is a setting for this in the Notation Window Options dialog.
- The various other instruments with an “N” (Pedal Steel, Slide Guitar, Resophonic, Trumpet, Alto Sax, Tenor Sax) have RealCharts in standard notation.

- At the top of the screen, if a track has RealTracks, but is NOT a RealCharts track, then the track name is green.
- Real Instrument charts: If a track has a RealChart, the track name is green and underlined with a short line.
- RealGuitar charts: If a track has RealChart, and is a guitar track with accurate tab and on-screen guitar fretboard display, then it is green and underlined with a long line.

The RealCharts can be saved to MIDI files or with Band-in-a-Box songs (MGU).
RealCharts are optional and are selected in the RealTracks Settings dialog.

- “Show RealCharts notation from styles and songs” will show RealCharts that have been generated from styles or songs stored with RealTracks.
- “Show RealCharts notation for Soloists” will show RealCharts that have been generated from the Select Soloist dialog.
- “Save RealCharts in MIDI files” will save the RealChart to a MIDI track so you can analyze it in other programs.
- “Save RealCharts in BB Songs (MGU)” will save the RealChart MIDI information to the MGU file.

RealTracks Folder
The RealTracks styles are stored in c:\bb\RealTracks (assuming that c:\bb is your Band-in-a-Box folder). You can choose an alternate location by pressing on the folder button and picking an alternate folder. Then, click on the [Update] button to confirm the new location.

You don’t need to visit this folder when using RealTracks; it is used internally by Band-in-a-Box, so you shouldn’t add or remove files from this RealTracks folder unless you “know what you’re doing.”

If Band-in-a-Box cannot find your RealTracks folder a yellow hint message appears at boot up to alert you to that, and tells you how to fix it: “Note: You have RealTracks installed, but none are found in your RealTracks folder. You should point to your correct RealTracks folder in Prefs | RealTracks Settings.”

Applying RealTracks Settings
You can apply an overall Volume Adjust to the RealTracks. If they are too loud overall, try a Global Volume Adjust of about -10 dB.

“Allow soloing to crescendo” can be applied to some RealTracks to have the intensity of the solo building up, with the flashiest part of the solos playing as the solo builds.
“Allow soloing to crescendo” can be applied to some RealTracks to have the intensity of the solo building up, with the flashiest part of the solos playing as the solo builds.

If you have similar RealTracks available at different tempos, Band-in-a-Box will automatically choose the best one to use. For example, if you have a ballad loaded, with an Acoustic Bass RealTracks at tempo of 60, and you speed up the tempo to 140, and press [Play], Band-in-a-Box will automatically choose an Acoustic Bass RealTracks closer to tempo of 140, if it is the same genre and feel. This means you can use a simple Jazz style, and play it at various tempos, without having to set the best RealTracks based on tempos. The RealTracks that support the Tempo Swapping are listed in the next to last column (headed TS) of the RealTracks assign dialog.

There is also an option in the RealTracks Settings dialog to disable automatic tempo swapping. When automatic RealTracks substitution is disabled (unchecked) the “Show message when better RT are available at this tempo” setting will be turned on.

A yellow message appears if RealTracks are selected, but better RealTracks are available for the current tempo. You can then substitute all four parts by pressing the RealTracks toolbar button and then clicking on Select better RealTracks for this tempo.

This “speed up” feature works automatically and uses CPU resources during playback. If you have a multi-core machine, you may not notice this at all, since it will use different cores than the main Band-in-a-Box thread. If you have an older machine, low on memory, slow hard drive etc., you can disable this feature to ensure that your machine is doing less CPU work during playback.

4-bar endings allow time for a natural decay of the instruments. By “4-bar-endings” we are referring to a 2-bar ending that has an additional two bars to allow for the natural decay of the audio instrument (instead of being quickly faded out). 4-bar endings are on by default. You can disable 4-bar endings globally by leaving this box unchecked or on a song-by-song basis in the Song Settings dialog, Edit | Settings (for this song).

When this is set, reverb will be added to the RealTracks and RealDrums.

RealTracks support Shots, Holds, and Pushes.

The RealTracks Assign dialog that lists each RealTrack has the last column called “Holds” that lists whether that RealTrack supports Shots, Holds, and Pushes. If there is a number there (other than a blank field), then they are all supported.

If there is an “n” this means that they are supported, but you don’t have the Holds_## files in the RealTracks\Library\Holds folder.

Assuming that you have the Holds files for the RealTracks that you are generating, then you just use Band-in-a-Box as you would normally, and type chords with shots (e.g. C..), holds (C…), or pushes (^C or ^^C for 8th or 16th note push), or combinations of push and hold (^C…).
Many Jazz comping styles play triads (instead of 7ths) when simple triads are entered, instead of “jazzing them up” to 7ths chords. Enable this setting if you prefer to have triads automatically “jazzed up” when comping using Jazz RealTracks.

The [Demos] button displays a menu of song demos with RealTracks in the bb\RealTracks – Demos folder.

[Assign to Track] launches the Assign RealTracks to Track dialog, where RealTracks instruments are listed and assigned to Band-in-a-Box tracks.

Save the new settings you have made in this dialog by pressing the [Update] button. Most changes will take effect the next time you press [Play].

The installation routine for Band-in-a-Box usually installs (decompresses) the audio files to WAV files. If you decided not to decompress them during the installation, you can press the [Install] button to complete that process by decompressing any WMA/MP3 files in the RealTracks folder that do not have a .WAV file, or that have an older .WAV file.

The small button to the right of the [Install] button installs .WAVm files for a single folder. This will search the selected folder and find .WMA files that can be expanded to .WAV files.

The [Archive] button will erase the .WAV files in the RealTracks folder when there is a smaller .WMA file available. The .WAVs can be restored at a later time by pressing the [Install] button.

The small button to the right of the [Archive] button archives .WAV files for a single folder. This will search the selected folder and find .WAV files that can be erased because a .WMA file with the same name also exists. [Install] will restore the .WAV file.

The [Verify] function checks your installation to find if RealTracks are properly installed, or any files are missing.

1. It checks the Bt0 status of the RealTracks st2, compared to the Bt0 found in the RealTracks folder.
2. It issues error messages if an st2 is found, but not the RealTracks folder.
3. Issues a message if an xt2 not found (for a chording RealTracks).

[Defaults] sets RealTracks Settings back to default settings.

Press [OK] to make your selection and exit the RealTracks Settings dialog.

Press [Cancel] to exit the RealTracks Settings dialog without making any changes. To see the [Cancel] button, it may be necessary to expand the window by maximizing it or dragging down the lower border.

Tranzport

TranzPort is a wireless hardware device that provides remote control for Band-in-a-Box. The TranzPort unit is sold separately.
First, make sure that the TranzPort is installed and working. This can be determined by running Band-in-a-Box, and looking at the list of MIDI Drivers (Opt. | MIDI/Audio driver setup). If “TranzPort” appears on the list of MIDI-IN and MIDI-OUT drivers, then the TranzPort is installed correctly.

Enable TranzPort support for Band-in-a-Box in the Tranzport Settings dialog.

If you want lyrics to display on the TranzPort during playback, set these options. Players of non-concert pitched instruments can use “Transpose the display.” For example, an Alto sax player would press the “Eb Alto” button, and then the TranzPort display would show chords transposed to his key.

Practice

The Practice Window allows convenient “1-click” access to many Band-in-a-Box features that help you with practicing.

There are several purposes for the Practice Window.

Quick access to your favorite/preferred “practice” folders, so that you can setup load in songs without having to navigate dialogs.
One-click access to many of the education-related features of Band-in-a-Box (play along soloing, Ear Training, games).

Handy buttons for on-screen transposition for non-concert instruments.

One button access to many of the Band-in-a-Box add-ons “101 Riffs” series and “Master Solos.”

N/A indicates other Band-in-a-Box add-ons that are available, but not installed on your computer.

Most of these items are “add-on” products, available separately, and are not included in the Band-in-a-Box program. If you have these items installed to your hard drive, the Practice Window will find them if they are installed them to the default directories, and if not, you will be able to point the program to the location of the program, which will be remembered in future sessions.

PowerTracks Pro Audio is PG Music’s multitrack digital audio and MIDI sequencer. Many people import their Band-in-a-Box songs into PowerTracks and work on them further in that program.

For items that you don’t have, you can choose to display or not display them on-screen using the “Show add-ons if N/A (not available)” setting.

Press this button if you have just installed an add-on or a program. This will allow you to access it from the Practice Window.

The PG Music Reverb window lets you select the Audio Reverb type or make your own.
You can enable/disable the audio reverb. If you disable it, this will save some CPU cycles, so this might be advisable on an older/slower machine if you hear that the audio is clicking or not keeping up.

Click on the green Select a Preset button to open the list of presets. This list will show only the “Band-in-a-Box Default Reverb” until you save some presets of your own.

As you adjust the settings they will be applied to the current song. The [Swap “Default”] button toggles between your current settings and the default settings. This allows you to hear the effect of the changes you make to the settings.

Use the row of “room” buttons to load typical settings for different types of spaces. These buttons are a convenient way to either apply a particular effect or to load settings that you can then tweak to make your own preset.

Saving Settings to Presets

You can save your reverb types as presets, and the current settings will also be saved with the song in a DX Settings\PGReverbSettings.bin file.

To save the current settings to a preset, type in a name for your preset in the “Preset Name” field.

Then click on the Save Preset arrow and choose a location in the Preset list. You can write over an existing name.

DAW Plugin

This gives access to the DAW plug-in options available in the Plugin settings dialog.
Allow Drag n Drop (Default=true). If disabled, the Drag Drop feature will not work. There shouldn’t be a reason to disable this.

“Drag Individual MIDI tracks as audio (using VST/DXi)” (default=false). When enabled, the chosen MIDI tracks get converted to audio, using your currently selected VST/DXi (e.g. Roland VSC, or Forte)

Drag Combo track as audio (using VST/DXi) (default=true). When enabled, the entire arrangement gets converted to audio using your currently selected VST/DXi (e.g. Roland VSC, or Forte). If not selected, the MIDI tracks in the arrangement get transferred as MIDI, in a single file.

Drag Combo as separate tracks (default=false). If set to true, when dragging the Combo radio button, the drop will result in multiple files, one for each track.

Drag Audio as WAV/WMA. If set to WAV, the audio gets dropped as WAV. If set to WMA, the audio gets dropped as WMA. Note that most sequencers will want WAV files.

Always on Top. If set, the plug-in window will be always-on-top. Note that if you change this in the dialog, it won’t take effect until you exit the dialog.

Preserve dragged files permanently in folder. (default=false). When you drag a file, Band-in-a-Box makes a copy of it and puts it in the c:\bb\DragDrop folder. This is a temp folder. Most DAWs (and Windows Explorer) take the dropped file, and make their own copy of it to incorporate into their file structure, but some don’t (e.g. “pure” wav editors like SoundForge). So if you are dropping the files to a DAW that works with dropped files and doesn’t make a local copy of them (like CoolEdit or SoundForge), then you should set the “Preserve dragged files permanently in folder c:\bb\DragDrop” to true. Otherwise, Band-in-a-Box will recycle (trash) the files in the DragDrop folder on boot up. You can retrieve these files from the trash if needed.

You can use a Custom Drag n Drop Folder for the temp files if you prefer, inside your DAW’s folder for example. Then the dragged files will also be in Explorer in a folder near your DAW’s audio project.
## Play Menu

<table>
<thead>
<tr>
<th>Command</th>
<th>Keystroke</th>
</tr>
</thead>
<tbody>
<tr>
<td>Play</td>
<td>F4 or &lt;5o&gt;&lt;Sp&gt;</td>
</tr>
<tr>
<td>Stop Playback</td>
<td>&lt;Esc&gt; or &lt;Sp&gt;</td>
</tr>
<tr>
<td>Generate (even if tracks are frozen)</td>
<td></td>
</tr>
<tr>
<td>Hold (pause)</td>
<td>Ctrl H</td>
</tr>
<tr>
<td>Replay</td>
<td>Ctrl A</td>
</tr>
<tr>
<td>Render Song to Audio (and mute tracks)</td>
<td></td>
</tr>
<tr>
<td>Un-Render Song from Audio Track (Enables tracks, erase audio track)</td>
<td></td>
</tr>
<tr>
<td>Freeze all tracks [not frozen]</td>
<td></td>
</tr>
<tr>
<td>Un-freeze all tracks [not frozen]</td>
<td></td>
</tr>
<tr>
<td>Freeze Track...</td>
<td></td>
</tr>
<tr>
<td>Play (loop) Highlighted Section</td>
<td>F10</td>
</tr>
<tr>
<td>Play From Bar…</td>
<td>Ctrl F</td>
</tr>
<tr>
<td>Play From Current Position</td>
<td>Ctrl G</td>
</tr>
<tr>
<td>Go (Open and Play)</td>
<td></td>
</tr>
<tr>
<td>Step Advance</td>
<td></td>
</tr>
<tr>
<td>Slide Tracks…</td>
<td></td>
</tr>
<tr>
<td>Looping</td>
<td></td>
</tr>
<tr>
<td>Tempo</td>
<td></td>
</tr>
<tr>
<td>JukeBox Play…</td>
<td>F8</td>
</tr>
<tr>
<td>Previous JukeBox Song</td>
<td></td>
</tr>
<tr>
<td>Next JukeBox Song</td>
<td></td>
</tr>
<tr>
<td>Wizard Playalong feature</td>
<td></td>
</tr>
<tr>
<td>Wizard uses &quot;Smart&quot; notes</td>
<td></td>
</tr>
<tr>
<td>Panic !</td>
<td>F12</td>
</tr>
<tr>
<td>Panic should also Reset DXi synth</td>
<td></td>
</tr>
</tbody>
</table>

### Note:
Most commands in the Play menu are performed by onscreen buttons, or by the keystrokes listed to the right of the menu command.

### Play
Generates a new arrangement and plays the song.

### Stop Playback
Stops playback. To resume either use the Play From Current Position command or the [From] button the play from the start of the current bar, or use the [Play] or Replay [+ ] buttons to play from the start of the song.

### Hold (pause)
Pauses the song. Repeating this command resumes play from the exact location where the song was paused.

### Generate (even if tracks are frozen)
When you do this, the song will regenerate, the tracks will get rewritten, and the song will stay frozen. So if you’re freezing songs to get the instant playback with RealTracks, but get tired of the “same-old” frozen arrangement, just press Shift+Play, generate a new arrangement, and press Save. Then the new “fresh-frozen” arrangement will play instantly, even with many RealTracks.

**Tip:** Obviously you wouldn’t use this feature to force regeneration of a frozen song if you have made custom edits to the song that you don’t want to lose, unless you’ve saved the song and have a backup copy.

### Replay
Plays the current arrangement from the start without regenerating the parts. Edits to accompaniment parts are kept.

### Render Song to Audio
Use to render all tracks to the Audio track and mutes the MIDI tracks.
Tracks (and mute tracks)

**Un-Render Song from Audio Tracks (Enables tracks, erase audio track)**
- Use to erase a rendered Audio track and restore MIDI playback.

**Freeze all tracks**
- Freezes all tracks – MIDI, RealTracks and RealDrums – for fast replay without regenerating tracks.

**Un-freeze all tracks**
- Unfreezes tracks to allow normal regeneration.

**Freeze track**
- allows the selection of a single track to freeze.

**Play (loop) Highlighted Section**
- Drag the mouse cursor to select a region of bars in the chordsheet and then use this command to play the selected region as a loop.

**Play From Bar**
- Choose a chorus and bar to play from in the current arrangement. Parts are not regenerated. Use this command during playback to jump to any bar in the song.

**Play From Current Position**
- When the song is stopped this command starts playback again at the bar with the highlight cell.

**Go (Open and Play)**
- Launches an Open File dialog for selection of any song in any directory. The selected song loads and plays automatically in Band-in-a-Box.

**Step Advance submenu**
- When a song is paused these commands can be used to navigate step-by-step through the currently selected track. For example, if the current track is set to the Melody track using the row of buttons on the Notation window, Lead Sheet window, or Guitar window; pressing the advance buttons will display the next note or chord of the melody on the piano display, guitar display, lead sheet and notation. This is a great way to study the notes being played, and to navigate around the track.

<table>
<thead>
<tr>
<th>Command</th>
<th>Shortcut</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step Advance One Chord</td>
<td>NUMPAD DEL</td>
</tr>
<tr>
<td>Step Back One Chord</td>
<td>NUMPAD INS</td>
</tr>
<tr>
<td>Step Advance One Note</td>
<td>Shift &lt;RIGHT&gt;</td>
</tr>
<tr>
<td>Step Back One Note</td>
<td>Shift &lt;LEFT&gt;</td>
</tr>
</tbody>
</table>

**Slide Tracks**
- This allows you to move any of the Bass, Drums, Piano, Guitar, Strings or Melody track ahead or behind by a certain amount. You could, for example, slide the Bass track so it plays a little ahead of the rest of the band. This has the effect of making the bass player “drive the band,” and is useful in Jazz styles to make the music sound more exciting.

**Looping**
- You can loop any section of the song. The program will then start playback at the first loop point and play the looped section until stop is pressed or looping is turned off.
- Looping of a section of the song is enabled by the “LoopSec” checkbox, with the Loop section Enabled command, or with the keystroke NUMPAD 1.
- Open up the Loop Section Settings dialog with the menu command, by clicking the Loop button in the toolbar, or pressing NUMPAD 2. The Loop settings
dialog will then display; see its online Help for detailed instructions. The remaining commands in this submenu are also found in the Loop Section Settings dialog.

**Tempo**

<table>
<thead>
<tr>
<th>Command</th>
<th>Hotkey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set Tempo...</td>
<td>Ctrl-Alt-T</td>
</tr>
<tr>
<td>Normal Speed 1</td>
<td>Ctrl =</td>
</tr>
<tr>
<td>Half Speed (1/2)</td>
<td>Ctrl -</td>
</tr>
<tr>
<td>Quarter Speed (1/4)</td>
<td></td>
</tr>
<tr>
<td>Eighth Speed (1/8)</td>
<td></td>
</tr>
</tbody>
</table>

- When a new song is started the tempo is set based on Style. This is the tempo that is embedded in the style file. It can be reset to any tempo.
- You can quickly enter a specific tempo for a song with the Set Tempo… command (hot key is Ctrl+Alt+T), or by clicking on the tempo. A dialog opens up where you can type in a tempo.
- You can quickly change to different speeds with the menu commands or hot keys. For example, choosing Half Speed (or the hot keys Ctrl -) will change the playback speed to half, and Normal Speed (Ctrl =) will revert to normal speed.
- Load an audio file and use the tempo feature to play it at reduced speed without changing the pitch, a big help for analyzing and transcribing songs.

**Juke Box Play**

- Opens the Options for Juke Box dialog to select and play a jukebox list.

**Previous Juke Box Song / Next JukeBox song**

- Navigate back and forth in a jukebox set list.

**Wizard Play Along feature**

- The Wizard is a play along feature that allows you to use the QWERTY keyboard or your connected MIDI keyboard to play along with Band-in-a-Box. The Wizard is only active during playback.

**Wizard uses “Smart” notes**

- Toggle this on so the Wizard will only play notes based on the chord/key of the song. Toggle “Smart” notes OFF (unchecked) to have the Wizard provide you access to the chromatic scale.

**Panic!**

- Select this if your MIDI notes are stuck ON and it’s driving you crazy!

**Panic should also Reset DXi synth**

- When selected hung DXi/VSTi notes are also cleared by the Panic feature.

**Lyrics Menu**

<table>
<thead>
<tr>
<th>Command</th>
<th>Hotkey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enter Lyrics at current bar</td>
<td>Ctrl L</td>
</tr>
<tr>
<td>Big Lyrics Window</td>
<td>Ctrl Shift L</td>
</tr>
<tr>
<td>Lyric Document Window</td>
<td>Ctrl Alt Shift L</td>
</tr>
<tr>
<td>Copy Lyrics to Clipboard</td>
<td></td>
</tr>
<tr>
<td>Copy 1st chorus Lyrics to whole song</td>
<td></td>
</tr>
<tr>
<td>Erase all Lyrics</td>
<td></td>
</tr>
<tr>
<td>Erase note Lyrics only</td>
<td></td>
</tr>
<tr>
<td>Kill Lyrics Choruses</td>
<td></td>
</tr>
<tr>
<td>Move Lyric ahead to timeline</td>
<td></td>
</tr>
<tr>
<td>Move Lyric back to timeline</td>
<td></td>
</tr>
<tr>
<td>Timeshift Lyrics (tricks)</td>
<td></td>
</tr>
<tr>
<td>Insert Beat(s) in Lyrics</td>
<td></td>
</tr>
<tr>
<td>Delete Beat(s) from Lyrics</td>
<td></td>
</tr>
<tr>
<td>Edit Lyrics as Event List</td>
<td></td>
</tr>
<tr>
<td>Line based Lyrics</td>
<td></td>
</tr>
</tbody>
</table>
Enter Lyrics at current bar
- Opens the Lyric entry box at the current location of the timeline or highlight cell.

Big Lyrics Window
- Opens the Big Lyrics window for viewing lyrics and, optionally, chord symbols.

Lyric Document Window
- Displays a full screen of formatted lyrics. Easily copy and paste lyrics to and from your favorite word processor. The lyrics will then display in the Big Lyrics window.

Copy Lyrics to Clipboard
- This function allows you to copy a song's lyrics (and/or the chords) to the Standard Windows Clipboard. By pasting this data into a word processor, you can print out the lyrics in the font of your choice. The dialog has options to allow copying of note-based and/or line-based lyrics. With either option you can choose to include the chord symbols, have double or single line spacing, and make margin settings.

Copy 1st chorus Lyrics to whole song
- Copies the note-based lyrics for the first chorus to the rest of the song.

Erase all Lyrics
- Erases note-based and line-based Lyrics.

Erase Note Lyrics only
- Erases only the note-based lyrics.

Kill Lyrics Choruses
- Select from a list box to kill lyrics in the selected chorus.

Move Lyric ahead to time line
- If you have a note-based lyric that you want to time shift ahead or back, you can click on the time line at the destination that you want, and then choose this item. You can also shift lyric times using the Lyric Event list.

Move Lyric back to time line
- These are functions that apply to the entire lyric track. They are useful when you're inserting bars or beats into the song and need to move the lyrics around to keep them in sync.

Edit Lyrics as Event List
Opens the Edit Lyrics dialog with Edit, Insert, Append, and Delete functions.

Line-based Lyrics opens a special submenu for line based lyrics. These are lyrics that are entered line by line as text. They are not directly linked to the corresponding melody notes. To enter line-based lyrics in the Notation window, either press Ctrl+L or open up the Notation window.

Copy Line Lyrics to Note Lyrics
Move Line Lyrics to Note Lyrics

Auto-Update all songs in folder to Note based Lyrics

Move Lyrics Up or Down row(s)
Erase Line based Lyrics only

Copy Line Lyrics to Note Lyrics converts line-based lyrics to note based lyrics. It is imprecise, because the line-based lyrics don't correspond to individual notes. But you can edit the positions of the note-based lyrics using the event list or the Move Lyric back/ahead to time line functions discussed above.

Move Line lyrics to Note Lyrics works like the Copy Line Lyrics to Note Lyrics function, except it erases the Line-based lyrics.
Auto-Update all songs in folder to Note-based Lyrics will update an entire folder worth of songs, copying the Line Lyrics to Note Lyrics. Only Note-based lyrics get displayed in the Big Lyrics Dialog, so this feature will allow you to see these lyrics in the Big Lyrics window.

Move Lyrics Up or down row(s)… moves a line of line-based lyrics up/down a number of rows.

Erase Line-based Lyrics only erases only the line-based lyrics, preserving the note-based lyrics.

Melody Menu

<table>
<thead>
<tr>
<th>Track Type [Single Channel]</th>
<th>▼</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melodist - Generate Melody and Chords</td>
<td>Shift F5</td>
</tr>
<tr>
<td>Melody Maker</td>
<td>▼</td>
</tr>
<tr>
<td>Enbellish Melody during playback</td>
<td>Ctrl-Alt-E</td>
</tr>
<tr>
<td>Enbellish Melody Dialog…</td>
<td>Ctrl-Alt-L</td>
</tr>
<tr>
<td>Mute Melody during Middle choruses</td>
<td></td>
</tr>
<tr>
<td>Sequencer Window for multi-Channel Melody</td>
<td></td>
</tr>
<tr>
<td>Edit Melody Track</td>
<td>▼</td>
</tr>
</tbody>
</table>

Track Type

Normally you’d leave the track type set to Single. But you can set it to:

- Multi (16) -Channel – All channels get preserved, and outputted on the channels, this would be useful for importing an entire MIDI file, and playing it from the Melody channel (using a silent style).
- Guitar – Channels 11 to 16 will display on the guitar as strings 11 to 16, TAB will show, the notation will be up an octave, and the MIDI file will contain the channels preserved.
- Piano – In this mode, channels 8 and 9 are treated as the left and right hand of a piano part.
- Selecting any one of Bass, Ukulele, Mandolin, Banjo (5-string), or Violin will display the correct tablature in the Notation window and the correct fretboard in the Guitar window.
- Set the track to match any of the 11 alternate guitar tunings, such as DADGAD, Open G, or Double Drop D, supported by Band-in-a-Box. Then you’ll see the correct notes on the guitar fretboard, in the notation and tablature.

Melodist – Generate Melody and Chords launches the Melodist feature.

Melody Maker submenu items allow you to edit Melodist files using the Melody Maker.

<table>
<thead>
<tr>
<th>Start a Melodists file</th>
<th>Edit a Melodists file</th>
<th>Edit Current Melodists File</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refresh Melodists</td>
<td>Shift F7</td>
<td>------------------------------</td>
</tr>
</tbody>
</table>

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**Embellish Melody during playback** launches the Embellisher dialog. This optionally embellishes the Melody during playback.

**Embellish Melody Dialog** allows you to customize the settings of the Embellisher, choose an embellisher type from presets, and make a particular Embellishment permanent.

**Mute Melody during Middle Choruses** to allow for soloing.

**Sequencer Window for multi-Channel Melody**

There are 2 tracks in Band-in-a-Box to add your own recordings. These are the Melody and Soloist tracks. Normally you would want a single part on each of them. But, since MIDI information can have separate channels, it is possible to store 16 separate parts on each of the Melody and Soloist parts.

When the Melody or Soloist track has been set to “Multi (16)-Channel” we refer to this as “Sequencer Mode.” Selecting this command will then launch the **Sequencer Window**. Then you can customize which channels will play and display.

In the example picture, we have set Channel 2 (Bass) and Channel 4 (Trumpet) to show on the notation, and have set all of the channels to play (to hear them).

For a specific channel, (e.g. channel 3: piano), we see the following information.

Channel 3: Acoustic Piano (this is the patch name found on the track).

- There are 842 events in the track, usually every note is an event.
- We have customized the piano track so that it can be heard (Play=True), but not seen in notation (Show=False).
There is a small button at the right of the track line that allows you to delete/rechannel or merge the channel with another channel.

You can increase or decrease the velocity of the track and move it to the Soloist track.

You can also change the patch (instrument) for that track by using the instrument patch combo box.

So now that we’ve customized the display, we are seeing the bass and trumpet on the notation, and hearing the entire track.

**Edit Melody Track submenu**

<table>
<thead>
<tr>
<th>Import Melody from MIDI File</th>
<th>Import Melody from Clipboard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Record Melody</td>
<td>R</td>
</tr>
<tr>
<td>Record Melody From any bar</td>
<td>R</td>
</tr>
</tbody>
</table>

- **Step Edit Melody**
- **Quantize Melody**
- **Humanize with Straight Feel**
- **Humanize with Swing Feel**
- **Humanize Melody,…**
- **Transpose Melody only…**
- **Copy 1st chorus to whole song**
- **Kill entire melody**
- **Kill Melody Choruses**
- **Adjust Level of melody**
- **Timestretch Melody (ticks)**
- **Insert Beat(s) in Melody**
- **Delete Beat(s) from Melody**
- **Copy to Soloist Track**
- **Move to Soloist Track**
- **Swap Melody and Soloist Track**
- **Map Melody track to C7 chord**
- **Convert Harmony to Melody Track…**
- **Remove Harmony (or guitar solo) from Melody Track**
- **Generate Guitar Chord Solo**
- **Rechannel to Guitar Display…**
- **Utilities**

**Import Melody from MIDI File** allows you to import MIDI data from a file (*.MID) into the Melody track.

**Import Melody from Clipboard** allows you to import MIDI data that has been pasted into the clipboard (e.g., from a sequencer such as PowerTracks).

**Record Melody** launches the Record Melody dialog to record a MIDI melody.

**Record melody From any bar** starts recording at the current location of the highlight cell after playing a two bar lead-in.

**Step Edit Melody** allows you to enter/edit a melody in step time from the Notation window. This uses an event list.

**Quantize Melody** opens the **Quantize Melody Options** dialog. The **Humanize Melody…** feature is an advanced version of this function.
Chapter 15: Reference

Resolution. Choose the division you would like the track quantized to. Choosing 16 will Quantize to 16th notes.

Starting at Bar# and Chorus#. Quantization will begin at the place you select and applied for the number of bars.

% strength. Choose 100% if you want the notes quantized exactly to the division. Otherwise, the notes will be moved the % toward the target quantization.

Quantize Start Times. By default, this option is set to “Yes.” If you don’t want the beginnings of the notes quantized, set it to “No.”

Quantize Durations. This quantizes the END of the notes. By default, this is set to “Off.”

Humanize with Straight Feel / Humanize with Swing Feel
Band-in-a-Box uses intelligent humanization routines, which can humanize a melody from one feel to another, from one tempo to another, and vary the amount of swing in 8th notes (but not randomly). The results are very musical with natural sounding MIDI melodies.

Humanize Melody
Opens the Melody: Quantize to New Tempo or Feel dialog. The humanize effect is broken down into 5 main categories: Tempo, Lateness, 8th Note Spacing, Legato, and Feel.

Transpose Melody only… allows you to transpose the melody track without affecting the other tracks in the song.

Copy 1st chorus to whole song stretches the melody track out over the entire song (i.e. first, last, and middle choruses).

Kill entire melody erases the melody track and any data that was contained therein.

Kill Melody Choruses eliminates the Melody from the First Chorus, Middle Choruses, or Last Chorus as selected from a list box.
Adjust Level of melody allows you to increase or decrease the volume (velocity) of the Melody track without affecting the other tracks.

Timeshift Melody (ticks) allows you to move the Melody forwards or backwards in small increments relative to the rest of the song tracks. (Measured in ticks or parts per quarter, PPQ.)

Insert Beat(s) in Melody allows you to insert a blank beat or beats into the song relative to the current time signature.

Delete Beat(s) from Melody allows you to delete a beat or beats from the song relative to the current time signature.

Copy to Soloist Track copies the entire contents of the Melody track to the Soloist Track. Useful for a temporary holding area for your Melody or bouncing tracks.

Move to Soloist Track copies the entire contents of the Melody track and erases the original data from the Melody track, preparing it for a new track or data.

Swap Melody and Soloist Track performs a “double copy/move” so that the data that was in the Melody track gets transferred to the Soloist track and visa versa. This is also known as track bouncing.

Map Melody track to C7 chord is a useful tool when making styles.

Convert Harmony to Melody Track… converts a single line Melody track to include the current harmony selection.

Remove Harmony (or guitar solo) from Melody Track removes a harmony from a track, providing that the harmony was put there by Band-in-a-Box in the first place using the Convert Harmony to Melody Track command.

Generate Guitar Chord Solo opens the Guitar feature dialog for generating a guitar chord solo.

Rechannel to Guitar Display converts channels on a track to channels 11 to 16. Channels 11 to 16 are used by Band-in-a-Box to indicate strings 1 to 6 of a guitar. It uses the current position marker on the guitar for this command. A popup question will ask if you want to include events that are already on the guitar channels.

Utilities

There is a Utilities submenu that has utility functions to convert the pitch bend range of a track, insert pitch bend note events, transpose, and transform melodies.

Eliminate Note Overlap – Preserve Double Stops
Eliminate Note Overlap – Remove Double Stops
Loosen up Start times
Change Pitch Bend Range
Insert Guitar Bend events when pitchbend found
Transpose One Octave DOWN Ctrl Alt 1
Transpose One Octave UP Ctrl Alt 2
Piano Hand-Split

Transform Waltz Melody & Soloist to 4/4
Transform 4/4 Melody & Soloist to Waltz
Adjust Channels by ...

Eliminate Note Overlap – Preserve Double Stops / Eliminate Note Overlap – Remove Double Stops opens a Choose Range dialog to select the range of bars where note overlap will be eliminated while double stops are either preserved or eliminated.
Loosen up Start Times is a dedicated function to vary the start times of notes on the Melody or Soloist tracks, with options for what notes to affect (harmony, chords) and amount of variance.

<table>
<thead>
<tr>
<th>Loosen start times of notes (for melodies or harmonies)</th>
</tr>
</thead>
<tbody>
<tr>
<td>This will vary the start times of notes on the Melody or Soloist track. Randomizing the start times give the sound a 'looser', less mechanical sound. This is also useful for harmonies that are on the Melody/Soloist track.</td>
</tr>
<tr>
<td>Range to adjust start times (eg. -5 to +5)</td>
</tr>
<tr>
<td>-5 to 5 ticks,</td>
</tr>
<tr>
<td>□ OK to change timing of notes that are not part of chord or harmony</td>
</tr>
<tr>
<td>□ For harmonies, OK to change timing of melody notes</td>
</tr>
<tr>
<td>Defaults OK Cancel Help</td>
</tr>
</tbody>
</table>

Change Pitch Bend Range… lets you set the range in semitones.
Insert Guitar Bend events when pitch bend found… will insert controllers so the guitar will display bends.
Transpose One Octave DOWN / Transpose One Octave UP transposes the Melody part one octave in either direction. This is often useful if the Melody instrument has been changed. Transposing can be done while the song plays.
Piano Hand-Split manually splits a piano part on a Melody or Soloist track using the intelligent hand-splitting routines. The left/right hands display in red/blue on the big piano, and on bass/treble clefs on the notation. Import a piano MIDI file to the Melody track to get a split-hands display and printout.
Transform Waltz Melody & Soloist to 4/4
If you have a song with a 3/4 time signature, you can instantly hear it as a 4/4 feel. Simply load the Waltz song and then change the style to a 4/4 style. Band-in-a-Box uses intelligent algorithms to transform the melody to the new time signature.
Transform 4/4 Melody & Soloist to Waltz
You can automatically transform any 4/4 song/melody to a Waltz 3/4 feel. Simply load in any 4/4 song and change the style to a Waltz style. The program will offer to transform the melody so that it works as a Waltz. It’s fun and educational to hear and play familiar songs in a Waltz feel.
Adjust Channels by will adjust all MIDI channels by the number value entered.

<table>
<thead>
<tr>
<th>Type in a number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjust all channels by?</td>
</tr>
<tr>
<td>1 OK Cancel</td>
</tr>
</tbody>
</table>
**Soloist Menu**

<table>
<thead>
<tr>
<th>Track Type [Single Channel]</th>
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</thead>
<tbody>
<tr>
<td>Generate and Play a Solo...</td>
</tr>
<tr>
<td>Soloist Maker</td>
</tr>
<tr>
<td>Sequencer Window for multi-Channel Soloist</td>
</tr>
<tr>
<td>Edit Soloist Track</td>
</tr>
</tbody>
</table>

**Track Type**

Normally you'd leave the track type set to Single. But you can set it to:

- **Single Channel**
- **Multi (16) - Channel**
- **Guitar (Standard tuning)**
- **Piano**
- **Bass**
- **Ukulele**
- **Mandolin**
- **Banjo (5-string)**
- **Violin**
- **Guitar - Drop D Tuning**
- **Guitar - DADGAD Tuning**
- **Guitar - Open G Tuning**
- **Guitar - Double Drop D**
- **Guitar - ETuning**
- **Guitar - High Strung**
- **Guitar - Drop D (High Strung)**
- **Guitar - DADGAD (High Strung)**
- **Guitar - Open Tuning (High Strung)**
- **Guitar - Double Drop D (High Strung)**
- **Guitar - ETuning (High Strung)**

**Generate and play a Solo...**

Opens the Select Soloist dialog where a preset Soloist style can be selected or your own Soloist can be defined.

**Soloist Maker submenu**

<table>
<thead>
<tr>
<th>Start a Soloists File</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edit a Soloists file</td>
</tr>
<tr>
<td>Edit Current Soloists File</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Refresh Soloist</th>
</tr>
</thead>
<tbody>
<tr>
<td>OK to Load Soloists With Songs</td>
</tr>
</tbody>
</table>

**Start a Soloists File** allows you to make and edit Soloist styles saved under the filename of your choice. See Soloist Edit dialog for additional details on importing/exporting/saving Soloists.

**Edit a Soloists file** opens an Open File dialog where you can select any Soloist file (*.SOL) to edit. To edit the soloist you are using, use the Edit Current Soloists File command.

If you want to make your own soloists or modify an existing Soloist, use the Soloist Maker (edit) module. The Soloist Maker allows you to define the parameters essential to a soloist's playing, such as instrument range (i.e. tenor saxophone), extra legato playing, playing more on top of the beat, playing straighter 8th notes than usual swing 8th...
notes. In addition, you can set phrasing options, such as how long the phrase should be, and how much “space” to leave between phrases. You can also set how “outside” the playing should be.

**Edit Current Soloists File** opens the Select Soloist dialog with the currently installed Soloists file.

**Refresh Soloist** allows the Soloist full access to all solo ideas contained in its database. Use to refresh after several Soloists have been made.

**OK to Load Soloists w/Songs.** Enable this option if you want Soloists to be automatically loaded with a song that was saved with Soloist information.

**Allow Soloist Harmony (on THRU Harmony).** Enable this option to permit the Soloist to utilize the Harmony features. This will allow the Soloist to make a harmonized solo with the harmony of your choice. See the Select Soloist dialog for additional details.

**Sequencer Window for multi-Channel Soloist**

There are two tracks in Band-in-a-Box to add your own recordings. These are the Melody and Soloist tracks. Normally you would want a single part on each of them. But, since MIDI information can have separate channels, it is possible to store 16 separate parts on each of the Melody and Soloist parts.

When the Melody or Soloist track has been set to “Multi (16)-Channel” we refer to this as “Sequencer Mode.” Selecting this command will then launch the **Sequencer Window**. Then you can customize which channels will play and display.

![Sequencer Window](image)

In the example picture, we have set Channel 2 (Bass) and Channel 4 (Trumpet) to show on the notation, and have set all of the channels to play (to hear them).

For a specific channel, (e.g. channel 3: piano), we see the following information.

Channel 3: Acoustic Piano (this is the patch name found on the track).

842 There are 842 events in the track, usually every note is an event.

We have customized the piano track so that it can be heard (Play=True), but not seen in notation (Show=False).
There is a small button at the right of the track line that allows you to delete/rechannel or merge the channel with another channel.

You can increase or decrease the velocity of the track and move it to the Melody track.

You can also change the patch (instrument) for that track by using the instrument patch combo box.

So now that we’ve customized the display, we are seeing the bass and trumpet on the notation, and hearing the entire track.

**Edit Soloist Track** is a submenu of editing options.

<table>
<thead>
<tr>
<th>Import to Soloist Part from MIDI File</th>
</tr>
</thead>
<tbody>
<tr>
<td>Import to Soloist Part from Clipboard</td>
</tr>
<tr>
<td>Record To Soloist Part</td>
</tr>
<tr>
<td>Record to Soloist Part From...</td>
</tr>
<tr>
<td>Step Edit Soloist Part</td>
</tr>
<tr>
<td>Quantize Soloist Part</td>
</tr>
<tr>
<td>Humanize Soloist Part w/Straight Feel</td>
</tr>
<tr>
<td>Humanize Soloist Part w/Swing Feel</td>
</tr>
<tr>
<td>Humanize Soloist Part…</td>
</tr>
<tr>
<td>Transpose Soloist Part</td>
</tr>
<tr>
<td>Copy 1st chorus to whole song</td>
</tr>
<tr>
<td>Kill entire Soloist Part</td>
</tr>
<tr>
<td>Kill Soloist Choruses</td>
</tr>
</tbody>
</table>

**Adjust Level of Soloist Part**: Allows you to change the volume of the soloist track.

**Timeshift Soloist Part (ticks)**: Allows you to shift the entire soloist track in time.

**Insert Beat(s) in Soloist Part**: Inserts beats into the soloist track at specific locations.

**Delete Beat(s) from Soloist Part**: Deletes beats from the soloist track at specific locations.

**Copy to Melody Track**: Copies the soloist track to the melody track.

**Move to Melody Track**: Moves the soloist track to the melody track.

**Swap Melody and Soloist Track**: Swaps the melody and soloist tracks.

**Convert Harmony to Soloist Track…**: Converts harmony parts to soloist parts.

**Remove Harmony (or guitar solo) from Soloist Track**: Removes harmony parts from the soloist track.

**Generate Guitar Chord Solo**: Generates guitar chord solos for the soloist track.

**Rechannel to Guitar Display…**: Rechannels the guitar display to the soloist track.

**Utilities**

**Import to Soloist Part from MIDI File** allows you to import MIDI data from a file (*.MID) into the Soloist track.

**Import to Soloist Part from Clipboard** allows you to import MIDI data that has been pasted into the clipboard (e.g., from a sequencer such as PowerTracks).

**Record To Soloist Part** in the Soloist | Edit Soloist Track submenu records a MIDI part to the Soloist track instead of recording to the Melody track, so you can record a second Melody track.

**Record to Soloist Part From…** starts recording at the current location of the highlight cell after playing a two bar lead-in.

**Step Edit Soloist** allows you to enter/edit a soloist in step time from the Notation window. This uses an event list.

**Quantize Soloist** opens the Quantize Soloist Options dialog. The Humanize Soloist Part... feature is an advanced version of this function.
**Humanize Soloist Part w/Straight Feel / …/Swing Feel.** Band-in-a-Box uses intelligent humanization routines, which can humanize a Soloist from one feel to another, from one tempo to another, and vary the amount of swing in 8th notes (but not randomly). The results are very musical, with natural sounding MIDI solos.

**Humanize Soloist Part…** opens the Soloist: Quantize to New Tempo or Feel dialog. The humanize effect is broken down into 5 main categories: Tempo, Lateness, 8th Note Spacing, Legato, and Feel.

**Transpose Soloist Part** allows you to transpose the Soloist track without affecting the other tracks in the song.

**Copy 1st chorus to whole song** stretches the Soloist track out over the entire song (i.e. first, last, and middle choruses).

**Kill entire Soloist Part** erases the Soloist track and any data that was contained therein.

**Kill Soloist Choruses** eliminates the Soloist from the First Chorus, Middle Choruses, or Last Chorus as selected from a list box.

**Adjust Level of Soloist Part** allows you to increase or decrease the volume (velocity) of the Soloist track without affecting the other tracks.

**Timeshift Soloist Part (ticks)** allows you to move the Soloist forward or backwards in small increments relative to the rest of the song tracks. (Measured in ticks or parts per quarter, PPQ.)

**Insert Beat(s) in Soloist Part** allows you to insert a blank beat or beats into the song relative to the current time signature.

**Delete Beat(s) from Soloist Part** allows you to delete a beat or beats from the song relative to the current time signature.

**Copy to Melody Track** in the Soloist | Edit Soloist Track submenu copies the entire contents of the Soloist track to the Melody Track. Useful for a temporary holding area for your soloist or for bouncing tracks.

**Move to Melody Track** copies the entire contents of the Soloist track and erases the original data from the Soloist track, preparing it for a new track or data.

**Swap Melody and Soloist Track** performs a “double copy/move” so that the data that was in the Soloist track gets transferred to the Melody track and vice versa. This is also known as track bouncing.

**Convert Harmony to Soloist Track…** converts a single line Soloist track to include the current harmony selection.

**Remove Harmony (or guitar solo) from Soloist Track** removes a harmony from a track, providing that the harmony was put there by Band-in-a-Box in the first place using the Convert Harmony to Soloist Track command.

**Generate Guitar Chord Solo** opens the Guitar feature dialog for generating a guitar chord solo.

**Rechannel to Guitar Display** converts channels on a track to channels 11 to 16. Channels 11 to 16 are used by Band-in-a-Box to indicate strings 1 to 6 of a guitar. It uses the current position marker on the guitar for this command. A popup question will ask if you want to include events that are already on the guitar channels.

**Utilities**

There is a Utilities submenu that has utility functions to convert the pitch bend range of a track, or to insert pitch bend note events.

<table>
<thead>
<tr>
<th>Utilities</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eliminate Note Overlap - Preserve Double Stops</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Eliminate Note Overlap - Remove Double Stops</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Loosen up Start times</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Transpose One Octave DOWN</strong></td>
<td>Ctrl Alt 3</td>
</tr>
<tr>
<td><strong>Transpose One Octave UP</strong></td>
<td>Ctrl Alt 4</td>
</tr>
<tr>
<td><strong>Piano Hand-Split</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Adjust Channels by</strong></td>
<td></td>
</tr>
</tbody>
</table>
Eliminate Note Overlap – Preserve Double Stops / Eliminate Note Overlap – Remove Double Stops opens a Choose Range dialog to select the range of bars where note overlap will be eliminated while double stops are either preserved or eliminated.

Loosen up Start Times is a dedicated function to vary the start times of notes on the Melody or Soloist tracks, with options for what notes to affect (harmony, chords, and amount of variance).

Transposing One Octave DOWN / Transpose One Octave UP transposes the Soloist part one octave in either direction. This is often useful if the Soloist instrument has been changed. Transposing can be done while the song plays.

Piano Hand-Split manually splits a piano part on a Melody or Soloist track using the intelligent hand-splitting routines. The left/right hands display in red/blue on the big piano, and on bass/treble clefs on the notation. Import a piano MIDI file to the Soloist track to get a split-hands display and printout.

Adjust Channels by will adjust all MIDI channels by the number value entered.
Audio Menu

<table>
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<tr>
<th>Record Audio</th>
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</thead>
<tbody>
<tr>
<td>Record Audio and MIDI (Melody)</td>
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<tr>
<td>Record Audio and MIDI (Soloist)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Plugin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edit Audio</td>
</tr>
<tr>
<td>Mute Audio</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Render MIDI to Stereo .WAV file etc…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burn an Audio CD (using CD-R, CDRW Drive)…</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Playback Mixer / Playback VU Meter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recording Mixer / Recording VU Meter</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Export Audio to Sequencer…</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Import Audio (WAV, WMA, MP3, WMV)…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Launch Audio Chord Wizard…(WAV, WMA, MP3, WMV, CDA)…</td>
</tr>
<tr>
<td>Audio Chord Wizard Utilities…</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Audio Edit Window</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ctrl Shift A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Audio Harmonies &amp; Pitch Tracking…</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>DX Synth Settings…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Realtime DX Audio Settings…</td>
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</table>

<table>
<thead>
<tr>
<th>Audio Drivers/Settings…</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Set Audio Master (Base) Tempo…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set Audio Stretching Method…</td>
</tr>
</tbody>
</table>

| ✔️ Use fast loading of audio files … |

The **Record Audio** function is used to Record Audio using a microphone plugged into your sound card or a guitar (or mixer) plugged into the line-in on your sound card. This launches the **Record Audio** Dialog and the **Record Audio – Keep Take** dialog.

The next two items, **Record Audio and MIDI (Melody)** and **Record Audio and MIDI (Soloist)** refer to the situation where you want to simultaneously record an audio track (vocals etc.) as well as a MIDI piano part. You can record the MIDI to the Melody or Soloist track.
The **Plugin** menu command refers to running a plug-in audio effect. This applies an audio effect such as Reverb or Chorus to the already recorded audio part.

Band-in-a-Box comes with a large selection of high quality audio effects built-in, such as Compressor, Gate, Distortion, Reverb, Echo, Chorus, Flanger, Ring Mod, Tremolo, Tone Control, Graphic EQ, Parametric EQ, Gain Change, De-Ess, Auto-Wah, Pitch Shift, Exciter, Enhancer and Hum Filter. DirectX plug-ins from PG Music and other makers are also supported.

The plug-ins are fully documented in the online Help.

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### Edit Audio submenu

<table>
<thead>
<tr>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copy 1st chorus to whole song</td>
</tr>
<tr>
<td>Kill entire Audio</td>
</tr>
<tr>
<td>Erase Audio Choruses</td>
</tr>
<tr>
<td>Erase Region of Audio…</td>
</tr>
<tr>
<td>Adjust Output Level of Audio (Quick)</td>
</tr>
<tr>
<td>Adjust level of region of .WAV file (permanent)…</td>
</tr>
<tr>
<td>Timeshift Audio (ms)…</td>
</tr>
<tr>
<td>Insert Bar(s) in Audio</td>
</tr>
<tr>
<td>Delete Bar(s) from Audio</td>
</tr>
</tbody>
</table>

**Copy 1st chorus to whole song** copies the first chorus of audio to the rest of the song.

The **Kill entire Audio** menu item is used to erase the Audio Track.

**Erase Audio Choruses** will erase the First Chorus, Middle Choruses, or the Last Chorus as chosen from a list box.

**Erase Region of Audio** will erase a specified region of bars/beats of audio.

**Adjust Output Level of Audio (Quick)** uses the Windows mixer to adjust the output level of the audio track. You can also use the Windows mixer directly by pressing the yellow speaker icon.

**Adjust level of region of .WAV file (permanent)**… changes the volume of the audio track itself. It uses a sophisticated peak-limiting algorithm to ensure that increases in the volume do not result in clipping of the sound, which would be heard as a loud distortion. It accepts units of decibels (dB). Zero means no change in the level, whereas +6 would be a doubling of the sound, and –6 halves the sound level.

**Timeshift Audio (ms)…** is used to time shift the whole audio track a certain number of milliseconds. Normally you wouldn't have to time shift a track at all. There are settings in the Audio-Options Dialog (see below) that can adjust for synchronization differences between your sound card and MIDI devices (for example, the VSC has a 430ms latency). But the time shift audio command can be useful in special cases.

**Tip:** 1000ms = 1 second. Positive values move the audio track ahead, negative values move it back.

**Insert Beat(s) in Audio** and **Delete Beat(s) from Audio** are used to insert, silence, or remove parts of the audio track. You can specify the region to use. For example, if you decide to add an extra 2 bars to the intro in Band-in-a-
Box, and you've already recorded an audio track, you should insert 2 bars (8 beats in a 4/4 time signature) into the audio track as well.

**Mute Audio** is a toggle switch to mute and unmute the audio track.

**Render MIDI to Stereo .WAV file etc…** This command launches the dialog that allows you to Render (convert) the Band-in-a-Box song (with or without an audio track) to a stereo .WAV file.

**Burn an Audio CD (using CD-R, CDRW Drive)** takes you to the **Render to Audio File** dialog where you can launch the built-in MiniBurn program with the [‘Burn’ to Audio CD] button.

**Playback Mixer / Playback VU Meter** takes you directly to the Windows **Playback** control to adjust volumes on your sound card. Note that not all sound devices have VU meters.

**Recording Mixer / Recording VU Meter** takes you directly to the Windows **Recording** control to adjust volumes on your sound card. Note that not all sound devices have VU meters.

**Export Audio to Sequencer…** gives instructions on how easy it is to use your Band-in-a-Box wave file in any audio sequencer, like PowerTracks Pro Audio.

**Import Audio (WAV, WMA, MP3, WMV)** will open an audio file in WAV, MP3, Windows Media Player, or CD Audio format.

**Launch Audio Chord Wizard** will open the Audio Chord Wizard to analyze chords in an existing Band-in-a-Box song (that has a WAV file on the audio track).

**Audio Chord Wizard Utilities** opens a dialog with handy options to
- Make/Remove tempo map in Band-in-a-Box
- Remove audio file from song.
- Auto-set Key signature, with button present in the Audio Chord Wizard.
- Enable/disable the BB MIDI style.

**Audio Edit Window** launches the audio edit window where the wave file can be viewed and edited.
Audio Harmonies & Pitch Tracking opens the Generate Audio Harmonies dialog. There are three uses of the Audio Harmonies in Band-in-a-Box, namely:
- Pitch tracking (fixing) of the melody.
- Harmonizing your voice using Band-in-a-Box harmonies (when a MIDI melody is present).
- Harmonizing your voice to the chords of the song (when no MIDI melody is present).

DXi Synth Settings opens the DirectX Plugins dialog to the Synth Track where you can select a DXi synth and apply real time effects to its audio output.

Realtime DX Audio Settings opens the DirectX Plugins dialog to the Audio Track where you can apply real time effects to the Band-in-a-Box audio track.

Audio Drivers/Settings opens the Audio Settings dialog where you can set up audio drivers, for example, select ASIO drivers if you have them on your system.

Set Audio Master (Base) Tempo is used to ensure that tempo stretches are based on correct master tempo.

Set Audio Stretching Method to 0 = default, 1 = sax, 2 = acoustic guitar, 3 = pedal steel.

Use fast loading of audio files allows fast loading of audio files with lower quality stretching. Disabling this setting will make the audio file loading slow for the first time a WAV is loaded, but will create a high quality tempo stretch file (bt0) file.

GM Menu

- Roland GS
- Send MIDI Message
- Master Tuning…
- Master (Combo) Volume Adjust
- Set Panning to MONO
- Set Panning to Stereo
- Run Other Program
- Convert Patch list from PowerTracks or Cakewalk…

The GM functions work on MIDI sound devices that support the GM (General MIDI) standard, which includes most newer MIDI Keyboards and sound cards.

The GS functions work on instruments that support the Roland GS specification. This includes the Roland Sound Canvas, SCC1, and JV-30.

The XG functions work on instruments that support the Yamaha XG specification.
Roland GS submenu

<table>
<thead>
<tr>
<th>Reset Roland GS (Quick)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reset GS (all ID’s)</td>
</tr>
<tr>
<td>Set Reverb Type (GS Module)</td>
</tr>
<tr>
<td>Set Chorus Type (GS Module)</td>
</tr>
<tr>
<td>Assign Part/Channel etc. for GS Module</td>
</tr>
</tbody>
</table>

Reset Roland GS (Quick) and Reset GS (all ID’s) reset the module to factory settings.

Set Reverb Type or Set Chorus Type (GS Module): Roland GS instruments allow different type of reverb and chorus settings. These settings boxes allow you to select them.

Assign Part/Channel etc. for GS Module The GS Part settings are for GS compatible synthesizers only. These synthesizers have 16 parts. The default is for part 1 to be channel 1, part 2 channel 2 etc., but you can change a part to another channel. This allows you to use the same channel for 2 parts, so that you hear a layer of 2 instruments playing the same part.

Send MIDI Message submenu

<table>
<thead>
<tr>
<th>Send General MIDI mode ON, &amp; BB Patches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ctrl-Alt-Q</td>
</tr>
<tr>
<td>Send General MIDI mode ON (no patches)</td>
</tr>
<tr>
<td>Send GS Mode ON Message (Roland)</td>
</tr>
<tr>
<td>Send XG Mode On Message (Yamaha)</td>
</tr>
</tbody>
</table>

Auto-Send GM Mode On at startup
Auto-Send GS Mode On at startup
Auto-Send XG Mode On at startup

Turn Local OFF (external MIDI keyboard)
✓ Turn Local ON (external MIDI keyboard)
✓ When program quits, turn Local ON

Send General MIDI mode ON, & BB Patches sends a General MIDI mode ON message to the external MIDI device and the sends the startup Band-in-a-Box patch changes.

Send General MIDI mode ON (no patches) sets the external module to General MIDI mode. This command will ensure that the module is ready to accept GM-specific MIDI data such as Bank, Controller, and Patch information.

Send GS Mode On Message (Roland) / Send XG Mode On Message (Yamaha): Since the inception of the GM (General MIDI) standard, there have been two major subsets/extensions of this standard; GS (Roland) and XG (Yamaha). Therefore, in addition to the GM Mode-on menu item feature there are additional commands to send a GS mode ON or a XG mode ON message at any time by accessing the GM menu.

Auto-Send GM Mode On at startup sends a “General MIDI mode on” message when the program boots up.
Auto-Send GS Mode On at startup sends a Roland GS system on message when the Band-in-a-Box program boots up.
Auto-Send XG Mode On at startup sends a Yamaha XG system on message when the Band-in-a-Box program boots up.

Turn Local OFF / ON (external MIDI keyboard)
“Local” refers to music playing on an external MIDI keyboard. If set to “Off,” Band-in-a-Box will play the keyboard via the THRU part. If set to “On,” both Band-in-a-Box and the keyboard might be playing the same Thru part.

When program quits, turn Local ON automatically turns the external MIDI keyboard back on at the end of the Band-in-a-Box session.

Master Tuning... allows you to master tune your sound card or sound module. This is useful if you're playing along with an instrument or recording that can't easily be re-tuned like an acoustic piano. A setting of 0 is the default A = 440.

Note: Not all sound cards/ modules support Master Tuning. To see if your sound card supports Master Tuning, press the [Test...] button.
Master (Combo) Volume Adjust submenu

<table>
<thead>
<tr>
<th>Master Volume uses MIDI messages instead of GS/GM SysEx</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Roland - GS Master Volume Message</td>
</tr>
<tr>
<td>General MIDI Master Volume Message</td>
</tr>
<tr>
<td>Reduce Master Volume by 5</td>
</tr>
<tr>
<td>Increase Master Volume by 5</td>
</tr>
<tr>
<td>Set Master Volume…</td>
</tr>
<tr>
<td>Reduce all Part Volumes by 5</td>
</tr>
<tr>
<td>Increase all Part Volumes by 5</td>
</tr>
<tr>
<td>Set all Part Volumes to…</td>
</tr>
<tr>
<td>Reduce Current Part’s Volume by 5</td>
</tr>
<tr>
<td>Increase Current Part’s Volume by 5</td>
</tr>
<tr>
<td>Set current Part’s Volume…</td>
</tr>
<tr>
<td>Ctrl-Alt-A</td>
</tr>
<tr>
<td>Ctrl-Alt-S</td>
</tr>
<tr>
<td>Ctrl-Alt-D</td>
</tr>
<tr>
<td>Ctrl-Alt-Shift-Q</td>
</tr>
<tr>
<td>Ctrl-Alt-Shift-W</td>
</tr>
<tr>
<td>Ctrl-Alt-Shift-E</td>
</tr>
<tr>
<td>Ctrl-Shift-Q</td>
</tr>
<tr>
<td>Ctrl-Shift-W</td>
</tr>
<tr>
<td>Ctrl-Alt-Shift-R</td>
</tr>
</tbody>
</table>

Master Volume uses MIDI messages instead of GS/GM SysEx should be set by all users except if you have a Roland GS synth, Roland Sound Canvas, or Roland VSC. If set, the Combo settings will allow Master Volume and other MIDI settings to work. This submenu allows you to set whether to use Roland - GS or General MIDI for Master Volume messages. Unless you have a Roland you should select General MIDI.

If you want to “turn it all up or down,” this can be done quickly with menu commands or hot keys to set the Master Volume. There are also hot keys that control the overall volume by reducing (or increasing) volumes on all parts by 5 to simulate a Master Volume effect (especially useful for sound cards that don’t support Master Volume changes). These items also have hot keys as listed on the menu (Ctrl+Alt+Shift Q, W, and E). Commands and hot keys are also provided to change the volume of the current part only.

**Set Panning to MONO** sets the panning of your Band-in-a-Box parts (Bass, Drums, Piano, etc.) to mono.

**Set Panning Mode to Stereo** sets the panning of your Band-in-a-Box parts (Bass, Drums, Piano, etc.) to a typical stereo setup, which is saved with the preferences.

**Run Other Program submenu**

<table>
<thead>
<tr>
<th>Soundcard Volume / Playback VU Meter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soundcard Recording / Recording VU Meter</td>
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<tr>
<td>SoundBlaster AWE Control Panel…</td>
</tr>
<tr>
<td>SoundBlaster Mixer</td>
</tr>
<tr>
<td>Run Windows Control Panel…</td>
</tr>
<tr>
<td>Run Other Application… [.\VE\AUDIOD\AUDICHQU.EXE]</td>
</tr>
<tr>
<td>Choose 'Other Application'…</td>
</tr>
<tr>
<td>Run DLL or EXE plugin… []</td>
</tr>
<tr>
<td>Choose DLL or EXE PlugIn…</td>
</tr>
</tbody>
</table>

**Sound card Volume / Playback VU Meter** launches the Windows mixer to adjust volumes on your sound card with the Playback panel.

**Sound card Recording / Recording VU Meter** launches the Windows Mixer to adjust volumes on your sound card with the Recording panel.

**Note**: This uses the c:\windows\sndvol32.exe Mixer program. You may need to have the Windows 98 version of this program for the Recording Panel to open properly. If you don’t, you’d see the “Volume Control” panel and will have to manually set it to the Recording Panel (by choosing Options | Properties | Recording).

**SoundBlaster AWE Control Panel** applies only to users with a SoundBlaster. This function launches the “AWE Control” application.

**SoundBlaster Mixer** is also for Sound Blaster users only, and launches the mixer for volumes.

**Run Other Application**... and Choose [Other Application...] allows you to specify and run any other application (mixer application, PowerTracks etc.).

**Run DLL or &EXE plugin...** and Choose DLL or EXE PlugIn... allows you to run a plug-in that has been made specifically for a PG Music product.

**Convert Patch list from PowerTracks or Cakewalk...**
This will let you convert a PowerTracks Pro Audio .INI file or a Cakewalk .INS file to a Band-in-a-Box .PAT file.

**Harmony Menu**

<table>
<thead>
<tr>
<th>Harmony Menu</th>
<th>Hotkey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melody Harmony (select)</td>
<td>Alt F10</td>
</tr>
<tr>
<td>Thru Harmony (select)</td>
<td>Alt F11</td>
</tr>
<tr>
<td>Favorite Melody Harmonies...</td>
<td>Ctrl F10</td>
</tr>
<tr>
<td>Favorite Thru Harmonies...</td>
<td>Ctrl F11</td>
</tr>
<tr>
<td>Start a New Harmonies File</td>
<td></td>
</tr>
<tr>
<td>Edit a Harmonies File</td>
<td></td>
</tr>
<tr>
<td>Edit Current Harmonies File</td>
<td></td>
</tr>
<tr>
<td>✔ OK to Load Harmonies With Songs</td>
<td></td>
</tr>
<tr>
<td>Save Harmony with this song</td>
<td></td>
</tr>
<tr>
<td>✔ Change Harmony with new chord</td>
<td></td>
</tr>
<tr>
<td>✔ Allow Melody Harmony</td>
<td>Shift F10</td>
</tr>
<tr>
<td>✔ Allow Thru Harmony</td>
<td>Shift F11</td>
</tr>
<tr>
<td>✔ Allow Soloist Harmony (on THRU Harmony)</td>
<td></td>
</tr>
<tr>
<td>Convert Harmony to Melody Track...</td>
<td></td>
</tr>
<tr>
<td>Convert Harmony to Soloist Track...</td>
<td></td>
</tr>
<tr>
<td>Use Passing harmonies for THRU</td>
<td></td>
</tr>
<tr>
<td>Only THRU Harmonize if note held down= 36 (C 3)</td>
<td></td>
</tr>
<tr>
<td>Real Time MIDI Harmonics...</td>
<td></td>
</tr>
<tr>
<td>Audio Harmonies &amp; Pitch Tracking...</td>
<td></td>
</tr>
</tbody>
</table>

**Melody Harmony (select)...**
This option brings up the complete Harmony styles list, and allows you to choose one for the current Melody track.

**Thru Harmony (select)...**
This option brings up the complete Harmony styles list, and allows you to choose one for the current Thru track.

**Favorite Melody Harmonies**
This option brings up your favorite 50 Harmony styles (based on recent usage) and allows you to choose one to use on the Melody track.

**Favorite Thru Harmonies**
This option brings up your favorite 50 Harmony styles (based on recent usage) and allows you to choose one to use on the Thru track.

**Start a New Harmonies File**
Allows you to make and edit Harmony styles saved under your own filename.

**Edit a Harmonies File**
Allows you to edit a Harmony file that is in your \bb directory.

**Edit Current Harmonies File**
Allows you to edit the Harmony file that is currently loaded on your system.

**OK to Load Harmonies With Songs**
Toggle this option “On” if you want to load any harmony settings that were saved/embedded in a given song.
Save Harmony with this song
Toggle this option “On” to allow Band-in-a-Box to embed the harmony settings for the current song so that they may be recalled automatically at a later time.

Change Harmony with new chord
Toggle this option “On” to allow the program to vary the harmony characteristics (i.e. inversions) each time a new chord is encountered in the song.

Allow Melody Harmony
Toggle this option “On” to allow harmonies on the Melody MIDI channels.

Allow Thru Harmony
Toggle this option “On” to allow harmonies on the Thru MIDI channels.

Allow Soloist Harmony (on THRU Harmony)
Toggle this option “On” to allow the Thru MIDI channels to utilize the harmony features for the Soloist track.

Convert Harmony to Melody Track…
Converts a single line Melody track to include the current harmony selection, with options to convert the whole song or specify a range of bars, to eliminate note overlaps, and loosen note start times.

Convert Harmony to Soloist Track…
This converts a single line Soloist track to include the current harmony selection (On the Thru harmony), with options to convert the whole song or specify a range of bars, to eliminate note overlaps, and loosen note start times.

Use Passing Harmonies for THRU
When playing along on a MIDI keyboard (or the Wizard) using a Thru harmony, you can use passing harmonies. For example, on a C7 chord, with an Ab note, the harmony might be a B diminished chord, which is a passing harmony.

Only THRU Harmonize if note held down = 36 (C3)
By setting this option you can specify to only harmonize the note if a certain note is held down. (The default note is a C two octaves below middle C.)

Real Time Harmonies
This feature allows you to play harmonies in real time. Use this with your MIDI keyboard (while Band-in-a-Box is stopped). Hold a chord down with the left hand and play notes with the right hand. The notes will be harmonized according to the chord that you’re playing in the left hand.

Audio Harmonies & Pitch Tracking
You can apply a harmony to the audio part – allowing you to automatically create up to 4 part vocal harmonies from your singing. The Choir Effect can create up to sixteen voices.

Band-in-a-Box generates the harmonies using the world-leading TC-Helicon Vocal Technologies engine. Once you have recorded a vocal part into Band-in-a-Box, you can use this feature in many ways, including:
- Pitch tracking (fixing) of the melody.
- Harmonizing your voice using Band-in-a-Box harmonies (when a MIDI melody is present).
- Harmonizing your voice to the chords of the song (when no MIDI melody is present), including unison voices.
### Notation Menu

<table>
<thead>
<tr>
<th>Notation/edit/note roll mode</th>
<th>Ctrl-Alt-N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print...</td>
<td></td>
</tr>
<tr>
<td>Note Insert mode</td>
<td></td>
</tr>
<tr>
<td>Mono Entry Mode</td>
<td></td>
</tr>
<tr>
<td>✔️ Clean Display Mode</td>
<td></td>
</tr>
<tr>
<td>Event List Editor...</td>
<td></td>
</tr>
<tr>
<td>Play Previous Screen</td>
<td>&lt;arrow&gt; up</td>
</tr>
<tr>
<td>Play Next Screen</td>
<td>&lt;arrow&gt; down</td>
</tr>
<tr>
<td>Instrument Displayed</td>
<td></td>
</tr>
<tr>
<td>Switch to Next Track</td>
<td>Ctrl F5</td>
</tr>
<tr>
<td>Switch to Previous Track</td>
<td>Ctrl Shift F5</td>
</tr>
</tbody>
</table>

**Notation/edit/note roll mode** moves the notation window through its various entry modes.

**Print...** brings up the print dialog box.

**Note Insert mode**
Toggling this to “on” allows you to insert notes graphically with your mouse or keyboard on the notation window.

**Mono Entry Mode**
Toggle this “on” if you are inserting single notes (not chords) on the notation window.

**Clean Display Mode**
Toggle this “on” if you want notes displayed on your notation window in a quantized view (does not affect song playback).

**Event List Editor**
This opens the Event List window. You can edit events including all MIDI events and lyric events using the Event List Editor. You can edit the Melody, Soloist, Lyrics, or StyleMaker patterns using this event list. The information in the Event List is color coded by channels for multi-channel Melody and Soloist tracks.

The event list can also be launched from the Notation window by pressing the event list button (#).

**Play Previous Screen**
Backs the song up four bars.

**Play Next Screen**
Moves the song to the next four bars.

**Instrument Displayed**
Since there is not enough room on the screen to display the notation for all instruments, only one is displayed at a time. You can choose which one you want to display from this menu option or with the instrument buttons on the Notation window.

**Switch to Next Track / Switch to Previous Track**
Select parts from left to right in the Instrument row buttons.
Window Menu

<table>
<thead>
<tr>
<th>Window Menu</th>
<th>Shortcut</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notation (or chords) Window</td>
<td>Ctrl W</td>
</tr>
<tr>
<td>Movable Notation Window</td>
<td>Ctrl O</td>
</tr>
<tr>
<td>Lead Sheet Window</td>
<td>Alt W</td>
</tr>
<tr>
<td>Big Lyrics Window</td>
<td>Ctrl Shift L</td>
</tr>
<tr>
<td>Lyric Document Window</td>
<td>Ctrl Alt Shift L</td>
</tr>
<tr>
<td>Show Karaoke Window</td>
<td>Ctrl Shift L</td>
</tr>
<tr>
<td>Big Piano Window</td>
<td>Ctrl Shift N</td>
</tr>
<tr>
<td>Drum Kit Window</td>
<td>Ctrl Shift D</td>
</tr>
<tr>
<td>Guitar Window</td>
<td>Ctrl Shift G</td>
</tr>
<tr>
<td>Audio Edit Window</td>
<td>Ctrl Shift A</td>
</tr>
<tr>
<td>Moveable Audio Edit Window</td>
<td></td>
</tr>
<tr>
<td>Piano Roll Window</td>
<td></td>
</tr>
<tr>
<td>Moveable Piano Roll Window</td>
<td></td>
</tr>
<tr>
<td>Put Notation/Chords on Top</td>
<td>Ctrl T</td>
</tr>
<tr>
<td>MIDI Monitor</td>
<td></td>
</tr>
<tr>
<td>Guitar Tuner</td>
<td></td>
</tr>
<tr>
<td>AWE Editor</td>
<td></td>
</tr>
<tr>
<td>Chord Substitution Dialog (choose your own)</td>
<td></td>
</tr>
<tr>
<td>Auto-Generate Chord Substitutions</td>
<td></td>
</tr>
<tr>
<td>Chord Reharmonist Dialog (choose your own)</td>
<td></td>
</tr>
<tr>
<td>Auto-Generate Chord Reharmonization</td>
<td></td>
</tr>
<tr>
<td>Generate Soundtrack…</td>
<td></td>
</tr>
<tr>
<td>Ear Training Window</td>
<td>Ctrl Shift J</td>
</tr>
<tr>
<td>Practice Window</td>
<td>Alt Shift L</td>
</tr>
<tr>
<td>Vocal Wizard…</td>
<td></td>
</tr>
<tr>
<td>Chord Builder</td>
<td></td>
</tr>
<tr>
<td>MIDI Chord Detection…</td>
<td></td>
</tr>
<tr>
<td>Conductor Window</td>
<td>Ctrl ~</td>
</tr>
<tr>
<td>Plug-in Mede for DAW</td>
<td>Ctrl Shift 5</td>
</tr>
</tbody>
</table>

Notation (or chords) Window toggles between the notation and the chordsheet views.
Movable Notation Window opens a movable and resizable notation window.
Lead Sheet Window launches the lead sheet notation.
Big Lyrics Window launches a window that displays lyrics in a Karaoke format.
Lyric Document Window displays a full screen of formatted lyrics. Easily copy and paste lyrics to and from your favorite word processor. The lyrics will also display in the Big Lyrics window.
Show Karaoke Window and load Karaoke MP3/CDG files to see scrolling Karaoke lyrics in the CDG window.
Big Piano Window launches a window that displays a Big Piano.
Drum Kit Window launches the animated Drum Kit. Once launched, press [Help] to get more information about the Drum Kit.
Guitar Window launches an on-screen Guitar.
The Audio Edit Window allows you to edit audio data, using copy, cut, and paste. You can zoom the audio in to the sample level so that you can see the actual sine waves present.
Moveable Audio Edit Window opens the regular Audio Edit Window but lets you reposition it on the screen.

Piano Roll Window launches the Piano Roll window where you can edit the Melody or Soloist track in a traditional piano roll format.

Moveable Piano Roll Window opens the regular Piano Roll window, but lets you move and reposition it on the screen.

Put Notation/Chords on Top moves the notation window to the top of the main screen and moves the piano roll at the bottom of the main screen.

The MIDI Monitor, Guitar Tuner, and AWE Editor items launch the selected module. Each one has extensive help available inside the module. There are also buttons available for these items.

Chord Substitution Dialog (choose your own)
This allows you to see a list of possible chord substitutions for the current chord progression. You can also access it from a right mouse click on the chordsheet, and by pressing the Chord Substitution button. Auto-Generate Chord Substitutions…
This will automatically pick chord substitutions for all or part of the song.

Chord Reharmonist Dialog (choose your own) shows you the current bar in the song with a list of suggested chord progressions for the current melody, based on the melody and genre that you choose. Auto-Generate Chord Reharmonization generates an entirely new chord progression for a complete song or a portion of a song. Selecting this menu option opens the Reharmonist dialog. Generate Soundtrack launches the SoundTrack feature, which allows you to generate music in the style you choose for any length of time you specify. As the “producer,” you select the genre, length of time, instruments, and fade-in/fade-out options. The SoundTrack adjusts the tempo and duration to match the settings, and then allows you to save the file as a WAV, WMA (Windows Media Audio), or MP3 file.

Ear Training Window
You can practice your ear training with help from Band-in-a-Box. In addition to the common interval exercises (perfect 4th, minor 2nd, etc.), learning to play-by-ear for Jazz and Pop music is further enhanced by ear training exercises to recognize common chord types (e.g., Major, Minor, Dominant, etc.)

You’ll also see buttons that launch musical games for fun while you train your ear.

Pitch Invasion helps to develop perfect pitch as you shoot down “alien” notes invading from above (you hear the note sound, and click on the on-screen Piano, MIDI or QWERTY keyboard to shoot them down).

Music Replay develops your pitch, rhythm, and melody recognition by replaying what the program plays in note, rhythm, or melodic modes.

Vocal Wizard selects and transposes the song to the best key for the singer’s vocal range.

Practice Window allows convenient 1-click access to many Band-in-a-Box features that help you with practicing. These include the Ear Training dialog, games (Pitch Invasion etc.), Metronome, CopyMe, Sight Reading, 101 Riffs series, and more.
Chord Builder submenu

<table>
<thead>
<tr>
<th>Chord Builder...</th>
<th>Ctrl Shift B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Play Current Chordsheet Chord</td>
<td>&lt;Shift&gt; Enter</td>
</tr>
</tbody>
</table>

Chord Builder... Allows you to build up chords using mouse clicks.

Play Current Chordsheet Chord  This function plays the current chord on the chordsheet. It is most commonly accessed by pressing Shift+Enter on the chordsheet.

MIDI Chord Detection...

This Window menu command brings up a submenu for entering chords from a keyboard.

<table>
<thead>
<tr>
<th>MIDI Chord Detection...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insert current MIDI keyboard chord</td>
</tr>
<tr>
<td>Insert current MIDI keyboard chord - next beat</td>
</tr>
</tbody>
</table>

Select MIDI Chord Detection... and play any chord on your MIDI keyboard. Band-in-a-Box will then provide you with up to 4 interpretations of the chord you played, with its best suggestion at the top and alternates below.

Choose the chord you want to have pasted into your song by clicking the appropriate [Enter] button beside the chord name. You can insert up to two chords per bar in this fashion, and move backwards and forwards in a song with the [<] [>] buttons in the top right section of the dialog.

Tip: You can also insert chords this way without opening up this dialog. Just press Ctrl+Enter keys at any time to insert the last chord that you’ve played on your MIDI keyboard onto the worksheet.

Conductor Window

As the song is playing, many “single key” hot keys are available to control the playback and looping of the song. For example, pressing the “4” key will insure that the middle chorus is the next one played, and pressing the “S” key will insure that the middle section is looped. This would be useful to extend a song that has the last chorus playing. Custom loop points can also be set for each song.

These settings are ideal for live performance, or “jam sessions” where you aren’t entering new Band-in-a-Box songs, but want full control of the playback. These loops happen seamlessly at the end of the chorus, so are suitable for the “dance floor.” In addition, you can control Band-in-a-Box from a standard MIDI keyboard, pressing MIDI keys corresponds to program functions. For example, load the next song, play/pause/tempo adjust/change thru patch/jump to middle choruses/open the notation or lead sheet window – all from your MIDI keyboard!
**Plug-in Mode for DAW** puts Band-in-a-Box into plug-in mode, open as a small always-on-top window that acts as a plug-in for your favorite DAW/sequencer so that you can drag-and-drop MIDI and audio (WAV) tracks from BB to your favorite sequencer.

The DAW Plug-in mode is a mode within the regular Band-in-a-Box program. This mode allows you to transfer tracks, or parts of tracks, to other DAW Sequencers easily, by simply dragging the track icons from Band-in-a-Box (BB) to the tracks window of your DAW.
Help Menu

| Index | F1 |
| Topic Search | Ctrl F1 |
| Using help |
| How to… | Shift F1 |
| Basics |
| Tutorials |
| ✔ Show help hints |
| Update, Add/On and other Product info |
| ReadMe (for Latest info not in manual) |
| Newest Features |
| Tip of the Day |
| What add-ons do I have?… |
| Display Program Manual… |
| Display Program UPGRADE Manual… |
| Web www.pgmusic.com |
| About Band-in-a-Box |

**Index**
Lists all of the Help topics. Type in a keyword under the “Index” tab to go to the topic you want.

**Topic Search**
Opens the Help file where you can search the Table of Contents or the Index, or use the Search feature to find your topic.

**Using help**
Has Windows tips for using Help files.

**How to…**
Opens a categorized list of topics. It’s a fast way to find out about a particular feature or operation.

**Basics**
Goes directly to the “Basics” introduction to Band-in-a-Box.

**Tutorials**
Provide detailed, step-by-step instructions for Band-in-a-Box.

**Show help hints**

| Show NO hints |
| Show hints on main screen only |
| ✔ Show all hints (main screen and dialogs) |
| ✔ If hints are displayed, show Comprehensive hints |
| Customize hint settings… |

Band-in-a-Box has comprehensive fly-by hints that appear when you move over an item. These include hints for the dialog boxes and various windows. You can set the hints to display none, basic, or detailed information.

**Update, Add/On and other Product info**
Other Band-in-a-Box add-ons, PG Music Inc. products, and contact information.

**ReadMe (for Latest info not in manual)** documents the latest features, plus an archive of earlier updates.

**Newest Features** describes the new features in the current version.

**Tip of the Day**
Power user tips. This feature can be set to run automatically when Band-in-a-Box opens. If you want to add your own tips, you can edit the BBW.TIP file. Just put a tip on a single line (no carriage return till the end of the tip).
Tips are limited to 255 characters per tip. Band-in-a-Box automatically compiles the BBW.TIP file at startup of the program to a binary file called BBW.TPB.

**What add-ons do I have?...**

One of the greatest strengths of Band-in-a-Box is the ability to add-on and enhance the program through add-on Styles, Soloist, and Melodist disks. The “What Add-ons” feature in the Help menu scans your computer's Band-in-a-Box directory and displays what add-ons are and aren't found. To see the latest add-ons click on the [www.pgmusic.com/addons.htm](http://www.pgmusic.com/addons.htm) button to go directly to the add-ons page on the PG Music Inc. web site.

**Display Program Manual**

This opens a .pdf file of the full Band-in-a-Box manual in Acrobat Reader. Follow the bookmarks to find specific topics.

**Display Program UPGRADE Manual**

This will open a .pdf of the upgrade manual for this particular version of Band-in-a-Box, which may include new documentation not yet added to the full manual. The upgrade manual is often a more convenient way to reference the new features in Band-in-a-Box without looking through the full manual.

**Web** [www.pgmusic.com](http://www.pgmusic.com)

Links to some important pages on the PG Music Inc. web site. Selecting one of these topics will automatically launch your Web Browser, and direct you to the PG Music web site.

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<th>Visit web-site (<a href="http://www.pgmusic.com">www.pgmusic.com</a>)</th>
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<td>Upgrades &amp; news (<a href="http://www.pgmusic.com">www.pgmusic.com</a>)</td>
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**About Band-in-a-Box** launches a dialog with key information such as the version number you are running and computer system information.
Shortcuts: Keystroke Commands - Hot Keys

Quick Song Settings
Typing special words, instead of chord names, will make the following settings:

- begin + Enter: Sets the beginning of the chorus to the current bar
- chorusend + Enter: Sets the end of the chorus to the current bar
- end + Enter: Sets the end of the song to the current bar
- tkc + Enter: Sets key signature to c, tkbb would set it to bb
- trc + Enter: Transposes song to key of C
- t125 + Enter: Sets tempo to 125

Quick-Load Songs and Styles
You can quick-load a song by typing only. In chord entry mode (Chordsheet or Notation window) type the word “song” followed by a file name or partial file name + Enter and the song will get loaded if it is in the current folder. Typing “bossa” would load in the first song with bossa in the name AFTER the current song name in the current folder.

To change to another folder, type “song” followed by the full path and file name. For example, type song and then c:\bb\zzjazz.mg1 + Enter to load in that exact song name.

Quick-load a style by typing “style” followed by a style name, e.g., stylezzbossa + Enter loads in zzbossa.sty.

Keystroke Commands
It’s often faster to use keystrokes instead of using the mouse. For example, there are keystroke “hot keys” to mute instruments or to adjust volume, panning, reverb, chorus, or bank of instruments.

Muting Parts
- Alt+3: Mutes the Bass
- Alt+4: Mutes the Piano
- Alt+5: Mutes the Drums
- Alt+6: Mutes the Guitar
- Alt+7: Mutes the Soloist
- Alt+8: Mutes the Strings
- Alt+9: Mutes the Melody

Selecting Parts
- Ctrl+3: Selects the Bass
- Ctrl+4: Selects the Piano
- Ctrl+5: Selects the Drums
- Ctrl+6: Selects the Guitar
- Ctrl+7: Selects the Soloist
- Ctrl+8: Selects the Strings
- Ctrl+9: Selects the Melody

Instrument Part Settings
Hold down Ctrl+Shift and the letter to change these instrument settings.

- Q,W: Decrease/Increase Volume
- E,R: Decrease/Increase Panning
- T,Y: Decrease/Increase Reverb
- U,I: Decrease/Increase Chorus
- O,P: Decrease/Increase Bank
Use **Ctrl+Shift** together with the 1-9 and 0 keys on the keyboard to select Favorite Instruments. For example, let’s change the Piano part to Rhodes Piano.

1. Press **Ctrl+4** to select the Piano part.
2. Press **Ctrl+Shift+2** to select the Favorite #2. That is Rhodes Piano.

Use **Ctrl+Shift** and the [-] and [=] keys to decrease/increase the patch by 1.

**Volume Settings**

- **Ctrl+Alt+Shift+R**: Set current part’s volume.
- **Ctrl+Alt+A**: Decrease master volume by 5.
- **Ctrl+Alt+S**: Increase master volume by 5.
- **Ctrl+Alt+D**: Set master volume.
- **Ctrl+Alt+Shift Q**: Reduce all part volumes by 5.
- **Ctrl+Alt+Shift W**: Increase all part volumes by 5.
- **Ctrl+Alt+Shift E**: Set all part volumes.

**Looping / Song Navigation Keystrokes**

- **NUMPAD 1**: Toggle looping on/off.
- **NUMPAD 2**: Open Loop Section Settings dialog.
- **Ctrl+NUMPAD 1**: Play with last chorus looped.
- **Ctrl+NUMPAD 2**: Play with middle choruses looped.
- **Ctrl+NUMPAD 3**: Play with middle and last choruses looped.
- **Ctrl+NUMPAD 4**: Jump to last chorus.
- **Ctrl+NUMPAD 5**: Jump to ending.
- **Ctrl+NUMPAD 7**: Loop Notation screen.
- **NUMPAD [DEL]**: Advances the notation, lead sheet, and guitar window by one chord (group of notes).
- **NUMPAD [INS]**: Backs up the notation, lead sheet, and guitar window by one chord.

**Transpose Settings**

- **Ctrl+Alt+1**: Transpose Melody down one octave
- **Ctrl+Alt+2**: Transpose Melody up one octave
- **Ctrl+Alt+3**: Transpose Soloist down one octave
- **Ctrl+Alt+4**: Transpose Soloist up one octave
- **Ctrl+Alt+5**: Transpose down 1 semitone.
- **Ctrl+Alt+6**: Transpose up 1 semitone.
- **Ctrl+Alt+7**: Transpose setting dialog.

**Custom File Open Dialog**

- **Ctrl+Shift+F3**: Load song with custom file dialog.
- **Alt+F**: In custom file dialog - Favorite Folders.
- **Alt+N**: In custom file dialog - Font selection.
- **Alt+S**: In custom file dialog - Search dialog.

**Windows**

- **Ctrl+W**: Toggle Notation and Chordsheet windows.
- **Ctrl+O**: Movable Notation window.
- **Alt+W**: Lead Sheet window.
- **Ctrl+T**: Put Notation/Chords at top of screen.
- **Ctrl+~**: Conductor window.
- **Ctrl+Shift+A**: Audio Edit window.
Ctrl+Shift+D  Drum Kit window.
Ctrl+Shift+G  Guitar window.
Ctrl+Shift+J  Ear training window.
Ctrl+Shift+L  Big Lyrics window.
Ctrl+Shift+N  Big Piano window.
Ctrl+Shift+S  Plug-in mode for DAW.
Alt+Shift+L  Practice window.
Ctrl+Alt+Shift+L  Lyric Document window.

**StyleMaker Hot Keys**

F1, Shift+F1, Ctrl+F1  Help
F2  Save style
Alt+F2  Save style as ...
R or F3  Record pattern
<Spacebar> or F4  Play pattern
F8  Play pattern on chord
F10  Edit pattern options
F6 or Shift+F6  Change instrument
**Cursor Keys**
Alt+F4  Move around screen

**StyleMaker Drum Screen Hot Keys**

F5  Drum alternate notes
**Bottom row (ZXCVBNM,. /)**  Drum note entry
F6  Time base
F10 or Alt+F4  Exit

**Additional Keystrokes**

There are additional keystrokes available, listed on the pull down menus beside the function. Hot keys may access any function on the pull-down menu by pressing the Alt key and the first letter of the Menu followed by the underlined letter of the command. For example, Alt+F+O would access File | Open.

| Note: In the Opt. | Preferences menus, there are other ways that the SPACEBAR can be set to work. |

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<td>Help.</td>
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<td>Help – How To.</td>
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<td>Record (melody or pattern).</td>
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<td>Record from any bar.</td>
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<td>Jukebox start/stop.</td>
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<td>Save song.</td>
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<td>Save song with patches.</td>
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<td>Load song.</td>
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<tr>
<td>Load song using favorite song list.</td>
<td>Shift+F3</td>
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<tr>
<td>Load song using titles window.</td>
<td>Ctrl+F3</td>
</tr>
<tr>
<td>Load songs with melodies.</td>
<td>Alt+F3</td>
</tr>
<tr>
<td>Load song with standard long file dialog.</td>
<td>Alt+Shift+F3</td>
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</tbody>
</table>
Load next file (alphabetical by file name).
Load previous (alphabetical by file name).
Load next style. (in alphabetical order).
Load previous style. (in alphabetical order).
Enable/disable style.
Launch MIDI File to Style Wizard.
Load songs in current style.
Choose a user style.
Notation – switch to next track
Notation – switch to previous track
Open **StylePicker**.
Select favorite styles.
Edit user style.
Edit current style.
Refresh Melodist or Soloist
Select Melody Harmony
Favorite Melody Harmonies
Allow Melody Harmony
Select Thru Harmony
Favorite Thru Harmonies
Allow Thru Harmony
Turn song Embellisher on/off.
Import chords from MIDI file.
Send GM mode on message.
Set tempo.
Open the Preferences dialog.
Open the Song Settings dialog.
Launch Chord Builder.
Enable/Disable RealDrums
Edit current bar options.
Save MIDI file.
Quit the program.

**Chord List**

*Commonly used chords are displayed here in bold type.*

These chords are displayed in a list in the Chord Builder Dialog, accessible from the User Menu or by right clicking on the chordsheet.

**Major Chords**

C, Cmaj, C6, Cmaj7, Cmaj9, Cmaj13, C69, Cmaj7#5, C5b, Caug, C+, Cmaj9#11, Cmaj13#11

**Minor Chords**

Cm, Cm6, Cm7, Cm9, Cm11, Cm13, Cmaug, Cm#5, CmMaj7

(half diminished)

Cm7b5,

**Diminished**

Cdim
Dominant 7th Chords
C7, 7+, C9+, C13, C7b13, C7#11, C13#11, C7#11b13, C9, C9b13, C9#11, C13#11, C9#11b13, C7b9, C13b9, C7b9b13, C7b9#11, C13b9#11, C7b9#11b13, C7#9, C13#9, C7#9b13, C9#11, C13#9#11, C7#9#11b13, C7b5, C13b5, C7b5b13, C9b5, C9b5b13, C7b5b9, C13b5b9, C7b5b9b13, C7b5#9, C13b5#9, C7b5#9b13, C7#5, C13#5, C7#5#11, C13#5#11, C9#5, C9#5#11, C7#5b9, C13#5b9, C7#5b9#11, C13#5b9#11, C7#5b9#11b13, C7#5#9, C13#5#9, C7#5#9b11, C13#5#9#11, C7#5#9#11b13, C13#5#9#11

Suspended 4 Chords
Csus, C7sus, C9sus, C13sus, C7susb13, C7sus#11, C13sus#11, C7sus#11b13, C9susb13, C9sus#11, C13sus#11, C9sus#11b13, C7susb9, C13susb9, C7susb9b13, C7susb9#11, C13susb9#11, C7susb9#11b13, C7sus#9, C13sus#9, C7sus#9b13, C9sus#11, C13sus#9#11, C7sus#9#11b13, C7susb5, C13susb5, C7susb5b13, C9susb5, C9susb5b13, C7susb5b9, C13susb5b9, C7susb5b9b13, C7susb5#9, C13susb5#9, C7susb5#9b13, C7sus#5, C13sus#5, C7sus#5#11, C13sus#5#11, C7sus#5#11b13, C9sus#5, C9sus#5#11, C7sus#5b9, C13sus#5b9, C7sus#5b9#11, C13sus#5b9#11, C7sus#5b9#11b13, C7sus#5#9, C13sus#5#9, C7sus#5#9b11, C13sus#5#9#11, C7sus#5#9#11b13, C7sus#5#9#11

Notes:
- It is not necessary to type upper or lower case. The program will sort this out for you.
- Any chord may be entered with an alternate root ("Slash Chord") e.g.: C7/E = C7 with E bass.
- Separate chords with commas to enter 2 chords in a 2 beat cell, e.g., Dm,G7

Tricky Chords:
C5b This is "C flat 5." It is spelled this way to avoid confusion.
C2, C5, C4, C69, C7alt, Cm7#5
You can type C-7 for Cm7 (i.e. use the minus sign) or C7-9 for C7b9.

Shortcut Chords:
If you enter a lot of songs, you'll appreciate these shortcut keys.
J = Maj7
H = m7b5 (H stands for Half diminished)
D = dim
S = Sus
Example: To type CMaj7, just type CJ (it will be entered as CMaj7)

Add your own chord shortcuts.
Have you found a chord that Band-in-a-Box doesn't recognize? If so, add it to your chord shortcuts file, and Band-in-a-Box will allow you to type in that chord in the future. This also lets you define chord "shortcuts," one-letter abbreviations for longer chord names ("J" for "Maj7" etc.). If you find a chord that Band-in-a-Box won't accept like Csus2, when it expects C2 instead you can enter this on a single line (without the quotes) "Csus2@C2." Then Band-in-a-Box will enter the chord C2 if you type in Csus 2.
The text file c:\bb\Shortcut.txt allows you to add new chord shortcuts. Note that this file doesn't ship with Band-in-a-Box (or it would overwrite your file!). The file \bb\pgshortc.txt for shortcuts supplied by PG Music. You can add your own shortcuts in a text file you make yourself and name \bb\shortcut.txt.

Band-in-a-Box files
Essential Program Files
Band-in-a-Box for Windows requires the following files to operate.
BBWDLL16.DLL  DLL handling playback.
BBW.EXE  Executable file.
BBW.LST  This is the text file for the Style List information.
BBWRES.DLL  DLL required for some graphics.
CPALETTE.DLL  Required DLL.
DEFAULT.HAR  These are the default Harmonies.
DEFAULT.GIT  The default Guitarists.
DEFAULT.MEL  The default Melodists.
DEFAULT.SOL  The default Soloists.
GP5.DLL  Required DLL.
PGCHORDS.TTF  PG Music chord font.
PGJAZZ_.TTF  PG Music Jazz font.
PGMUS.TTF  PG Music notation font.
PGTEXT.TTF  PG Music text font.
ZZ*.STY  Band-in-a-Box needs Style Files for the built-in Styles.
A_PGMUSIC.DS  Lists the RealDrums styles to use.

**Transferring Files Among Computer Platforms (IBM to Mac)**

Many of the Band-in-a-Box song/style and patch map files are directly compatible. Any Macintosh file automatically gets a 128-byte header added on to it by the Macintosh system.

If transferring the files by modem, make sure the Macintosh modem software strips off the header off the files. Other than that, the files are identical.

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**Note:** Atari files are the same format as IBM files; no conversion is needed.
Appendix: RealTracks Sets

There are one hundred and one sets of RealTracks available for Band-in-a-Box!
The basic Band-in-a-Box Pro package includes a basic set of RealCombos for Pop, Country and Jazz. In addition, there are hundreds more RealTracks instruments available in one hundred and one different sets.

RealTracks Set 1: The Originals, New and Improved
Improved versions of the original RealTracks – Tenor Sax, Tenor Sax (Bluesy), Pedal Steel, and Acoustic Guitar.

RealTracks Set 2: Country Ballad
Acoustic guitar, both strumming and fingerpicking, a beautiful “spacey” electric guitar with delay effects, as well as a sweet pedal steel part and a RealBass.

RealTracks Set 3: Swingin’ Country
Two Swing RealPedalSteel styles and five Swing 8ths acoustic guitar RealTracks, including both strumming and fingerpicking.

RealTracks Set 4: Modern Country
Rock, Pop, Folk and Country with RealResonatorGuitar, RealAcousticGuitar & RealBass plus a modern syncopated groove that includes both acoustic & electric guitars.

RealTracks Set 5: Rockin’ Guitar
Smokin’ Rock & Country Rock rhythm guitar grooves, as well as slide guitar solos and R&B RealBass.

RealTracks Set 6: All Metal
Three different tempos of killer Metal rhythm guitar parts and totally tight bass parts plus the RockHardEven8 RealDrums style.

RealTracks Set 7: Acoustic Jazz Bass and Rock Sax
RealDoubleBass with either the straight-ahead, fluid approach of our PaulC bass style, or the aggressive approach of our RayB style. Also in this set is the “Motown Rock” sax soloist.

RealTracks Set 8: Country Folk
Resonator Guitar, sweet RealFiddle, and basic acoustic guitar strumming patterns.

RealTracks Set 9: Country Electric Guitar
Great Country guitar grooves and solos played by top Nashville session musicians. Included are two rhythm guitar parts, “Cowboy,” which is a true classic country groove, and “Train,” which is a fast train-beat groove.

RealTracks Set 10: All Blues (Shuffle)
A smokin’ blues band a Real rhythm guitar player, a Real bassist, a Real B3 player and even a Real harmonica player all backing you up on a groovin’ Blues Shuffle. Killer soloing on electric guitar and harmonica.

RealTracks Set 11: All Bluegrass (Rhythm)
Step out in front of your very own Bluegrass band, and take charge. Mandolins, fiddles, guitars, and banjos abound – all held to a steady beat by a fat Bluegrass bass.

RealTracks Set 12: All Bluegrass (Solos)
Banjo, Fiddle, Guitar, and Mandolin solos. Spice up any Bluegrass song with a foot-stompin’ Banjo solo, or you can really get things going by adding multiple solo instruments.

RealTracks Set 13: “Older” Jazz Swing Solos
The essential instruments of Jazz Soloing - alto sax, trumpet, and trombone - recorded by top studio musicians. With the stretching features in Band-in-a-Box and RealBand, they can be used over a wide tempo range.

RealTracks Set 14: Mainstream Swing – Jazz Rhythm Section
A world-class Jazz rhythm section with a choice of either acoustic piano or Jazz electric guitar as your comping instrument, and an acoustic bass style to round out the bottom end.

RealTracks Set 15: Mainstream Swing – Jazz Soloists
Alto sax, trumpet, and trombone RealTracks plus bass soloing and piano soloing, complete with left-hand comping! Combine with RealTracks Set 14: Mainstream Swing - Jazz Rhythm Section for a complete Real Jazz band!

RealTracks Set 16: Bossa - Rhythm Section
This authentic sounding Latin-Jazz set includes a balance of piano, acoustic bass, and electric guitar RealTracks for use in all keys. Combine with RealTracks Set 17: Bossa - Soloists for your dream Bossa band!

**RealTracks Set 17: Bossa - Soloists**
This set includes hours of trumpet, trombone, alto sax, and even acoustic bass soloing. You'll have all the tools available to generate a killer Bossa solo with the most authentic sounds available.

**RealTracks Set 18: Jazz Ballad - Rhythm Section**
This set includes rhythm tracks for piano, acoustic bass and electric guitar. You can really focus on your melody while the bass, piano and guitar provide solid rhythm and harmony all around you.

**RealTracks Set 19: Jazz Ballad – Soloists**
This RealTracks Set comes equipped with alto sax, trombone and trumpet soloing in every key for your Jazz ballad. Every time you press play, you get a brand new solo. Your Jazz ballad composition deserves these killer lines!

**RealTracks Set 20: Dual Rock Guitars**
This set features two tempos of Rock ‘n’ Roll guitar recorded by two different top studio musicians, each playing off of the riffs of the other. These are classic Rock guitar tones for both laid back and up-tempo tunes.

**RealTracks Set 21: Clean Strat Rock**
Add a clean, even, classic Rock guitar sound to all your songs, old and new, with Clean Strat Rock rhythms and solos. Use the Rhythm Guitar with your verses while letting the Soloist fly during a chorus.

**RealTracks Set 22: Funk & Pop Bass**
A variety of Funk styles, including Funk Finger Bass, Funk Slap Bass, and Pop Bass, which suits a wide range of musical styles. Using all electric basses, this set adds another color to your PG Music palette!

**RealTracks Set 23: Pop Acoustic Guitar**
A solid rhythm section of acoustic guitars playing an even style, whether it be strumming or fingerpicking. These RealTracks can be used for more than just Pop; they blend well with many other styles of music too.

**RealTracks Set 24: Pop Swing 8ths Guitar**
Fill in a rhythm section with this dynamic set of acoustic strumming and fingerpicking guitar styles. With a wide range of tempos RealTracks Set 24 completes your Swing 8ths Pop or country song with an understated touch!

**RealTracks Set 25: Pop Swing 8ths Bass 1**
Use these RealTracks with many styles of music to add a delicate touch and a human feel. Turn to RealTracks Set 25 whenever you need a bass player to stick to the basics and back you up!

**RealTracks Set 26: Pop Swing 8ths Bass 2**
Add the solid foundation of Swing 8ths Bass to your song. With a wide range of tempos and electric and acoustic basses to choose from, you can always rely on this RealTracks set to keep perfect timing.

**RealTracks Set 27: “Dreamy” Pop Guitar and More**
With these simple, tasteful, and dreamy guitar licks, you can add a new level of atmosphere to your song. Whether you're composing a fast pop masterpiece or a mellow country ballad, these styles are for you!

**RealTracks Set 28: Jazz Waltz**
This set redefines what it means to swing in ¾ time with this Jazz waltz collection of acoustic bass, piano, and electric guitar RealTracks.

**RealTracks 29: Freddie and Wes - Jazz Guitar Comping**
If you’re looking for the “four-on-the-floor“ beat with a tasteful groove that'll keep the dance floor full all night RealTracks Set 29 is the answer. Some of the sweetest comping this side of bebop!

**RealTracks Set 30: Blues (Slow Swing)**
Electric guitar, bass and resophonic guitar provide the solid rhythm foundation, in a variety of combinations. Then to fill up the band we also have the soloists: electric guitar, harmonica and a sweet slide guitar!

**RealTracks Set 31: Blues (Slow Even 8ths)**
This set features some straight-8ths, slow rockin' grooves on the electric guitar, electric bass, harmonica, and even the resophonic guitar! All styles in this set were recorded at the same tempo, so they blend together perfectly.

**RealTracks Set 32: Blues (Fast Even 8ths)**
A solid even 8ths rhythm section of electric guitar, electric bass and resophonic guitar. In addition, this set comes with harmonica, tenor sax, and Blues harmonica soloists to complete the band.
RealTracks RealTracks Set 33: Bluegrass (Medium Tempo)
All you need to play a medium tempo Bluegrass song. This set of RealTracks is full of awesome features like A and B substyles for the fiddle and banjo as well as RealCharts for the acoustic guitar soloist.

RealTracks RealTracks Set 34: Country Train Beat
Solid train rhythm that doesn't miss a beat plus RealCharts to see the notation for all of the instruments. You get RealCharts for fiddle, harmonica, and pedal steel so you can see exactly what the top studio musicians are playing.

RealTracks Set 35: Chet and Travis Pickin'
This set comes with four different RealTracks styles in this unique genre, two played with that sweet mellow nylon guitar, and two played with the warm tones of the electric guitar.

RealTracks Set 36: Swingin' Country 2
Five swing 8ths RealTracks styles featuring a sweet pedal steel style, as well as two tempos of resonator guitar and swing 8ths mandolin. Medium slow and fast tempos are included.

RealTracks Set 37: Swingin' Country 3
Get ready to swing! RealTracks Set 37 provides some swinging Country licks at a variety of tempos with mandolin, harmonica, pedal steel, and resonator guitar playing at tempos ranging from 130 to 190 beats-per-minute.

RealTracks Set 38: Classic Country - Pedal Steel n' More
Classic Country with three variations of Pedal Steel at a range of tempos plus a fiddle that is always ready to play a solo. You also get the added bonus of RealCharts that show you the notation for all of the RealTracks in this set.

RealTracks Set 39: Slow Country
Ballad stylings on pedal steel, fiddle, banjo, harmonica, and acoustic guitar with the added bonus of RealCharts for the pedal steel, harmonica and fiddle to show you the notation for these instruments.

RealTracks Set 40: American Pop-Rock
There are 4 Electric Guitar styles included in this set, and each style includes two different substyles. The two “American” guitar styles are meant to be used together, as are the two “RootsRock” styles, so either way you get that polished, radio-friendly sound that'll make you sound like a professional producer.

RealTracks Set 41: Rockin' Hard
This set comes with 4 different RealTracks guitar styles, and each of those styles has 2 different substyles. “Hard Rock Thrash” and “Hard Rock Thrash Hollow” are two slow hard-rockin' styles that can be used together, or individually. “Pop Rock Brit Edgy” and “Pop Rock Brit Heavy” provide that modern British sound.

RealTracks Set 42: Boogie 'n Texas Rock
“Texas Boogie” and “Texas Rock” guitar RealTracks styles. “Texas Boogie” includes two different guitar styles, intended to be used together if you want a full band effect, or separately if you just need a touch of that Boogie flavor. “Texas Rock” is the same, with two distinct styles that mesh together beautifully, or can be used individually.

RealTracks Set 43: Rockin' Down South
This set includes both acoustic and electric rhythm guitar styles, as well as two marvellously raunchy slide guitar styles. To top it all off, we have a rollicking southern organ.

RealTracks Set 44: Blues Guitar and Organ
This set includes three different Blues Organ RealTracks styles: “Monday” Swing 8ths at 65bpm, “Roadhouse” Even 8ths at 120bpm, and “BB” Even 8ths at 85bpm. Also included in this set is a rollicking Slide Guitar Blues RealTracks style.

RealTracks Set 45: Driving British Rock
All of the guitars included in this set feature different takes on the same slow driving groove, and can be used together to create a full, produced sound, or can be used individually to fill in the spaces for your own project. This set includes a strumming acoustic guitar, and two electric guitars, one that is more “driving” and one that is more “soulful”.

RealTracks Set 46: Medium Pop - Harmonica, Organ and Bass
This set provides you with some great background organ & harmonica playing, as well as two options for straight-ahead pop electric bass. The harmonica style provides some great pop licks, but as a background style it doesn't get in the way of a singer or the other instruments. The Organ style is a real B3, and will give your pop song that authentic sound. For electric bass, there are two options. The “PopHalfNotesSync” style plays on the 1, and-of-2,
and the 3, which is one of the most common ways to play pop music. The alternate, 'PopHalfNotesPush is the same basic pattern, but doesn't restate the note on beat 3, driving the song with a pushed feel.

**RealTracks Set 47: Slow and Fast Pop - Harmonica & Organ**

Covering the whole even 8ths tempo spectrum, our B3 Organ styles can provide that growling B3 sound whether you've written a slow ballad, or a rockin' fast pop tune. For the fast tunes, we've also got a background Pop Harmonica style.

**RealTracks Set 48: Medium Modern Rock**

This set provides three Guitar RealTracks, one acoustic, and two electrics. The acoustic guitar is a bright, strummed rock part. The two electrics have distinct sounds that compliment each other: “ElecRockArp” is a clean guitar tone that plays arpeggios for the A section, then switches to strummed chords for the B section. 'ElecRockDirty' is a distorted guitar tone that plays muted syncopated chords at 'A', and then plays with a more open sound at 'B'.

**RealTracks Set 49: Spirited Acoustic Guitar**

There are two Acoustic Guitar styles included with this set, both at slow tempos, but they're designed to give the song a harder edge than most ballad playing. Also included in this set are two pop Electric Bass styles, both at 85 beats-per-minutes. The 'PopHalfNotesSync' style plays on the 1, and-of-2, and the 3, which is one of the most common ways to play pop music. The alternate, 'PopHalfNotesPush is the same basic pattern, but doesn't restate the note on beat 3, driving the song with a pushed feel.

**RealTracks Set 50: More Bossa!**

This set features some great Bossa Nova Guitar and Flute playing. The Nylon-Electric Rhythm Guitar style provides a great backing track for any chord progression, and is an excellent tool for singers or soloists. The Flute and Electric Guitar Soloist RealTracks can provide fantastic melodic soloing over any changes, and the solo created by Band-in-a-Box will be different every time you press play!

**RealTracks Set 51: Slow Bossas and More**

With RealTracks Set 51, you can choose either the smooth sounds of acoustic bass and piano playing slow gentle bossas, or the fast excitement of some boogying tenor sax. The bass and piano, when used in conjunction with our Bass Brushes RealDrums, provide a great rhythm section for singers or soloists.

**RealTracks Set 52: Fast Samba**

This RealTracks set provides you with some smokin' fast Latin sounds. It includes the essential rhythm section instruments, bass and piano, as well as a soprano sax soloist. No matter what chords you enter in Band-in-a-Box, these styles will soar!

**RealTracks Set 53: Slow Jazz Ballad - Rhythm Section**

This set includes both Piano and Acoustic Bass playing at 60 beats-per-minute, and because of the superior stretching features in Band-in-a-Box and RealBand, they can actually be used over a wide range of tempos. There are also several variations where they start playing double-time (essentially a 120 bpm groove) for the B section.

**RealTracks Set 54: Slow Jazz Ballad - Soloists & Solo Piano Accompaniment**

In addition to the Slow (60bpm) Ballad Tenor Sax RealTracks, this set also includes the Jazz Ballad Electric Guitar Soloist, at a slightly quicker pace (85bpm), and a “Solo-Accompaniment” Jazz Ballad Piano (85bpm). This piano style is intended to be used without Bass or Drums, essentially it's a rhythm section all on its own.

**RealTracks Set 55: Fast BeBop Jazz**

RealTracks Set 55 gives you the tools you need to start hearing some lightning fast jazz coming out of your computer speakers. Simply enter any chords you like, select these BeBop styles, and Band-in-a-Box will generate flawless Acoustic Bass, Piano and Tenor Sax tracks for you.

**RealTracks Set 56: Jazz, Old and New**

This set includes 4 different RealTracks styles, including “Modern Jazz” versions of Acoustic Bass and Acoustic Piano playing at a medium-swing tempo. These two styles together form the perfect rhythm section for soloing, and provide great inspiration for developing sophisticated lines. The set also includes 2 soloists, the classic “older swing” clarinet style, and the intricate electric guitar jazz swing soloist.

**RealTracks Set 57: Jazz Swing, Laid Back**

This set features both the essential rhythm section instruments and the soprano sax soloist for that sweet slow-medium groove that sits perfectly in the pocket. The rhythm section is comprised of double bass and piano, and both styles include both an “A” section and a “B” section, so you can add further dynamic range to your jazz tune.

**RealTracks Set 58: Jazz and Pop Waltzes**
With RealTracks Set 58, we provide both Jazz and Pop Waltz styles. On the Jazz front, a Tenor Sax soloist is included, which can be used with some of our previously released Jazz Waltz rhythm section instruments. For the Pop fans, we've provided Acoustic Bass and Piano styles playing a slow even 8ths Pop Waltz.

**RealTracks Set 59: Crossover**
The RealTracks you need for the popular sound of Swing 16ths Crossover between Country Music and Hip Hop. This set provides you with a total of 5 RealTracks styles, one bass style and four guitar styles. They were recorded at 75 & 90 beats-per-minute, and with the stretching features in Band-in-a-Box, the tempos in between and beyond are covered as well.

**RealTracks Set 60: Country Rock!**
4 new guitar styles. 'ModernCountrySync' is an even-16ths-based groove, and we provide both an Acoustic and an Electric Guitar style. The 'SouthernSnappy' is a classic sounding Country-Rock groove, also 16ths-based, and for this groove we provide two Electric Guitars, 'Clean' and 'Gritty'.

**RealTracks Set 61: Ballads and More!**
An assortment of Pop and Country Ballad styles with two rhythm electric guitar styles, a hard-edged ballad soloist, and a solo-accompaniment pop piano style. The two rhythm guitars are meant to be used together, but have very distinct sounds. One is a clean guitar tone, playing choppy chords for the A section and held chords for the B section, and the other is a distorted guitar style, playing a syncopated groove at 'A', and straightening out to even quarter notes at 'B'. The soloist is a driving distorted power ballad, and is great for intros or breaks. Finally, we include a 'solo-accompaniment' piano pop-ballad style.

**RealTracks Set 62: Western Swing and Bluegrass!**
Three Western Swing electric guitar styles include rhythm playing at the medium-fast tempo of 165bpm, and an up-tempo style at 190bpm. Also at 190 is the “CountryClassicSwing” Soloist, which will create a solo over any changes you care to throw it's way. As a bonus, this set also includes a Bluegrass Mandolin Soloist, playing at the laid-back (for Bluegrass) tempo of 100.

**RealTracks Set 63: Country Waltz 1**
This Set provides 4 Acoustic Guitar styles, playing at two waltz tempos, 85 & 140. With the stretching features in Band-in-a-Box and RealBand, these styles actually cover a wide range of tempos. Each tempo has a Fingerpicking and a Strumming Acoustic Guitar, and the styles work great together, or they can be used individually.

**RealTracks Set 64: Country Waltz 2**
This set comes with three guitar styles, all recorded at the comfortable waltz tempo of 110, and a Solo-Accompaniment Waltz Piano style at a bouncy swinging tempo of 85. The guitar styles include strumming acoustic, fingerpicking acoustic, and electric.

**RealTracks Set 65: Alt-Country**
Alt.Country, also known as Americana, has 4 Electric Guitar styles. For the very slow tempos, we have a distorted electric guitar providing a gritty backdrop to your melancholy ballad. For ballads a little bit quicker, we have a brighter clean electric guitar style. The two Alt.Country styles recorded at 75bpm are intended to be used together, as they play off of each other beautifully. One is a moody sounding electric, while the other is more rootsy.

**RealTracks Set 66: Modern Nashville Pop**
4 Electric Guitar styles straight from Music City, USA. The two 'CountryRock' styles are intended to be used together, and play off each other beautifully, but can also be used individually. The same goes for the two “NashvillePop” styles, one of which uses a distorted guitar sound, the other clean.

**RealTracks Set 67: Rockin' in Three-Quarter Time**
3/4 (or 6/8) time has become an important part of the hard rock world. With RealTracks Set 67, you get 10 different Rock and Pop 3:4 styles. These styles can be used individually, together, or combined in A-B combinations. Also included are 12-string acoustic guitar RealTracks, both a picking style, and a strumming style.

**RealTracks Set 68: R&B Rock**
4 different modern R&B electric guitars, two guitars with a warm mellow tone, one playing basic quarter notes with embellishment, the other playing a strumming pattern. Then, we have some funkier guitar styles, one playing an off-beat pattern, the other playing a 16th-note-based groove. All of these styles have RealCharts capabilities, so you can see exactly what's being played, either on the on-screen guitar fretboard, or in notation and TAB.

**RealTracks Set 69: Rockin' in the North, Rockin' in the South**
Northern Rock and classic 80s Texas Blues-Rock grooves. 8 different guitar styles include quarter-note variations, strummed patterns, offbeat & syncopated grooves. A variety of guitar tones are employed including mellow fuzz, an edgy, gritty sound, and different registers of that Texas Rock 'n' Roll sound. All styles are equipped with RealCharts, so you can see the notes you're hearing either in TAB, notation, or on the on-screen guitar fretboard.

**RealTracks Set 70: Piano Pop**
Sophisticated, mellow piano featuring 7 different Piano RealTracks styles. Use them alone or with a rhythm section. Included are British PopLiverpool and PopLondon styles, a PopBronx style from New York, and PopFunkyTexas. All come with RealCharts for on-screen notation and piano keyboard display.

**RealTracks Set 71: Folk-Rock**
12-String Acoustic Guitar RealTracks with a variety of tempos and feels, such as slow ballad folk-rock & medium folk-rock waltz. The waltz comes with both a 12-string and a 6-string guitar style, which can be used individually, or blended together.

**RealTracks Set 72: Smooth Jazz - Swing 16ths Hip Hop**
Smooth Jazz sound with an Urban flavor. 4 RealTracks styles with classic Real Electric Piano and Electric Bass at two Hip-Hop swing 16ths tempos. The Electric Piano styles can be used either completely dry, with no effects at all, or with chorus, delay, and reverb effects for that true Smooth Jazz sound. The dry sound is perfect if you'd like to use these styles in a Rock setting, or if you'd like to add your own effects in RealBand.

**RealTracks Set 73: Smooth Jazz - Ballad and Pop**
More classic Smooth Jazz with Electric Bass styles as well as classic Real Electric Piano, both “dry” and with authentic Smooth Jazz effects. Both instruments include both a slow Ballad, and a faster even-16th-based Poppy Smooth Jazz groove. These styles are ideal to use with RealDrums Set 28, but can also be used with many of our other even 8th and even 16th Jazz RealDrums.

**RealTracks Set 74: Ballroom Latin**
Ballroom Latin made for dancing with 7 styles featuring both Acoustic Bass and Piano. Practice your musical chops, your dancing chops, or both! A perfect match with RealDrums Set 5: Latin.

**RealTracks Set 75: More Bossa**
Acoustic Bass, Electric Guitar and Piano playing a sultry medium-slow Bossa tempo. The guitar features a “FreeComp” version, with the guitar as the sole comping instrument, and a “GrooveComp” version, which is intended to work well while there is a piano comping at the same time. Both piano and guitars have RealCharts for on-screen notation and TAB plus piano keyboard and guitar fretboard displays.

**RealTracks Set 76: More Jazz Waltz**
Jazz Waltzes, with Piano, Guitar, and Acoustic Bass styles. Included are two tempos: a slow waltz ballad at 85 bpm, and a medium-slow laid-back waltz at 110 bpm. All three instruments are represented at both tempos, and in addition, there is a rehearsal piano waltz style. This style is a basic piano approach to the swing waltz, and is intended to be used by itself to back up a singer or soloist.

**RealTracks Set 77: Ballad, Stride & More**
Jazz with both electric and acoustic guitars at a variety of tempos, as well as 4 different accompaniment piano styles. The slow Jazz Ballad tempo has a free-rhythm Electric Guitar style, an Acoustic Guitar that is designed to work well with a comping piano, and a Stride Jazz Ballad piano. Also included is a slightly quicker Stride Ballad, as well as a “Rehearsal” Piano style that's great if you need a basic piano approach to back up your singing or soloing. All instruments in this set are equipped with RealCharts for on-screen notation and TAB plus piano keyboard and guitar fretboard displays.

**RealTracks Set 78: Memphis Swing**
Memphis Swing gives you 4 different RealTracks styles with 4 different approaches to this distinct version of Country Swing. Two of the styles use a crisp, clean guitar tone, one playing chords letting the notes ring, the other with a shorter staccatto approach. Then we have a guitar with a grittier tone, played either with a palm-mute effect, or with a wide open approach.

**RealTracks Set 79: Medium Country Boogie**
This set features 6 medium tempo Country Boogie guitar RealTracks including 2 acoustic guitars and 4 electrics. With acoustic guitar, you can choose between a palm-mute style of playing, or a more open approach, or you can mix-and-match, using one style for the A section of your song, and the other for the B section. You have lots to
choose from with the Electrics too, with both clean and distorted guitars, playing syncopated patterns, classic riffs, palm-mute, and twangy variations. All of these styles are equipped with RealCharts, so you can see exactly what's being played by these world-class studio musicians!

**RealTracks Set 80: Fast Country Boogie**
This set features 6 up-tempo Country Boogie guitar RealTracks including 2 acoustic guitars and 4 electrics. With Acoustic Guitar, you can choose between a palm-mute style of playing, or a more open approach, or you can mix-and-match, using one style for the A section of your song, and the other for the B section. You have lots to choose from with the Electrics too, with both clean and distorted guitars playing syncopated patterns, classic riffs, palm-mute, and twangy variations. All of these styles are equipped with “RealCharts,” so you can see exactly what's being played by these world-class studio musicians!

**RealTracks Set 81: More Country Swing**
RealTracks Set 81 adds 8 Country Swing electric guitar styles featuring both clean and “gritty” guitar sounds, played over both slow swing at 85bpm, and medium-up-tempo at 140bpm. The different variations can be used individually, or together, and they can also be used in various A-B combinations. All of these guitar styles are equipped with RealCharts, so you'll see exactly what is being played by these top Nashville studio musicians!

**RealTracks Set 82: More Country Waltz**
10 new electric guitar Country Waltz styles covering a range of tempos from 85bpm through to 140bpm with both clean guitars and distorted guitars. You can mix and match styles, either using multiple styles at the same time, or A-B combinations. And all of these guitars are equipped with RealCharts and display notation, TAB, and on-screen guitar fretboard.

**RealTracks Set 83: LA Hard Rock**
This set provides you with 4 distinct Electric Guitar styles, 2 with a “crisp” tone, and 2 with a “fuzzy” tone, so you're sure to find what you need for your song or section. Also included is the HardRockLA Bass style, a syncopated bass style with a big fat tone. As a bonus, we're also throwing in the HardRockLA RealDrums style! This style has 5 different substyle options, combined together for a total of 8 different style variations. Each substyle was recorded at 3 different tempos, and with the superior stretching features in Band-in-a-Box, the entire tempo spectrum in between tempos is also covered.

**RealTracks Set 84: Lite Pop**
This set features 12-string Acoustic Guitar RealTracks styles as well as 3 Pop Piano styles. The 12-string Acoustic Guitar provides a beautifully full sound which works great on its own, or in the context of a full band. There are two of these styles, one picking, and the other strumming, both at a slow ballad tempo. Additionally, we also include a style that uses the picking for the “a” section of your song, and strumming for the “b” section. The 3 Pop Piano styles continue our collection of solo-accompaniment piano styles. Two of the styles embody the melodic California sound, one a slow ballad, the other an upbeat energetic style. The third style is a flowing melodically arpeggiated style.

**RealTracks Set 85: Rockin' Bass**
This set features two classic Brit-Rock basses, a heavily scooped and distorted thrash bass, and a deep rockin' bass that turns out pulsing eighth notes. You can view tab and notation for every style in this set in Band-in-a-Box or RealBand. The wide range of tempos ensures that you'll have a rockin' bass for every occasion.

**RealTracks Set 86: Blues Rock**
Three unique and driving guitar styles are included: two with a crisp, unrelenting single-coil tone (which can be linked together as an A/B substyle) and one with a low, twangy fuzz tone. Also included is a dark-toned blues rock bass that syncs up nicely to the guitar styles. All of these styles are equipped with RealCharts, which means that even though you're listening to actual audio recordings of real musicians, you can see the notes they're playing on the on-screen fretboards, in TAB, in standard notation, and on the on-screen piano keyboard. Our unique stretch methods insure that you're covered for a range of tempos and all twelve keys.

**RealTracks Set 87: Electric For All Occasions**
This set offers an extensive selection of bright guitar sounds for all occasions. At each of the three tempos, we provide you with both clean and slightly distorted guitar tones. Plus you also have control over the particular texture of the guitars. All of the styles were recorded with both open chords, if you want a brighter sound, and barre chords, if you want a slightly more muted effect. All styles play any chord in any key, and our stretch methods insure that all in-between tempos are covered! All of these styles also come complete with notation and tablature.
RealTracks Set 88: 12-String Electric
RealTracks Set 88 offers some unique, clean 12-string electric guitar tones. The styles are split into two main categories: strumming and fingerpicking. The strumming styles offer a silky, sustained, solid rhythm while the fingerpicking styles deliver an open and bright feel that fills in the eighth notes. Both the strumming and fingerpicking styles were recorded at multiple tempos ranging from slow ballad to uptempo pop, and with the superior stretching features in Band-in-a-Box and RealBand, all the tempos in between are covered too! Notation and tableture are also included for all of your scoring and learning needs.

RealTracks Set 89: Northern Rock Ballad
RealTracks Set 89 provides Acoustic Guitar, High-Strung Acoustic, Banjo & Electric Bass. Both guitar styles feature open chords with traditional folk strumming patterns. These two guitars used together provide a full, rich sound by covering the full sonic spectrum. In addition, both guitars and the electric bass are equipped with RealCharts, which means not only are you getting real instruments played by real musicians, but you can see what they're playing in notation, TAB, and on the on-screen guitar/bass fretboards. The banjo is a nicely subtle, understated fingerpicking style that blends perfectly with the other instruments.

RealTracks Set 90: Jazz Organ
A collection of Jazz B3 organ styles from slow, laid-back ballads to energetic up-tempo swing and bebop. The style provides both comping and killer bass lines which play “in-2” for the A sections and walk for the B sections. There are 5 separate styles recorded over the range of tempos from 60 to 190 beats-per-minute. And, with the superior stretching features in Band-in-a-Box, all styles in between are automatically covered as well!

RealTracks Set 91: Smooth Jazz - Sax Soloing
Five new additions to your Smooth Jazz RealTracks collection: three alto saxes, a soprano, and a tenor. All of these styles show tasteful contrast with soothing melodies intertwined with fast jazz runs and phrases. This set also covers three avenues of smooth jazz: cool, poppy, and ballad. It offers a wide range of tempos ranging from dramatically slow to moderately fast. The inclusion of RealCharts means that not only will you be hearing Real Saxophone played by a top studio musician, but you'll be able to see exactly what's being played in both notation and on the on-screen piano keyboard.

RealTracks Set 92: Smooth Jazz - Trumpet Soloing
This set features four different soloists in the subgenres of cool, poppy, and ballad. The cool Jazz styles have a funky swung sixteenth note feel while the down-tempo poppy and ballad styles rely on even spacing and tasteful phrasing. You'll have a variety of tempos and all twelve keys at your fingertips thanks to the stretching methods used by Band-in-a-Box and RealBand, and with our RealCharts you'll be able to see exactly what's being played, in both notation and on the on-screen piano keyboard.

RealTracks Set 93: Smooth Jazz - Trumpet Soloing
RealTracks Set 93 adds more Rhythm & Soul to our collection of Smooth Jazz RealTracks styles! This set includes two electric piano soloist styles and two rhythm guitar styles all together. Both split up into two subgenres: a funky swung sixteenth feel and a slow even sixteenth ballad feel. And, the two electric piano styles provide you with even more options, as each one has three different effects sets: Chorus with delay effect, chorus alone, and completely dry. If you want the slick Smooth Jazz sound, go for the chorus & delay, but if you want the unadulterated sound of the real vintage electric piano, go for the dry. All four styles are also equipped with RealCharts which allow you to see the notes that are being played in notation and on the on-screen piano keyboard, and the guitars have the added benefit of correctly displaying TAB & the notes on the on-screen guitar fretboard. We've got you covered in ALL keys, and with the superior stretching features in Band-in-a-Box, a wide tempo range is covered.

RealTracks Set 94: Jazz Guitar Soloing and More
This set includes 4 electric guitar styles, ranging from medium-slow tempos up to fast bebop tempos, in both jazz waltz meters, as well as straight ahead 4:4 swing. In addition, there's an energetic samba soloist played on nylon guitar, and two solo accompaniment piano styles! These real pianos offer a fun and energetic feel and are the perfect companion to a show tunes singer. Every single style in this set is equipped with RealCharts, which means not only will you be hearing great real audio recordings of real musicians, but you'll be able to SEE what they're playing too, in notation, and on the on-screen piano keyboard. The electric guitars have the added bonus of displaying correctly in TAB and on the on-screen guitar fretboard.
RealTracks Set 95: Jazz Rhythm Guitar: Bossa and Swing
Included are four electric guitar styles that cover a large range of tempos, as well as two bossa styles, and a fast “Freddie” Acoustic Guitar. The Electrics are split into “FreeComp” and “GrooveComp” styles. The FreeComp styles are intended to be the sole comping instrument (no piano) featuring sophisticated rhythms and harmonies. The GrooveComp styles use more repetitive rhythms and more basic harmonies so that they can be used with other comping instruments such as piano or organ without getting in the way. The Bossa Guitars have a warm nylon tone, and were recorded at the tempos of 85 & 140, and with the superior stretching features in Band-in-a-Box, all of the tempos in between are also covered. The electric & acoustic guitars are also equipped with RealCharts which means that not only are you hearing actual audio performances by actual musicians, you can also see what they're playing in notation, TAB, and on the on-screen guitar fretboard.

RealTracks Set 96: Modern Bluegrass Waltz
This set includes a total of six new waltz styles on five different instruments! You will receive two acoustic guitars (one fingerpicking, one strumming), acoustic bass, fiddle, mandolin, and banjo. Every one of these styles covers all twelve keys, and covers a wide tempo range thanks to the high quality stretching features in Band-in-a-Box and RealBand.

RealTracks Set 97: Unplugged Country Swing
There are four country swing fiddle styles included, three of which feature melodic background playing over the tempo spectrum of 85 bpm ballads to the sprightly tempo of 140. Since they were recorded at intervals, the entire tempo range is covered, since Band-in-a-Box's superior stretching features can use those three tempos to cover all of the tempos in between. At 140, you also have the option of choosing the "chops" style, where the fiddle plays very short chordal shots on beats 2 & 4. This is a style that would generally only be used on faster tempo tunes. All of these styles also feature RealCharts which means that not only are you hearing audio recordings of top studio musicians playing your song, you can SEE what they're playing too, in notation & on the on-screen piano keyboard!

RealTracks Set 98: Unplugged, 12-String & Fiddle
Three strummed acoustic 12-string guitar styles and two country boogie fiddle styles, all recorded over a wide tempo range. And with the superior stretching features in Band-in-a-Box, all the tempos in between are also covered. The 12-string styles were recorded at 85, 120 & 165 beats-per-minute, so if you're song is at 95, no problem, you're covered with 85, which Band-in-a-Box can easily stretch up. Or, if you need 12-string at 160, no problem, the 165 bpm style can easily stretch down to cover that too! RealCharts are included with all 5 styles here, which means that not only do you get real audio recordings of top studio musicians playing your songs, you can see what they're doing in notation, on the on-screen piano keyboard, and for the guitars you can also view the notes in TAB and on the on-screen guitar-fretboard. And all keys are covered, so if you want to boogie down in C sharp, no problem!

RealTracks Set 99: More Country Waltz: Pedal Steel, Bass & Fiddle
Three bass styles offer a solid, rhythmic foundation over a wide tempo range, two fiddles offer a variety of melodic ideas, and two pedal steels offer rich layers of harmonies. That's a total of seven new styles, all of them crucial to your Country Waltz songs! In conjunction with previously release Country Waltz styles, it's easy to put together a full band at any tempo. All styles play effortlessly in any key, and the pedal steel & fiddle styles have the added bonus of RealCharts, which let you see the notes that are being played in notation or on the on-screen keyboard.

RealTracks Set 100: More Western Swing: Pedal Steel & Electric Guitar
RealTracks Set 100 includes 4 new electric guitar styles that can be used in conjunction with our previously release Western Swing styles. The styles were recorded at 2 tempos, 165 and 190, with basic comping patterns at both tempos; a "picked" style at the slower tempo, and a "held" style at the faster tempo. Plus we add to our increasing collection of Pedal Steel styles at both of these tempos as well. These swinging styles use the classic Western Swing C6 tuning. And you're not limited to 165 or 190, all tempos in between are also covered with the superior stretching features in Band-in-a-Box. With tempo-swapping enabled in Band-in-a-Box, the program will automatically use the best tempo for your song.

RealTracks Set 101: Folk and Country Swing
This library of country and folk crossover styles delivers a large collection on a variety of instruments. Included are Ukulele, Acoustic Bass Guitar, Electric Guitar, and Fiddle styles. The Ukulele and Acoustic Bass Guitars work well as playful duos: a moderate tempo acoustic-bass guitar and ukulele duo with a country feel and a faster tempo acoustic-bass guitar and ukulele duo with a cheerful island feel. The “Memphis” fiddle adds to our existing Electric Guitar styles, and the two Country Swing electric guitar styles can be used independently, or together as an A-B
style. The fiddle and guitar have the added bonus of having RealCharts enabled, which allows you to view the notes being played in notation, on the on-screen piano keyboard, and on an on-screen guitar-fretboard.

**More about RealTracks**
For full descriptions of all of the RealTracks sets, please go to [www.pgmusic.com](http://www.pgmusic.com) and see the RealTracks page, [http://www.pgmusic.com/products_realtracks.htm](http://www.pgmusic.com/products_realtracks.htm). While you’re there be sure to check for new releases.
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PG Music Registration Form

Please register your program. Registering your PG Music software entitles you to free, unlimited technical support, advance notice of product upgrades, and news about new product releases. If you haven't registered your PG Music software yet, please take a few moments and do so now.

**How To Register**

**Mail** to PG Music Inc., 29 Cadillac Avenue, Victoria, BC V8Z 1T3, Canada

**Fax** to 1-250-475-2937 or toll-free to 1-877-475-1444.

**On-line** at [www.pgmusic.com](http://www.pgmusic.com)

**Telephone** 1-250-475-2874, toll-free in North America at 1-800-268-6272, or + 800-4746-8742 where Universal International Freephone Service is available.

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Telephone number ____________________________ Fax number ______________________________

E-mail address ______________________________

Computer (check): IBM MAC Model ______________________________

Operating system: Windows 9x, XP; Macintosh OS X Panther) ______________________________

What MIDI interface are you using? ______________________________

What primary synth/sound card do you use? ______________________________

Favorite Styles: Jazz ____ Rock ____ Pop ____ Country ____ Latin ____ Other ___________________

Purchased from ______________________________

Date of purchase ______________________________

Comments/Suggestions

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________