Copyright and Disclaimer

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means electronic, mechanical, photocopying, recording, or otherwise without the prior written permission of CyberLink Corporation.

To the extent allowed by law, AudioDirector IS PROVIDED “AS IS”, WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTY FOR INFORMATION, SERVICES, OR PRODUCTS PROVIDED THROUGH OR IN CONNECTION WITH AudioDirector AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, EXPECTATION OF PRIVACY, OR NON-INFRINGEMENT. BY USING THIS SOFTWARE, YOU AGREE THAT CYBERLINK WILL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, OR CONSEQUENTIAL LOSS ARISING FROM THE USE OF THIS SOFTWARE OR MATERIALS CONTAINED EITHER IN THIS PACKAGE.

The terms and conditions here under shall be governed and construed in accordance with the laws of Taiwan.

AudioDirector is a registered trademark along with other company and product names mentioned in this publication, used for identification purposes and remain the exclusive property of their respective owners.

Manufactured under license from Dolby Laboratories. Dolby and the double-D symbol are registered trademarks of Dolby Laboratories. Confidential unpublished works. Copyright 1995-2005 Dolby Laboratories. All rights reserved.

International Headquarters

Mailing Address  CyberLink Corporation
                15F., No. 100, Minquan Rd., Xindian Dist.
                New Taipei City 231, Taiwan (R.O.C.)

Website  http://www.cyberlink.com

Telephone  886-2-8667-1298
Fax  886-2-8667-1385

Copyright © 2014 CyberLink Corporation. All rights reserved.
Contents

Introduction..................................................1

Welcome.................................................................1

Latest Features ......................................................1

DirectorZone and CyberLink Cloud .........................2

AudioDirector Versions ...........................................2

System Requirements..............................................4

AudioDirector Workspace.................................5

AudioDirector Rooms..............................................5

Media Library.........................................................6

Adjustments and Effects Panel..............................6

AudioDirector Timeline.........................................6

Audio Channels......................................................8

Range Selection.....................................................9

Timeline View........................................................10

Timeline Markers...................................................12

Timeline Zoom......................................................12

AudioDirector Quick Bar.......................................13

Playback Controls................................................15

Video File Playback...............................................15

Audio Level Meter................................................17

Expanding the Workspace....................................18

Keyframes Panel..................................................21

Volume Tab..........................................................21

Effect Tab............................................................21
Importing Media..................................................23
Importing Audio and Video Files........................................23
  Supported Formats ..................................................23
Downloading Audio and Sound Clips.................................24
  Downloading Sound Clips from DirectorZone .................24
  Downloading Sound Clips from CyberLink Cloud .............25
  Sound Clips Library ................................................26
Recording Audio.....................................................26
  Recording Settings ...............................................27
AudioDirector Projects.............................................29
Exporting Projects...................................................29
  CyberLink Cloud Projects .......................................30
Editing Audio.......................................................31
Converting Audio Profiles..........................................31
  Using the Editing Tools ..........................................32
Normalizing Audio Channels.......................................32
Adjusting Audio.....................................................33
  Boosting Audio Volume ..........................................33
  Applying Fades ....................................................34
  Trimming Audio ................................................36
Adjusting Length ....................................................37
Adjusting Pitch .....................................................38
Inserting Silence ...................................................39
Inserting Noise .....................................................39
Reversing Audio ...................................................40
Adjusting the Master Volume ..................................41
Panning Audio Left/Right ........................................42
Applying Audio Effects........................................43
  Using Dynamic Range Control ................................43
Adding Delays .....................................................45
Adding Reverb ................................................................. 47
Creating a Phase Effect ...................................................... 48
Creating a Flange Effect ..................................................... 49
Adding a Chorus Effect ....................................................... 51
Adding an Echo Effect ....................................................... 52
Transforming Vocals .......................................................... 53
Using the Equalizer ............................................................ 54
Applying the Radio Effect ................................................... 55
Applying the Phone Effect .................................................. 56
Applying a Noise Gate ....................................................... 57
Removing Vocals in Music ................................................... 58
Applying VST Effects ......................................................... 59

Restoring Audio ............................................................... 61
Using Visual Repair ............................................................ 61
Regional Selection Tools .................................................... 61
Repairing the Audio .......................................................... 72
Using Noise Reduction ....................................................... 74
Auto Denoise ...................................................................... 74
Noise Reduction ............................................................... 75
Using Clipping Removal ..................................................... 76
Using Click Removal ........................................................ 77
Using Hum Removal .......................................................... 78
Simple Mode ...................................................................... 78
Advanced Mode ............................................................... 79
Using Hiss Removal ........................................................... 81

Mix Room .......................................................................... 83
Creating an Audio Mix ........................................................ 83
Configuring Audio Profile Settings ....................................... 85
Adding Media to Your Mix .................................................. 85
Mixing Audio ..................................................................... 86
Using Audio Transitions ..................................................... 90
Chapter 1:

Introduction

This chapter introduces the CyberLink AudioDirector program and includes an overview of its features. It also outlines the recommended system requirements for running the program.

Welcome

Welcome to the CyberLink family of digital software programs. CyberLink AudioDirector lets you record, trim, cut, restore, and enhance digital audio from both imported audio files or the audio track in your videos. You can also apply effects to audio, save audio in different formats, and mix the audio from multiple sources into one file.

Latest Features

The latest version of CyberLink AudioDirector includes many new features that make editing audio even easier. This section lists the latest features in the CyberLink AudioDirector program.

- import and export video files in the H.265 HEVC format.
- import files in the ALAC and FLAC audio formats.
- loop back and record the audio that you are hearing on your computer using record What You Hear.
- change the voice in your audio using the Vocal Transformer.
- restore your damaged audio with saved noise profile presets and the all new hiss removal.
- utilize the mixer panel and Surround Sound Panner in the Mix room to create your perfect audio mix.
- output video with resolution as high as 2K and 4K.
- back up your sound clips, program preferences, and more with the CyberLink
Cloud storage service.

**DirectorZone and CyberLink Cloud**

You can upload/download sound clips, and back up media, preferences, projects, and more with the DirectorZone and CyberLink Cloud features.

**DirectorZone**

DirectorZone is a web service that lets you download sound clips created by other users, so you can use them in your audio. You may also share your own custom sound clips by uploading them to DirectorZone.

To access the benefits of DirectorZone, you can sign in by clicking the button at the top of the window to open the AudioDirector preferences, and then on the DirectorZone tab. See [DirectorZone Preferences](#) for more information.

Go to http://directorzone.cyberlink.com to view more information on the features and benefits of the DirectorZone web site.

**CyberLink Cloud**

CyberLink Cloud is a cloud storage service from CyberLink where users can upload and download their sound clips, AudioDirector projects, produced media clips, and more. CyberLink Cloud allows users to back up media, preferences, projects, etc., and ensure their working environment is the same on multiple computers.

*Note: CyberLink Cloud is a subscription cloud storage service that is included with some CyberLink products, and is available for purchase through our web site. For more detailed information, see [http://www.cyberlink.com/products/cyberlink-cloud/](http://www.cyberlink.com/products/cyberlink-cloud/).*

**AudioDirector Versions**

The features that are available in CyberLink AudioDirector are completely dependent on the version you have installed on your computer. Click the AudioDirector logo in the top right to determine the version and build number for your copy of CyberLink AudioDirector.
AudioDirector Live

AudioDirector Live is a subscription based version of CyberLink AudioDirector that provides all the audio editing features you expect, and adds the CyberLink Cloud storage service and more.

With a AudioDirector Live subscription, you get:

- All the advanced audio editing features of the Ultra version of CyberLink AudioDirector.
- The ability to back up program preferences, projects, and sound clips on the cloud storage space CyberLink Cloud.
- Guaranteed updates to the latest versions of CyberLink AudioDirector Ultra.

AudioDirector Live is the must-have solution for on-the-go audio editors who want easy access to their media and the latest up-to-date editing technologies.

Updating AudioDirector

Software upgrades and updates (patches) are periodically available from CyberLink. CyberLink AudioDirector automatically prompts you when either is available.

Note: you must connect to the Internet to use this feature.

To update your software, do this:

1. Open the Upgrade Information window by doing one of the following:
   - click the button.
   - click on the AudioDirector logo in the top right corner, and then on the Upgrade button in the About AudioDirector window.

2. Click the feature you would like to upgrade to, or the patch you want to update CyberLink AudioDirector with.

3. A web browser window opens, where you can purchase product upgrades or download the latest patch update.
System Requirements

The system requirements listed below are recommended as minimums for running CyberLink AudioDirector.

Note: to ensure you can enjoy all the features within CyberLink AudioDirector, make sure your computer meets or exceeds the minimum system requirements.

<table>
<thead>
<tr>
<th>Minimum System Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OS</strong></td>
</tr>
<tr>
<td>• Microsoft Windows 8/8.1 (32 bit and 64 bit).</td>
</tr>
<tr>
<td>• Microsoft Windows 7 Home Basic, Home Premium, Professional, Ultimate (32 bit and 64 bit).</td>
</tr>
<tr>
<td>• Microsoft Windows Vista Home Basic, Home Premium, Business, Ultimate (32 bit and 64 bit) - service pack 2 or higher required.</td>
</tr>
<tr>
<td><strong>Memory</strong></td>
</tr>
<tr>
<td>• 1 GB (2 GB recommended).</td>
</tr>
<tr>
<td><strong>CPU</strong></td>
</tr>
<tr>
<td>• Intel Core 2 Duo 2.0 GHz.</td>
</tr>
<tr>
<td><strong>HDD Space</strong></td>
</tr>
<tr>
<td>• 1 GB free space required.</td>
</tr>
<tr>
<td><strong>Sound Card</strong></td>
</tr>
<tr>
<td>• Windows-compatible sound card.</td>
</tr>
<tr>
<td><strong>Device</strong></td>
</tr>
<tr>
<td>• Microphone for recording audio.</td>
</tr>
<tr>
<td><strong>Resolution</strong></td>
</tr>
<tr>
<td>• 1024x768 16 bit color or higher.</td>
</tr>
<tr>
<td><strong>Internet Connection</strong></td>
</tr>
<tr>
<td>• Required for program activation and other online services.</td>
</tr>
</tbody>
</table>
Chapter 2: 

AudioDirector Workspace

This chapter provides a complete overview of the CyberLink AudioDirector workspace. It also takes you through the settings used to customize the program to your preference.

AudioDirector Rooms

CyberLink AudioDirector has the following main rooms: the Edit, Restore, Mix, and Create CD rooms.
- **Edit**: in this room you can adjust, trim, cut, and enhance digital audio, and much more. See [Editing Audio](#) for more information.

- **Restore**: in this room you can repair audio clips using the Click Removal, Clipping Removal, and Noise Reduction features, or manually fix audio using the Visual Repair. See [Restoring Audio](#) for more information.

- **Mix**: in this room you can record and mix multiple audio tracks into one customized audio file. See [Mixing Audio](#) for more information.

- **Create CD**: in this room you can use the media in the library to create CDs in the audio CD format. See [Creating CDs](#) for more information.

The workspace within each CyberLink AudioDirector room is different, but do contain common features and areas. All the rooms have the audio library, as well as the AudioDirector quick bar you use to edit and add audio as required.

### Media Library

When you import media into CyberLink AudioDirector, it is available in the media library. You can freely edit, restore, and apply effects to all of the media in the media library, or use the media in the Mix room.

You can import audio and also video files into the media library, as CyberLink AudioDirector lets you edit and restore the audio track of videos you import.

See [Importing Media into the Library](#) for more information on importing audio and videos files into the media library.

### Adjustments and Effects Panel

The adjustments and effects panel is where you set the edits you want to make to your audio clips and apply effects. The adjustments and effects that are displayed depends on which room you are in.

### AudioDirector Timeline

The timeline is a visual representation of the digital audio files selected in the media library. When a media file is selected, CyberLink AudioDirector displays each of its audio channels separately in the timeline.
**Note:** the timeline can display up to 8 channels (7.1 channel). See Audio Channels for more information.

By default, the values along the top represent the playback time, while the values along the right indicate the audio intensity, or loudness, measured in decibels.

![Timeline Example](image)

**Note:** you can switch the view of the timeline by clicking the buttons in the top right corner of the program. See Timeline View for more information.

The timeline is available in the Edit, Restore, and Mix rooms of CyberLink AudioDirector, and is where you work on editing, restoring, and mixing your audio files.

When you click the play button, the timeline slider begins to move, indicating the current playback position. If required, you can click and drag the timeline slider to any position if you want to jump forward in the audio.

In the Mix room there are multiple tracks in the timeline. Each file you add, adds another layer of audio onto the final outputted media represented by the Master Track.

![Mixing Example](image)

See Mixing Audio for information on mixing audio in CyberLink AudioDirector.
Audio Channels

When a media file is selected in the library, CyberLink AudioDirector displays all of its audio channels in the timeline. The timeline can display up to eight channels, and supports the following audio channel configurations:

- 7.1 surround sound (8 channels).
- 5.1 surround sound (6 channels).
- stereo (2 channels).
- mono (1 channel).

**Note:** CyberLink AudioDirector supports the import and edit of audio and video files with 5.1 channel audio. It also supports the import of audio and video files with 7.1 channels, but only for .WAV audio files are all 8 channels displayed in the program and available for editing. For video files with 7.1 channel audio, two of the audio channels (BL/BR) are hidden and unavailable for editing.

Multi-Channel Display

When a media file has more than one audio channel, each audio channel is labeled in the top left corner. The following table defines the terminology for all the possible audio channel types available in a selected media file and the possible availability for the various audio channel configurations:

<table>
<thead>
<tr>
<th>Channel Label</th>
<th>Channel Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>Front left</td>
</tr>
<tr>
<td>R</td>
<td>Front right</td>
</tr>
<tr>
<td>C</td>
<td>Center</td>
</tr>
<tr>
<td>LFE</td>
<td>Low-frequency effects</td>
</tr>
<tr>
<td>BL</td>
<td>Back left</td>
</tr>
<tr>
<td>BR</td>
<td>Back right</td>
</tr>
<tr>
<td>Lc</td>
<td>Front left of center</td>
</tr>
<tr>
<td>Rc</td>
<td>Front right of center</td>
</tr>
<tr>
<td>BC</td>
<td>Back center</td>
</tr>
<tr>
<td>Channel</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>----------------</td>
</tr>
<tr>
<td>Ls</td>
<td>Side left</td>
</tr>
<tr>
<td>Rs</td>
<td>Side right</td>
</tr>
<tr>
<td>TpC</td>
<td>Top center</td>
</tr>
<tr>
<td>TpFL</td>
<td>Top front left</td>
</tr>
<tr>
<td>TpFC</td>
<td>Top front center</td>
</tr>
<tr>
<td>TpFR</td>
<td>Top front right</td>
</tr>
<tr>
<td>TpBL</td>
<td>Top back left</td>
</tr>
<tr>
<td>TpBC</td>
<td>Top back center</td>
</tr>
<tr>
<td>TpBR</td>
<td>Top back left</td>
</tr>
</tbody>
</table>

**Note:** the type of channel that is available in the selected media file is completely dependent on the audio configuration of the file.

### Selecting Channels for Editing

When you are editing and restoring audio in CyberLink AudioDirector, you can choose to apply the edits, effects, fixes, etc. to all the channels, or just one single channel.

Click ![select_all](image) if you want to apply the edits to all of the audio channels, or ![select_channel](image) to make edits on one specific channel only. Once selected, just click the channel you want to apply the edits to in the timeline.

### Range Selection

When editing and restoring audio, drag the timeline slider to a position in the timeline (or use the playback controls to find the position), and then click and drag one of the yellow nodes on either side of the timeline slider to select a range of the audio.
You can also click and drag on the waveform directly to select a range of the audio.

Note that when you select a range of the audio, the editing tools on the AudioDirector quick bar become active. See Using the Editing Tools for detailed information about using each of these tools.

Details about the selected range are indicated in the Start, End, and Length fields below the timeline. Once you have a range of an audio file's wave form selected, you can then preview, cut, copy, delete or crop it as required.

**Timeline View**

When a file is selected in the media library in the Edit or Restore rooms, CyberLink AudioDirector by default displays the waveform view for each channel in the timeline.

There are two available timeline views to choose from: click 🎵 for the waveform view, or 📊 for spectral frequency view.

Click the buttons in the top right corner of the timeline to switch between the two available views.

**Waveform View**

When a file is selected in the media library, CyberLink AudioDirector by default displays the waveform information for each channel in the timeline. The waveform
view is a visual representation of both the time and the audio intensity (or loudness, measured in decibels) of the audio in each channel.

Spectral Frequency View

The spectral frequency view is a graphical representation of the audio in each channel, and is ideal when using the Visual Repair feature. The colored graph you see in this view is a three dimensional illustration of the audio attributes in the selected media file.

The graph shows playback time along the top, and the frequency (relative pitch) of the audio (measured in hertz) along the right. The colors on the graph indicate the amplitude or strength of the audio at the point in time. The lighter the color, the louder the audio is at that frequency and time.
Timeline Markers

When editing, restoring, or mixing audio, click to add a timeline marker at the current position of the timeline slider. Markers are used to mark the positions in your audio files where you might want to edit the audio file or start an effect from. In the Mix room, use markers when adding audio clips as they will snap to the timeline markers.

Adding Timeline Markers

To add a timeline marker, do this:

1. Use the playback controls to find, or drag the timeline slider to the position where you want the marker, and then click .
2. Input a Description for the new timeline marker, if required.
3. Click on OK to add the new timeline marker.

Note: you can double click on a time marker to edit its properties, if required.

Timeline Zoom

When editing, restoring, or mixing audio on the timeline, use the controls to zoom in on the audio timeline to make your editing more precise. There are two types of zooming available: horizontal zoom and vertical zoom.

Note: when using the zoom controls, you can click the button at any time to zoom all the way back out for a full view of the audio waveform.

Horizontal Zoom

The horizontal zoom controls let you increase/decrease the time magnification of the audio in the timeline.

Use these zoom controls if you want to, for example, zoom in on a specific two
seconds in an audio clip.

**Vertical Zoom**

Vertical zoom lets you increase/decrease the intensity magnification of the audio in the timeline.

![Vertical Zoom Control]

Use these zoom controls if you want to, for example, zoom in on a specific noise to get a closer look at the waveform.

**AudioDirector Quick Bar**

The AudioDirector quick bar offers you several tools you can access in all the rooms. Depending on which room you are in, the buttons on the quick bar differ.

![AudioDirector Quick Bar]

The available functions on the AudioDirector quick bar are as follows:

*Note: see Creating CDs for a description of the tools on the quick bar in the Create CD room.*

<table>
<thead>
<tr>
<th>Button</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Profile/Quality" /></td>
<td>If in the Edit or Restore room, click this button to change the profile or quality of the selected media file. See Converting Audio Profiles for more information. If you're in the Mix room, click it to configure the profile settings of the mixed audio you produce. See Mixing Audio for more detailed information.</td>
</tr>
<tr>
<td><img src="image" alt="Cut" /></td>
<td>In the Edit, Restore, and Mix rooms you can click on this button to cut a selected portion out of the audio file, and place it on your clipboard for pasting. See Using the Editing Tools for more detailed information.</td>
</tr>
<tr>
<td><img src="image" alt="Copy" /></td>
<td>In the Edit, Restore, and Mix rooms you can click on this button to make a copy of a selected portion on your clipboard for pasting. See Using the Editing Tools for more detailed information.</td>
</tr>
<tr>
<td></td>
<td>Description</td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>![Clip]</td>
<td>In the Edit, Restore, and Mix rooms you can click on this button to paste the audio waveform you cut or copied to the right of the current timeline position. See <a href="#">Using the Editing Tools</a> for more detailed information.</td>
</tr>
<tr>
<td>![Trash Can]</td>
<td>In the Edit, Restore, and Mix rooms you can click on this button to delete a selected portion of the audio file. See <a href="#">Using the Editing Tools</a> for more detailed information.</td>
</tr>
<tr>
<td>![Crop]</td>
<td>In the Edit, Restore, and Mix rooms you can click on this button to crop to the selected portion of the audio file. See <a href="#">Using the Editing Tools</a> for more detailed information.</td>
</tr>
<tr>
<td>![Markers]</td>
<td>In the Edit, Restore, and Mix rooms you can click this button to add timeline markers at the current timeline slider position. See <a href="#">Timeline Markers</a> for more detailed information.</td>
</tr>
<tr>
<td>![Normalize]</td>
<td>In the Edit, Restore, and Mix rooms you can click this button to normalize the selected audio. See <a href="#">Normalizing Audio</a> for more information.</td>
</tr>
<tr>
<td>![Share]</td>
<td>In the Edit, Restore, and Mix rooms you can click this button to share the selected audio file on DirectorZone. See <a href="#">Sharing Audio on DirectorZone</a> for more detailed information.</td>
</tr>
<tr>
<td>![Produce]</td>
<td>In the Edit, Restore, and Mix rooms you can click this button to produce the selected audio or video file, exporting it with all the edits you made applied. See <a href="#">Producing Audio</a> for more detailed information.</td>
</tr>
<tr>
<td>![Mix Track]</td>
<td>Click this button in the Mix room to add a mix track to the timeline. See <a href="#">Mixing Audio</a> for more detailed information.</td>
</tr>
<tr>
<td>![Split]</td>
<td>Click this button in the Mix room to split an audio file that is selected on a mix track into two separate parts. See <a href="#">Mixing Audio</a> for more detailed information.</td>
</tr>
</tbody>
</table>
Playback Controls

Once media is imported into the program, use the available playback controls to preview it. To preview a file, select it in the media library and then use the controls as follows:

<table>
<thead>
<tr>
<th>Playback Controls</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Play" /></td>
<td>Click to play the audio from the current position to the end of the track.</td>
</tr>
<tr>
<td><img src="image" alt="Pause" /></td>
<td>Click to pause playback.</td>
</tr>
<tr>
<td><img src="image" alt="Stop" /></td>
<td>Click to stop playback.</td>
</tr>
<tr>
<td><img src="image" alt="Repeat" /></td>
<td>If <img src="image" alt="Repeat" /> is displayed, the current audio file plays to the end of the track. If <img src="image" alt="Repeat" /> is displayed, the audio will loop continuously until you click pause or stop. Click to toggle between the two available audio playback behaviors.</td>
</tr>
<tr>
<td><img src="image" alt="Timeline" /></td>
<td>Click to make the timeline slider jump to the beginning of the current selected audio track or selected range of the audio waveform.</td>
</tr>
<tr>
<td><img src="image" alt="Rewind" /></td>
<td>During playback, click and hold this button to rewind through the current audio track.</td>
</tr>
<tr>
<td><img src="image" alt="Fast Forward" /></td>
<td>During playback, click and hold this button to fast forward through the current audio track.</td>
</tr>
<tr>
<td><img src="image" alt="End Timeline" /></td>
<td>Click to make the timeline slider jump to the end of the current selected audio track or selected range of the audio waveform.</td>
</tr>
<tr>
<td><img src="image" alt="Record" /></td>
<td>Click to record custom audio in CyberLink AudioDirector. See Recording Audio for detailed information on recording custom audio in the program.</td>
</tr>
</tbody>
</table>

Video File Playback

When you import video files into the library, a small video preview displays in the bottom left corner of the CyberLink AudioDirector window when it is selected. When you click play, the video plays with the audio for added reference when editing the video file's audio track.
During playback, you can:

- click \[\text{[]}\] to minimize the video preview window. Click \[\text{[]}\] to restore it.

- click \[\text{[]}\] to undock the preview window if you would like a larger preview that you can resize to your preference.
• the video preview window also includes slightly different playback controls, that include the \( \text{ } \) and \( \text{ } \) buttons you can use to step backwards or forwards one frame when the video is paused.

• click \( \text{ } \) to re-dock the preview window to the bottom left.

**Audio Level Meter**

Use the audio level meter to view the audio level, or loudness in decibels, of the current clip at different moments in time during playback. If the audio levels rise to the red levels, you can adjust the master volume to lower the audio level.

In the Mix room, each mix track has its own audio level meter. Just use the volume slider to the left of the track to adjust the audio level as necessary.
There are also audio level meters for each track in the Mix room’s mixer panel. See Mixer Panel for more information.

Expanding the Workspace

You can adjust the CyberLink AudioDirector workspace to fit your editing requirements. For example, you can expand out the adjustment and effects panel to get better look at all the available controls, if required.
You can also expand the keyframe panel for a better view when adjusting the master volume and panning audio left or right. Doing so, reduces the width of the audio tracks in the timeline.
If you have lots of media in the library, you can expand it to view all the files.
Keyframes Panel

The keyframes panel provides powerful and precise editing tools in the Edit room. On the Volume tab you can adjust the master volume of audio, or pan audio to the left or right channel. On the Effect tab, you can precisely apply multiple effects to a single audio clip.

Volume Tab

On the Volume tab on the keyframes panel, you can adjust the master volume and pan audio the left or right.

See Adjusting Master Volume and Panning Audio Left/Right for more detailed information on the use of these editing features.

Effect Tab

The Effect tab shows you precisely where effects you applied are located in the audio clip you are editing.

On this tab you can perform the following on the effects:

- deselect an effect to disable it and preview the audio without the effect applied. Reselect it to reapply it.
- hover your mouse over the effect on the tab and then click to edit the effect in the effects panel.
• to remove effects, hover your mouse over the effect on the tab and then click on the individual effect. Click to the right of the panel to remove all the similar effects from the entire timeline.
Chapter 3:

Importing Media

You can import both audio and video files from your hard drive or from a removable device, into CyberLink AudioDirector. You can also record your own custom audio, or download sound clips from DirectorZone directly into the library.

**Note:** when media is imported into the library, CyberLink AudioDirector creates a temp working file for each file. It uses the file to log the edits and changes you want to make to the original files. The changes are not applied to the original file, as you must produce the audio and output it as a new file to apply them.

Importing Audio and Video Files

To import audio or video from your hard drive or a removable device, click , browse to its location, and then click on **Open**. You can import multiple files into the library at once and then work on them all in CyberLink AudioDirector.

When importing video files you must make sure that **Video files** is selected from the format type drop-down so that the files you are trying to import are visible.

Once imported, use the playback controls to preview both the audio and video. See **Playback Controls** for more information.

Supported Formats

CyberLink AudioDirector supports the import of audio and video files in the following formats:

**Audio:** AIF, AIFF, CAF, FLAC, MP3, M4A (AAC, ALAC), OGG, WAV, WMA**.

**Note:** ** CyberLink AudioDirector does not support the editing of WMA audio files with DRM file protection.

**Video:** 3GPP2, AVI, DivX (on Windows 7), DV-AVI, DVR-MS, HD MPEG-2, M2T (H.264 AVC, H.265 HEVC), MKV (H.264 AVC, H.265 HEVC), MOD, MOV, MOV (H.264 AVC), MP4 (H.264 AVC, H.265 HEVC), MPEG-1, MPEG-2, TOD, VOB, VRO, WMV, WMV-HD.
Note: CyberLink AudioDirector supports the import and edit of audio and video files with 5.1 channel audio. It also supports the import of audio and video files with 7.1 channels, but only for .WAV audio files are all 8 channels displayed in the program and available for editing. For video files with 7.1 channel audio, two of the audio channels (BL/BR) are hidden and unavailable for editing.

Downloading Audio and Sound Clips

You can download audio files and sound clips from DirectorZone and CyberLink Cloud. The sound clips are stored in the Downloaded Sound Clips Library of CyberLink AudioDirector.

Downloading Sound Clips from DirectorZone

You can download sound clips from DirectorZone that was shared by other CyberLink AudioDirector users.

To download sound clips from DirectorZone, do this:

1. Click on and then select Download Sound Clips from DirectorZone. CyberLink AudioDirector launches DirectorZone in your default web browser.

2. You must first sign in to DirectorZone to download content. If you don't have an account, click the Sign up link at the top of the page to get one for free.

3. Select the AudioDirector tab to display all the available sound clips you can download.

4. Find a sound clip that you want to download, and then click the Download Now button underneath it.

5. Click Download again.

6. Save the sound clip to your computer. Find the location on your computer where you saved it, and then double-click on it to install it in the Downloaded Sound Clips Library.
My DirectorZone Sound Clips

In the My DirectorZone window you can conveniently download your custom sound clips that you previously uploaded to DirectorZone. You can also access and download sound clips from your DirectorZone download history and also your favorite sound clips.

To download My DirectorZone sound clips, do this:

1. Click on the button.
2. Click the My DirectorZone tab.
3. Filter the sound clips by My Uploads, Download History, or My Favorites, or enter a search keyword in the field provided.
4. Select all of the sound clips you want to download.
5. Click Download them to your computer and import them into the sound clips library.

Downloading Sound Clips from CyberLink Cloud

If you have a CyberLink Cloud subscription you can download the sound clips you previously backed up to CyberLink Cloud. Once downloaded, these sound clips are stored in the download folder specified in CyberLink Cloud Preferences, and imported into the sound clips library.

To download sound clips from CyberLink Cloud, do this:

1. Click on button.
2. Click the My CyberLink Cloud tab.
3. Filter the sound clips by selecting a collection from the drop-down, or enter a search keyword in the field provided.
4. Select all of the sound clips you want to download.
5. Click Download to download them to your computer and import them into the sound clips library.
Sound Clips Library

Click the button to open the sound clips library of CyberLink AudioDirector. In the sound clips library you can manage and organize the clips you downloaded from DirectorZone and CyberLink Cloud*.

Note: * CyberLink Cloud is a cloud service from CyberLink that is currently only available to users who have a subscription to AudioDirector Live.

In the sound clips library you can:

- view sound clips by category.
- preview the sound clips in the library.
- import the selected sound clips into your current project.

Recording Audio

In CyberLink AudioDirector you can record your own custom audio in the WAV format, which is added directly into the timeline. The audio that is recorded is placed onto any existing audio in the timeline.

You can record using a connected microphone, or select the What do you hear? option to record audio coming from an audio device that is connected to your computer.

To record audio, do this:

1. If required, click on to open and configure the recording settings, including setting the recorded audio source. See Recording Settings for detailed information.

2. To begin recording audio, click .

3. Click again to stop recording and save/import the recorded file into the CyberLink AudioDirector library.
Recording Settings

Set your recording settings as follows:

- **Devices**: select the import source, or audio device, you want to use to record audio with by doing one of the following:
  - **Microphone**: select this option and then the microphone from the list if you want to record from a connected microphone.
  - **What You Hear**: select this option to loop back and record the audio that you are hearing on your computer. Just select from the devices connected to your computer that is the source of the audio, i.e. sound card, speakers, etc.

- **Channels**: select the channel (or **Stereo** if you want it recorded in both channels) you want the audio recorded to.

- **Sample rate**: set the sample rate of the recorded file by selecting it from the drop-down.

- **Bit depth**: set the bit depth of the recorded file by selecting it from the drop-down.

- **Monitor input**: set this option to **On** if you want to hear the import source during the recording. If set to **Off**, you cannot hear the input source during recording.

- **Countdown timer**: select this option to enable a countdown before CyberLink AudioDirector begins recording audio. Set the length of the countdown (maximum 30 seconds) in the field provided.

Click **OK** to save any changes you make to the recording settings.
CyberLink AudioDirector
Chapter 4:

AudioDirector Projects

When editing, restoring, and mixing audio in CyberLink AudioDirector, click the button to save your work as a project in the .ads file format, which is used exclusively by CyberLink AudioDirector.

*Note:* A CyberLink AudioDirector project (.ads) file essentially contains a list of the audio and video files in the library, and that you are editing or mixing. The project file maintains a log of all the edits and effects you want to apply to audio, as well as a list of the audio for mixing and other use preferences (volume levels, timeline markers, etc.). Project files do not include the audio and video clips in them.

Use the options in the File menu to save, create new, or open existing projects in CyberLink AudioDirector. If you have a CyberLink Cloud subscription you can also upload saved projects and more to CyberLink Cloud. See CyberLink Cloud Projects for more information.

*Note:* When you create a new project, CyberLink AudioDirector resets your library.

The changes you make to your audio clips in CyberLink AudioDirector do not affect the original audio files you imported into the program. Since your edits are all saved in the project file, you can edit and make adjustments to your clips, but still keep your original files on your hard drive, untouched. So let yourself get creative. If you end up changing things too drastically, you can always start over.

Exporting Projects

You can export your CyberLink AudioDirector projects by packing all the materials in a folder on your computer's hard drive or CyberLink Cloud*. Exported projects can then be imported into another computer running CyberLink AudioDirector.

To export your project, select File > Export/Pack Project Materials. If you are an AudioDirector Live subscriber you can select File > Pack Project Materials and Upload to CyberLink Cloud to back up all the media files, and the project file, in a folder on CyberLink Cloud.
**Note:** *CyberLink Cloud is a cloud service from CyberLink that is currently only available to users who have a subscription to AudioDirector Live.*

**CyberLink Cloud Projects**

If you have a CyberLink Cloud subscription you can select **File > Upload Project to CyberLink Cloud** to store project files on the CyberLink Cloud service from CyberLink.

To open a project that was saved on CyberLink Cloud, including projects that were packed in a folder with their media (materials), select **Download Project from CyberLink Cloud** from the **File** menu. In the window that displays, select a project and then click **Download**.

**Note:** when you open a packed project stored on CyberLink Cloud, the project file and all the project media is downloaded to your local computer and stored in the download folder specified in **CyberLink Cloud Preferences**.
Chapter 5:

Editing Audio

Once you import media into the library, you can start editing its audio in the Edit room. In the Edit room you can use the editing tools to crop and trim the audio, or use the adjustment options to change audio length, pitch, apply fades, and much more. You can also apply rich audio effects to audio to enhance it, or to achieve a desired result.

If required, click the Edit button to begin editing, adjusting, and applying effects to audio.

*Note:* the changes to the audio are not applied to the original file, as you must produce it as a new file in the Produce window. See Producing the Audio for more information.

Converting Audio Profiles

CyberLink AudioDirector lets you convert the audio profile of a media (audio or video) file by adjusting its sample rate, bit depth, and the number of audio channels it contains.

To convert the audio profile of a media file, do this:

1. Select the media file in the library that you want to convert.

2. Click the button.

3. As required, change the following audio profile settings:
   - **Sample rate:** select the new sample rate you want the media file to have. A higher sample rate increases audio quality and file size.
   - **Bit depth:** select the new bit depth you want the media file to have. A higher bit depth also increases the audio quality and file size.
   - **Channels:** set the number of channels you want the media file to have. Note that added channels are left empty, allowing you to further edit them in CyberLink AudioDirector later.
   - **CyberLink TrueTheater Surround:** if you want to increase the number of channels in the audio, select this option to use CyberLink TrueTheater Surround to enhance the quality of the expanded audio. You can choose
from Living Room, Theater, or Stadium.

4. Click **OK** to apply the changes.

### Using the Editing Tools

Use the editing tools on the AudioDirector quick bar to crop, trim, and even add portions (using the paste function) to your audio.

To edit an audio file, do this:

1. Click the **Edit** button to open the edit audio room.
2. Select the media file in the library that you want to edit.
3. Decide whether you want to perform the edits on all the available channels, or just one channel. See **Selecting Channels for Editing** for more information on selecting channels.
4. Use range selection to select the portion of audio you want to edit. See **Range Selection** for more information on selecting a range of an audio file.
5. Use the editing tools to perform edits on your audio files as follows:

<table>
<thead>
<tr>
<th><strong>Editing Tools</strong></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Cut" /></td>
<td>Click to cut the selected portion out of the audio file, and place it on your clipboard for pasting.</td>
</tr>
<tr>
<td><img src="image" alt="Copy" /></td>
<td>Click to make a copy of the selected portion on your clipboard for pasting.</td>
</tr>
<tr>
<td><img src="image" alt="Paste" /></td>
<td>Click to paste the audio waveform you cut or copied to the right of the timeline slider's current position.</td>
</tr>
<tr>
<td><img src="image" alt="Delete" /></td>
<td>Click to delete the selected portion of the audio file.</td>
</tr>
<tr>
<td><img src="image" alt="Crop" /></td>
<td>Click to crop out the selected portion of the audio file, removing the parts of the audio file that are not selected.</td>
</tr>
</tbody>
</table>

### Normalizing Audio Channels

If you find that audio on some channels is much louder than on other channels when editing or restoring it, you can normalize the volume across all channels.
Normalizing is the process of applying a constant amount of gain to your audio file to bring the average or peak amplitude (volume levels) to a same level.

To normalize the audio channels for a media file, do this:

**Note:** this section is for normalizing the audio across all channels in the Edit and Restore rooms. For information on normalizing the audio in the Mix room see Normalizing Audio Across Multiple Tracks.

1. Select the media file in the library that has the audio channels you want to normalize.
2. If required, use range selection to select the portion of audio you want to normalize. See Range Selection for more information on selecting a range of an audio file.
   **Note:** be sure to select the entire audio file's waveform if you want to normalize the audio in the entire track.
3. Click the button to normalize the volume of the selected audio channels.

### Adjusting Audio

Once you have imported media into the library, you can start using the features in the adjustments and effects panel to modify the audio to fit your requirements. To begin, select the media you want to adjust and then click Adjust Audio to display all the available adjustment options.

**Note:** when you make adjustments to audio, they are not applied to the original file until you produce it in the Produce window. See Producing the Audio for more information.

### Boosting Audio Volume

Use the Boost feature to increase the volume of audio. You can boost the volume by up to 12 decibels.

To boost audio volume, do this:

1. Select the media file in the library that you want to adjust.
2. Click Boost under the Adjust Audio section.
3. Decide whether you want to boost the audio's volume on all the available channels, or just one channel. See Selecting Channels for Editing for more
information on selecting channels.

4. Use range selection to select the portion of audio you want to boost. See Range Selection for more information on selecting a range of an audio file.

   *Note: the entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.*

5. Drag the Volume slider, boosting the selected range of audio the desired decibels.

6. If required, you can preview how the adjusted audio will sound by selecting Adjusted result and then clicking the play button on the playback controls. Select Original audio if you want to play the original audio.

7. Click Apply to apply the boost.

## Applying Fades

Use the Fades feature to apply fades to audio. You can make the audio fade in or out in a variety of ways.

To apply a fade to audio, do this:

1. Select the media file in the library that you want to adjust.

2. Click Fades under the Adjust Audio section.

3. Decide whether you want to apply the fade on all the available channels, or just one channel. See Selecting Channels for Editing for more information on selecting channels.

4. To fade the audio in from the beginning of the clip, select the Fade in option and then set the following:

   - select from one of the three fade in types:  - a gradual fade in that increases the volume proportionately during the length of the fade;  - fades audio in dramatically at first, and then tapers off towards the end of the fade;  - exponentially increases the audio as it progresses through the length of the fade.

   - Initial volume: set the level of the audio's volume at the beginning of the fade in.
by default the fade in duration is 5 seconds. To change the duration, click and drag the grey square to the desired time you want the fade to end, i.e the audio to be at full volume.

5. To fade the audio out at the end of the clip, select the **Fade out** option and then set the following:

- select from one of the three fade out types: 
  - a gradual fade out that decreases the volume proportionately during the length of the fade; 
  - fades audio out dramatically at first, and then tapers off towards the end of the fade; 
  - exponentially decreases the audio as it progresses through the length of the fade.

- **End volume**: set the level of the audio’s volume at the end of the fade out.

- by default the fade out duration is 5 seconds. To change the duration, click and drag the grey square to the desired time you want the audio to begin fading out.
6. If required, you can preview how the adjusted audio will sound by selecting Adjusted result and then clicking the play button on the playback controls. Select Original audio if you want to play the original audio.

7. Click Apply to apply the fade.

**Trimming Audio**

Use the Trim Audio feature to trim out unwanted portions from your media clip's audio.

To trim audio, do this:

1. Select the media file in the library that you want to trim.

2. Click Trim Audio under the Adjust Audio section.

3. Decide whether you want to perform the trim on all the available channels, or just one channel. See Selecting Channels for Editing for more information on selecting channels.
4. Use range selection to select the portion of audio you want to trim. See Range Selection for more information on selecting a range of an audio file.

5. Select the Mode of trimming you want to perform as follows:
   - **Remove selected part**: select if you want to trim out the part you selected in the previous step.
   - **Keep selected part**: select if you want to keep the part you selected in the previous step, removing the portions on either side.

   **Note**: if required, click to use the Mark in and Mark out previews to listen to the audio a few seconds before and after the trim points to ensure you are trimming the audio you want.

6. Click Apply to trim the audio.

**Adjusting Length**

Use the Adjust Length feature to change the length of audio by speeding it up, or by slowing it down.

To adjust the length of audio, do this:

1. Select the media file in the library that you want to adjust.

2. Click Adjust Length under the Adjust Audio section.

3. Decide whether you want to perform the adjustment on all the available channels, or just one channel. See Selecting Channels for Editing for more information on selecting channels.

4. If required, use range selection to select the portion of audio you want to adjust the length of. If you don't select a range, the adjustment is applied to the entire audio file. See Range Selection for more information on selecting a range of an audio file.

   **Note**: the entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

5. To adjust the length of the audio, do one of the following:
   - Manually enter the New audio length in the field provided. Use this feature if you want the audio to be an exact specified length.
   - Use the Stretch ratio slider to set the increase/decrease amount you want to use.
Select the Keep pitch option to have CyberLink AudioDirector maintain the pitch of the original audio, so that the adjusted result does not sound sped up or slowed down.

**Note**: Keep pitch is only available if the change to the audio's length is between 0.5X and 2X.

7. If required, you can preview the adjusted audio by selecting Adjusted result and then clicking the play button on the playback controls. Select Original audio if you want to play the audio at its original length.

8. Click **Apply** to adjust the length of the audio.

### Adjusting Pitch

Use the Adjust Pitch feature to change the pitch of the audio. The resulting effect is audio that sounds like it is sped up or slowed down, without changing the length of the audio.

To adjust the pitch of audio, do this:

1. Select the media file in the library that you want to adjust.
2. Click **Adjust Pitch** under the **Adjust Audio** section.
3. Decide whether you want to perform the adjustment on all the available channels, or just one channel. See **Selecting Channels for Editing** for more information on selecting channels.
4. If required, use range selection to select the portion of audio you want to adjust the pitch in. If you don't select a range, the adjustment is applied to the entire audio file. See **Range Selection** for more information on selecting a range of an audio file.

**Note**: the entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

5. Drag the **Semitones** slider to adjust the pitch up or down as required.

**Note**: increasing/decreasing by one semitone is equivalent to changing the overall the pitch up/down one musical note in a 12-tone scale. For example, C to C# (sharp) or C to Cb (flat).
6. If required, you can preview how the adjusted audio will sound by selecting Adjusted result and then clicking the play button on the playback controls. Select Original audio if you want to play the audio at its original pitch.

7. Click Apply to adjust the pitch of the audio.

## Inserting Silence

Use the Insert Silence feature to add a specified amount of silence into audio clips.

To insert silence into audio, do this:

- **Note:** you can also silence a range of audio by selecting it, right clicking on the selection, and then selecting Silence Selected. This does not insert a range of silence, but rather silences the selected audio.

1. Select the media file in the library that you want to add silence to.
2. Click Insert Silence under the Adjust Audio section.
3. Decide whether you want to perform insert the silence on all the available channels, or just one channel. See Selecting Channels for Editing for more information on selecting channels.
4. Drag the timeline slider to the position in the audio clip where you want to insert the silence.
5. Enter the duration, in seconds, of the silence to be inserted in the field provided.
6. Click Apply to insert the silence.

## Inserting Noise

Use the Insert Noise feature to add a specified amount of generated noise, or static, into audio clips.

To insert noise into audio, do this:

1. Select the media file in the library that you want to add noise to.
2. Click Insert Noise under the Adjust Audio section.
3. Decide whether you want to perform insert the noise on all the available channels, or just one channel. See Selecting Channels for Editing for more information on selecting channels.
4. Drag the timeline slider to the position in the audio clip where you want to insert the noise.

5. Select one of the following types of noise from the **Noise type** drop-down:
   - **Normal**: common white noise, or static, which can be quite loud to the listener.
   - **Pink**: static like noise that sounds softer and quieter than normal white noise.
   - **Brown**: a lower frequency static like noise, which is quite quiet compared to the others.

6. Enter the duration, in seconds, of the noise to be inserted in the field provided.

7. Click **Apply** to insert the noise.

### Reversing Audio

Use the Reverse feature to make a selected audio clip play in reverse.

To reverse audio, do this:

1. Select the media file in the library that you want to reverse.

2. Click **Reverse** under the **Adjust Audio** section.

3. Decide whether you want to perform reverse the audio on all the available channels, or just one channel. See [Selecting Channels for Editing](#) for more information on selecting channels.

4. If required, use range selection to select the portion of audio you want to reverse. If you don’t select a range, the adjustment is applied to the entire audio file. See [Range Selection](#) for more information on selecting a range of an audio file.

   **Note**: the entire audio file’s waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

5. If required, you can preview how the reversed audio will sound by selecting **Adjusted result** and then clicking the play button on the playback controls. Select **Original audio** if you want to play the original audio.

6. Click **Apply** to reverse the audio in the selected clip.
Adjusting the Master Volume

CyberLink AudioDirector lets you adjust the volume of an audio file at any point in the timeline. You can make it louder at a certain moment, and then quieter at another, as required.

To adjust the master volume of an audio file, do this:

1. Use the playback controls or drag the timeline slider to the position where you want the audio to reach its loudest/quietest point.

2. Click on the **Volume** tab in the keyframe panel, and then click on the line in the Volume area and drag the volume key to desired volume level.

3. Use the playback controls or drag the timeline slider to locate the position where you want the change in audio level to begin.

4. Click on the line in the master volume area and drag the volume key back to the original volume level.

*Note: this last step is just a recommendation, and is not necessary if you want the audio to fade up or down from the very beginning to the desired level.*

5. Continue adjusting the volume keys as required to achieve the desired audio levels throughout the audio file.

6. Preview your edited audio and once you are satisfied with the result, you are ready to save/produce it as a new audio file. See **Producing Audio** for more
information.

**Panning Audio Left/Right**

CyberLink AudioDirector lets you adjust the balance of audio by panning it to the left or right channel, reducing the volume of the audio in the respective channel.

To pan the audio, do this:

1. Use the playback controls or drag the timeline slider to the position where you want to start panning the audio.

2. Click on the **Volume** tab in the keyframe panel, and then click on the line in the L-R pan area and drag the pan key to the desired pan level.

3. **Note:** when panning 5.1 or 7.1 audio, the center channels are not affected.

4. Use the playback controls or drag the timeline slider to locate the position where you want the change in pan level to begin.

5. Click on the line in the L-R pan area and drag the pan key back to the original pan level.

6. **Note:** this last step is just a recommendation, and is not necessary if you want the audio to pan left or right from the very beginning to the desired level.

7. Continue adjusting the pan keys as required to achieve the desired pan levels in each channel throughout the audio file.

8. Preview your edited audio and once you are satisfied with the result, you are ready to save/produce it as a new audio file. See *Producing Audio* for more information.
Applying Audio Effects

In CyberLink AudioDirector you can choose from a number of default effects and apply them to your audio files. You can also import custom VST plugin effects that you downloaded and apply them to your audio.

*Note: when you apply effects to audio, they are not applied to the original file, as you must produce it as a new file in the Produce window. See Producing the Audio for more information.*

Using Dynamic Range Control

Use Dynamic Range Control to adjust the shaping of the dynamics in your audio.

To use dynamic range compression on audio, do this:

1. Select the media file in the library that you want to use dynamic range compression on.

2. If required, use range selection to select the portion of audio you want to apply the effect to. See Range Selection for more information on selecting a range of an audio file. If you don’t select a range, the effect is applied to the entire audio clip.

   *Note: the entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.*

3. Decide whether you want to apply the effect on all the available channels, or just one channel. See Selecting Channels for Editing for more information on selecting channels.

4. Click Dynamic Range Control under the Apply Effect section.

5. Use the control sliders as follows:

   *Note: see Common Dynamic Range Controls below of a description of what each available slider does in the Dynamic Range Control window.*

   - **Limiter:** adjust these sliders to aggressively limit high level signals. You can use the limiter to prevent clipping or distortion.

   - **Compressor:** use these sliders to apply more gentle dynamic control to medium level signals and peaks.
• **Gate/Expander**: use these sliders to boost (expand) the level of soft signals. Note that the expander can have a ratio greater or less than 1.0. When the ratio is greater than 1, it is operating as a gate and any signals below the threshold will be decreased in volume.

6. Use the **Output Gain** slider to adjust the output gain for the processed file to make up for a decrease in the audio's volume.

7. The meter in the top right of the Dynamic Range Control window is a level histogram, or a level meter that keeps track of its history. This allows you to visualize the overall "level content" of the audio by providing a running display of levels over a period of time. By moving the red bar in this display with your mouse, you can adjust the limiter threshold. The center meter is a reduction meter. It shows (in dB) the amount of reduction the compressor/limiter and/or gate is providing. The right meter is a traditional dynamics curve, where the x or horizontal axis is the signal going into the dynamics module, and the y or vertical axis is the signal coming out. As a curve becomes more horizontal, it means the signal is being flattened (compressed) more. You can use your mouse to adjust threshold and ratio controls by clicking on parts of this curve.

8. If required, you can preview how the applied effect will sound by selecting **Adjusted result** and then clicking the Preview button. Select **Original audio** if you want to preview the original audio.

9. Click **Apply** to apply the dynamic range control.

   **Note**: if required, click on the Effect tab to see the applied effect in the edit panel. See Effect Tab for more information.

### Common Dynamic Range Controls

When using the Dynamic Range Control sliders, adjusting these common control sliders will have the resulting effects:

- **Threshold**: use to set the point where the dynamics processing takes place.

- **Ratio**: use to set the ratio for its respective dynamics section. Higher ratios will result in more extreme compression, limiting or expansion.

- **Attack**: use to set how quickly the compressor, limiter or expander/gate reacts (in milliseconds) to an incoming signal when the signal passes the specified threshold.
• **Release**: use to set how quickly the module stops applying compression, limiting or expansion/gating when the signal falls below the threshold.

### Adding Delays

Use the Delay effect to add analog and tape-style echoes to your tracks. This vintage gear-inspired delay unit has unique features, including a delay meter that lets you see and adjust the level and spacing of each echo generated.

To add a delay to audio, do this:

1. Select the media file in the library that you want to add the delay to.
2. If required, use range selection to select the portion of audio you want to apply the effect to. See [Range Selection](#) for more information on selecting a range of an audio file. If you don't select a range, the effect is applied to the entire audio clip.

   **Note**: the entire audio file’s waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

3. Decide whether you want to apply the effect on all the available channels, or just one channel. See [Selecting Channels for Editing](#) for more information on selecting channels.
4. Click **Delay** under the **Apply Effect** section.
5. Select a delay preset from the **Presets** drop-down. Select the preset that best suits the sound you want to achieve.
6. If required, click **⚙️** to modify the advanced settings as follows:

   • Select the delay mode you want to use:
     
     • **Tape**: simulates vintage tape echo effects, including saturation and wow/flutter characteristics.
     
     • **Tape/Tube**: another tape delay emulation, featuring additional tube saturation simulating the warmth of old tube-based analog circuitry.
     
     • **Analog**: a lo-fi analog delay effect with smearing and analog degradation, similar to analog guitar stomp boxes.

   • Use the available control sliders to customize the delay as follows:
• **Dry Out**: sets the output gain of the dry signal without delay added to the signal.

• **Wet Out**: sets the output gain of the wet/delayed signal.

• **Feedback**: sets the gain of the delay feedback. Higher values will result in longer audible feedback times, i.e. more repeats.

• **Trash**: sets the amount of degradation for the delay. For example, higher Trash values for tape delays results in more saturation. Higher Trash values for lo-fi digital delays results in more bit truncation and aliasing.

• **Spread**: for stereo tracks only. Sets the stereo spread of the signal, from mono (0%) to extra wide (200%).

• **Delay**: sets the delay time in milliseconds by default. If required, select the **Sync To Host** to lock the delay time of the effect to the tempo set in the host program, perfect for creating echoes that are in sync with your project’s rhythm. Use the **Tempo** to set the delay time when selected.

• **Tap**: another method for setting the speed of echoes. Click the **Tap** button in rhythm to sync the delay manually to a tempo.

7. The meter at the bottom of the Delay window shows a series of bars that represent the level of the echoes created by the effect. You can also use this display to control delay parameters as follows:

   • drag the first bar up and down to control Dry Out level.
   • drag the second bar up and down to control Wet Out level.
   • drag the third bar up and down to control Feedback (number of repeats).
   • drag the second bar right and left to shorten or lengthen the Delay time.
   • click on the meter and move your mouse wheel to adjust the zoom of the display.

8. If required, you can preview how the applied effect will sound by selecting **Adjusted result** and then clicking the Preview button on the playback controls. Select **Original audio** if you want to play the original audio.

9. Click **Apply** to add the delay to the audio.
Adding Reverb

Use Reverb to apply an effect that reverberates the original audio, i.e. applies an echo-like effect to it.

To add reverb to audio, do this:

1. Select the media file in the library that you want to apply the reverb effect to.

2. If required, use range selection to select the portion of audio you want to apply the effect to. See Range Selection for more information on selecting a range of an audio file. If you don't select a range, the effect is applied to the entire audio clip.

3. Decide whether you want to apply the effect on all the available channels, or just one channel. See Selecting Channels for Editing for more information on selecting channels.

4. Click Reverb under the Apply Effect section.

5. Select a reverb preset from the Presets drop-down. Select the preset that best suits the sound you want to achieve.

6. If required, click 🔄 to modify the advanced settings as follows:

   • use the Sparkle slider to add a grainy sound to the audio. The more sparkle applied, the grainier it will sound.

   • use the Room width slider to widen a stereo audio signal without disturbing the low frequencies. This allows you to control the perceived location of the sound, ranging from a more centered source to one that is wider left and right.

   • use the Room size slider to add reverberation to the audio signal, simulating it being played in a room. Larger values will simulate a larger room.

   • use the Dry-Wet mix slider to set the ratio between the dry (original direct sound) and wet (reflected sound) audio. Adjusting the mix can help change

Note: if required, click on the Effect tab to see the applied effect in the edit panel. See Effect Tab for more information.
the perceived distance of the audio from the listener, giving the audio spatial depth.

7. If required, you can preview how the applied effect will sound by selecting **Adjusted result** and then clicking the play button on the playback controls. Select **Original audio** if you want to play the original audio.

8. Click **Apply** to add the reverb effect to the audio.

   **Note:** if required, click on the Effect tab to see the applied effect in the edit panel. See **Effect Tab** for more information.

### Creating a Phase Effect

Use the Phaser to create a phase effect, which is produced by splitting an audio signal and then filtering it by shifting the signal's phase to and from the audio's frequency. This modified (wet) audio signal is then mixed back together with the original (dry) audio, giving the audio a watery or sweeping sound.

To add a phase effect to audio, do this:

1. Select the media file in the library that you want to apply the phase effect to.

2. If required, use range selection to select the portion of audio you want to apply the effect to. See **Range Selection** for more information on selecting a range of an audio file. If you don't select a range, the effect is applied to the entire audio clip.

   **Note:** the entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

3. Decide whether you want to apply the effect on all the available channels, or just one channel. See **Selecting Channels for Editing** for more information on selecting channels.

4. Click **Phaser** under the **Apply Effect** section.

5. Select a phaser preset from the **Presets** drop-down. Select the preset that best suits the sound you want to achieve.

6. If required, click ✉️ to modify the advanced settings as follows:
   
   - **Stage count:** from the drop-down, select the number of stages, or phase shifting filters, that are applied to the audio signal. The more stages you
select, the more dense sounding the phase effect will be.

- **Delay depth**: use the slider to set how much the filters sweep below the source frequency. The larger the delay depth, the more of a trembling effect it will have on the audio.

- **Modulation rate**: use the slider to control how quickly (measured in hertz, or cycles per second) the filters sweep to and from the source frequency of the audio.

- **Feedback**: use the slider to set the percentage of the phaser output that is fed back in to the original audio. A negative value will invert the phase waveform before feeding the audio back, reducing the loudness of the audio.

- **Dry-Wet mix**: use the slider to set the ratio between the dry (original audio) and wet (modified/filtered sound) audio. Dragging the slider to the left provides more of the original audio in the mix, while to the right adds more of the modified audio.

7. If required, you can preview how the applied effect will sound by selecting Adjusted result and then clicking the play button on the playback controls. Select Original audio if you want to play the original audio.

8. Click **Apply** to add the phase effect to the audio.

   **Note**: if required, click on the Effect tab to see the applied effect in the edit panel. See **Effect Tab** for more information.

### Creating a Flange Effect

The flange effect is a time delay effect that is created by mixing two audio channels together, after performing a phase shift on one of the channels and then slightly delaying its signal. This produces a subtle swirling or psychedelic sound effect in the audio.

To add a flange effect to audio, do this:

1. Select the media file in the library that you want to apply the flange effect to.

2. If required, use range selection to select the portion of audio you want to apply the effect to. See **Range Selection** for more information on selecting a range of an audio file. If you don't select a range, the effect is applied to the entire audio clip.
CyberLink AudioDirector

**Note:** the entire audio file’s waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

3. Decide whether you want to apply the effect on all the available channels, or just one channel. See Selecting Channels for Editing for more information on selecting channels.

4. Click Flanger under the Apply Effect section.

5. Select a flanger preset from the Presets drop-down. Select the preset that best suits the sound you want to achieve.

6. If required, click to modify the advanced settings as follows:
   - **Initial delay time:** use this slider to set how far behind, in milliseconds, the audio with the flange effect applied will start behind the original audio signal.
   - **Delay depth:** use this slider to control the depth of the pitch that is applied to the effect.
   - **Phase diff:** use this slider to set the phase difference between the two channels (0~360 deg).
   - **Feedback:** use the slider to set the percentage of the delayed output that is fed back into the original audio. Adjusting this option can greatly intensify the effect.
   - **Modulation rate:** use the slider to control how quickly (measured in hertz, or cycles per second) the filters sweep to and from the source frequency of the audio.
   - **Shape:** select the shape of the transition from the initial delay time to final delay, and then back again. *Sine* makes the transition follow a sine wave, while *Triangle* makes it follow a triangle wave.
   - **Dry-Wet mix:** use the slider to set the ratio between the dry (original audio) and wet (delayed flanged audio signal) audio. Dragging the slider to the left provides more of the original audio in the mix, while to the right adds more of the modified audio.

7. If required, you can preview how the applied effect will sound by selecting Adjusted result and then clicking the play button on the playback controls. Select Original audio if you want to play the original audio.

8. Click Apply to add the flange effect to the audio.
Note: if required, click on the Effect tab to see the applied effect in the edit panel. See Effect Tab for more information.

Adding a Chorus Effect

In CyberLink AudioDirector you can make your audio sound richer by adding a chorus effect to it. This is done by adding some delays and feedback, so it sounds as if multiple audio sources, voices, or instruments are playing together.

To add a chorus effect to audio, do this:

1. Select the media file in the library that you want to apply the chorus effect to.
2. If required, use range selection to select the portion of audio you want to apply the effect to. See Range Selection for more information on selecting a range of an audio file. If you don’t select a range, the effect is applied to the entire audio clip.
   
   Note: the entire audio file’s waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

3. Decide whether you want to apply the effect on all the available channels, or just one channel. See Selecting Channels for Editing for more information on selecting channels.
4. Click Chorus under the Apply Effect section.
5. Select a chorus preset from the Presets drop-down. Select the preset that best suits the sound you want to achieve.
6. If required, click to modify the advanced settings as follows:

   • **Voices count**: use this slider if you want to increase the perceived number of voices in the audio. As you drag the slider right, the number of voices heard in the audio increases.

   • **Initial delay time**: use this slider to set how far behind, in milliseconds, the audio with the chorus effect applied will start behind the original audio signal.

   • **Delay depth**: use this slider to control the range of sweeping in each modulation period.

   • **Modulation rate**: use the slider to control how quickly (measured in hertz, or cycles per second) the filters sweep to and from the source frequency of the
Adding an Echo Effect

In CyberLink AudioDirector you can add an echo to your audio, by adding a series of delayed and decaying sources of the original audio to it.

To add a chorus effect to audio, do this:

1. Select the media file in the library that you want to apply the phase effect to.

2. If required, use range selection to select the portion of audio you want to apply the effect to. See Range Selection for more information on selecting a range of an audio file. If you don't select a range, the effect is applied to the entire audio clip.

   ![Note: The entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.]

3. Decide whether you want to apply the effect on all the available channels, or just one channel. See Selecting Channels for Editing for more information on selecting channels.

4. Click Echo under the Apply Effect section.

5. In the window that displays, select the echo preset from the Presets drop-
down. Select the preset that best suits the sound you want to achieve.

6. If required, click  to modify the advanced settings as follows:

- **Initial delay time**: use this slider to set how far behind, in milliseconds, the audio with the echo effect applied will start behind the original audio signal.

- **Feedback**: use this slider to set the ratio that determines how long the echoed sound will last. Dragging the slider left produces less of an echo, while dragging it right can produce an echo that never seems to fade out.

- **Equalizer**: use these sliders to adjust the room characteristics where the audio is being reflected to create the echo. More reflective surfaces create a brighter sound, while a room with absorbent walls creates an echo that is a lot darker.

7. If required, you can preview how the applied effect will sound by selecting **Adjusted result** and then clicking the play button on the playback controls. Select **Original audio** if you want to play the original audio.

8. Click **Apply** to add the echo effect to the audio.

   **Note**: if required, click on the Effect tab to see the applied effect in the edit panel. See **Effect Tab** for more information.

### Transforming Vocals

Use the Vocal Transformer effect to transform the voice in a media clip.

To transform the voice in a media clip, do this:

**Note**: for the best results, it is recommended that the audio only contains the sound of voice, as the effect can affect the other audio harmonics in the clip.

1. Select the media file in the library that you want to transform the vocals in.

2. If required, use range selection to select the portion of audio you want to apply the effect to. See **Range Selection** for more information on selecting a range of an audio file. If you don't select a range, the effect is applied to the entire audio clip.

   **Note**: the entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

3. Decide whether you want to apply the effect on all the available channels,
just one channel. See Selecting Channels for Editing for more information on selecting channels.

4. Click Vocal Transformer under the Apply Effect section.

5. Select one of the Presets from the drop down. Each preset provides a different effect to the voice.

6. If required, click to modify the advanced settings as follows:

   - **Pitch**: use this slider to adjust the pitch of the transformed voice. Dragging the slider right will make the voice higher, while dragging it left will make it deeper.

   - **Timbre**: use this slider to adjust the tone quality of the voice. Adjusting this slider can significantly change the characteristics of the voice.

     **Note**: if you selected a Custom preset, you can then use the Robot voice and/or Duck voice as a starting point for the custom voice you create using the above settings.

7. If required, you can preview how the applied effect will sound by selecting Adjusted result and then clicking the play button on the playback controls. Select Original audio if you want to play the original audio.

8. Click Apply to apply the effect to the audio.

     **Note**: if required, click on the Effect tab to see the applied effect in the edit panel. See Effect Tab for more information.

### Using the Equalizer

Select Equalizer effect to apply preset equalizer filters on your audio. You can also fully customize the overall sound of your audio using the available sliders.

To use the equalizer on audio, do this:

1. Select the media file in the library that you want to use the equalizer on.

2. If required, use range selection to select the portion of audio you want to apply the effect to. See Range Selection for more information on selecting a range of an audio file. If you don't select a range, the effect is applied to the entire audio clip.
3. Decide whether you want to apply the effect on all the available channels, or just one channel. See Selecting Channels for Editing for more information on selecting channels.

4. Click Equalizer under the Apply Effect section to open the Equalizer window.

5. If required, select an equalizer preset from the Presets drop down. Equalizer presets can enhance audio, and the preset you should select depends on the type of audio or genre of music you are editing.

6. If required, click to modify the advanced settings as follows:
   - drag the equalizer sliders to customize the audio effect applied.

7. If required, you can preview how the applied effect will sound by selecting Adjusted result and then clicking the Preview button. Select Original audio if you want to play the original audio.

8. Click Apply to apply the equalizer effect to the audio.

   Note: if required, click on the Effect tab to see the applied effect in the edit panel. See Effect Tab for more information.

Applying the Radio Effect

Use the Radio effect to apply a filter to your audio that mimics the sound of a radio.

To apply the radio effect to audio, do this:

1. Select the media file in the library that you want to apply the radio effect to.

2. If required, use range selection to select the portion of audio you want to apply the effect to. See Range Selection for more information on selecting a range of an audio file. If you don't select a range, the effect is applied to the entire audio clip.

   Note: the entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

3. Decide whether you want to apply the effect on all the available channels, or just one channel. See Selecting Channels for Editing for more information on
selecting channels.

4. Click **Radio** under the **Apply Effect** section.

5. Select the **Radio type** from the drop down. Each type provides a slightly different effect to your audio.

6. If required, you can preview how the applied effect will sound by selecting **Adjusted result** and then clicking the play button on the playback controls. Select **Original audio** if you want to play the original audio.

7. Click **Apply** to apply the radio effect to the audio.

   **Note**: if required, click on the **Effect tab** to see the applied effect in the edit panel. See **Effect Tab** for more information.

---

**Applying the Phone Effect**

Use the Phone effect to apply a filter to your audio that mimics the sound over a phone.

To apply the phone effect to audio, do this:

1. Select the media file in the library that you want to apply the phone effect to.

2. If required, use range selection to select the portion of audio you want to apply the effect to. See **Range Selection** for more information on selecting a range of an audio file. If you don't select a range, the effect is applied to the entire audio clip.

   **Note**: the entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

3. Decide whether you want to apply the effect on all the available channels, or just one channel. See **Selecting Channels for Editing** for more information on selecting channels.

4. Click **Phone** under the **Apply Effect** section.

5. Select the **Phone type** from the drop down. Each type provides a slightly different effect to your audio.

6. If required, you can preview how the applied effect will sound by selecting **Adjusted result** and then clicking the play button on the playback controls. Select **Original audio** if you want to play the original audio.
7. Click **Apply** to apply the phone effect to the audio.

   *Note: if required, click on the Effect tab to see the applied effect in the edit panel. See [Effect Tab](#) for more information.*

## Applying a Noise Gate

Apply the noise gate if you want to control the volume of a media file's audio signal by blocking audio that falls below a specified threshold or decibel level. The resulting audio can then be processed differently from the original audio.

To apply a noise gate to audio, do this:

1. Select the media file in the library that you want to apply the noise gate to.

2. If required, use range selection to select the portion of audio you want to apply the effect to. See [Range Selection](#) for more information on selecting a range of an audio file. If you don't select a range, the effect is applied to the entire audio clip.

   *Note: the entire audio file’s waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.*

3. Decide whether you want to apply the effect on all the available channels, or just one channel. See [Selecting Channels for Editing](#) for more information on selecting channels.

4. Click **Noise Gate** under the **Apply Effect** section.

5. Select a noise gate preset from the **Presets** drop-down. Select the preset that best suits the sound you want to achieve.

6. If required, click ![ ]( ) to modify the advanced settings as follows:

   - **Threshold**: use this slider to determine the minimum input audio level required to make the noise gate open and pass the audio signal through.

   - **Attack time**: use this slider to set the duration that the noise gate takes to change from closed to open. Attack time is similar to a fade-in.

   - **Release time**: use this slider to set the duration it takes for the noise gate to change from fully open to closed. Release time is similar to a fade-out.

   - **Hold time**: use this slider to set the duration the noise gate stays open after the signal has fallen below the defined threshold.
7. If required, you can preview how the applied effect will sound by selecting Adjusted result and then clicking the play button on the playback controls. Select Original audio if you want to play the original audio.

8. Click Apply to add the noise gate to the audio.

   Note: if required, click on the Effect tab to see the applied effect in the edit panel. See Effect Tab for more information.

Removing Vocals in Music

Use the Vocal Removal in Music effect to create a karaoke or instrumental version of your stereo music files.

   Note: this effect can only be applied to stereo (two channel) audio files, and best works on files where the vocals are evenly distributed on both channels, i.e. panned to the center.

To remove vocals in music, do this:

1. Select the music file in the library that you want to remove the vocals from.

2. If required, use range selection to select the portion of audio you want to apply the effect to. See Range Selection for more information on selecting a range of an audio file. If you don't select a range, the effect is applied to the entire audio clip.

   Note: the entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

3. Click Vocal Removal in Music under the Apply Effect section.

4. If required, you can preview how the applied effect will sound by selecting Adjusted result and then clicking the play button on the playback controls. Select Original audio if you want to play the original audio.

5. Click Apply to remove the vocals from the audio.

   Note: if required, click on the Effect tab to see the applied effect in the edit panel. See Effect Tab for more information.
Applying VST Effects

VST plug-in effects are the industry standard for audio processing software. You can purchase, download and then import VST effects into CyberLink AudioDirector for use.

*Note: check the associated documentation for each VST plugin effect for detailed information on using these effects.*

Importing VST Effects

With VST plug-in effects you can find and add the desired custom effect you want on your audio. VST plug-in effects are widely available for download from the Internet, and can easily be imported into CyberLink AudioDirector.

*Note: CyberLink does not guarantee the usability of downloaded VST plug-in effects, nor the quality of the VST modules.*

If you have downloaded a VST plug-in effect, do this to import it into CyberLink AudioDirector:

1. From the menu select **File > Import VST Plug-in Effects**.
2. Browse to the location where the downloaded VST plugin effect is located.  
   *Note: CyberLink AudioDirector imports VST plug-in effects that are in the DLL format. If the downloaded effect is in the ZIP format, you must first unzip it before trying to import it into the program.*
3. Select the VST plugin effect and then click **Open** to import the effect into the VST section of CyberLink AudioDirector.
   
   *Note: Once imported, VST effects are always available in the program every time it is launched. Right-click on imported VST effects and then select **Remove** to remove them from the CyberLink AudioDirector.*
Chapter 6:

Restoring Audio

Click on the Restore button to repair audio clips using the Noise Reduction, Clipping, Click, Hum, or Hiss Removal features. You can also do more precise and powerful fixing using Visual Repair.

Note: when you are repairing audio, the fixes are not applied to the original file, as you must produce it as a new file in the Produce window. See Producing the Audio for more information.

Using Visual Repair

If any of your audio clips have unwanted background sounds, such as sirens, car alarms, etc., you can use the visual repair feature to remove them. CyberLink AudioDirector provides several selection tools for you to manually find and select the unwanted sound using the spectral frequency view. The visual repair feature also has three different ways to repair audio - auto attenuate, manual attenuate, and volume adjustment to remove specific unwanted sound.

To access Visual Repair, click the Visual Repair option under the Adjustment section.

Regional Selection Tools

CyberLink AudioDirector supplies you with five different selection tools that help you to choose the regions of an audio clip you want to repair. Once selected, use the visual repair tools to fix the audio.

Note: these regional selection tools are only available when in the spectral frequency view. See Spectral Frequency View for more information on selecting this view.
**Time Selection**

The time selection tool lets you select a vertical area of the audio clip based on playback time. This selection tool is similar to the range selection.

To use the time selection tool, do this:

1. In the Visual Repair section, click on the button.
2. Click and drag on the region of the audio clip you want to repair.

CyberLink AudioDirector vertically selects all of the content in the region for fixing.
3. Click the [button to preview only the selected content to ensure it is what you need to fix.

4. Use the visual repair functions to repair the audio as required. See Repairing the Audio for more information.
Time Frequency Selection

Use the time frequency selection tool to choose a more precise area of the audio, by selecting a rectangular region for fixing.

To use the time frequency selection tool, do this:

1. In the Visual Repair section, click on the button.
2. Click and drag on the region of the audio clip you want to repair.

CyberLink AudioDirector highlights the content in a rectangle for fixing.
3. Click the button to preview only the selected content to ensure it is what you need to fix.

4. Use the visual repair functions to repair the audio as required. See Repairing the Audio for more information.
**Frequency Selection**

The frequency selection tool lets you select a horizontal area of the audio clip based on its frequency.

To use the frequency selection tool, do this:

1. In the Visual Repair section, click on the button.
2. Click and drag on the region of the audio clip you want to repair.

CyberLink AudioDirector horizontally selects the all of the content in the region for fixing
3. Click the button to preview only the selected content to ensure it is what you need to fix.

4. Use the visual repair functions to repair the audio as required. See Repairing the Audio for more information.
**Magic Wand Selection**

The magic wand selection tool helps you to auto select similar attributes (frequency or amplitude) in the audio clip that may be the area that requires fixing.

To use the magic wand selection tool, do this:

1. In the Visual Repair section, click on the button.
2. Click on the regions of the audio clip you want to repair.

CyberLink AudioDirector auto selects the similar attributes (frequency or amplitude) for fixing.
3. If required, you can select the **Harmonic finder** option to have CyberLink AudioDirector auto select the attributes that have similar harmonic qualities.
4. Click the 🎨 button to preview only the selected content to ensure it is what you need to fix.

5. Use the visual repair functions to repair the audio as required. See Repairing the Audio for more information.
Brush Selection

You can use the brush selection tool to select, or brush, just the parts of the audio clip you want to repair.

To use the brush selection tool, do this:

1. In the Visual Repair section, click on the brush button.
2. Use the **Size** slider to set the width of the area selected by the brush.
3. Click, hold down the mouse button, and then drag the mouse over all regions of the audio clip you want to repair.

Let go of the mouse button to finalize the selected area.
4. Use the visual repair functions to repair the audio as required. See Repairing the Audio for more information.

**Repairing the Audio**

Once you have selected the portion of the audio that you want to repair, use one of the following functions to fix it as required.

**Auto Attenuate**

The auto attenuate function automatically levels off the selected audio so that it has the same attributes as the surrounding audio.

To apply auto attenuate, do this:

1. Select the **Auto attenuate** function.
2. If required, you can preview the repaired audio by selecting **Restored result** and then clicking the play button. Select **Original audio** if you want to play the original audio.

3. Click **Apply** to repair the selected audio.

**Manual Attenuate**

The manual attenuate function lets you manually level off the selected audio so that it has the same attributes as the surrounding audio.

To apply manual attenuate, do this:

1. Select the **Manual attenuate** function.
2. Use the **Strength** slider to set the amount of attenuation you want to apply on the selected area.
3. In the **Direction** drop-down, select whether you want to level off (attenuate) the selected area to match the attributes horizontally (above and below) or vertically (left and right) around it.
4. If required, you can preview the repaired audio by selecting **Restored result** and then clicking the play button. Select **Original audio** if you want to play the original audio.
5. Click **Apply** to repair the selected audio.

**Volume Adjustment**

Use this function to manually repair the selected audio by adjusting the volume, or amplitude.

To repair with volume adjustment, do this:

1. Select the **Volume adjustment** function.
2. Use the **Volume** slider to adjust the volume of the selected area.
3. If required, you can preview the repaired audio by selecting **Restored result** and then clicking the play button. Select **Original audio** if you want to play the original audio.
4. Click **Apply** to repair the selected audio.
Using Noise Reduction

Use the Noise Reduction feature if your audio contains unwanted static, or other background noise. There are two types of noise reduction available: **Auto Denoise** and **Noise Reduction**.

To remove unwanted noise in your audio, do this:

1. Select the media file in the library that you want to remove audio from.
2. Decide whether you want to remove it from all the available channels, or just one channel. See *Selecting Channels for Editing* for more information on selecting channels.
3. Click **Noise Reduction** to open the Noise Reduction window.
4. Select one of the following options:
   - **Auto Denoise**: select this option to use audio denoise on audio that was recorded outdoors, in a room with poor acoustics, in a car, or other noisy locations. The audio denoise tool uses CLNR (CyberLink Noise Reduction) technology to automatically improve your audio's quality and reduce background noise. Also use it if you have trouble finding an audio sample in the Noise Reduction feature. See *Auto Denoise* for more information.
   - **Noise Reduction**: select this option to use CyberLink's Noise Reduction technology to reduce broadband and tonal noise for more natural-sounding results. CyberLink AudioDirector asks you to manually select an area that contains the noise, then through analysis helps you remove it from your audio. See *Noise Reduction* for more information.
5. Click **Next** to proceed.

Auto Denoise

To use the Audio Denoise on audio, do this:

1. Use the **Sensitivity** slider to adjust the degree of denoise applied to the audio.
2. Use the **Dry-Wet mix** slider to set the ratio between the dry (original audio that includes the unwanted noise) and wet (audio with denoise applied) audio. Adjusting the mix can balance the original audio and the audio with the denoise applied, reducing a loss of quality on the audio portion you want to
3. If required, you can preview the repaired audio by selecting **Restored result** and then clicking the **Preview** button. Select **Original audio** if you want to play the original audio.

4. Click **Apply** to repair the audio.

**Noise Reduction**

To use the Noise Reduction on audio, do this:

1. In step 1, do one of the following:
   - Select the first option and then select a range of the audio that only contains the noise, i.e. devoid of the audio you want to keep in the file. See **Range Selection** for more information on selecting a range of an audio file. Next, click the **Analyze** button to analyze the range of audio. Doing this creates a noise profile that CyberLink AudioDirector uses to remove the noise.
     
     **Note:** you can click the **Noise** button to listen to the detected noise, if required.

   - Select the second option and then **Select a preset** from the drop-down. Select the preset that best fits the type of noise you are trying to remove.

2. Use the **Sensitivity** and **Noise reduction level** sliders to adjust the amount of reduction applied to the selected range. If required, click the **Noise** button again to listen to the noise that will be removed.

   **Note:** when previewing the noise, if you hear portions of the audio you want to keep, it is recommended that you reduce the **Sensitivity** and/or the **Noise reduction level** until you don't hear it anymore, for the best results on the repaired audio.

3. Use the **Dry-Wet mix** slider to set the ratio between the dry (original audio that includes the unwanted noise) and wet (audio with noise reduction applied) audio. Adjusting the mix can balance the original audio and the audio with the noise reduction applied, reducing a loss of quality on the audio portion you want to keep.

4. Click the **Next** button to go to step 2.

5. Select which range of audio you want to apply the noise reduction to by selecting one of the following:
CyberLink AudioDirector

- **Analyzed range only**: select this option to only apply the noise reduction to the range of audio you selected and analyzed in step 1.

- **Entire audio content**: select this option if you want to apply the noise reduction to the entire audio clip.

- **Select a different range**: select this option to select a new range of audio where you want the noise reduction applied. This range can contain both the noise and the audio content you want to keep.

6. If required, you can preview the repaired audio by selecting **Restored result** and then clicking the **Preview** button. Select **Original audio** if you want to play the original audio.

   **Note**: click the **Save as Preset** button once you are done to save the Noise Reduction settings as a new preset. The next time you need to remove noise from audio that was recorded in the same or similar environment, you can just select the preset from the drop-down in step 1.

7. Click **Apply** to repair the audio.

### Using Clipping Removal

Use Clipping Removal feature if parts of your audio's waveform is clipped off at the top or bottom, causing distortions or loss in audio quality. This feature can restore the waveform through attenuation, resulting in audio that is less intense, but without distorted or lost audio parts.

To use the Clipping Removal on audio, do this:

1. Select the media file in the library that you want to repair.

2. If required, use range selection to select the portion of audio you want to repair. See **Range Selection** for more information on selecting a range of an audio file. If you don't select a range, the entire audio clip is repaired.

   **Note**: the entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

3. Decide whether you want to repair all the available channels, or just one channel. See **Selecting Channels for Editing** for more information on selecting channels.

4. Click **Clipping Removal** to open the Clipping Removal window

5. Select the **Quality** amount of the clip restoration. The higher the quality
selected, the more attenuation that is applied to the audio, and the lower its resulting intensity or loudness.

6. If required, you can preview the repaired audio by selecting **Restored result** and then clicking the play button. Select **Original audio** if you want to play the original audio.

7. Click **Apply** to repair the audio.

### Using Click Removal

Use the Click Removal feature if your audio clips contain unwanted clicking or related sounds in them.

To use the Click Removal on audio, do this:

1. Select the media file in the library that you want to repair.

2. If required, use range selection to select the portion of audio you want to repair. See **Range Selection** for more information on selecting a range of an audio file. If you don’t select a range, the entire audio clip is repaired.

   **Note**: the entire audio file’s waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

3. Decide whether you want to repair all the available channels, or just one channel. See **Selecting Channels for Editing** for more information on selecting channels.

4. Click **Click Removal** to open the Click Removal window.

5. If required, select a preset from the **Presets** drop down. These presets can auto repair your audio for you.

6. Use the **Sensitivity** slider to adjust the amount of Click Removal applied to the selected audio clip.

7. If required, you can preview the repaired audio by selecting **Restored result** and then clicking the play button. Select **Original audio** if you want to play the original audio.

8. Click **Apply** to repair the audio.
Using Hum Removal

The Hum Removal feature removes hum noise and its harmonics from audio clips. Hum noise is usually caused by electronics (faulty microphone, electrical interference with recording device, etc.) during the original recording.

To use Hum Removal on audio, do this:

1. Select the media file in the library that you want to repair.

2. If required, use range selection to select the portion of audio you want to repair. See Range Selection for more information on selecting a range of an audio file. If you don't select a range, the entire audio clip is repaired.

   **Note:** the entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

3. Decide whether you want to repair all the available channels, or just one channel. See Selecting Channels for Editing for more information on selecting channels.

4. Click **Hum Removal** to open the Hum Removal window.

5. Select one of the following options:

   • **Simple Mode:** select this option if you want CyberLink AudioDirector to remove the hum using a selected frequency range band. See Simple Mode for more information.

   • **Advanced Mode:** select this option to use the more advanced controls. CyberLink AudioDirector asks you to manually select an area that contains the hum, then through analysis helps you remove it from your audio. See Advanced Mode for more information.

6. Click **Next** to proceed.

**Simple Mode**

Because most hum noise is in the 50Hz to 60Hz frequency range band, sometimes the simple mode of selecting a specific frequency range band is all that is required to remove the hum noise.

In Simple Mode, do this:

1. Select a frequency band from the list as follows:
• **Remove 50Hz**: select this option to remove all audio that is in the 50Hz frequency range band.

• **Remove 50Hz and the harmonics**: select this option to remove all audio that is in the 50Hz frequency range band. This option will also remove any corresponding harmonics.

• **Remove 60Hz**: select this option to remove all audio that is in the 60Hz frequency range band.

• **Remove 60Hz and the harmonics**: select this option to remove all audio that is in the 60Hz frequency range band. This option will also remove any corresponding harmonics.

2. Use the **Reduction level** slider to set the amount of attenuation applied on the hum noise.

3. If required, you can preview the repaired audio by selecting **Restored result** and then clicking the **Preview** button. Select **Original audio** if you want to play the original audio.

4. Click **Apply** to repair the audio.

### Advanced Mode

For hum noise that is harder to remove, the advanced mode lets you select a region of the audio that contains the hum so CyberLink AudioDirector can detect it. Once detected, you can then customize its removal using a series of parameters.

In Advance Mode, do this:

1. In step 1, do one of the following:
   - Select the first option and then select a range of the audio that only contains the hum you want to remove, i.e. devoid of the audio you want to keep in the file. See **Range Selection** for more information on selecting a range of an audio file. Next, click the **Analyze** button to analyze the range of audio. Doing this creates a noise profile that CyberLink AudioDirector uses to remove the hum. **Note**: you can click the **Hum** button to listen to the detected noise, if required.
   - Select the second option and then **Select a preset** from the drop-down. Select the preset that best fits the frequency of the hum you are trying to remove.
2. If required, use the following sliders to further remove the hum from the audio:

- **Base frequency**: use this slider to manually specify the root note of the hum noise, if the detected hum is incorrect.

- **Reduction level**: use this slider to set the amount of attenuation applied on the hum noise.

- **Number of harmonics**: select the number of harmonics the hum noise appears to have.

- **Filter bandwidth**: use this slider determine the width of the root frequency and its harmonics. Dragging the slider left affects a wider range of frequencies, while dragging it right will affect a narrower range.

- **Harmonic slope**: use this slider to set the ratio of attenuation applied to the harmonics.

3. Click the **Next** button to go to step 2.

4. Select which range of audio you want to apply the hum removal to by selecting one of the following:

- **Selected range only**: select this option to only apply the hum removal to the range of audio you selected and analyzed in step 1.

- **Entire audio content**: select this option if you want to apply the hum removal to the entire audio clip.

- **Select a different range**: select this option to select a new range of audio where you want the hum removal applied. This range can contain both the hum and the audio content you want to keep.

5. If required, you can preview the repaired audio by selecting **Restored result** and then clicking the **Preview** button. Select **Original audio** if you want to play the original audio.

   **Note**: click the **Save as Preset** button once you are done to save the Hum Removal settings as a new preset. The next time you need to remove hum noise from audio that was recorded in the same or similar environment, you can just select the preset from the drop-down in step 1.

6. Click **Apply** to repair the audio.
Using Hiss Removal

The Hiss Removal feature removes hiss noise from audio clips.

To use Hiss Removal on audio, do this:

1. In step 1, do one of the following:
   - Select the first option and then select a range of the audio that only contains the hiss you want to remove, i.e. devoid of the audio you want to keep in the file. See Range Selection for more information on selecting a range of an audio file. Next, click the Analyze button to analyze the range of audio. Doing this creates a noise profile that CyberLink AudioDirector uses to remove the hiss.  
     
     **Note:** you can click the Hiss button to listen to the detected noise, if required.
   - Select the second option and then Select a preset from the drop-down. Select the preset that best fits the type of hiss (frequency) you are trying to remove.

2. If required, use the following sliders to further remove the hiss from the audio:
   - **Noise level threshold:** use this slider to manually set the minimum noise level. Anything that falls above this threshold level will be left untouched by hiss removal.
   - **Reduction level:** use this slider to set the amount of hiss removal applied.
   - **Frequency smoothing:** use the slider to recover any loss of quality (on the frequency range) that was caused by the hiss removal. Dragging the slider left will use more of the original audio, dragging to right will use more of the audio with the hiss removed.
   - **Temporal smoothing:** use the slider to recover any loss of quality (over the selected range of audio) that was caused by the hiss removal. Dragging the slider left will use more of the original audio, dragging to right will use more of the audio with the hiss removed.
   - **Attenuation ratio:** use this slider to set the amount of attenuation applied.

3. Click the **Next** button to go to step 2.

4. Select which range of audio you want to apply the hiss removal to by
selecting one of the following:

- **Selected range only**: select this option to only apply the hiss removal to the range of audio you selected and analyzed in step 1.

- **Entire audio content**: select this option if you want to apply the hiss removal to the entire audio clip.

- **Select a different range**: select this option to select a new range of audio where you want the hiss removal applied. This range can contain both the hiss and the audio content you want to keep.

5. If required, you can preview the repaired audio by selecting Restored result and then clicking the Preview button. Select Original audio if you want to play the original audio.

   **Note**: click the Save as Preset button once you are done to save the Hiss Removal settings as a new preset. The next time you need to remove hiss noise from audio that was recorded in the same or similar environment, you can just select the preset from the drop-down in step 1.

6. Click Apply to repair the audio.
Chapter 7:
Mix Room

In the Mix room you can mix audio together to create customized audio files. You can also create soundtracks for videos, by mixing audio with videos added to the video track.

Click the Mix button to open the Mix room. The Mix room displays as follows:

Creating an Audio Mix

To create an audio mix, do this:

1. Before getting started, click the button to configure your audio mix's
profile settings. See Configuring Audio Profile Settings for a description of each of the available profile settings.

2. Add the audio files that you want to include in the mix to the Mix room timeline. See Adding Media to Your Mix for more detailed information. For detailed information about the timeline in the Mix room, see Mix Room Timeline.

3. Position each added audio file to start precisely when you want it by dragging it to the desired starting position. You can use timeline markers to make this task easier. See Timeline Markers for more information.

4. If required, use the buttons to cut, copy, paste, or delete the audio on the tracks. You can also select an audio file on a track and click to split it at the timeline slider position into two separate parts that can be moved separately among tracks.

   \[\text{Note: if required, you can click an audio clip on the timeline and drag the beginning or end to quickly trim the audio file length.}\]

5. If required, right click on an audio clip and then select Edit Clip in Edit Room to edit it in the Edit room. See Editing Audio for detailed information on editing audio clips.

6. If required, right click on an audio clip on a track and then select Edit Clip in Restore Room to fix it in the Restore room. See Restoring Audio for detailed information on editing audio clips.

7. Mix all of the audio together using the mixing tools, mixer panel, and more. See Mixing Audio for detailed information.

8. If required, select an audio clip on a track and go to the Adjustment panel to apply an effect. See Applying Audio Effects in the Mix Room for more information.

9. Preview your audio mix and once you are satisfied with the result, you are ready to mix it down and produce it as a new audio file. See Producing Audio for more information.
Configuring Audio Profile Settings

Before creating your mix, click the button to configure the audio profile, or the quality and number of channels, of the audio file you are creating in the Mix room. The available options are as follows:

- **Sample rate**: select the sample rate from the drop-down that CyberLink AudioDirector will use by default when previewing audio in the mix room.

- **Bit depth**: select the bit depth from the drop-down that CyberLink AudioDirector will use when previewing audio in the mix room.

- **Channels**: select the number of channels you want in the audio preview.

Adding Media to Your Mix

Add media to your mix by dragging audio files that are in the library to any of the tracks in the Mix room timeline, and at any position. If the audio that you want to include in the mix is not in library, see Importing Media into the Library for information on importing it.

You can also add a video file to your mix. When added, CyberLink AudioDirector displays a video track in the timeline and shows the corresponding audio track.

*Note*: you can only have one video track in the timeline, but you can place more than one video file on this track.

When adding media to the Mix room timeline, if you drop it on to an existing clip on the timeline, you are asked if you want to split the clip and **insert** the new clip between the two portions, or **overwrite** the existing clip. The other options include using a transition between the clip you are adding and the existing clip on the timeline. See Using Audio Transitions for more information.

Mix Room Timeline

The following is some information that you may find helpful about the Mix room timeline:

- by default, the Mix room timeline includes four tracks, one of which is the Master Track. To hide the Master Track, just right click on it and then select **Hide Master Track**.
you cannot add audio to the Master Track directly, as it works as a guide for your audio mix project. It is visual representation for all the audio that is in your mix.

if you want to apply audio effects to your entire mix, you can do so by selecting the Master Track. You can also use range selection to apply the effects to just a selected range. See Range Selection for more information on selecting a range of audio.

you can add up to 100 audio tracks in the Mix room timeline. To add a new track, click the button.

once a video file is added to your mix, you can right-click on the video track and select Remove Video Track if you only want the video’s audio in the mix.

if you don't want to include a video file's audio in your mix, you can just remove it from the corresponding audio track.

Mixing Audio

Once you have all of the audio in the tracks of the Mix room, the next step is to mix all of the audio together. Creating your mix is the most important part of the process, and CyberLink AudioDirector provides several mixing tools to assist in the creation.

Mixer Panel

Click the button located in the top right above the timeline to open the mixer panel.
To use the mixer panel to mix your audio, do this:
• each track in your Mix room timeline has corresponding controls in the mixer panel. If you cannot find an audio track, you can click and drag on the left edge of the mixer panel to expand it, or use the scroll bar at the bottom to find the track controls. The master track is always the last control (on the right) in the mixer panel.

• to mix your audio, ensure that audio track mode R is selected for all the tracks that you want to alter the volume levels on. If R is not selected, you cannot change the volume level in that track.

• ensure that audio track mode Ι is selected to lock any audio tracks whose volume levels you don't want changed.

• click the play button and then use the master volume controls in each track to mix your audio.

   **Note:** you can continually alter the volume levels on each track throughout the entire duration of the mix. When R is selected, CyberLink AudioDirector records and remembers the changes you made to the volume at each moment of your mix.

• click the play button and then use the track balance controls in each track to pan the audio left or right in the mix.

• ensure that audio track mode Ρ is selected and then preview your mix by playing it back. This allows you to listen to and watch the recorded volume levels (and track balance) change.

### Using the Mixing Tools

The mixing tools are available for each of the tracks in the mix room timeline, except the video and master track. The tools that are available are outline in the below table.

<table>
<thead>
<tr>
<th>Mixing Tools</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Label Icon]</td>
<td>If required, click this button and select a label for the track. Select an icon that closely matches the type of audio in the track.</td>
</tr>
<tr>
<td>![Record Icon]</td>
<td>Click to enable this track for recording. Click the button at the bottom of the CyberLink AudioDirector window when you are ready to begin recording. You can enable multiple tracks at once. All their inputs will be recorded and added to the corresponding track,</td>
</tr>
</tbody>
</table>
simultaneously. Click \( \text{ headphones} \) to configure the recording settings by selecting the import source for the recorded audio, and whether you want to monitor the input.

Click this button to mute the corresponding audio track. If you only want to mute one single clip on an audio track, just right click on it and then select **Mute Clip** (or click \( \text{ headphones} \) on the selected clip).

Select this button if you only want to hear the audio in the corresponding track when previewing the audio mix. You can enable as many tracks as you want. All the tracks where \( \text{ headphones} \) is not selected are muted during the preview.

Click to modify the master volume for the audio file on the selected track using volume keys at specific points. See Adjusting the Master Volume for detailed information on modifying master volume keys.

Click to modify the balance of the audio file on the selected track by panning the audio left or right. See Panning Audio L/R for detailed information on panning audio.

Use the slider to the right of this icon to set the audio input level for the entire duration of the track.

---

**Normalizing Audio Across Multiple Tracks**

If you find that some of the audio in your mix is much louder than the audio on the other tracks, you can normalize the volume across multiple tracks. Normalizing is the process of applying a constant amount of gain to your mix to bring the average or peak amplitude (volume levels) to a same level.

To normalize the audio across multiple tracks, do this:

1. Select the all of the tracks in the mix that you want to normalize.
2. If required, use range selection to select the portion of audio you want to normalize. See Range Selection for more information on selecting a range of an audio file.
Note: be sure to select the entire audio file's waveform if you want to normalize the audio in the entire track.

3. Click the button to normalize the volume of the selected audio tracks.

Using Audio Transitions

When adding more than one audio clip onto a timeline track, you can use a transition to mix the two clips together.

To use an audio transition, do this:

1. Drag an audio clip to a timeline track, and then drag and drop a second clip to the position on the first clip where you want the transition to begin, i.e. the duration you want the two audio clips to overlap. You can also drag an existing clip on the timeline and drop it on the audio clip you want to transition it with.

   Note: make sure you drag and drop the second clip to the exact time position where you want the transition between the two clips to begin. You can use timeline markers to make this task easier. See Timeline Markers for more information.

2. In the pop-up that displays, select one of the following transition options:

   - **Crossfade**: select this option if you want the first audio clip to gradually fade into the second clip. Once selected, choose the fade type from the available options. Use the Preview button to help you pick the fade type that best suits your requirements.

     Note: select the Always use selected type check box to set the selected fade type as the default. Once selected, CyberLink AudioDirector will use this fade type automatically the next time you use a crossfade transition. To change the transition type, just right click on the transition and select Edit Crossfade Transition.

   - **Smart Transition**: select this option to use a more customized transition. Select from the available transition effects and then adjust its properties. See Adjusting Smart Transition Properties for a detailed description of the available properties.
Note: the maximum length of a smart audio transition is 30 seconds. If the duration of the overlap between the first and second audio clip is more than 30 seconds, then the Smart Transition option is not available.

3. Click **OK** to apply the audio transition between the two clips.

**Note:** you can change the length of the audio transition by dragging the second clip and moving it to a new position. When using a crossfade, double click on the transition area to edit the transition's properties. For smart transitions, just click , , or (depending on the transition type) to edit the properties.

### Adjusting Smart Transition Properties

When you use a smart transition you can choose one of the following transition effects between the two clips: **Tempo Transition**, **DJ Scratch**, or **Smart Repeat**.

**Note:** click the **Preview** button while adjusting the transition properties to preview the results and help you fine tune them to fit your requirements. If required, click the **Reset to Defaults** button at any time to reset the edited properties back to the original settings.

### Tempo Transition

Creates a smooth transition between the audio clips based on the tempo of each. Once selected, edit the properties as follows:

**Tempo adjustment:**

- **First clip's estimated tempo:** if required, use to adjust the tempo of the first clip. You can speed up or slow down the tempo, depending on the tempo of the second clip. Use **2X** to double the clip's tempo, or **0.5X** to halve it.

- **Second clip's estimated tempo:** if required, use to adjust the tempo of the second clip. You can speed up or slow down the tempo, depending on the tempo of the second clip. Use **2X** to double the clip's tempo, or **0.5X** to halve it.

### DJ Scratch

Creates a transition using the scratching of a record and the tempo of each audio clip. Once selected, edit the properties as follows:
• **Scratch strength ratio**: use the slider to set the strength of the record scratch during the transition.

**Tempo adjustment:**

• **First clip's estimated tempo**: if required, use to adjust the tempo of the first clip. You can speed up or slow down the tempo, depending on the tempo of the second clip. Use **2X** to double the clip's tempo, or **0.5X** to halve it.

• **Second clip's estimated tempo**: if required, use to adjust the tempo of the second clip. You can speed up or slow down the tempo, depending on the tempo of the second clip. Use **2X** to double the clip's tempo, or **0.5X** to halve it.

**Smart Repeat**

Creates a transition that repeats the last portion of the original clip a set amount times, giving the transition a skipping effect. Once selected, edit the properties as follows:

• **Number of repeats**: select the number of times you want the end of the first clip to repeat.

**Tempo adjustment:**

• **First clip's estimated tempo**: if required, use to adjust the tempo of the first clip. You can speed up or slow down the tempo, depending on the tempo of the second clip. Use **2X** to double the clip's tempo, or **0.5X** to halve it.

• **Second clip's estimated tempo**: if required, use to adjust the tempo of the second clip. You can speed up or slow down the tempo, depending on the tempo of the second clip. Use **2X** to double the clip's tempo, or **0.5X** to halve it.

**Applying Audio Effects in the Mix Room**

While mixing audio in the Mix room you can apply any of the effects in the Adjustment panel to your audio. Click **Apply Effect** for a list of the available effects in the Mix room, and see **Applying Audio Effects** for a detailed description of these effects.
**Note:** in the Mix room, audio effects can only be applied to one audio clip on a track at a time, or to all the audio in the mix by selecting the Master Track. If you select more than one audio clip, the effects are not available.

For information on the use of the Surround Sound Panner, see [Using the Surround Sound Panner](#) section below.

**Note:** once an effect is applied to an audio clip, click on ![fx](image) to view the Effect List for the click. In the Effect List you can deselect or click ![remove](image) to remove the effect from the clip.

### Using the Surround Sound Panner

You can use the Surround Sound Panner to pan the audio of a selected audio clip to any or all of the available channels. You can do this manually, or select from one of the panning templates.

**Note:** if you haven't configured the audio profile settings yet, it is recommended that you set the desired number of channels in your mix before using the Surround Sound Panner. See [Configuring Audio Profile Settings](#) for more information.

To use the Surround Sound Panner on an audio clip in your mix, do this:

1. Select the audio clip in the Mix room timeline to use, or select the Master Track if want to pan all of the audio in the mix.

2. Click **Surround Sound Panner** under the **Apply Effect** section.

3. If you selected the Master Track you can use range selection to select the portion of the audio mix you want to apply the effect to. See [Range Selection](#) for more information on selecting a range of an audio file. If you don't select a range, the effect is applied to the entire audio mix.

4. Select one of the following panner options:

   - **Manually set channel output:** select this option if you want the selected audio to be panned to a specific channel, and not move. Once selected, click and drag ![channel](image) to the channel you want the audio to be panned to.

   - **Use panning template:** select this option if you want the selected audio clip to pan across multiple channels. Select from one of the available templates. If the panning template contains the ![path](image) icon, you can click and drag its path to achieve the pan you require.
CyberLink AudioDirector

*Note:* you can select the *Pan the audio twice (forward and backward)* option if you want the audio to pan forward then backward along the template path. You can also indicated how many times you want the pan to *Repeat* by entering in the number of times in the field provided.

5. If required, click the **Preview** button to listen to how the applied effect will sound.

6. Click **Apply** to apply the pan effect to the audio.
Chapter 8:

Producing the Audio

The last step when editing, restoring, and mixing audio files is to save and produce it to a new file. CyberLink AudioDirector uses the original media and then applies all the specified changes to it, creating a new file, either in the same format, or in a new file format if you prefer.

*Note:* if you have CyberLink PowerDirector 11 or above installed on your computer, you can also select an edited file in the library and then File > Export Audio to PowerDirector from the menu to quickly produce and export just the audio to PowerDirector.

**Supported Formats**

CyberLink AudioDirector supports the production and export of audio files into the following formats:

**Audio:** M4A, MP3, WAV, WMA.

**Video:** H.264 AVC (.M2TS, .MP4), H.264 HEVC (.MKV, .MP4), MPEG-2 (.MPG), Windows Media Video (.WMV).

**Producing Audio**

When you are finished performing edits, adding effects, or restoring an audio file in the library, you can save the changes and produce it as a new audio file. This produce feature is also used when mixing down all the tracks in the Mix room, combining them into a single audio file.

*Note:* you can also convert audio files in the library into other formats using this feature.

To produce your audio file as a new file, do this:

1. Select the audio file in the library you want to save/produce, and then click **Produce** in the AudioDirector quick bar above the timeline. The Produce Audio window opens.
CyberLink AudioDirector

Note: if there is a video file in the Mix room, or you are editing a video file’s audio track (and you only want to output the edited audio), select **Produce Audio** after clicking the **Produce** button.

2. Set the **File information** as follows:
   
   - **File name**: enter in a new file name for the file.
   
   - **Location**: click on ![...](image) to set the location of the folder where the produced audio is saved.
     
     Note: if you have a CyberLink Cloud subscription you can select the **Upload a copy to CyberLink Cloud** option if you also want the program to upload the produced file to your CyberLink Cloud storage space after production.

3. Use the **Audio profile settings** to set the quality of the produce file as follows:
   
   - **Format**: select the format you want for the newly produced audio file from the drop-down. See **Supported Formats** for information on the supported audio file formats.
   
   - **Bitrate**: if required, set the bitrate for the produced file by selecting it from the drop-down.
   
   - **Sample rate**: set the sample rate of the produced file by selecting it from the drop-down.
   
   - **Bit depth**: set the bit depth of the produced file by selecting it from the drop-down.
   
   - **Channels**: set the number of channels the produced file will have. If you are producing it as a WAV file, you can produce it with 5.1 or 7.1 channels, if required.
   
   - **CyberLink TrueTheater Surround**: if increasing the number of channels in the audio, select this option to use CyberLink TrueTheater Surround to enhance the quality of the expanded audio. Choose from Living Room, Theater, or Stadium.

4. Click on **Produce**. The file is saved to the folder location specified.
   
   Note: the new file is also added to the library and is available for use in other projects in CyberLink AudioDirector.
# Producing Video

After you have edited the audio tracks of an imported video file, use the produce video function to re-render the video with the updated audio applied. This produce feature is also used when mixing down all the tracks in the Mix room, including a video track, and then combining them into a single video file with the mixed audio.

To produce a video file, do this:

1. Select the video file in the library you want to produce, click **Produce** in the AudioDirector quick bar above the timeline, and then select **Produce Video**. The Produce Video window opens.

2. Set the **File information** as follows:
   - **File name**: enter in a new file name for the file.
   - **Location**: click on \( \cdots \) to set the location of the folder where the produced video is saved.

   **Note**: if you have a CyberLink Cloud subscription you can select the **Upload a copy to CyberLink Cloud** option if you also want the program to upload the produced file to your CyberLink Cloud storage space after production.

3. Use the **Video profile settings** to set the quality of the produce file as follows:
   - **Video format**: select the format you want for the newly produced video file from the drop-down. See **Supported Formats** for information on the supported video file formats.
   - **Video profile**: select the video profile, or video quality, of the produced file from the drop-down.

   **Note**: when outputting video in the H.264 and H.265 formats, video profiles with resolutions as high as 2K and 4K are available if the original video file is compatible.

4. Use the **Audio profile settings** to set the quality of the produce file as follows:
   - **Audio codec**: select the audio used on the audio portion of the file from the drop-down.
   - **Bitrate**: if required, set the bitrate for the video's audio by selecting it from the drop-down.
   - **Sample rate**: set the sample rate of the video's audio by selecting it from the
**CyberLink AudioDirector**

- **Bit depth**: set the bit depth of the video's audio by selecting it from the drop-down.

- **Channels**: set the number of channels the video's audio will have. Depending on the video file format and audio codec specified, you can produce it with up to 5.1 channels, if required.

5. Click on **Produce**. The file is saved to the folder location specified and is also available in the media library.

![Note: if you selected to upload a copy of the produced file to CyberLink Cloud, AudioDirector will ask you if you want to convert it before uploading. Click **Yes** to convert it to an .MP4 file that is playable on a portable device, or **No** if you want to upload the original produced file.]
Chapter 9:
Sharing and Backing Up Audio

You can share the sound clips you create with other users by uploading them to DirectorZone. If you have a CyberLink Cloud subscription you can back up all your sound clips by storing them on CyberLink Cloud.

The sound clips are first converted to 44100Hz, 16bit .MP3 stereo audio files before they are uploaded. The sound clips you upload to DirectorZone are shared with other users, who can download and use them in their own audio creations.

Note: the maximum length allowed of sound clips shared on DirectorZone is 30 seconds. There is no length limitation on sound clips uploaded to CyberLink Cloud.

To share and back up your sound clips, do this:

1. Select it in the library and then click and then click **Upload** in the CyberLink AudioDirector quick bar above the timeline.

2. In the upload window, enter the information as follows:
   - **Destination**: select where you want to upload the sound clip.
   - **Title**: name of the sound clip as it will display once uploaded.
   - **Style**: select the style or category for the sound clip.
   - **Tags**: enter some keyword search tags that will help users find the sound clip when searching.
     
     Note: separate each tag you enter with a comma. If you want to use two words as the tag, just put quotes around them, e.g. "dollar bill".

   - **Collection**: enter the name of the collection you want the sound clip added to.
   - **Description**: enter a short description of your sound clip.

3. Click **Next** to proceed.

4. If required, confirm the copyright disclaimer, and then click **Next** to proceed.
with the upload.

5. Click on **Close** to close the upload window.
Creating CDs

Chapter 10:

Once you are done editing, restoring, and mixing your media files, you can use them to create CDs that are burned in the audio CD format.

*Note:* you can add both audio and video files to the CD, however just the video file's audio is burned to the disc.

To create a CD, do this:

1. Click the **Create CD** button to open the Create CD room.

2. Add tracks to the CD by dragging media from the media library to the CD track list view window. You can preview them in the media library before adding them by clicking beside the file.

   *Note:* if you added a media file by mistake, select it and then click to remove it. Click if you want to remove all the media files on the CD.

3. Use the and buttons to order the tracks on the CD to your preference.

4. If required, click on to edit the track information for each added media file. When editing the CD-Text, you can add the song title, artist, album, and writer information, and more. If adding the Album title and the Artist name, and they are the same for each track, select the Apply album information to all tracks and Apply artist information to all tracks options so you don’t need to add them for each track.

   *Note:* this track information will only be visible on disc players that support CD-Text reading.

5. Before burning the CD, click on to edit the CD properties as follows:

   - **Normalize volume in all tracks of the CD**: select this option to set the volume of all of the audio tracks on the CD to the same level.

   - **Insert audio gap between tracks**: select this option if you want to include gaps of silence between each track on the CD. You can specify the length of the
CyberLink AudioDirector

gap in the field provided.

6. If required, use the playback controls at the bottom of the window to preview the entire CD before burning it to a disc.

7. When you are ready, put a blank CD in your burning drive, and then click the **Burn Now** button.

8. In the Burn Settings window, set the following options:

   - **Recording drive**: select the burning drive CyberLink AudioDirector will use to burn the tracks to the CD.
   
   - **Recording speed**: set the recording speed used when burning the CD. If you encounter errors during the burning process, try lowering the burning speed.
   
   - **Number of copies**: in the field provided, enter the number of CDs you want CyberLink AudioDirector to burn for you in succession.

   **Note**: if the disc you want to use is not blank and is rewritable, click the **Erase Disc** option to erase it. To erase a disc, select the **Quick erase** option to erase the disc index contained on the disc, or the **Full erase** option to erase all of the content the disc contains. Next, click **Erase** to erase the disc.

9. Click **Burn** to finish creating your CD and burn it to a disc.
Chapter 11:

**AudioDirector Preferences**

Use the CyberLink AudioDirector preferences to select a UI language, set the default profile settings for audio files, and more.

To configure your preferences in CyberLink AudioDirector, click the button.

**General Preferences**

In the Preferences window, select the **General** tab. The available options are as follows:

**Internet**

- **Automatically check for software updates**: select to periodically check for updates or new versions of AudioDirector automatically.

**Language**

- **Use system default language**: select this option for the language display to be the same as the language of your operating system.

- **User defined**: select this option and then select the language from the drop-down list that you want to use.

**Editing**

- **Snap to reference**: select this option if you want the timeline slider and clips to snap to reference points during the editing and mixing process. The reference points include timeline markers and other clips on the timeline.

**Messages**

- Click the **Reset** button to reset the all the "Never show again" confirmation dialogs back to the default settings. All of the confirmation dialogs will display again once selected.
File Preferences

In the Preferences window, select the File tab. The available options are as follows:

**File default profile settings:**

- **Sample rate**: select the sample rate from the drop-down that CyberLink AudioDirector will use by default when producing audio.
- **Bit depth**: select the default bit depth from the drop-down that CyberLink AudioDirector will use when producing audio.
- **Channels**: select the default number of channels you want in the audio files produced by CyberLink AudioDirector.

Project Preferences

In the Preferences window, select the Project tab. The available options are as follows:

**Project default profile settings:**

- **Sample rate**: select the default sample rate from the drop-down of the audio in newly created projects.
- **Bit depth**: select the default bit depth from the drop-down of the audio in newly created projects.
- **Channels**: select the default number of channels of the audio in newly created projects.

**Default project folder:**

- **Project folder**: set the folder where CyberLink AudioDirector project files are saved by default. To change this folder, click and then select a new folder.
- **Working folder**: set the folder that CyberLink AudioDirector uses to store the working files it creates when editing, mixing, and adding effects to your audio. To change this folder, click and then select a new folder.
DirectorZone Preferences

In the Preferences window, select the DirectorZone tab. The available options are as follows:

**Auto sign in:**

- **Auto sign in to DirectorZone:** select this option and then enter in your e-mail address and password to automatically sign in to DirectorZone when the program is opened. If you do not have a DirectorZone account, click on the Get an Account button.

**Privacy rules:**

- **Allow DirectorZone to gather editing information:** select this option to allow DirectorZone to collect information about how you edited the sound clips you are uploading to DirectorZone.

Audio Settings Preferences

In the Preferences window, select the Audio Setting tab. The available options are as follows:

**Audio hardware settings**

- **Default input:** from the drop-down select the audio hardware device, such as a microphone, that you want to use by default when recording audio in CyberLink AudioDirector.

CyberLink Cloud Preferences

In the Preferences window, select the CyberLink Cloud tab. The available options are as follows:

- **Back up and restore your preferences:** if you have a CyberLink Cloud subscription you can click Back up to CyberLink Cloud to back up program preferences to CyberLink Cloud. Click Restore from CyberLink Cloud to replace your current program preferences with the ones you previously backed up on CyberLink Cloud.

- **Download folder:** click the button to change the folder where CyberLink Cloud sound clips, projects, and media are stored when downloaded.
- **Clear CyberLink Cloud cache**: click the **Clear Offline Cache** button to free up some disk space by emptying the temp files stored when downloading content from CyberLink Cloud.

- **Sign out from CyberLink Cloud service**: if you are currently signed in to CyberLink Cloud, click the button to sign yourself out.

  *Note: click the **Account Information** link in the bottom right corner of the preferences windows if you want to know your CyberLink Cloud subscription expiry date, how much storage space you have, and more.*
Chapter 12:

AudioDirector Hotkeys

The following is a list of the hotkeys available in CyberLink AudioDirector for your convenience:

<table>
<thead>
<tr>
<th>Hotkey</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ctrl+N</td>
<td>New project</td>
</tr>
<tr>
<td>Ctrl+O</td>
<td>Open project</td>
</tr>
<tr>
<td>Ctrl+S</td>
<td>Save project</td>
</tr>
<tr>
<td>Ctrl+Shift+S</td>
<td>Save project as</td>
</tr>
<tr>
<td>Ctrl+Q</td>
<td>Import media</td>
</tr>
<tr>
<td>Space bar</td>
<td>Play/Pause</td>
</tr>
<tr>
<td>,</td>
<td>Jump to Beginning</td>
</tr>
<tr>
<td>.</td>
<td>Jump to End</td>
</tr>
<tr>
<td>Ctrl+C</td>
<td>Copy</td>
</tr>
<tr>
<td>Ctrl+V</td>
<td>Paste</td>
</tr>
<tr>
<td>Ctrl+X</td>
<td>Cut</td>
</tr>
<tr>
<td>Ctrl+Y</td>
<td>Redo</td>
</tr>
<tr>
<td>Ctrl+Z</td>
<td>Undo</td>
</tr>
<tr>
<td>Delete</td>
<td>Remove</td>
</tr>
<tr>
<td>Alt+C</td>
<td>Open AudioDirector preferences</td>
</tr>
<tr>
<td>F1</td>
<td>Open help</td>
</tr>
<tr>
<td>Esc</td>
<td>Exit countdown timer</td>
</tr>
<tr>
<td>Alt+F4</td>
<td>Close AudioDirector</td>
</tr>
</tbody>
</table>
Chapter 13:

Licensing and Copyright Information

This section contains the AudioDirector licensing and copyright information.

iZotope Software

Intellectual Property Notices and Legends:

iZotope Noise Reduction, iZotope Delay, and iZotope Dynamics, iZotope®; © 2011 iZotope, Inc. All Rights Reserved.

Dolby Laboratories

Manufactured under license from Dolby Laboratories. Dolby and the double-D symbol are registered trademarks of Dolby Laboratories. Confidential unpublished works. Copyright 2003-2005 Dolby Laboratories. All rights reserved.
CyberLink AudioDirector
Chapter 14: Technical Support

If you require technical support, then this chapter can help. It includes all the information you need to find the answers you are looking for. You may also find answers quickly by contacting your local distributor/dealer.

Before Contacting Technical Support

Before contacting CyberLink technical support, please take advantage of one or more of the following free support options:

- consult the user’s guide or the online help installed with your program.
- refer to the Knowledge Base at the following link on the CyberLink web site: http://www.cyberlink.com/support/search-product-result.do
- check the Help Resources page in this document.

When contacting technical support by e-mail or phone, please have the following information ready:

- registered product key (your product key can be found on the software disc envelope, the box cover, or in the e-mail received after you purchased CyberLink products on the CyberLink store).
- the product name, version and build number, which generally can be found by clicking on the product name image on the user interface.
- the version of Windows installed on your system.
- list of hardware devices on your system (capture card, sound card, VGA card) and their specifications. For fastest results, please generate and attach your system info using the DxDiag.txt.

Note: here are the steps to generate the system info DxDiag.txt file: Click Windows (start) button, and then search for "dxdiag". Click Save All Information button to save the DxDiag.txt file.

- the wording of any warning messages that were displayed (you may want to write this down or take a screen capture).
• a detailed description of the problem and under what circumstances it occurred.

Web Support

Solutions to your problems are available 24 hours a day at no cost on the CyberLink web site:

*Note: you must first register as a member before using CyberLink web support.*

CyberLink provides a wide range of web support options, including FAQs, in the following languages:

<table>
<thead>
<tr>
<th>Language</th>
<th>Web Support URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td><a href="http://www.cyberlink.com/cs-help">http://www.cyberlink.com/cs-help</a></td>
</tr>
<tr>
<td>Traditional Chinese</td>
<td><a href="http://tw.cyberlink.com/cs-help">http://tw.cyberlink.com/cs-help</a></td>
</tr>
<tr>
<td>Japanese</td>
<td><a href="http://jp.cyberlink.com/cs-help">http://jp.cyberlink.com/cs-help</a></td>
</tr>
<tr>
<td>Spanish</td>
<td><a href="http://es.cyberlink.com/cs-help">http://es.cyberlink.com/cs-help</a></td>
</tr>
<tr>
<td>Korean</td>
<td><a href="http://kr.cyberlink.com/cs-help">http://kr.cyberlink.com/cs-help</a></td>
</tr>
<tr>
<td>Simplified Chinese</td>
<td><a href="http://cn.cyberlink.com/cs-help">http://cn.cyberlink.com/cs-help</a></td>
</tr>
<tr>
<td>German</td>
<td><a href="http://de.cyberlink.com/cs-help">http://de.cyberlink.com/cs-help</a></td>
</tr>
<tr>
<td>French</td>
<td><a href="http://fr.cyberlink.com/cs-help">http://fr.cyberlink.com/cs-help</a></td>
</tr>
<tr>
<td>Italian</td>
<td><a href="http://it.cyberlink.com/cs-help">http://it.cyberlink.com/cs-help</a></td>
</tr>
</tbody>
</table>

Help Resources

The following is a list of help resources that may assist you when using any of CyberLink’s products.

• Access CyberLink’s Knowledge base and FAQ (frequently asked questions): http://www.cyberlink.com/cs-resource

• View video tutorials for your software: http://directorzone.cyberlink.com/tutorial/
Technical Support

- Ask questions and get answers from our users on the CyberLink Community Forum: http://forum.cyberlink.com/forum/forums/list/ENU.page

**Note:** CyberLink’s user community forum is only available in English and German.
CyberLink AudioDirector
Index

5
5.1 8, 23

7
7.1 8, 23

A
Analog 45
Attack time 57
Attenuate
  ratio 81
  visual repair 72
Audio
  adding markers 12
  attenuate 72
  boosting 33
  channels 31
  converting 31, 95
  creating 83
  cropping 9
  CyberLink Cloud 99
  downloading 24
  editing 31
  effects 43
  exporting 95
  fading 34
importing 23
inserting noise 39
inserting silence 39
length 37
level meter 17
master track 85
mixer panel 86
mixing 86
mixing down 95
noise reduction 74
normalizing 32, 89
panning 42, 93
pitch 38
playback controls 15
producing 95
recording 26
removing clicks 77
removing vocals 58
repairing 61
restoring 61
reversing 40
saving 95
sharing 99
speed 37
supported formats, export 95
supported formats, import 23
trimming 36
TrueTheater surround 31
uploading 96, 99
volume 41
AudioDirector
  Live 2
  patches 2
  upgrading 2
B
Base frequency 80
Bit depth 31
Boost 33

C
CDs
creating 101
Change speed 37
Channels
editing 9
normalizing 32
overview 8
panning 93
setting number of 31
Chorus effect 51
Click removal 77
Clipping removal 76
Compressor 43
Controls
playback 15
zoom 12
Convert 95
audio 31
Create
audio mix 83
CDs 101
discs 5
Crop 9
Crossfade 90
CyberLink Cloud
account information 105
backing up sound clips 99
downloading sound clips 25
overview 2
pack project materials 29
preferences 105
projects 30
signing out 105
uploading audio 96

D
Decay 52
Delay depth
chorus effect 51
flanger 50
phaser 49
Delays
adding 45
DirectorZone
downloading sound clips 24
overview 2
preferences 105
sharing sound clips 99
Discs
creating 101
DJ scratch 91
Dry-wet mix
auto denoise 74
chorus effect 52
delays 46
flanger 50
noise reduction 75
phaser 49
Dry-wet mix reverb 47
Dynamic range control 43

E
Echo 47
   adding 52
Edit
   audio 5, 31
   tools 32
Effects 21
   applying 43
   chorus 51
   echo 52
   flanger 49
   importing 59
   noise gate 57
   phaser 48
   VST 59
Equalizer 53, 54
Expander 44
Export 95
   projects 29
   to CyberLink Cloud 29

F
Fades 34
Feedback
   delays 46
   echo 53
   flanger 50
   phaser 49
   Filter bandwidth 80
   Flanger 49
   Frequency smoothing 81

G
Gate 44

H
Harmonic slope 80
Harmonics 80
Help 112
Hiss removal 81
Hold time 57
Hotkeys 107
Hum removal 78

I
Import
   audio 23
   effects 59
   supported formats 23
   video 23
Initial delay time
   chorus effect 51
   echo 53
   flanger 50
Insert 83

Index
L
Language changing 103
Levels 17
Library 6
Limiter 43
Loopback recording 27

M
Markers
timeline 12
Master track 85
Master volume 41
Media
editing 31
importing 23
playback controls 15
Meter 17
Microphone 27
Mix 83
audio 5
master track 85
timeline 7
Mix down 95
Mixer panel 86
Modulation rate
chorus effect 51
flanger 50
phaser 49
Mono 8

N
New features 1
Noise
inserting 39
reducing 74
Noise gate 57
Noise level threshold 81
Normalize
across tracks 89
audio channels 32
volume on CD 101

O
Output gain 44
Overwrite 83

P
Panning 42, 93
Phase diff 50
Phaser 48
Phone 56
Pitch
adjusting 38
vocals 54
Playback 15
Plug-ins 59
PowerDirector 95
Preferences 103
Produce 95
Index

Produce 95
  audio 95
  video 97
Projects 29
  CyberLink Cloud 30
  exporting 29

Q
Quick bar 13

R
Radio 55
Range selection 9
Record 26
  loopback 27
  settings 27
  what you hear 27
Release time 57
Restore 61
Reverb 47
Reverse 40
Room size 47
Room width 47

S
Sample rate 31
Save
  projects 29
Shape 50
Share 99
Silence 39
Slider 7
Smart repeat 91
Smart transition 90
Sound clips
  CyberLink Cloud 25
  DirectorZone 24
  library 26
Sparkle 47
Spectral frequency view 11
Speed 37
Split 83
Spread 46
Stage count 48
Stereo 8
Surround sound panner 93
System requirements 4

T
Tap 46
Tape 45
Technical support 111
Tempo transition 91
Temporal smoothing 81
Threshold
  noise gate 57
  noise level 81
Timbre 54
Timeline
  adding tracks 85
  markers 12
  master track 85
  mix audio 7
Timeline
  overview 6
  slider 7
Tracks
  adding 85
  normalizing 89
Transitions 90
Trash 46
Trim 36
  range 9
TrueTheater surround 31

Voices count 51
Volume 21
  master 41
  normalizing 101
VST effects 59

W
Waveform view 10
Web support 112
What you hear 27

Z
Zoom 12

U
UI language 103

V
Videos
  editing audio 31
  importing 23
  only audio 85
  only video 85
  playback controls 15
  producing 97
Views
  spectral frequency 11
  waveform 10
Visual repair 61
Vocals
  changing 53
  pitch 54
  removing 58
  transforming 53