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Special thanks to the Beta Test Team, who were invaluable not just in tracking down bugs, but in making this a better product.
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1 Welcome to the SYMPHONY ESSENTIALS

Thank you for purchasing SYMPHONY ESSENTIALS STRING ENSEMBLE. This document will give you information about the library, as well as step-by-step instructions and advice on how to achieve the best results with it.

We hope that you will enjoy using the SYMPHONY ESSENTIALS products.

1.1 About SYMPHONY ESSENTIALS STRING ENSEMBLE

SYMPHONY ESSENTIALS STRING ENSEMBLE is part of the SYMPHONY ESSENTIALS line of KONTAKT Instruments. This series provides composers with a basic tool set for creating highly realistic orchestral textures with an expansive sound full of character.

The ESSENTIALS STRING ENSEMBLE allows you to use a production-ready stereo mix. On the dedicated Effects page, a parametric EQ, convolution REVERB, and COMPRESSION effects let you adjust the sound to suit any project you’re working on.

You can switch between articulations in real time utilizing freely assignable Key Switches or MIDI CCs. An Auto Divisi feature distributes voices to different sub sections. Users of KOMPLET KONTROL S-Series of keyboard.

1.2 About this Document

This document was written in a way that allows you to access information out of order. While the topics are structured to guide you through the features and usage of ESSENTIALS STRING ENSEMBLE topic by topic, you can skip ahead at any time.

Jump right in the midst of the document to a topic you’re interested in. You shouldn’t have to look up related information to be able to follow any of the workflow tutorials. All relevant information is given as part of each description.
1.3 Manual Conventions

This document uses particular formatting to point out special facts and to warn you of potential issues. The icons introducing the following notes let you see what kind of information can be expected:

![Exclamation Mark Icon] Whenever this exclamation mark icon appears, you should read the corresponding note carefully and follow the instructions and hints given there if applicable.

![Light Bulb Icon] This light bulb icon indicates that a note contains useful extra information. This information may often help you to solve a task more efficiently, but does not necessarily apply to the setup or operating systems you are using; however, it's always worth a look.

Furthermore, the following formatting is used:

- Text appearing in (drop-down) menus (such as Open..., Save as... etc.) in the software and paths to locations on your hard disk or other storage devices is printed in *italics*.
- Text appearing elsewhere (labels of buttons, controls, text next to checkboxes etc.) in the software is printed in *blue*. Whenever you see this formatting applied, you will find the same text appearing somewhere on the screen.
- Important names and concepts are printed in **bold**.
- References to keys on your computer’s keyboard you’ll find put in square brackets (e.g., “Press [Shift] + [Enter]”).

► Single instructions are introduced by this play button type arrow.

→ Results of actions are introduced by this smaller arrow.

**Naming Convention**

Throughout this document, we will refer to SYMPHONY ESSENTIALS STRING ENSEMBLE as just ESSENTIALS STRING ENSEMBLE.

The features described in this document are identical for KONTAKT and KONTAKT PLAYER. We will refer to both as KONTAKT.
2 Choosing the Right Instrument

ESSENTIALS STRING ENSEMBLE ships with a total of six KONTAKT Instruments (.nki files). To help you select the right one for your specific task, here is an overview of the included instruments.

Four orchestral instrument string sections were recorded:

- Violins
- Violas
- Cellos
- Basses

2.1 Section Instruments

For each orchestral section, ESSENTIALS STRING ENSEMBLE offers at least one dedicated Instrument with a choice of Articulations for detailed compositional work. Seven Articulations per Instrument can be configured and selected. The Section Instruments are the logical choice when you want full control over which part is played by which section and when you need the following features:

- Basses Essential.nki
- Cellos Essential.nki
- Violas Essential.nki
- Violins 1 Essential.nki
- Violins 2 Essential.nki

For every Articulation you assign, the corresponding samples are loaded into your computer’s RAM. De-activate every Articulation you don’t need to conserve memory as described in chapter 4.2.1, Removing Specific Articulation Assignments.
See also

- Removing Specific Articulation Assignments [→ 30]

2.2 Ensemble Instrument

The Ensemble Instrument allows you to play **all sections in one Instrument**, although with a limited choice of Articulations.

- STRING ENSEMBLE Essential.nki

This limitation, on the other hand, considerably reduces memory usage.

The Ensemble Instrument maps the different sections across the keyboard for rapid sketching of musical ideas involving the entire string ensemble. It represents the quickest way of distributing chords across Sections, playing Ensemble swells or massive orchestral stabs.
3 Playing SYMPHONY ESSENTIALS Instruments

3.1 Selecting Articulations with Key Switches

When loading one of the KONTAKT Instruments, seven Articulations are assigned to keys which are separate from the tonally playable keys. These are called Key Switches, and are displayed as either red, green or purple keys in KONTAKT’s on-screen keyboard and in the small Articulation Indicators beneath the Articulation label.

Key Switch colors on the on-screen keyboard and the Articulation Indicators

If ESSENTIALS STRING ENSEMBLE is configured to select Articulations by Key Switches, the corresponding keys in KONTAKT’s on-screen keyboard are colored according to the respective Articulation category:

- Red: Long Articulations
- Green: Short Articulations

On KOMPLETE KONTROL S-Series keyboards, the Light Guide LEDs visualize the Key Switches by lighting up in the same color.

To select an Articulation by Key Switch:
1. Load the Violins 1 Essential.nki KONTAKT Instrument.
2. Press the C0 MIDI note on your MIDI keyboard to select the Legato Articulation assigned to C0.
3. Play this Articulation using the dark blue range of keys.
4. Press the D0 key on your MIDI keyboard to select the Tremolo Articulation.
5. Play this Articulation using the dark blue range of keys.

KONTAKT’s on-screen keyboard with Key Switches

None of these Articulations are just static musical building blocks. Make a habit of using the Modulation Wheel (MIDI CC 1) to modulate the Dynamics control to record expressive parts.

In the context of a busy arrangement, these results may already be good enough. In passages which feature the strings more prominently, the discerning listener may still be able to identify details which give away the fact that you didn’t record a live orchestral performance.

The solution is to refine the recorded performance in your host software with the provided Performance Controls.

### 3.2 Refining a Recording in Your Host Software

The key to a realistic performance is a combination of three basic methods:

**Switching Between Articulations**

Articulations are one of the key ingredients of musical expression. Switching Articulations in ESSENTIALS STRING ENSEMBLE is the equivalent to writing articulation marks in music notation. When composing with ESSENTIALS STRING ENSEMBLE, lay out carefully which Articulations you will need.
Playing Like a String Player

Watch both, the note starts and endings. Depending on the pitch and instrument section, it takes real-life stringed instruments varying amounts of time to build up a steady tone (i.e. Attack) and to fade out (i.e. Release). These differences were recorded and are part of the Instruments.

Unlike playing a piano library, to achieve accurate timing, you will have to move some notes ahead of the precise beat by varying amounts, just as real string players compensate by playing slightly ahead.

Using the Performance Controls

Real time modulation of Performance Controls allows for more realistic performances. Recording automation with the Mod Wheel allows you to access the entire dynamic range of the orchestra.

The Mod Wheel (MIDI CC 1) is by default assigned to the Dynamics control and you should always play expressively with the tonal variations the Mod Wheel affords you.

You can achieve even more realistic results by automating slight variations to the Expression, Attack, Release and Brightness controls, even if the differences appear subtle at first.

3.3 About Using MIDI Controllers

It is highly recommended that you work with a MIDI controller, which lets you perform automation of the Performance Controls in real time. This way, you will hear the changes immediately, instead of just drawing automation curves in your host software.

If you load ESSENTIALS STRING ENSEMBLE inside KOMplete Kontrol or Maschine 2, the Performance Controls are automatically mapped to the controller’s first four knobs. The Dynamics control defaults to the Mod Strip on your KOMplete Kontrol S-Series keyboard, or to the Modulation Wheel (MIDI CC 1) if used with a generic controller.

All other parameters are available via your host software’s automation system. When selecting the KONTAKT plug-in as the automation target, the Performance Controls are the first four automation parameters.
In order to control the Performance Controls with a generic MIDI control device, please use the mechanism provided by your host to MIDI-control automation parameters.

- Cubase: Quick Controls
- Logic X: Automation Quick Access
- Ableton Live: MIDI Remote
- Pro Tools: MIDI CC Automation

3.4 Performance Controls

When you load ESSENTIALS STRING ENSEMBLE, the Performance Controls are the most prominent feature of the Instrument’s user interface. These controls are used to refine a performance to achieve very realistic results. Thanks to their unified layout, once you understand what they do in one product from the series, you’ll be immediately familiar with all of them.

The main Performance Controls
3.4.1 Dynamics

The Dynamics control is assigned to the Mod Wheel (MIDI CC 1) by default. It allows you to control the intensity of the Instrument in real-time by seamlessly blending between several layers of samples. At low settings, the instruments are bowed softly and have a slower Attack phase for tender passages. At high settings, the instruments are bowed more forcefully and with a pronounced attack, ideal for fast melodic lines.

The Dynamics control allows you to easily automate intensity changes to e.g. transition from leading to supporting passages.

3.4.2 Expression

The Expression control allows you to dynamically adjust the section volume. During a performance, you might for example want to increase the volume to help compensate for a drop in level that occurs at low settings of the Dynamics knob.
### 3.4.3 Attack

The *Attack* control allows you to increase the fade-in time per note to simulate realistic variations throughout a passage. When setting the *Attack* time to higher values, notes start to fade in more slowly, giving the notes a more solemn and gentle character.

The *Attack* and *Dynamics* controls interact with each other. Even small adjustments to either one of them help create very realistic performances.

### 3.4.4 Release

The *Release* control applies an additional envelope to the fade-out phase of the notes.

Reducing the Release setting to 0% produces a very "dry" sounding result, which can sometimes make the result sound artificial. However, this can be very useful when playing quick successive notes as it makes each note stand out more.

### 3.4.5 Brightness

The *Brightness* control allows you to adjust the tonality of the strings. At high settings, the string noise will sound more pronounced, while at low settings, the strings sound mellow and intimate.
3.5 Additional Controls

Below the Performance Controls, you’ll find the Articulation selector plus two additional sets of controls. Depending on the selected Articulation, different combinations of these controls are available. This is an overview of all controls you will encounter.

(1) **Articulation Selector**: This control is visible in every Instrument.

- Click the Articulation label to open the ARTICULATION SLOTS list.
Click the Articulation name to assign a different Articulation from the drop-down menu.

Click any of the eight Articulation Indicator dots to select a different Articulation.

**Additional Controls:** Depending on which ESSENTIAL STRING ENSEMBLE Instrument you open and which Articulation type you select, these two fields show different controls.

### 3.5.1 Repetition

Note that the Repetition module is only available for short articulations.

Click the small button to the left of the label to activate or de-activate Repetition. A thin ring shows it’s inactive, a solid dot means it’s active.

When Repetition is activated, every note you play is automatically repeated in a continuous loop.

**Time:** Set the speed of repetitions here. Click the button and select a note division value from the drop-down menu.

**Accent:** This parameter offers a number of typical rhythmical patterns which are played back in a very natural and fluent way.

► Select *No Accents* for no pronounced accentuation.

► Select *Accent 1 + 3* for accentuation of the first and third note in each repetition.

► Select *Strong Accent 1 + 3* for a more pronounced accentuation of the first and third note in each repetition.

► Select *Accent 1* for accentuation of the first note in each repetition.
3.5.2  Round Robin

Round Robin helps avoid a typical issue associated with repeated playback of a sample. If you play a Staccato pattern using the same sample for each note, the result will sound static and artificial. With Round Robin activated, there are between 2 and 4 alternative samples available for each note.

Round Robin Indicators

The selection of the next alternative sample in line depends on the selected Round Robin mode:

Cont.: The first note triggers the first sample, the next note triggers the second sample and so on until every sample position has been played, then it starts from the beginning.

Rnd: The first note selects a sample randomly. The second note selects a random note out of the alternative samples. No sample is played multiple times in a row.

The Round Robin indicator visualizes the selection of the alternative samples, the dot indicating the sample position being played back.

Slam: This knob adds more compression for a “bigger” sound to your short articulations. Use it when you want the articulation to sound “larger than life”.

⚠️ The compression applied by increasing the Slam parameter may boost the noise floor of the recordings.

3.5.3  Settings

Settings are available for the Harmonics Articulation.

Rel. Length: This extends the range of the main Release control for the Harmonics Articulation.
4 Configuring ESSENTIAL STRING ENSEMBLE

Each Instrument in ESSENTIALS STRING ENSEMBLE represents a default selection of Articulations assigned to Key Switches. You can configure your own collection of Articulations by means of the Articulation Slot Setup view as described in this chapter.

Once configured, you can save your work as a KONTAKT Snapshot for instant recall.

4.1 The Articulation Slot Setup View

To assign up to eight Articulations to either Key Switches or value ranges of a MIDI CC, ESSENTIALS STRING ENSEMBLE provides the Articulation Slot Setup view. This is how you access it:

1. Load Violins 1 Essential.nki.
2. While in the default view, click the Articulation label in the bottom left corner. This will open the ARTICULATION SLOTS list.
3. Click the **Edit** button to open the full **Articulation Slot Setup**. This view will completely cover the Performance Controls.

![Articulation Slot Setup](image)

⇒ You can now freely configure Articulation assignments.

For every Articulation you assign, the corresponding samples are loaded into your computer’s RAM. De-activate every Articulation you don’t need to conserve memory as described in chapter ↑4.2.1, **Removing Specific Articulation Assignments**.

### 4.1.1 Overview of the Articulation Slot Setup (Key Switch)

Depending on whether you assign **Key** switches or **MIDI CC**, the **Articulation Slot Setup** view offers slightly different sets of controls. This is an overview of the **Key** Switch setup.
Articulation Slot Setup view (Key Switch)

(1) **Key/MIDI CC selector**: The eight Articulation Slots can be selected either by **Key** (MIDI note) or by **MIDI CC** events. Click the respective text label to change this setting for the entire Instrument. The active option is highlighted.

(2) **Articulation Slot Macros**: Click the three dots to open the macro menu. Depending on whether **Key** or **MIDI CC** is selected, you'll have access to different convenience features (e.g. assigning ascending key switches to the Articulation Slots automatically).

(3) **Edit Button**: Click this button to show/hide the full Articulation Slot Setup view.

With **Edit** inactive, you have limited access to the Articulation Slots, while still being able to move the Performance Controls with the mouse.

With **Edit** activated, you get full access to **Key/MIDI CC** assignments and a visual representation of selectable Articulations.
(4) **Articulation List**: This list holds eight Articulation Slots. Each Slot represents a Key/MIDI CC value, the assigned Articulation, as well as a volume control per Articulation. Key/MIDI CC is set globally for all Articulation Slots in an Instrument.

(5) **Key Assignment selector**: Set the MIDI Key which will select this Articulation. Click and drag up/down to set the Key.

(6) **MIDI Learn button**: This offers an alternative to manually setting the MIDI Key. Click this button, then press a key on your MIDI keyboard to complete the assignment.

(7) **Velocity Range selector**: Multiple Articulations can be assigned to the same MIDI Key. The selection is then dependent on how much force you apply when playing that key (Velocity).

► Click and drag the value in the left field to set the lowest Velocity (0-127) that will select this Articulation.

► Click and drag the field on the right hand side to set the highest Velocity (0-127) that will select this Articulation.

(8) **Clear Slot button**: Click this button to remove the Articulation assignment from the selected slot. The samples of unassigned Articulations are automatically purged from RAM. The Key/MIDI CC setup is preserved when clicking the Clear Slot button.

(9) **Articulation Cell**: Each of these cells represent an Articulation. Click any of them to assign that Articulation to the selected Articulation slot.

![Warning]

If ESSENTIALS STRING ENSEMBLE is configured to select Articulations by Key Switches, the corresponding keys in KONTAKT’s on-screen keyboard are colored according to the respective Articulation category:

- Red: Long Articulations
- Green: Short Articulations

### 4.1.2 Overview of the Articulation Slot Setup (MIDI CC)

Depending on whether you assign Key switches or MIDI CCs, the Articulation Slot Setup view offers slightly different controls. This is an overview of the MIDI CC setup.
Articulation Slot Setup (MIDI CC)

(1) **Key/MIDI CC selector**: The eight Articulation Slots can be selected either by **Key** (MIDI note) or by **MIDI CC** events. Click the respective text label to change this setting for the entire Instrument. The active option is highlighted.

(2) **Articulation Slot Macros**: Click the three dots to open the macro menu. Depending on whether **Key** or **MIDI CC** is selected, you'll have access to different convenience features (e.g. assigning ascending key switches to the Articulation Slots automatically).

(3) **Edit Button**: Click this button to show/hide the full Articulation Slot Setup view.

With **Edit** inactive, you have limited access to the Articulation Slots, while still being able to move the Performance Controls with the mouse.

With **Edit** activated, you get full access to **Key/MIDI CC** assignments and a visual representation of selectable Articulations.
(4) **Articulation List**: This list holds eight Articulation Slots. Each Slot represents a Key/MIDI CC value, the assigned Articulation, as well as a volume control per Articulation. Key/MIDI CC is set globally for all Articulation Slots in an Instrument.

(5) **MIDI CC Assignment selector**: Click and drag up/down to set the MIDI CC number.

(6) **MIDI Learn button**: This offers an alternative to manually setting the MIDI CC number. Click this button, then move a knob, fader or button on your MIDI keyboard to send a MIDI Control message and to complete the assignment.

(7) **Controller Range selectors**: Multiple Articulations can be assigned to the same MIDI CC. The selection is then dependent on the MIDI CC value your controller sends.

  ▶ Click and drag the value in the left field to set the lowest CC value (0-127) that will select this Articulation.

  ▶ Click and drag the field on the right hand side to set the highest CC value (0-127) that will select this Articulation.

(8) **Clear Slot button**: Click this button to remove the Articulation assignment from the selected slot. The samples of unassigned Articulations are automatically purged from RAM. The Key/MIDI CC setup is preserved when clicking the Clear Slot button.

(9) **Articulation Cell**: Each of these cells represent an Articulation. Click any of them to assign that Articulation to the selected Articulation slot.

If ESSENTIALS STRING ENSEMBLE is configured to select Articulations by Key Switches, the corresponding keys in KONTAKT’s on-screen keyboard are colored according to the respective Articulation category:

- Red: Long Articulations
- Green: Short Articulations

### 4.2 Configuring Articulation Slots

There are different ways for you to re-assign different Articulations to pre-defined Articulation Slots.
Directly in the Performance View

This is the fastest option if you want to assign a different Articulation to the currently selected Articulation Slot. It also allows you to stay in the distraction-free performance view.

1. Load Violins 1 Essential.nki.
2. Click the leftmost Articulation Indicator in the bottom left corner. The Sustains Articulation is selected.
3. Click the Articulation name. A list of available Articulations will open.
4. Select the Harmonics Articulation by clicking in the list.

→ The Articulation is assigned to F6.

**In the Articulation Slots List**

Using the ARTICULATION SLOTS list gives you an overview of all Articulation assignments while still letting you access the Performance controls with the mouse.

1. Load Violins 1 Essential.nki.
2. Click on Articulation in the bottom left corner. The ARTICULATION SLOTS list will open.

3. Select the first Articulation Slot by clicking on it in that list.
4. Click on Sustains, the default assignment in the first Articulation Slot. A list of available Articulations will open.
5. Select Tremolo by clicking in the list.

→ The Tremolo Articulation is assigned to the first slot.
In the Articulation Slot Setup View

The full Articulation Slot Setup view allows you to switch between MIDI Key and MIDI CC assignment for the entire KONTAKT instrument. Depending on this selection, you can freely configure advanced parameters.

1. Load Violins 1 Essential.nki.
2. Click on Articulation in the bottom left corner. The ARTICULATION SLOTS list will open.
3. In that list, click the Edit button. The Articulation Slot Setup view will open, covering the Performance Controls.
4. Here, click the Trills tile to select the respective Articulation.

→ The Trills Articulation is now assigned.

If ESSENTIALS STRING ENSEMBLE is configured to select Articulations by Key Switches, the corresponding keys in KONTAKT’s on-screen keyboard are colored according to the respective Articulation category:

- Red: Long Articulations
- Green: Short Articulations

4.2.1 Removing Specific Articulation Assignments

To clear single Articulation assignments, use the ARTICULATION SLOTS list.
1. Load **Violins 1 Essential.nki**.
2. Click on **Articulation** in the bottom left corner. The **ARTICULATION SLOTS** list will open.

3. In the list, click on the Articulation name. A list of available Articulations will open.
4. Select **None**, the last entry in that list.

→ The assignment is removed.

### 4.2.2 Removing all Articulations

To clear all Articulation assignments, use the Articulation Macro.

1. Load **Violins 1 Essential.nki**.
2. While in the default performance view, click on Articulation in the bottom left corner. The ARTICULATION SLOTS list will open.

3. In the top right corner of this list, click the three vertical dots. A list of available macros will open.

4. Click on Empty all slots.

→ All assignments are deleted.

4.2.3 Assigning Key Switches to Articulations

Within a KONTAKT Instrument, you can assign either Key switches (MIDI key) or MIDI CCs (buttons) to select an Articulation. You cannot mix Key and MIDI CC assignments within one Instrument. This is how you assign a Key switch.

1. Load Violins 1 Essential.nki.
2. Click on Articulation in the bottom left corner. The ARTICULATION SLOTS list will open.

3. Click the Edit button in the top right corner of this list. This will open the Articulation Slot Setup view.

4. Make sure Key is selected.

5. Select the first Articulation slot by clicking in the list on the left hand side.

6. Select the Pizzicato Articulation by clicking the corresponding cell in the Articulation Slot Setup view.

7. Underneath the Articulations, click on the field labeled Key and drag up/down to set the MIDI Key to D0.
The Articulation is now assigned to D0 on your MIDI keyboard and can be selected by pressing that key.

Assigning the Key via MIDI Learning

As an alternative to setting the MIDI Key by clicking and dragging the value in the Key field, you can MIDI-learn the MIDI key.

1. Click the MIDI connector button.

2. Press the E0 key on your MIDI keyboard.

The selected Articulation is now assigned to E0 on your MIDI keyboard and can be switched on by pressing that key.

If ESSENTIALS STRING ENSEMBLE is configured to select Articulations by Key Switches, the corresponding keys in KONTAKT’s on-screen keyboard are colored according to the respective Articulation category:

- Red: Long Articulations
- Green: Short Articulations

4.2.4 Assigning Velocity Ranges to Key Switches

By default, key switch assignments are not sensitive to velocity. You can play the MIDI note on your keyboard softly or with force, as both will activate the same assigned Articulation.

If you need to switch between different Articulations with just one MIDI key, setting up velocity ranges allows you to do just that.
Setting Up the First Articulation

1. Load Violins 1 Essential.nki.
2. Click on Articulation in the bottom left corner. The ARTICULATION SLOTS list will open.
3. Click the Edit button in the top right corner of this list. This will open the Articulation Slot Setup view.
4. Make sure Key is selected.
5. Select the first Articulation slot by clicking in the list on the left hand side.
6. Select the Pizzicato Articulation by clicking the corresponding cell in the Articulation Slot Setup view.

7. Underneath the Articulations, click on the field labeled Key and drag up/down to set the MIDI key to D0.
8. Set the **Velocity Range** values to 1 in the left field and 90 in the field on the right hand side.

![Articulation Slots Configuration](image)

**Setting Up the Second Articulation**

1. Select the second Articulation slot by clicking in the **ARTICULATION SLOTS** list on the left-hand side.
2. Select the Spiccato Articulation by clicking the corresponding cell in the Articulation Slot Setup view.

3. Underneath the Articulations, click on the field labeled Key and drag up/down to set the MIDI key to F0.
4. Set the **Velocity Range** values to 120 in the left field and 127 in the field on the right hand side.

![Velocity Range Configuration](image)

You have now configured the D0 key on your keyboard to switch to the **Pizzicato** Articulation when pressed lightly, and to the **Spiccato** Articulation when pressed more forcefully.

**4.2.5 Assigning MIDI CCs to Articulations**

Within a KONTAKT Instrument, you can assign either **Key** Switches (MIDI key) or **MIDI CCs** (MIDI button) to select an Articulation. You cannot mix **Key** and **MIDI CC** assignments within one Instrument.

Switching by **MIDI CC** is different from using **Key**, because here, you have to set up value ranges, whereas setting up velocity ranges for **key** is optional. The reason is that each instance of an ESSENTIALS STRING ENSEMBLE Instrument will only receive one **MIDI CC** number. So switching Articulations requires you to set up value ranges.

1. Load **Violins 1 Essential.nki**.
2. While in the default performance view, click on **Articulation** in the bottom left corner. The **ARTICULATION SLOTS** list will open.
3. Click the **Edit** button in the top right corner of this list. This will open the **Articulation Slot Setup** view.

4. Make sure **MIDI CC** is selected.

5. Right next to the **MIDI CC** switch, click on the field and drag up/down to set the **MIDI CC** to **16**. By default, the available value range of 0-127 is evenly distributed across the eight Articulation slots. Unless your specific setup requires you to change it, it is recommended you keep this default.

6. Select the first Articulation slot by clicking in the list on the left hand side.

7. Select the **Staccato** Articulation by clicking the corresponding cell in the **Articulation Slot Setup** view on the right.

→ The selected Articulation is now assigned to **CC 16** on your MIDI controller.

**Assigning MIDI CC via MIDI Learning**

As an alternative to setting the **MIDI CC** by clicking and dragging the value in the **MIDI CC** field, you can MIDI-learn it.
1. Click the MIDI Learn button next to the MIDI CC label.

2. Press a button assigned to MIDI CC 16 on your MIDI controller.
   → The selected Articulation is now assigned to CC 16 on your MIDI controller.

By default, the Articulation in the first Articulation slot can be switched on by sending a CC value between 0 and 15 from your host software or a MIDI controller.

4.2.6 Configuring a Native Instruments Controller to Send MIDI CC

If you own any Native Instruments hardware controller, please use Controller Editor to configure the buttons/pads on your controller to send appropriate MIDI CC values as described in the Controller Editor Manual.

Loading an Instrument and Setting it to Receive MIDI CC

1. Load Violins 1 Essential.nki.

2. While in the default performance view, click on Articulation in the bottom left corner. The ARTICULATION SLOTS list will open.

3. Click the Edit button in the top right corner of this list. This will open the Articulation Slot Setup view.
4. Make sure **MIDI CC** is selected.

![MIDI CC selection](image)

The Articulation Slots are set up to switch when MIDI CC values are received.

**Configuring a Native Instruments Controller to Send MIDI CC Values**

In order to select either of the first two Articulation Slots, the controller has to send values within the value ranges assigned to the Articulation Slots. Slot 1 is assigned values from 0 to 16, Slot 2 is assigned values from 17 to 31.

Please set up the following values in **Controller Editor**:

<table>
<thead>
<tr>
<th></th>
<th>Hardware Button 1</th>
<th>Hardware Button 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type</strong></td>
<td>Control Change</td>
<td>Control Change</td>
</tr>
<tr>
<td><strong>Channel</strong></td>
<td>1^</td>
<td>1^</td>
</tr>
<tr>
<td><strong>Number</strong></td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td><strong>Mode</strong></td>
<td>Trigger</td>
<td>Trigger</td>
</tr>
<tr>
<td><strong>Value</strong></td>
<td>10</td>
<td>26</td>
</tr>
<tr>
<td><strong>Action On</strong></td>
<td>Down</td>
<td>Down</td>
</tr>
</tbody>
</table>

^ Channel 1 is the default for the first Instrument you load in KONTAKT. If you intend to open multiple Instruments within one KONTAKT instance, set the channel that ESSENTIAL STRING ENSEMBLE is receiving MIDI events from.
4.2.7 Sending MIDI CC From Your Host Software

Every modern music production software allows you to automate not just track volume and panorama, but also the full spectrum of MIDI messages and plug-in automation parameters. For a more detailed description, please refer to your host’s documentation.

Whether you draw MIDI CC automation or record MIDI CC events from a hardware MIDI controller, in order to switch Articulations by MIDI CC, you need to set up ESSENTIALS STRING ENSEMBLE to receive MIDI CC messages:

Loading an Instrument and Setting it to Receive MIDI CC

1. Load Violins 1 Essential.nki.
2. Click on Articulation in the bottom left corner. The ARTICULATION SLOTS list will open.
3. Click the **Edit** button in the top right corner of this list. This will open the **Articulation Slot Setup** view.

4. Make sure **MIDI CC** is selected.

**Switching Articulations by MIDI CC From Your Host**

In order to switch between the first two Articulation slots, write value automation for MIDI CC in your host for a track sending MIDI data to ESSENTIALS STRING ENSEMBLE.

**Slot 1** is assigned values from 0 to 16, **Slot 2** is assigned values from 17 to 31.

For better visibility of Articulation switches in your host, write discrete MIDI CC values (e.g. 10 for Slot 1, 26 for Slot 2) instead of continuous curves.

**4.3 Using Macros for Automatic Assignments (Key Switches)**

Due to its flexibility, it can take a lot of repetitive steps to set up a basic starting point for your custom configuration. This is why ESSENTIALS STRING ENSEMBLE features macro scripts which help you with certain tasks.

Depending on whether you assign **Key** or **MIDI CC**, there are different macros available.
4.3.1 Empty all Slots

If the configuration you’re about to set up is just too different from the default setup after loading an Instrument, use Empty all slots to start with a clean slate.

1. Load Violins 1 Essential.nki.
2. Click on Articulation in the bottom left corner. The ARTICULATION SLOTS list will open.

3. Click the Edit button in the top right corner of this list. This will open the Articulation Slot Setup view.

4. Make sure Key is selected.

5. In the top right corner of the ARTICULATION SLOTS list, click the three vertical dots. A list of available macros will open.
6. Click on *Empty all slots*. 

→ All assignments are deleted.

### 4.3.2 Reset All Start Conditions

If you need to return the Instrument to its default state:

1. Load *Violins 1 Essential.nki*.
2. Click on *Articulation* in the bottom left corner. The *ARTICULATION SLOTS* list will open.

3. Click the *Edit* button in the top right corner of this list. This will open the *Articulation Slot Setup* view.
4. Make sure **Key** is selected.

![Image of Key selection](image)

5. In the top right corner of the **ARTICULATION SLOTS** list, click the three vertical dots. A list of available macros will open.

6. Click on **Reset all start conditions**.

![Image of Articulation Slot Settings](image)

→ The Instrument's default state is loaded.

### 4.3.3 Set Ascending Keys From First Slot

By default, MIDI **Key** assignments start from **C0**, ascending in semi tones. If, for example, you'd like to move all assignments up an octave to start from **C1 instead**:

1. Load **Violins 1 Essential.nki**.
2. Click on **Articulation** in the bottom left corner. The **ARTICULATION SLOTS** list will open.

![Image of Articulation](image)
3. Click the **Edit** button in the top right corner of this list. This will open the **Articulation Slot Setup** view.

4. Make sure **Key** is selected.

5. Set the **Key** to **C1** by clicking in the field next to it and dragging the mouse up.

6. In the top right corner of the **ARTICULATION SLOTS** list, click the three vertical dots. A list of available macros will open.
7. Click on Set ascending keys from first slot.

![Articulation Slot Set](image)

→ All slots are assigned the keys starting from C1.

### 4.3.4 Distribute Velocity Range Equally on Active Slots

Assigning up to eight Articulations to velocity ranges of one Key is especially useful if you write automation in your host software and are running out of free Midi keys. This macro allows you to automatically assign equal shares of the 0 - 127 value range.

1. Load Violins 1 Essential.nki.
2. Click on Articulation in the bottom left corner. The ARTICULATION SLOTS list will open.
3. Click the **Edit** button in the top right corner of this list. This will open the **Articulation Slot Setup** view.

4. Make sure **Key** is selected.

5. Set the **Key** to C1 by clicking in the field next to it and dragging the mouse up.

6. In the top right corner of the **ARTICULATION SLOTS** list, click the three vertical dots. A list of available macros will open.
7. Click on *Distribute velocity range equally on active slots*.

→ All active slots (slots with Articulation assignments) are assigned the same C1 key switch. Each slot is assigned an equal fraction of the velocity range between 0 and 127.

### 4.4 Using Macros for Automatic Assignments (MIDI CCs)

Due to its flexibility, it can take a lot of repetitive steps to set up a basic starting point for your custom configuration. This is why ESSENTIALS STRING ENSEMBLE features macro scripts which help you with certain tasks.

Depending on whether you assign *Key* or *MIDI CC*, there are different macros available.

#### 4.4.1 Empty All Slots

If the configuration you’re about to set up is just too different from the default setup after loading an Instrument, use *Empty all slots* to start with a clean slate.

1. Load *Violins 1 Essential.nki*. 
2. Click on Articulation in the bottom left corner. The ARTICULATION SLOTS list will open.

3. Click the Edit button in the top right corner of this list. This will open the Articulation Slot Setup view.

4. Make sure MIDI CC is selected.

5. In the top right corner of the ARTICULATION SLOTS list, click the three vertical dots. A list of available macros will open.

6. Click on Empty all slots.
→ All assignments are deleted.

### 4.4.2 Reset All Start Conditions

If you need to return the Instrument to its default state:

1. Load **Violins 1 Essential.nki**.
2. Click on **Articulation** in the bottom left corner. The **ARTICULATION SLOTS** list will open.
3. Click the **Edit** button in the top right corner of this list. This will open the **Articulation Slot Setup** view.
4. Make sure **MIDI CC** is selected.
5. In the top right corner of the **ARTICULATION SLOTS** list, click the three vertical dots. A list of available macros will open.
6. Click on *Reset all start conditions.*

→ The Instrument’s default state is loaded.

### 4.4.3 Distribute Controller Equally on Active Slots

Assigning MIDI CCs to buttons or pads is a good way of avoiding conflicts in more complex MIDI controller setups.

1. Load *Violins 1 Essential.nki.*
2. Click on *Articulation* in the bottom left corner. The *ARTICULATION SLOTS* list will open.
3. Click the *Edit* button in the top right corner of this list. This will open the *Articulation Slot Setup* view.
4. Make sure **MIDI CC** is selected.

5. In the top right corner of the **ARTICULATION SLOTS** list, click the three vertical dots. A list of available macros will open.

6. Click on **Distribute controller equally on active slots**.

→ The **MIDI CC** value range from **0-127** is divided by the number of active slots and distributed evenly.

If you load any of the KONTAKT Instruments included in ESSENTIALS STRING ENSEMBLE and set it to receive MIDI CC, you'll find that the controller values are already assigned this way. Use this macro to quickly set up a new configuration when you assign less than the full eight Articulation Slots, or after you cleared all assignments in order to start from scratch.
5 KONTAKT Snapshots

Snapshots offer a way of saving variations of any KONTAKT Instrument for easy recall.

ESSENTIALS STRING ENSEMBLE, for example, allows you to apply effects like EQ, REVERB, and COMPRESSION to your stereo mix.

With KONTAKT Snapshots, you can create any number of different mixes for the same Instrument, save them in the new .nksn file format and re-use them in your next project or share these Snapshots across your computers. You can even share them with other users who own the same KONTAKT Library.

ESSENTIALS STRING ENSEMBLE doesn’t come with Snapshots, so in order to demonstrate the full feature set, we’ll save a Snapshot first.

Access the Snapshot View by clicking the camera icon in the Instrument Header

Switch back to the familiar Info View with its Input / Output configuration options by clicking the i icon.

5.1 Saving a User Snapshot

Let’s start exploring Snapshots with saving your own. By loading one of the supplied Instruments and adjusting some of its parameters, you will end up with a sound that is distinct enough for you to want to keep it.

Saving a Snapshot

Save this new sound as a Snapshot for convenience.
1. Click the camera icon in the Instrument Header. This will switch the Header to the Snapshot View.

2. Here, click the floppy disk icon to open the Snapshot Saving dialog.

3. Enter a Snapshot name (e.g. My first Snapshot) and click Save.

→ The Snapshot is saved and added to the Snapshot Menu.

All User Snapshots are automatically stored in the default User Content folder. This is where the SYMPHONY ESSENTIAL STRING ENSEMBLE Snapshot you just created will be stored:

- **On Mac OS X:** Macintosh HD/Users/Your Name/Documents/Native Instruments/User Content/Symphony Essentials String Ensemble/String Ensemble Essential/My first Snapshot.nksn
- **On Windows:** C:/Users/Your Name/My Documents/Native Instruments/User Content/Symphony Essentials String Ensemble/String Ensemble Essential/My first Snapshot.nksn

You can transfer any of your Snapshots to another computer by copying the respective Snapshot files.

Please make sure you include your Documents / My Documents folder in your regular data backups.
5.2 Loading a Snapshot From the Snapshot Menu

If you need to recall a specific sound for recurring use in the studio or for live playing, Snapshots give you an easy way of doing just that.

Let’s get to know this feature by loading a Snapshot from the Instrument Header’s Snapshot Menu. We assume here that you saved the My first Snapshot Snapshot as described in the 5.1, Saving a User Snapshot section.

Load a User Snapshot

1. In the Libraries Tab, load the String Ensemble Essential.nki Instrument. Play a few notes on your MIDI keyboard to get familiar with the ensemble’s sound.
2. Click the camera icon to switch the Instrument Header to the Snapshot View. By default, no Snapshot is loaded.
3. Open the drop-down menu and select the My first Snapshot Snapshot.

→ The Blends well with synths Snapshot is loaded.

Alternatively, when no Snapshot is loaded, click the Next Button after loading the ESSENTIAL STRING ENSEMBLE Instrument to achieve the same result.

5.3 Loading Snapshots From the File System

KONTAKT supports two ways of loading Snapshot files (.nksn):
Drag and dropping a Snapshot file from the Finder / Explorer onto the Rack

Loading via double-click in Finder (Mac OS X) or Explorer (Windows)

This allows you to take your favorite Snapshots to the studio on a flash drive or send them attached to an e-mail and load them from your Desktop without altering the installation on the studio computer.

**Drag and Drop**

In order to load a Snapshot from any disk, use Filer / Explorer to drag an .nksn file from its current location onto an empty area of the Rack. KONTAKT will load a new instance of the corresponding Instrument with that Snapshot.

If you drag a Snapshot onto an active Instrument in the Rack instead, that Instrument will be replaced by the Instrument loaded from the Snapshot.

Snapshots you open are not automatically saved to the default location.

Please note, the Next/Previous buttons can only skip through Snapshots located in the Factory Snapshots and the User Content folder

**Double-click**

Double-clicking a Snapshot file in Finder (Mac OS X) or Windows Explorer inserts a new Instrument instance in KONTAKT.

### 5.4 Deleting a User Snapshot

In order to keep things tidy in the Snapshot Menu, you can delete any Snapshots you saved when you feel you don’t need them anymore. Keep in mind that Snapshots are saved on a per-Instrument basis. So in order to delete a Snapshot in KONTAKT, you have to load it first.

Note that you can only delete User Snapshots. All KOMPLETE Factory Snapshots are read-only. In order to follow the steps described here, you have to have saved a Snapshot first as detailed in the ↑5.1, Saving a User Snapshot section
To demonstrate how deletion of Snapshots works, we’ll delete the My first Snapshot Snapshot saved in that section.

1. In the Libraries Tab, load the String Ensemble Essential.nki Instrument.

2. Click the Camera icon to access the Snapshot View.

3. Open the Blends well with synths Snapshot.

4. Click the trash bin icon in the Instrument Header.

5. Confirm deletion of the Snapshot in the dialog which pops up.

→ The Snapshot file is now erased from the folder on your hard disk as well as removed from the Snapshot Menu.
6 Audio Mix-down

6.1 Adding Effects

The mix can be processed with a number of integrated effects to help it blend better with the other instruments in your virtual orchestra.

Since the recordings have a very refined and production-ready sound, these effects aren't intended as corrective tools, but rather meant to put the finishing touches on an otherwise great mix.

6.1.1 Applying EQ

In a busy composition, instruments from different groups often overlap, resulting in a muddy, crowded mix lacking definition and transparency. Attenuating the non-essential frequencies and boosting the characteristic frequencies per instrument section helps clean up the mix.

1. Load Violins 1 Essential.nki.
2. Click the Effects label to open the Effects view.
3. Click the EQ label to select the Equalizer panel.
4. Click the small indicator dot next to the label to activate / bypass the Equalizer. A thin ring shows it’s inactive, a solid dot means it’s active.

5. Adjust the Low, Mid and High controls as needed.

**The EQ Controls**

The EQ offers parametric Low and High bands with Gain and Freq controls. The Mid band is fully parametric with Gain and Freq controls plus adjustable BW (bandwidth) control.

**Gain**: Boost or attenuate the Low EQ band. The EQ is a bell curve type with 18 dB of boost or cut.

**Freq**: Set the center frequency of the Low EQ band anywhere between 20 Hz and 20 kHz.

**BW**: Set the Mid band’s bandwidth between 1/3 octave and 3 octaves.

These controls affect the frequency balance of your KONTAKT Instrument’s Master Mix. If you need to adjust EQ per instrument section, load the Individual Instruments instead of the Ensemble Instrument.

### 6.1.2 Applying REVERB

Impulse responses in the REVERB are audio recordings that capture the way sounds naturally reflect and decay in different environments.

ESSENTIALS STRING ENSEMBLE includes 104 Impulse Responses; four Cinematic ambiances plus 10 further categories with 10 impulses each.
Most of these Impulse Responses were recorded by Soundiron for SYMPHONY SERIES STRING ENSEMBLE in a variety of unique real-world locations, such as cathedrals, churches, classrooms, halls, garages, military bunkers, tunnels, studios and more. However, some Impulses are custom sound-designed sound effects used purely for creating unique special effects.

The Impulse Responses in the Cinematic category were provided by Audiobro specifically to create a filmic sound for String instruments.

Use caution when using these Effects Impulses, as they can create strong resonant effects and feedback when mixed at high volumes in some cases.

**Activating the Reverb**

1. Load **Violins 1 Essential.nki**.
2. Click the Effects label to open the Effects view.
3. Click the REVERB label to select the REVERB panel.
4. Click the small dot next to the label to activate / bypass the REVERB.

→ The REVERB is activated. A thin ring shows its inactive state, a solid dot means it’s active.
Selecting an Impulse Response

1. Click the right arrow next to the **category name** above the preview image to cycle through the available categories.
2. Select **FX Long**.

![Image of FX Long category](image)

3. Click the right arrow next to the **Impulse Response name** below the preview image to select the actual Impulse Response **Dragging Iron**.

![Image of Dragging Iron Impulse Response](image)

→ **The Dragging Iron Impulse Response is applied to the Master Mix in Violins 1 Essential.nki, affecting all string sections equally.**

The REVERB Controls

- **Warning**: Reverb parameters should not be automated. Otherwise, audio drop-outs may occur.

![Image of Reverb parameters](image)

Reverb effect overview
**Size**: Stretches or compresses the impulse response audio file. This creates the illusion of the room size changing.

**Delay**: Introduces a pre-delay before the reverberation.

▶ Decrease the pre-delay to embed instruments in the reverb, creating a distant, ‘roomy’ sound.

▶ Increase the pre-delay to separate instruments from reverb, creating a close, ‘direct’ sound.

**Filter HiPass**: Removes low frequencies from the reverb signal to avoid boominess.

▶ Click and drag up to raise the frequency below which the signal is attenuated.

**Filter LoPass**: Removes high frequencies from the reverb signal to avoid excessive brightness and to help it blend in naturally.

▶ Click and drag down to lower the frequency above which the signal is attenuated.

**Mix Amount**: Blends anywhere between no reverb at all and just the reverb.

▶ Click and drag down to mix in less reverb, drag up to add more reverb.

### 6.1.3 Applying COMPRESSION

The Compressor is helpful to reduce the dynamic range of an Instrument in case the loudest passages mask other instruments in your arrangement.

**Activating the COMPRESSION**

1. Load Violins 1 Essential.nki.
2. Click the Effects label to open the Effects view.
3. Click the COMP label to select the Compressor panel.

4. Click the small dot next to the COMP label to activate the Compressor. The Compressor is activated. A thin ring to the left of each label shows its inactive state, a solid dot means it's active.

**The COMPRESSION Controls**

Compressor effect overview

**Threshold**: Sets the level above which compression occurs.

**Ratio**: Determines how strong the compression is. At a Ratio of 2:1, a signal that exceeds the Threshold by 6dB is reduced to 3dB above the Threshold.

**Attack**: Determines how quickly the compressor starts reducing the signal after the level exceeds the Threshold.

**Release**: Determines how quickly the compressor stops reducing the signal after the level falls below the Threshold.
6.2 Balancing Articulation Volumes

Although great care has gone into balancing the perceived loudness of a section’s Articulations, in context of other instrumentation and the actual composition, you may find an Articulation sounding too loud or too quiet.

Instead of having to automate the volume around this note, ESSENTIALS STRING ENSEMBLE allows you to adjust the volume of each Articulation Slot individually. That way, you could even assign the same Articulation to multiple Slots with different volume settings.

1. Load Violins 1 Essential.nki.
2. While in the default performance view, click on Articulation in the bottom left corner. The ARTICULATION SLOTS list will open.
3. In this list, click the Edit button. A volume knob is shown for the selected Articulation.
4. To adjust an Articulation’s volume, click it once to select and then click and drag the level knob.

→ Only the specific Articulation’s volume is adjusted.
7  Technical Specs

Recorded Tonal Range

<table>
<thead>
<tr>
<th></th>
<th>Basses</th>
<th>Cellos</th>
<th>Violas</th>
<th>Violins</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recorded Tonal Range</td>
<td>C0–C#3</td>
<td>C1–G4</td>
<td>C2–F5</td>
<td>G3–E6</td>
</tr>
</tbody>
</table>
Credits

Produced By Audiobro: Andrew Keresztes, Sebastian Katz
Scripting and UI Integration: Sebastian Katz, Gabor Valasek
Editing: Andrew Keresztes, Sebastian Katz
Mixing and Mastering: Andrew Keresztes
Instruments Programming and Mapping: Andrew Keresztes, Sebastian Katz
Audiobro Beta Testers: Andrew Keresztes, Sebastian Katz, Craig Sharmat, Willem Van den Broeck, Jesper Goor Pedersen, Nathan Furst, Brian Ralston, Kays Alatrakchi, Frederick Russ
Session directed by: Andrew Keresztes, Sebastian Katz
Session Producer: Andrew Keresztes
Concept and Design: Frank Elting
User Interface Design: Fabian Ruf, Werner Schäfner
Quality Assurance: Bymski
Artwork: Yvonne Hartmann
Finalization and Encoding: Carlos Ruiz
Product Management: Tobias Menguser, Christian Wachsmuth, Linda Klimesch