# Cremona Quartet Ensemble



## **Table of Contents**

| 1. Disclaimer   | 1  |
|---|--|
| 2. Welcome to Cremona Quartet Ensemble<br>Document conventions  |  |
| <b>3. Installation and setup</b><br>Installing Cremona Quartet Ensemble using Native Access<br>Loading Cremona Quartet Ensemble in Kontakt  | 4  |
| 4. Cremona Quartet Ensemble overview  |  |
| 5. Snapshots<br>Snapshots overview<br>Loading a Snapshot<br>Saving a User Snapshot<br>Saving a User Snapshot using the Navigator<br>Saving a User Snapshot using the Instrument Header<br>User Content Folder<br>Deleting a User Snapshot | 8<br>9<br>9<br>9<br>. 10<br>. 10   |
|   |  |
| 6. Play page<br>Articulation Browser<br>Articulation options<br>Articulation Matrix<br>Available articulations<br>Long articulations<br>Short articulations<br>Special articulations  | . 13<br>. 14<br>. 14<br>. 15<br>. 16<br>. 16   |
| Articulation Browser<br>Articulation options<br>Articulation Matrix<br>Available articulations<br>Long articulations<br>Short articulations   | . 13<br>. 14<br>. 14<br>. 15<br>. 16<br>. 16<br>. 16                                 |
| Articulation Browser<br>Articulation options<br>Articulation Matrix<br>Available articulations<br>Long articulations<br>Short articulations<br>Special articulations  | 13<br>14<br>14<br>15<br>16<br>16<br>16<br>16   |
| Articulation Browser<br>Articulation options<br>Articulation Matrix<br>Available articulations<br>Long articulations<br>Short articulations<br>Special articulations<br><b>7. Mixer page</b>  | . 13<br>. 14<br>. 15<br>. 16<br>. 16<br>. 16<br>. 16<br>. <b>17</b>                  |
| Articulation Browser<br>Articulation options<br>Articulation Matrix<br>Available articulations<br>Long articulations<br>Short articulations<br>Special articulations<br>Special articulations<br>8. Settings page                         | . 13<br>. 14<br>. 14<br>. 15<br>. 16<br>. 16<br>. 16<br>. 16<br>. 17<br>. 19<br>. 21 |

## 1. Disclaimer

The information in this document is subject to change without notice and does not represent a commitment on the part of Native Instruments GmbH. The software described by this document is subject to a License Agreement and may not be copied to other media. No part of this publication may be copied, reproduced or otherwise transmitted or recorded, for any purpose, without prior written permission by Native Instruments GmbH, hereinafter referred to as Native Instruments.

"Native Instruments", "NI" and associated logos are (registered) trademarks of Native Instruments GmbH.

All other trademarks are the property of their respective owners and use of them does not imply any affiliation with or endorsement by them.

Document authored by Nicolas Sidi, Thomas Koritke

Software version: 1.0 (01/2025)

## 2. Welcome to Cremona Quartet Ensemble

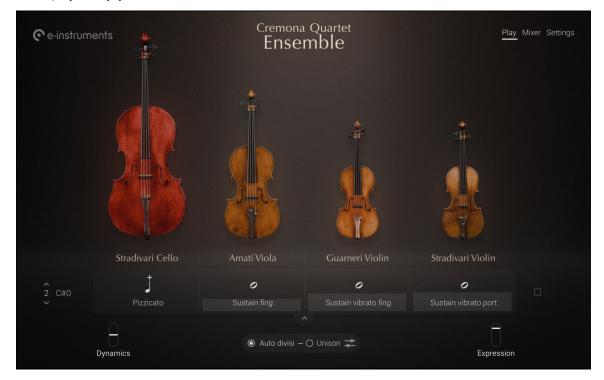
Cremona Quartet Ensemble reimagines four legendary stringed instruments as a unified ensemble. It features the Stradivari Violin, the Stradivari Cello, the Guarneri Violin, and the Amati Viola, all seamlessly integrated into a single Kontakt instrument. Its advanced auto divisi system allows you to create ultra-realistic string quartet arrangements with ease, using just one keyboard.

All long articulations include both non-vibrato and natural, musically-performed vibrato samples, as well as polyphonic fingered and portamento legato to provide realistic note transitions at your fingertips.

Control Cremona Quartet Ensemble via the Articulation Matrix, which lets you design your own complex combinations of articulations across all four instruments and activate them by pressing custom keys.

The dynamics and expression controls, together with the streamlined mixer, give you all the sonic possibilities from a close miked, intimate quartet ensemble to a large and lush chamber orchestralike sound.

This document shows you how to **install and setup** Cremona Quartet Ensemble and describes all features in detail, starting with the **overview**.



We hope you enjoy Cremona Quartet Ensemble!

#### **Document conventions**

In this document the following formatting is used to highlight useful information:

| Italics       | Indicates paths to locations on your hard disk or other storage devices. |  |  |  |
|---------------|--|--|--|--|
| Bold          | Highlights important names, concepts, and software interface elements.   |  |  |  |
| [Brackets]    | References keys on the computer keyboard.                                |  |  |  |
| ►             | Denotes a single step instruction.                                       |  |  |  |
| $\rightarrow$ | $\rightarrow$ Denotes the expected result when following instructions.   |  |  |  |

The following three icons denote special types of information:

The **light bulb** icon indicates a useful tip, suggestion, or interesting fact.

(i) The **information** icon highlights essential information in a given context.

The **warning** icon alerts you of potential risks and serious issues.

## 3. Installation and setup

Before making music with Cremona Quartet Ensemble, you must install and set up the necessary software. Follow these instructions to get started.

#### Installing Cremona Quartet Ensemble using Native Access

Native Access is your go-to app for downloading, activating, and updating all your NI music creation tools including Cremona Quartet Ensemble. If you are new to Native Instruments, you will first have to create your Native ID user account. To learn more about Native Access, visit our support page.

- 1. Download and install Native Access here.
- 2. Open the Native Access application.
- 3. Create a Native ID, if you do not have one already.
- 4. Login to Native Access using your Native ID.
- 5. Click Library on the left side of Native Access.
- 6. Click Available at the top of Native Access.
- 7. Click the Kontakt category to only show products related to Kontakt.
- 8. Click Install for the following products:
  - Cremona Quartet Ensemble
  - Kontakt or Kontakt Player
- → The software is installed automatically.

(i) If the software is already installed, click the **Updates** tab and install available updates before proceeding.

#### Loading Cremona Quartet Ensemble in Kontakt

Once installed, you can start using Cremona Quartet Ensemble in Kontakt. Cremona Quartet Ensemble is not an independent plug-in, so you first need to open an instance of Kontakt or Kontakt Player.

Kontakt offers two ways to load an instrument, the Library browser and the side pane browser.

To load an instrument using the Library browser:

- 1. Open Kontakt as a plug-in in your host software (DAW) or as a stand-alone application.
- 2. By default, Kontakt opens the Library browser on first launch. If you have turned this off, click **Library** in Kontakt's header to open the Library browser.
- **3.** In the Library browser, make sure that the **Instruments** category is selected at the top (this should be the case by default), otherwise click **Instruments** to select that category.
- 4. Locate Cremona Quartet Ensemble in the Library browser. You can use the search bar at the top to quickly find it.
- 5. Click on the arrow icon (>) in the top right corner of the instrument's artwork to load the instrument and its first preset.

- **6.** Alternatively, you can click the instrument's artwork to display its presets in the list on the right of the browser window.
- 7. Double click any preset to load it. The first entry, identified by a keyboard icon, loads the instrument with its default preset.

To load an instrument using the side pane browser:

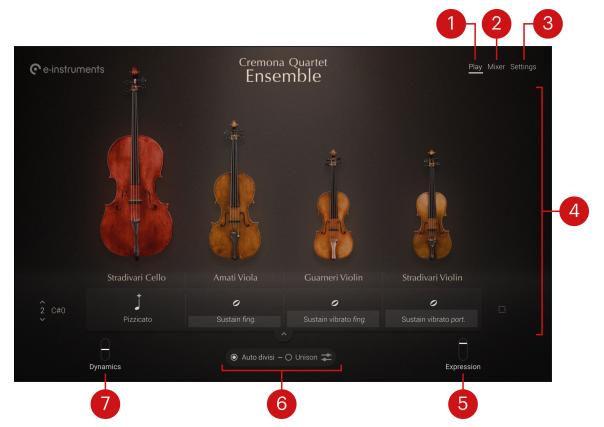
- 1. Open Kontakt as a plug-in in your host software (DAW) or as a stand-alone application.
- 2. In the side pane on the left, make sure that the **Instruments** category is selected (this should be the case by default), otherwise click **Instruments** to select that category.
- 3. Locate Cremona Quartet Ensemble's artwork tile below.
- Click on the arrow icon (>) in the top right corner of the instrument's artwork to load the instrument and its first preset.
- 5. Alternatively, you can click the instrument's artwork to display the list of its presets.
- 6. Double click any preset to load it. The first entry, identified by a keyboard icon, loads the instrument with its default preset.

If you are new to Kontakt and want more information, visit Kontakt Player and Kontakt.

## 4. Cremona Quartet Ensemble overview

This chapter introduces the main controls and areas of Cremona Quartet Ensemble.

When you first load Cremona Quartet Ensemble, it opens with the Play page. Cremona Quartet Ensemble provides the following key elements and global controls:



- 1. Play: Opens the Play page, which is the default page (depicted above). The Play page shows an artwork of the four instruments and lets you combine their articulations. Refer to Play page.
- 2. Mixer: Opens the Mixer page, where you can adjust the mix between the four instruments. Refer to Mixer page.
- **3. Settings**: Opens the Settings page, which provides global settings including tuning, pitch bend, room noise, bow changes, articulation switch, and aftertouch. Refer to **Settings page**.
- **4. Central area**: Shows the various pages of the instrument. By default it displays the Play page (depicted above). Refer to Play page.
- **5. Expression**: Adjusts the overall volume of the ensemble. By default it is assigned to MIDI CC 11 (Expression). You can also control the expression of each instrument in real time using polyphonic aftertouch: Changing the pressure on a hold key will modify the expression of the instrument playing this note.

- 6. Auto Divisi controls: Provide global controls for Cremona Quartet Ensemble's advanced automatic divisi system, which dynamically distributes single notes and chords of up to four notes to the four instruments in the ensemble. Refer to Auto divisi settings for more information.
  - **Auto divisi on/off switch**: Turns the auto divisi on or off. If you turn the auto divisi off, the ensemble will play in full polyphonic mode: Each instrument will play all the notes of the chord within its range, resulting in a much larger strings section sound.
  - **Unison on/off switch**: Turns unison on or off. This switch is available only when auto divisi is active. If you turn unison on, all the instruments will play together.
  - Auto Divisi Settings button: Opens the auto divisi settings where you can configure the auto divisi feature more in detail. Refer to Auto divisi settings.
- **7. Dynamics**: Adjusts the dynamics of the four instruments globally. The dynamics describes how soft or strong the instruments are played, which affects both their volume and their timbre. By default the **Dynamics** slider is assigned to MIDI CC 1 (Modulation Wheel) and it is set to the middle position (control value: 64). You can also control the dynamics of each instrument in real time using the note velocity: The force with which you hit a key will affect the dynamics of the instrument playing this note.

#### Key mapping

You can trigger various actions in Cremona Quartet Ensemble from your keyboard. The current key mapping is indicated in Kontakt's on-screen keyboard:



- **Red**: The red keys are used for switching between different articulation sets. For more information, refer to Play page.
- Pink: The pink key turns unison on or off. For more information, refer to Auto divisi settings.
- Yellow: The yellow key triggers a bow change. For more information, refer to Settings page.
- Blue: The blue keys indicate the range of notes playable with Cremona Quartet Ensemble.

(i) These colored keys are also indicated by the Light Guide on the Kontrol S-Series keyboard.

## 5. Snapshots

Snapshots are Kontakt's underlying file format for instrument presets. They offer a quick and convenient way of browsing for new sounds and saving custom presets. When a User Snapshot is saved, all parameter adjustments and instrument settings are stored within the preset. Using Snapshots, you can create your own preset sounds, save them in the .nksn file format and use them in other projects, across computers or even share them with other users.

#### **Snapshots overview**

Snapshots contain the parameters and controls:



- 1. Load Snapshot: Opens the Snapshot menu where you can load a Snapshot from the Factory or User library. For more information, refer to Loading a Snapshot.
- 2. Snapshot Name: Displays the name of the currently selected Snapshot.
- 3. Snapshot Previous/Next (<> icons): Allows you to quickly browse and load Snapshots. Pressing an arrow icon will load the previous or next Snapshot in the selected category. If no Snapshot is active, the first Snapshot on the list will be loaded. For more information, refer to Loading a Snapshot.
- 4. Save Snapshot (floppy disk icon): Allows you to save changes made to a sound. When a User Snapshot is saved, the macros settings, parameter controls, and sequence are stored within it and can be accessed at any time via the User library. For more information, refer to Saving a User Snapshot.
- Delete Snapshot (bin icon): Deletes the currently selected Snapshot from the User library. You can only delete User Snapshots and not Factory Snapshots. For more information, refer to Deleting a User Snapshot.
- 6. Snapshot View (camera icon): Provides access to the Snapshot features described above; saving, loading, browsing, and deleting. When Snapshot View is selected, configuration settings and features relating to the Info View are replaced in the display.

#### Loading a Snapshot

Snapshots are loaded from the drop-down menu in the top header of the instrument. You can also use the arrows to the left of the floppy disk icon to load the previous or next preset.

To load and browse Snapshots using the arrow icons:

1. Click the Snapshot View (camera icon) to open Snapshot view.

2. Click the arrow icons (<>) in the Snapshot header to browse through the Snapshots list.



→ The previous or next Snapshot will load immediately each time an arrow icon is clicked.

To load a Snapshot from the library:

- 1. Click the Snapshot View (camera icon) to open Snapshot view.
- 2. Click the arrow icon next to the Snapshot name field to open the Snapshot menu.
- Select the Factory category to load a Factory preset, or select the User category to load one of your own Snapshots.
- 4. Select an instrument category, if available.
- 5. Select a Snapshot to load it.

| **          | ** Cremona Quartet Ensemble  |            |                          |       |  |
|-------------|------------------------------|------------|--------------------------|-------|--|
| 0           | 📀 👻 Cremona Quartet Ensemble |            |                          |       |  |
|             | Factory                      | >          | All Longs                |       |  |
| -           | User                         | >          | All Shorts               | Cremo |  |
| င္ e-insirc | e-instruments                |            | All Specials             | Ens   |  |
|             |                              | Cello Lead | LIIJ                     |       |  |
|             |                              |            | Cromona Quartot Encomblo |       |  |

→ The loaded Snapshot is displayed in the instrument header.

(i) The **User** category will not appear until you have first saved a Snapshot.

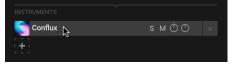
#### Saving a User Snapshot

You can save User Snapshots to recall your favorite sounds and settings at any time, share them with others, or create backups.

#### Saving a User Snapshot using the Navigator

When using Kontakt's Default view, you can save User Snapshots using the Navigator in the side pane.

1. Right-click the slot in the Navigator you want to save a User Snapshot for.



2. Click Save Preset... in the context menu to open the Save dialog.



3. Enter a name for your new User Snapshot and click **Save**. If you enter the same of an existing User Snapshot, you will be given the option to replace it by clicking **Overwrite**.



→ The User Snapshot is saved and added to the user content in the Browser.

#### Saving a User Snapshot using the Instrument Header

User Snapshots can be saved using the Instrument Header. When a sound parameter has been adjusted, that Save button (disk icon) becomes active.



If you are using Kontakt's Default view, the Instrument Header can be shown or hidden from the **View** menu in the Kontakt Header.

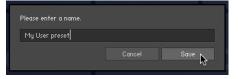
1. Click the Snapshot view button (camera icon) in the Instrument Header.



2. Click the Save button (floppy disk icon) to open the Save dialog.



3. Enter a name for your new User Snapshot and click **Save**. If you enter the same of an existing User Snapshot, you will be given the option to replace it by clicking **Overwrite**.



→ The User Snapshot is saved and added to the user content in the Browser.

#### **User Content Folder**

All User Snapshots are automatically stored in the default User Content folder. You can transfer any of your Snapshots to another computer by copying the respective Snapshot files.

The default User Content folders are:

| Mac OS X: | Macintosh HD/Users/ <user name="">/Documents/Native Instruments/User<br/>Content/</user> |
|-----------|--|
| Windows:  | C:\Users\ <user name="">\My Documents\Native Instruments\User Content\</user>            |

Delease make sure you include your *Documents / My Documents* folder in your regular data backups.

#### **Deleting a User Snapshot**

Snapshots can be deleted using the bin icon in the instrument header. To delete a User Snapshot:

- 1. Click the Snapshot view (camera icon) to open Snapshot view.
- 2. Load the User Snapshot you wish to delete.
- 3. Click the **Delete** button (bin icon).
- 4. Confirm deletion of the Snapshot by selecting **Yes** in the dialog box.

| Ø | <b>Kontakt</b><br>Do you want to delete the snapshot "My User Preset<br>01" ? |
|---|---|
|   | No Yes  |

→ The User Snapshot .nksn file is deleted from the User Snapshot Library.

## 6. Play page

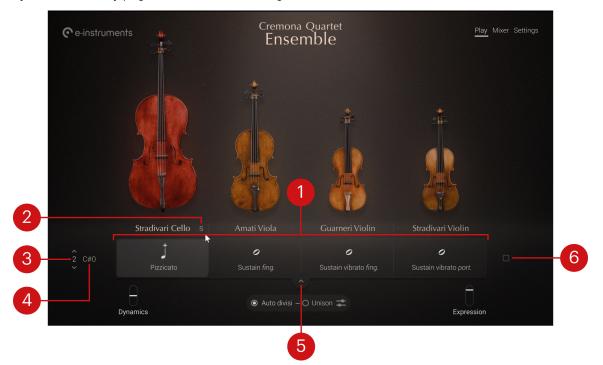
The Play page is the default page of Cremona Quartet Ensemble. It shows the four instruments of the ensemble along with their current articulations, and lets you configure the articulation for each instrument.

To display the Play page, do the following:

▶ Click **Play** at the top right of the instrument to display the Play page.



By default the Play page contains the following controls:



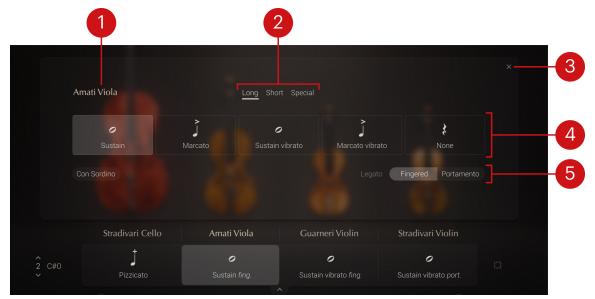
- 1. Articulation row: Contains four cells showing the current articulations for the four instruments. You can switch to another set of four articulations by pressing its keyswitch on your keyboard or by selecting another row number on the left. Clicking a cell or the instrument name above it selects this cell and opens the Articulation Browser in the upper part of the Play page, where you can choose another articulation for that instrument. For more information on the Articulation Browser, refer to Articulation Browser.
- 2. Solo button ("S"): Mutes all other instruments in order to hear this instrument alone. The solo button appears when hovering your mouse over the instrument. Only one instrument can be switched to solo at a time. It is a pure audio solo: the auto divisi remains active. This solo button is the equivalent of the instrument's solo button in the Mixer page. Refer to Mixer page for more information.
- **3. Articulation row number**: Shows the number of the current articulation row. You can click the little up and down arrows above and below the number to select the previous or next articulation row, making its articulations directly available on the four instruments.

- 4. Articulation row keyswitch: Shows the keyswitch assigned to the current articulation row. This keyswitch is indicated by a red key on Kontakt's on-screen keyboard and on your Kontrol S-Series keyboard. Pressing the corresponding key on your keyboard will select that articulation set. When hovering the keyswitch field with your mouse, little up/down arrows appear right of it: You can click these up/down arrows to set the keyswitch to the next/ previous key, or click the key value and drag your mouse vertically to adjust the keyswitch in greater jumps. At the bottom of the value range, you can set the keyswitch to Off to deactivate it.
- 5. Articulation Matrix button: Opens the Articulation Matrix. The Articulation Matrix shows four articulation rows at once instead of a single row. This helps you quickly compare and configure multiple sets of articulations. Refer to Articulation Matrix for more information.
- 6. Select Row button: Selects all four cells and opens the Articulation Browser in the upper part of the Play page, where you can choose an articulation for all instruments at once. For more information on the Articulation Browser, refer to Articulation Browser. You can click the Select Row button again to deselect all four articulation cells and close the Articulation Browser.

#### **Articulation Browser**

The Articulation Browser lets you select another articulation for a particular instrument or for the whole quartet. You can open the Articulation Browser from the Play page by clicking the articulation cell that you want to modify or by clicking the Select Row button on the right. While the Articulation Browser is open, you can click another cell or an entire row: The articulation that you choose in the Articulation Browser will replace the current articulation in the selected cell(s).

(i) When the Articulation Matrix is displayed, the Articulation Browser has a slightly thinner shape than when a single articulation row is displayed. Apart from that, it has the exact same functionality in both cases. For more information on the Articulation Matrix, refer to Articulation Matrix.



The Articulation Browser contains the following controls:

1. Instrument name: Shows the instrument for which you are choosing an articulation. If you have clicked the Select Row button, the name reads **Ensemble** and the chosen articulation will apply to all four instruments.

- 2. Category filter: Selects a category of articulations. The articulations in the selected category are displayed below.
- **3.** Close button ("x"): Closes the Articulation Browser. If the Articulation Matrix was open, it is closed as well and the display switches back to the active articulation row.
- 4. Articulation list: Shows the articulations available in the selected category. You can click the desired articulation to load it for the selected instrument (indicated in the top left corner of the Articulation Browser). The new articulation will take place into the corresponding cell of the active row below. In every category, you can select the None articulation to deactivate that instrument.
- **5. Articulation options**: Some articulations provide additional settings to adjust their sound. These settings are not real-time control parameters, but instead further define the articulation loaded in the selected cell(s).

(i) For a description of all the articulations available in the Articulation Browser, refer to Available articulations.

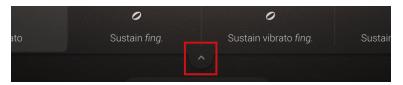
#### Articulation options

Depending on the selected articulation, the following options are available at the bottom of the Articulation Browser:

- For all articulations, a **Con Sordino** switch lets you activate a damper that both attenuates the instrument's volume level and modifies its timbre.
- Special category: The Tremolo and the Sautille provide a Speed slider adjusting how fast the articulation should be played. The Sautille provides an additional Sync button to synchronize the articulation speed with the global tempo of Kontakt (which is the tempo of your DAW if Kontakt is running as a plug-in). When you activate Sync, the Speed slider turns to a selector that lets you choose between 1x (normal speed) and 2x (double speed), the latter being useful in projects with a slow or very slow tempo.
- Long category: All the long articulations provide a Legato selector. Legato is a musical term used to describe notes that are played smoothly and connected without silence in between. The Legato selector lets you choose between two variants of legato: in Fingered mode the connected notes are played using different fingers, whereas in Portamento mode the same finger slides from one note to the next note.

#### Articulation Matrix

The Articulation Matrix shows four articulation rows at once instead of a single row. This lets you easily compare and edit multiple sets of articulations. You can open the Articulation Matrix from the Play page by clicking the little up-pointing arrow below the articulation row:



Most controls in the Articulation Matrix behave like their equivalents in the default one-row display, with only a few differences. The Articulation Matrix contains the following controls:

| < 1/8 > | Stradivari Cello s    | Amati Viola S         | Guarneri Violin s     | Stradivari Violin s   | Select<br>Row |
|---------|-----------------------|-----------------------|-----------------------|-----------------------|---------------|
|         | Sustain vibrato fing. | Sustain vibrato fing. | Sustain vibrato fing. | Sustain vibrato fing. |               |
|         |                       |                       | Sustain vibrato fing. | Sustain vibrato port. |               |
| 3 D0    |                       |                       |                       |                       |               |
|         |                       | Pizzicato             |                       |                       |               |
|         | Dynamics              | • Auto divisi –       | - O Unison 🌫          | Expression            |               |

- 1. **Page number**: Indicates the current page. The articulation rows are organized into eight pages of four rows each. You can click the little left and right arrows around the page number to switch to the previous or next page.
- 2. Articulation row number: Shows the number of the articulation row.
- 3. Articulation row keyswitch: Shows the keyswitch assigned to the articulation row. This keyswitch is indicated by a red key on Kontakt's on-screen keyboard and on your Kontrol S-Series keyboard. Pressing the corresponding key on your keyboard will select that articulation row. When hovering the keyswitch field with your mouse, little up/down arrows appear right of it: You can click these up/down arrows to set the keyswitch to the next/previous key, or click the key value and drag your mouse vertically to adjust the keyswitch in greater jumps. At the bottom of the value range, you can set the keyswitch to Off to deactivate it.
- 4. Articulation rows: Each row contains four cells corresponding to the articulations for the four instruments. The highlighted row represents the active set of articulations. You can switch to another set of articulations by pressing its keyswitch on your keyboard or by clicking anywhere in another row (possibly in another page). Clicking a cell activates its row and switches the focus of the Articulation Browser onto that cell, so that you can choose another articulation for that instrument. For more information on the Articulation Browser, refer to Articulation Browser.
- 5. Articulation Matrix button: Closes the Articulation Matrix and returns to the single-row display, which shows only the active set of articulations. For more information on the single-row display, refer to Play page.
- 6. Select Row button: Selects all four cells and opens the Articulation Browser, where you can choose an articulation for all instruments at once. For more information on the Articulation Browser, refer to Articulation Browser. You can click the Select Row button again to deselect all four articulation cells and return to the cell previously selected.
- 7. Solo button ("S"): Mutes all other instruments in order to hear this instrument alone. Only one instrument can be switched to solo at a time. It is a pure audio solo: the auto divisi remains active. This solo button is the equivalent of the instrument's solo button in the Mixer page. Refer to Mixer page for more information.
- **8. Instrument name**: Clicking the instrument name brings the focus of the Articulation Browser onto that particular instrument within the active articulation row.

#### Available articulations

This section describes all the articulations available in Cremona Quartet Ensemble, sorted by category.

#### Long articulations

The following long articulations are available:

- **Sustain**: Plays long, sustained notes. This articulation is performed without vibrato.
- **Marcato**: Play accented notes. Notes played in marcato are played with a stronger attack com pared to sustained notes. This articulation is performed without vibrato.
- **Sustain Vibrato**: Play long, sustained notes. This articulation is performed with a progressive vibrato.
- **Marcato Vibrato**: Play accented notes. Notes played in marcato are played with a stronger attack compared to sustained notes. This articulation is performed with vibrato.

For all these articulations, you can choose between two legato variants using the **Legato** selector. Refer to Articulation Browser for more information on these articulation options.

#### Short articulations

The following short articulations are available:

- Spiccatissimo: A shorter and more accented version of the spiccato articulation.
- **Spiccato**: Alternating bow strokes. The hair of the bow bounces off the string on each note change.
- **Pizzicato**: The string is picked with the index finger of the bowing hand. The pizzicato creates a very different, almost percussive sound compared to bowing.

#### **Special articulations**

The following special articulations are available:

- **Tremolo**: The note is played repeatedly with no specific accent with fast alternating bow strokes. You can use the **Speed** control in the articulation options to change the speed of the tremolo strokes.
- Sautillé: Sautillé notes played repeatedly. You can click Sync in the articulation options to synchronize the notes with the global tempo of Kontakt (which is the tempo of your DAW if Kontakt is running as a plug-in), and use the Speed control to adjust the speed of the articulation. Refer to Articulation Browser for more information on these articulation options.
- Sul Pont: The notes are bowed close to the bridge, resulting in a different timbre.
- **Harmonics**: The notes are played by placing fingers gently on the strings, resulting in harmonic overtones.

## 7. Mixer page

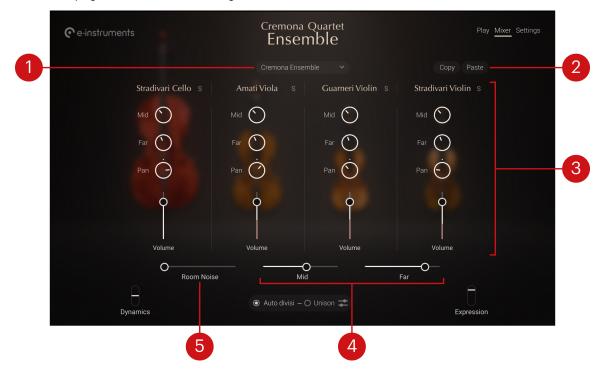
The Mixer page lets you adjust the mix between the four instruments of Cremona Quartet Ensemble. It provides level and pan controls as well as two send controls for the convolution reverb for each of the four instruments, along with a set of global mix controls.

To display the Mixer page, do the following:

• Click **Mixer** at the top right of the instrument to display the Mixer page.



The Mixer page contains the following controls:



- 1. **Mixer Preset menu**: Shows the name of the loaded mixer preset. Each mixer preset contains predefined values for all the parameters in the Mixer page. You can load another preset by clicking the name and selecting the desired entry from the menu. At any time you can also adjust the parameters manually.
- 2. Copy/Paste buttons: Let you easily duplicate the mixer settings across several instances of Cremona Quartet Ensemble in your DAW. When you are satisfied with the mixer settings in one instance, you can click Copy in that instance and Paste in the mixer of another instance to duplicate all the mixer settings to that instance.

- **3. Channel strips**: Each of the four instruments in the ensemble has a dedicated audio channel strip with the following controls, from top to bottom:
  - Solo button ("S"): Mutes all other channels in order to hear this instrument alone. Only one
    instrument can be switched to solo at a time. It is a pure audio solo: the auto divisi remains
    active. This solo button is the equivalent of the solo button for that instrument in the Play
    page. Refer to Play page for more information.
  - **Mid/Far knobs**: Adjust the levels of the signals sent to the convolution reverb from the middle and far microphones, respectively.
  - **Pan knob**: Adjusts the panoramic position of the instrument in the stereo field.
  - **Volume slider**: Adjusts the volume level of the instrument. As you play, the current level of the instrument appears on the slider.
- **4. Mid/Far sliders**: Adjust the return levels of the convolution reverb for the middle and far microphone positions, respectively.
- 5. Room Noise slider: Adjusts the level of the background room noise of the empty concert hall. At full left, no room noise is added. Dragging the slider to the right progressively adds room noise and glues performances together.

## 8. Settings page

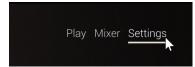
The Settings page lets you adjust various global options affecting the sound and the behavior of Cremona Quartet Ensemble.

í

The settings for the auto divisi have their own dedicated page. Refer to Auto divisi settings.

To display the Settings page, do the following:

▶ Click **Settings** at the top right of the instrument to display the Settings page.



The Settings page contains the following elements:

| € e-instruments |  | Cremona Quartet<br>Ensemble   | Play Mixer <u>Settings</u>           |
|-----------------|--|---|--------------------------------------|
|                 | ROOM NOISE   | BOW CHANGES   | ARTICULATION SWITCH                  |
|                 | <ul> <li>Constant</li> <li>First Note</li> </ul>                             | <ul> <li>○ Free</li> <li>○ BPM - 1 Bar</li> <li>● BPM - 2 Bars</li> <li>Keyswitch: B0 <sup>↑</sup></li> </ul> | ● Keyswitch<br>○ Keyswitch + CC #2 🗘 |
|                 | <ul> <li>● AFTERTOUCH</li> <li>Pitch 3% ↓</li> <li>Dynamics 42% ↓</li> </ul> | PITCH BEND<br>Range 2 🗘   | TUNING<br>Hz 440 🗘                   |
| Dynam           | nics   |   | Expression                           |

- ROOM NOISE: Specifies whether the room noise should be played continuously (Constant) or only on the first note (First Note). For more information on adjusting the room noise level, refer to Mixer page.
- BOW CHANGES: Adjusts when the bow changes should occur. If you select Free the bow changes will be automatically triggered at the end of the musician's bow. If you select BPM 1 Bar or BPM 2 Bars the bow changes will be in sync with Kontakt's tempo and occur every one or two bars, respectively. In any case, you can also trigger bow changes manually using a keyswitch, which you can choose with the Keyswitch parameter below. This keyswitch is indicated by the yellow key on Kontakt's on-screen keyboard and on your Kontrol S-Series keyboard.

- ARTICULATION SWITCH: Chooses the action(s) used for switching articulations. If you select Keyswitch (default setting), only the defined keyswitches will select the articulations. If you select Keyswitch + CC, you can also switch between articulations by using MIDI Control Change messages. The "#" field on the right lets you select the desired controller number: You can click the up/down arrows to select the next/previous CC number, or click the value and drag your mouse vertically to adjust the CC number in greater jumps.
- AFTERTOUCH: Let you control the ensemble's sound using MIDI aftertouch messages, if these are available on your MIDI keyboard. The aftertouch is the amount of pressure that you apply to the keys while you are holding them depressed. Cremona Quartet Ensemble supports polyphonic aftertouch (MIDI Key Pressure messages), which means that it can react to pressure changes on each individual key. You can use the **Pitch** and **Dynamics** parameters to adjust how much the key pressure will affect the note's pitch and volume, respectively. For either parameter you can click the up/down arrows to select the next/previous value, or click the value and drag your mouse vertically to adjust the value in greater jumps.
- **PITCH BEND**: The **Range** field selects the pitch range available on the Pitchbend wheel, in semitones. You can click the up/down arrows to select the next/previous value, or click the value and drag your mouse vertically to adjust the pitch range in greater jumps.
- **TUNING**: The **Hz** field adjusts the instrument's basic pitch, in Hertz. You can click the up/down arrows to select the next/previous value, or click the value and drag your mouse vertically to adjust the tuning in greater jumps.

## 9. Auto divisi settings

#### Abstract

The Auto divisi settings let you adjust the behavior of Cremona Quartet Ensemble's advanced auto divisi system.

The Auto divisi settings let you adjust the behavior of Cremona Quartet Ensemble's advanced auto divisi system. The auto divisi system dynamically distributes single notes and chords of up to four notes to the four instruments in the ensemble. It notably provides the following features:

- **Dynamic instrument assignment**: Play one note and get one instrument. The natural range of the instruments will define which instrument is playing. Adding more notes to the chord adds more instruments. You can pause instruments by releasing the corresponding key.
- **Polyphonic legato**: Moving notes within a chord will produce natural legato transitions for all long articulations. Cremona Quartet Ensemble provides polyphonic legato for all four instruments to ensure realistic transitions for the entire quartet.
- **Solo melodies**: You can play legato melodies on any of the four instruments by playing the next note shortly before you release the previous note.

(i) This section describes the settings for the auto divisi system. The other settings of Cremona Quartet Ensemble are available in the Settings page. Refer to Settings page for more information on these.

To display the Auto divisi settings, do the following:

Click the Auto Divisi Settings button (the icon showing little sliders) at the bottom of the instrument to show or hide the Auto divisi settings.



The various elements in the Auto divisi settings are active only if the auto divisi is on (**Auto divisi** switch turned on at the bottom of the window). If the auto divisi is off, the elements described here are grayed out and inactive.



The Auto divisi settings illustrate the path of the played notes vertically from top to bottom, starting from the incoming MIDI note at the top, through the auto divisi parameters in the middle, down to the resulting distribution across the four instruments at the bottom. The Auto divisi settings contain the following controls:



- 1. Note input (MIDI socket icon): Turns on when a MIDI note comes in, for example as you press a key on your MIDI keyboard.
- 2. **RESPONSE TIME**: Adjusts how long the auto divisi system will wait to decide whether:
  - a group of played notes is considered a chord or not. If the notes are played tightly enough, they are considered a chord and will be assigned to distinct instruments.
  - two following notes are considered part of a solo melody or not. If the first note is released shortly enough after the new note has been played, they are considered a solo melody and will be assigned to the same instrument.

The default **Auto** setting is the best choice in most situations, especially when playing live on a keyboard. You can select **Slow** if the chords or notes are played less precisely. For quantized chords, you can use the **Fast** setting as this provides the quickest response.

- 3. UNISON: Forces all four instruments to play together. For example, if you press a single key all four instruments will play that note. If the note is outside the natural range of either instrument, it will play the note at the closest octave within its range. The UNISON on/off switch turns unison on or off. This switch is the equivalent of the Unison on/off switch available at the bottom of the window. The Keyswitch field lets you choose a key that will temporarily activate unison (by default A0). This keyswitch is indicated by the pink key on Kontakt's on-screen keyboard and on your Kontrol S-Series keyboard. The CC field lets you select a MIDI CC number that will permanently turn unison on or off. In either Keyswitch or CC field, you can click the up/down arrows to select the next/previous value, or click the value and drag your mouse vertically to adjust it in greater jumps.
- 4. Instrument distribution: Shows which note is played by which instrument in the quartet.

## 10. MIDI Learn

You can use MIDI learn to map your MIDI controller to controls in Cremona Quartet Ensemble. This enables you to control multiple parameters at the same time, and play them in real time using knobs.

To map a knob on your MIDI controller to a control in Cremona Quartet Ensemble:

- 1. Hold [command] + [shift] on your computer keyboard and click the control that you want to assign the knob to.
- 2. Turn the knob on your MIDI controller.
- → The knob on your MIDI controller is mapped to the control in Cremona Quartet Ensemble.

(i) The procedure above applies to Mac only. On Windows, you can assign parameters to a MIDI device using the **Learn** button in the **Automation** tab of Kontakt. For more information, refer to the Kontakt user guide.

## 11. Credits

#### Hamburg

Thomas Koritke, Matt Pike, Hadi El Hosri, Lars Dahlke, Sascha Haske, Dr. Florian Pfeifle, Martin von Frantzius, Michael Gentner.

#### Berlin

Francesco Sabatini, Simon Fitchner, Aine O'Flaherty, Konstantin Hess, Elad Twito, Matteo Melchiori, Nicolas Sidi, Andre Bajorat, Samuel Hora, Lucy Crouch.

#### **Special thanks**

Leonardo Tedeschi, Mattia Bersani, Virginia Villa, Fausto Cacciatori, Marco Fornasari, Alessandro Bardelli and the team of Museo del Violino. Paolo Bodini and Friends of Stradivari. The Musicians: Antonio De Lorenzi, Gabriele Schiavi, Marcello Schiavi, Andrea Nocerino, Wim Jannsen. Donato Masci, Stefano Mistura. Musical Acoustic Lab of Politecnico University of Milano. Gianluca Galimberti–City of Cremona.