



SESSION  
PERCUSSIONIST

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# 1. Disclaimer

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## 2. Welcome to Session Percussionist

Session Percussionist delivers a versatile collection of drum patterns, rolls, and one-shots within an intuitive engine. It includes over 2000 rhythmic patterns performed by renowned session musicians along with 58 meticulously sampled instruments.

The browser makes it simple to search, filter, and audition sounds based on genre tags, instrument types, and tempo range. The curated ensemble presets contain up to five instrument slots that can be played simultaneously or individually for unique expression.

Session Percussionist's brand-new engine will search for loops and patterns that closely fit your productions based on the rhythms you enter. You can fully customize patterns by adding and deleting notes, changing velocity and articulations, inserting flams, and more.

Even though patterns can be fully modified or created from scratch, the revolutionary playback engine will always ensure that note transitions will sound realistic. In the case of Shaker or Tambourine, for example, six different tempos have been recorded, the selection of which happens dynamically based on the current tempo and note distances.

The Mixer page enables you to refine your sound using controls for tuning, timing, stereo width, and spatialization—each channel features an XY pad for intuitive placement of the instrument in the virtual recording room.

This document shows you how to [install and setup](#) Session Percussionist and describes all features in detail, starting with the basic [overview](#).

Thank you for choosing Session Percussionist. We hope you enjoy it!



## Document Conventions

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

<i>Italics</i>	Indicates paths to locations on your hard disk or other storage devices.
<b>Bold</b>	Highlights important names, concepts, and software interface elements.
[Brackets]	References keys on the computer keyboard.
▶	Denotes a single step instruction.
→	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.



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 Session Percussionist, you must install and set up the necessary software. Follow these instructions to get started.

### Installing Session Percussionist using Native Access

Native Access is where you will install the software for Session Percussionist. If you are new to Native Instruments, you will first have to create your Native ID. To learn more about Native Access, visit our [support page](#).

1. Download and install Native Access [here](#).
2. Create a Native ID if you do not yet have one.
3. Login to Native Access using your Native ID.
4. Click the **Available** tab.
5. Click **Install** for the following products:
  - Session Percussionist
  - Kontakt or Kontakt Player

→ The software is installed automatically.

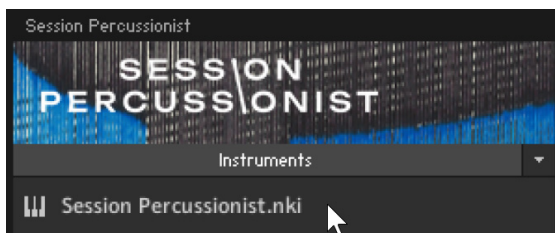


If the software is already installed, click the **Updates** tab and install available updates before proceeding.

### Loading Session Percussionist in Kontakt

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

1. Open Kontakt as a plug-in in your host software (DAW) or as a stand-alone application.
2. Locate Session Percussionist in the Browser, on the left side of the user interface.
3. Click **Instruments** to open the product's content.
4. Double-click the **Session Percussionist.nki** file to load the instrument.

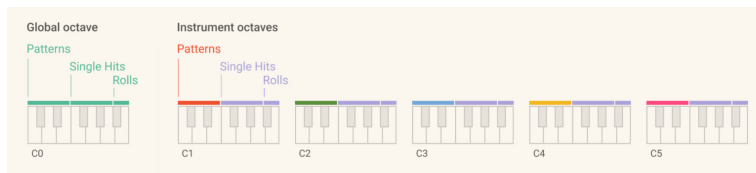


If you are new to Kontakt and want more information, visit [Kontakt Player](#) and [Kontakt](#).

## 4. About Session Percussionist

Session Percussionist provides you with a percussion ensemble containing up to five players. You can load entire ensembles including instruments and patterns for every player, and change instruments and patterns for each player individually. Each player has its own color throughout the interface: red, green, blue, yellow, magenta for player 1 to 5, respectively.

Each player has a dedicated octave on your MIDI keyboard: The octave starting with C1 controls player 1, the octave starting with C2 controls player 2, etc. In addition, the lower octave starting with C0 triggers all instruments together.



Each octave is split as follows:

- Keys C to E trigger five different rhythmic patterns.
- Keys F to A trigger single hits (or notes) in up to five different articulations.
- Keys A# and B trigger up to two different rolls.

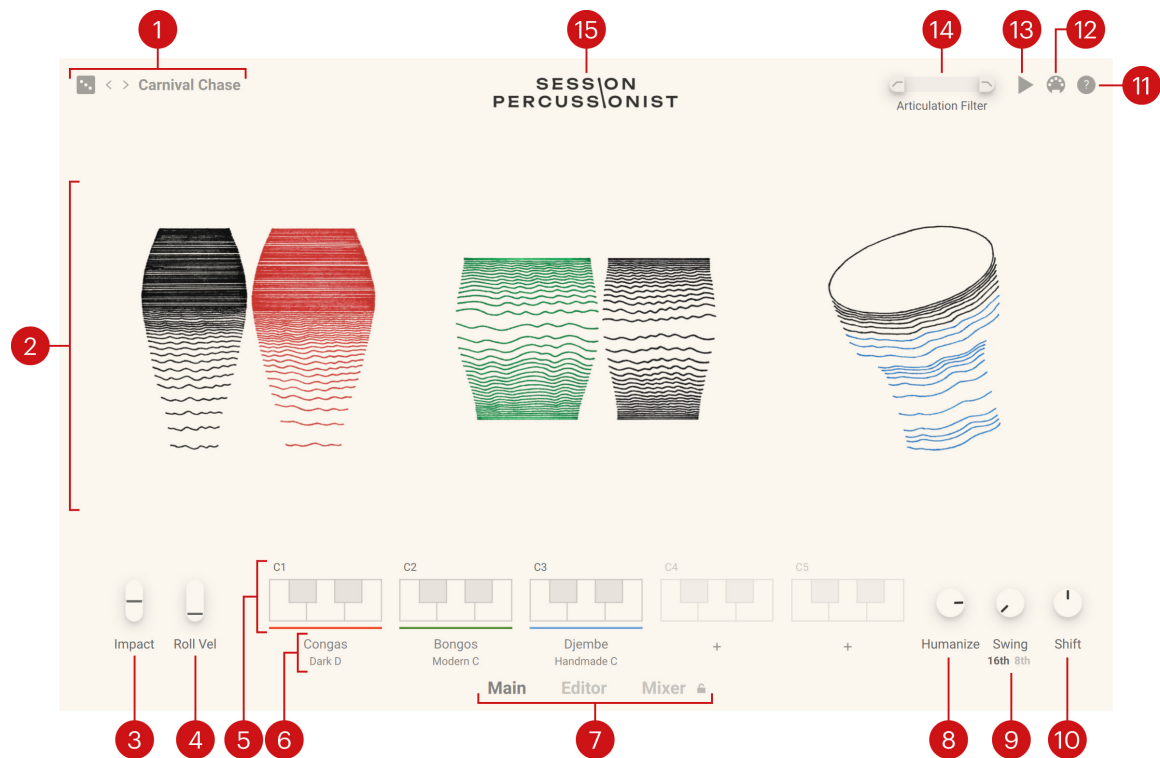
Advanced pages let you precisely adjust patterns and mixer settings for each player.

**i** On NI keyboards equipped with Light Guide, the keyboard mirrors the colors used in the ensemble: The lower global octave is mint, the pattern keys for each player use the player's color, and the remaining keys are plum. For instruments that include less than five articulations or only one roll, the inactive keys are off.

## 5. Session Percussionist overview

This chapter introduces the main concepts of Session Percussionist and its interface.

When you first open Session Percussionist, you see the Main page along with a set of global controls:



- 1. Ensemble preset:** Displays the name of the loaded ensemble preset. Ensemble presets are Kontakt Snapshots: They are global presets containing values for all parameters of the instrument, including the number of players, the players' instruments, the patterns and the mixer settings, etc. You can click the left and right arrows to cycle through ensemble presets, click the dice to load a random ensemble preset, or click the name of the ensemble preset to open the [Ensemble Browser](#) and look for another ensemble preset from the Session Percussionist factory library.
- 2. Central area:** This is the biggest part of the instrument and it can display various pages of parameters and Browsers. By default, it shows the Main page, which displays artworks depicting the various instruments in the current ensemble, each of them using the player's dedicated color. You can click any instrument to open the [Instrument Browser](#) and choose another instrument for this player.
- 3. Impact:** Modulates the velocities of all instruments in your ensemble. This control is assigned to the pitch wheel on your MIDI keyboard. At 0 % (wheel at rest), the notes are played at the velocities defined in the patterns. Push the wheel to increase all velocities and make your ensemble sound more energetic. Pull the wheel to decrease all velocities and make your ensemble sound calmer.
- 4. Roll Vel:** Adjusts the tempo and dynamics of the second roll (B keys) for all instruments. It is assigned to the modulation wheel on your MIDI keyboard. Note that the first roll (A# keys) is not affected by this setting, it reacts instead to the key velocity.



5. **Key selector:** Shows for each player the five keys that trigger rhythmic patterns. You can click any key to open the corresponding pattern in the [Pattern Editor](#) and modify the pattern assigned to that key. You can drag a key and drop it onto another key (possibly in another instrument/octave) to quickly duplicate the pattern. Duplicating the pattern also works across different instrument categories: in that case, the articulations will be remapped. Alternatively, you can use [option] + click (Mac) or [Alt] + click (Windows) on a key to remove the pattern from that key. The Key selector is not available on the Mixer page. As you trigger a pattern from your MIDI keyboard, the corresponding key lights up in the Key selector.
6. **Instrument selector:** Shows for each player the instrument category and the particular instrument variation loaded. You can click the label to open the [Instrument Browser](#) for that player and select another instrument variation from the Session Percussionist factory library. Alternatively you can click the left and right arrows to cycle through all instrument variations within the same category. You can also press [option] + click (Mac) or [Alt] + click (Windows) on the label to remove the instrument from the ensemble.
7. **Page selector:** Switches the central area between the Main page (depicted above), the Editor page and the Mixer page. Click a tab to display the corresponding page. The Editor page contains the [Pattern Editor](#) and the Mixer page contains the [Mixer](#).
8. **Humanize:** Scales up or down the timings for all notes played by the ensemble. The original timings are defined on the [Timing grids](#) in the [Pattern Editor](#) for each pattern and instrument. By default, **Humanize** is set to 100 % and the exact timings defined in the patterns are applied. Turn **Humanize** left to make the patterns globally sound more mechanical, turn it right to amplify or even overplay the patterns' human feel.
9. **Swing:** Adds groove to your patterns by delaying off-beat notes, either on a 16th or 8th time base. Turn the knob right to increase the swing. Below the knob, click the **16th** or **8th** button to select the time base.
10. **Shift:** Globally shifts the timings of all notes played by the ensemble in the range from -80 ticks to +80 ticks (one 16th note equals 240 ticks).
11. **Help:** Opens a help page containing useful reminders on how to play the instrument from your MIDI keyboard.
12. **MIDI Follow:** When this button is turned on, you can use your MIDI keyboard to select patterns for editing. Please make sure that the [Pattern Editor](#) is opened to use this feature. Please note that refreshing the user interface has an impact on your processor, so MIDI Follow should be deactivated before closing the Kontakt plugin window running in your DAW.
13. **Global Audition:** Plays back the selected patterns for the entire ensemble. This is useful to get an idea of how your ensemble sounds. While running, clicking on another key in the Key selector will synchronize the ensemble playback to that key.
14. **Articulation Filter:** Prevents notes from being triggered if their perceived main frequency is outside the defined range. For example, this tool can be very useful if you have additional drum or percussion tracks in your DAW: The **Articulation Filter** lets you nicely insert your ensemble into the mix without interfering with the other tracks. Drag the left and right handles to define the minimum and maximum perceived frequencies that should pass through. Any notes outside this range will not be triggered. The **Articulation Filter** also differentiates notes from a single instrument: some articulations might be filtered out while other would pass through, depending on their individual perceived frequencies. The **Articulation Filter** can also be controlled via MIDI by using CC#89 and CC#90 messages to set the lower handle and the upper handle, respectively.
15. **About:** Click the instrument name to open the About screen, which displays the credits for this instrument.

## 6. Browsers

The Session Percussionist factory library provides a total of 117 ensemble presets and 58 individual instruments, each instrument being available in four variations. Session Percussionist provides dedicated Browsers to navigate through the factory library and quickly find the desired objects:

- **Ensemble presets** contain values for all parameters of the Kontakt Instrument, including the set of players with their specific percussion instruments, the patterns assigned to the keys, the mixer settings for all players, as well as the global parameters described in the [interface overview](#). Browsing ensemble presets is done in the [Ensemble Browser](#).
- **Instruments** contain recordings of single percussion instruments along with dedicated patterns. Each instrument is provided with four different mixer settings called “variations” and labeled **A** to **D**. Browsing instruments and their variations is done in the [Instrument Browser](#).

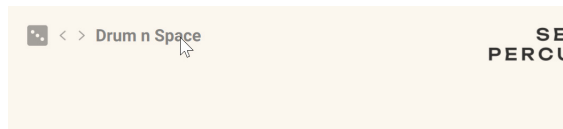
**i** Ensemble presets are stored as Kontakt Snapshots in Session Percussionist’s factory library. Therefore you will also find them in the Kontakt Browser and in the Instrument Header, however without the percussion-specific search tools available in the Ensemble Browser. Refer to [Snapshots](#) for more information on Snapshots. Refer to the Kontakt manual for more information on the Kontakt Browser.

**i** A third browser is tightly integrated into the Pattern Editor and allows you to quickly find interesting patterns from the factory library: the [Pattern Browser](#).

### Ensemble Browser

The Ensemble Browser lets you find and load ensemble presets from the Session Percussionist factory library.

- ▶ To open the Ensemble Browser, click the name of the current ensemble preset in the top left corner of the instrument:



The Ensemble Browser follows this typical workflow:

- In the left part of the Browser, you can click the properties describing the type of ensemble that you are looking for.
- In the right part of the Browser, the Results list shows the ensembles matching the properties that you have selected on the left. You can audition each of them in context before you choose one for loading.

The Ensemble Browser provides the following controls:



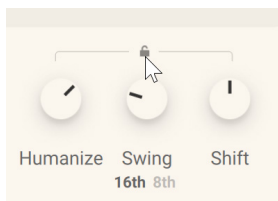
- 1. Tag filter:** Click the tags in the **Category**, **Genre** and **Playing Techniques** columns describing the ensemble that you are looking for. The Results list on the right is updated accordingly.
- 2. Max Amount of Players:** Defines how many players can be contained in the ensemble. For example, if you are looking for a smaller combo with only two or three instruments, click **3** in the **Max Amount of Players** selector to limit the results to ensembles containing three players or less.
- 3. Reset Search:** Removes any **Category**, **Genre** and **Playing Techniques** tags as well as the **Max Amount of Players** value you might have selected. In other words, this resets your search and the Results list shows again all the available ensemble presets. Note that this Reset Search button does not affect the Favorite display: if your Results was showing only your Favorites, it will still be the case after resetting your search.
- 4. Results list:** Shows the ensemble presets corresponding to the tags that you have selected in the **Category**, **Genre** and **Playing Techniques** columns on the left. Click an ensemble preset in the list once to audition it: it is temporarily loaded, you can try it on your keyboard and hear it in the context of your DAW, matching both tempo and playing position. Click it again to stop auditioning. Double-click an ensemble preset to load it and close the Ensemble Browser. In the top right corner, the Results list indicates the number of matching entries along with the total number of ensemble presets in the factory library. For each ensemble preset in the list, the **Players** column indicates how many players it contains and the **Bpm** column shows its tempo sweet spot (in BPM), that is, the tempo region that best fits the ensemble patterns, musically speaking. You can sort the Results list according to either column by clicking the little arrows next to **Players** and **Bpm**. Alternatively, you can click the **ID/A-Z** button to sort the list alphabetically or by IDs.
- 5. Favorites:** Click the star icons to add (lit icon) or remove (unlit icon) the ensemble presets to/from your Favorites. This way, you can quickly create a custom collection of your most beloved ensemble presets. You can then display only your Favorites by clicking the topmost star icon next to the **Ensemble Presets** header. Click the topmost lit star icon to display also non-Favorite ensemble presets.
- 6. OK (check mark):** Keeps the selected ensemble preset loaded and closes the Ensemble Browser. This is the same as double-clicking the ensemble preset in the Results list.
- 7. Close:** Closes the Ensemble Browser without changing anything. The auditioned ensemble preset is unloaded from the memory and your Kontakt Instrument returns to its previous state.

## Locking global settings when browsing ensemble presets

Ensemble presets store values for all parameters of your Kontakt Instrument, including the **Humanize**, **Swing**, **Shift**, and **Articulation Filter** controls. Therefore, if you are auditioning different ensemble presets in the Ensemble Browser, the values of these parameters will change each time you switch between presets. This can make it difficult to compare ensemble presets in context, for example, within an arrangement in your DAW. For this reason, you can lock these four controls when browsing ensemble presets: when locked, they will keep their current values even when switching between presets.

The **Humanize**, **Swing** and **Shift** controls are locked together:

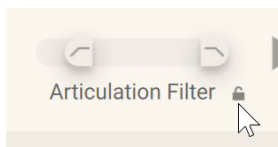
- ▶ To lock the **Humanize**, **Swing** and **Shift** controls, click the lock icon that appears above the controls when the Ensemble Browser is open:



- The lock icon turns on, and the position of the three knobs now stays fixed as you audition different ensemble presets in the Ensemble Browser.

The **Articulation Filter** can be locked separately:

- ▶ To lock the **Articulation Filter**, click the lock icon that appears below the control when the Ensemble Browser is open:



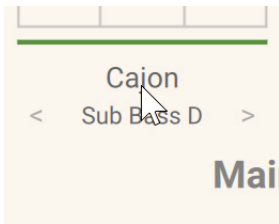
- The lock icon turns on and the two handles of the **Articulation Filter** now stay fixed as you audition different ensemble presets in the Ensemble Browser.

**i** Even when these controls are locked, you can adjust them manually. For more information on the **Humanize**, **Swing**, **Shift**, and **Articulation Filter** controls, refer to [Session Percussionist overview](#).

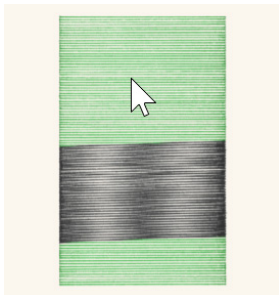
## Instrument Browser

The Instrument Browser lets you find and load instrument presets from the Session Percussionist factory library. This allows you to replace the instrument of an existing player, or to add another instrument to your ensemble if a slot is free.

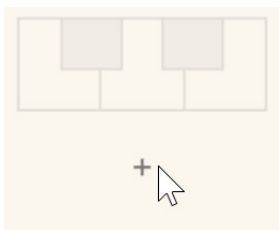
- ▶ To replace the instrument used by a player, click the instrument category or variation name in the Instrument selector, at the bottom of the window:



If the main page is displayed, you can also click the instrument artwork:



- The Instrument Browser appears and lets you select another instrument or variation for that player.
- ▶ To add a new instrument to your ensemble, click the “+” sign on a free slot of the Instrument selector, at the bottom of the window:

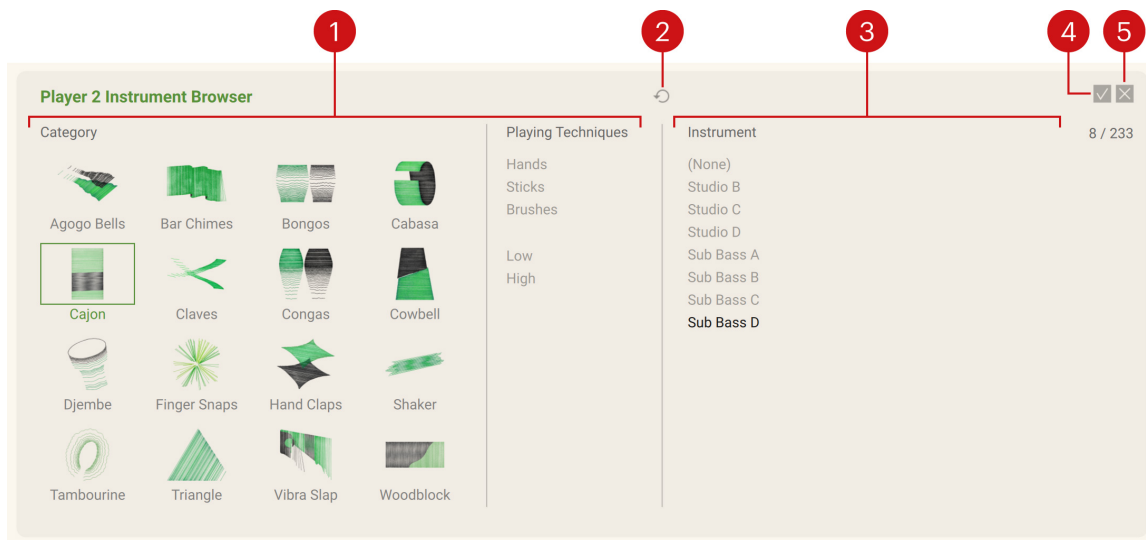


- The Instrument Browser appears and lets you select an additional instrument variation for your ensemble.

The Instrument Browser follows this typical workflow:

- In the left part of the Browser, you can select the properties describing the category of instrument and the playing that you are looking for.
- In the right part of the Browser, the Results list shows the instrument variations matching the properties that you have selected on the left. You can audition each of them in context before you choose one for loading.

The Instrument Browser provides the following controls:



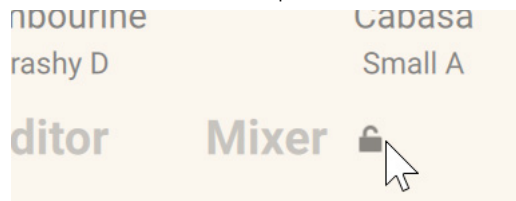
1. **Tag filter:** Click an instrument family in the **Category** grid and/or a tag in the **Playing Techniques** column describing the instrument that you are looking for. The Results list on the right is updated accordingly.
2. **Reset Search:** Removes any **Category** and **Playing Techniques** selections that you might have made. In other words, this resets your search and the Results list shows again all the available instruments.
3. **Results list:** Shows the instrument variations corresponding to your selections in the **Category** grid and **Playing Techniques** column on the left. Click an instrument variation in the list once to audition it: the variation is temporarily loaded onto the selected player, you can try it on your keyboard and hear it in context, even while your DAW is running: the selected instrument will then play its first pattern synced to the DAW's tempo and playing position. Click the same instrument variation again to stop auditioning. Double-click the instrument variation to load it and close the Instrument Browser. At the top of the Results list, you can click the **(None)** entry to remove the instrument from the player slot, leaving the slot empty. In the top right corner, the Results list indicates the number of matching entries along with the total number of instrument variations in the factory library.
4. **OK (check mark):** Keeps the selected instrument variation loaded and closes the Instrument Browser. This is the same as double-clicking the instrument variation in the Results list.
5. **Close:** Closes the Instrument Browser without changing anything. The auditioned instrument variation is unloaded from the memory and your ensemble returns to its previous state.

**i** Instrument variations that are already loaded in your ensemble are not listed in the Instrument Browser. Each instrument variation can be used only once in an ensemble.

## Locking the channel strip settings when browsing instrument variations

Instrument variations include settings for the **channel strip** on the Mixer. If you want to add or replace an instrument in your ensemble and are auditioning different instrument variations in the Instrument Browser, the settings on the channel strip will change as you switch between instruments variations. This can make it difficult to compare them and to determine how well they fit into your ensemble. For this reason, you can lock the channel strips: when locked, the channel strips will keep their current state when you switch between variations.

- ▶ To lock the channel strips, click the lock icon next to the **Mixer** tab, at the bottom of the window.



- The lock icon turns on. All controls in the channel strips will now stay fixed as you audition different instrument variations in the Instrument Browser. The lock also applies when you load the next/previous instrument variation by clicking the left/right arrows in the [Instrument selector](#).

**i** Even if the channel strip settings are locked, you can adjust them manually.

**i** Loading another ensemble preset will always unlock the channel strips, as the ensemble preset will only sound as intended with its Mixer settings fully applied.

## 7. Snapshots

Snapshots are Kontakt's underlying file format for instruments 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](#).
5. **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

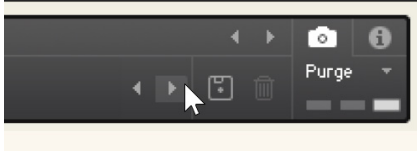
Snapshots are loaded from the drop-down menu in the top header of the instrument. You can also use the arrows to the left of the floppy disk icon to load the previous or next preset.

To load and browse Snapshots using the arrow icons:

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



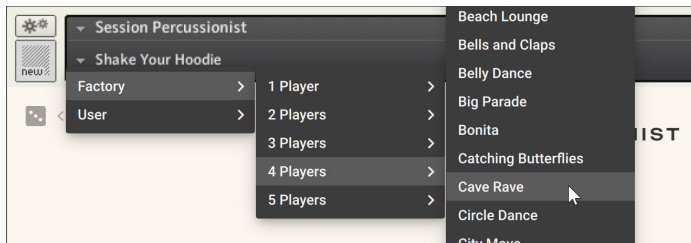
- Click the arrow icons (<>) in the Snapshot header to browse through the Snapshots list.



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

To load a Snapshot from the library:

- Click the Snapshot View (camera icon) to open Snapshot view.
- 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.
- Select an instrument category, if available.
- Select a Snapshot to load it.



→ The loaded Snapshot is displayed in the instrument header.

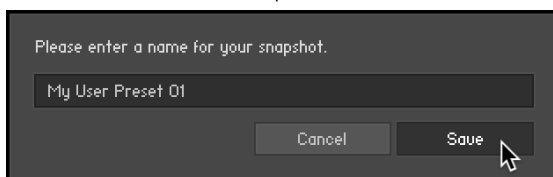
**i** The **User** category will not appear until you have first saved a Snapshot.

## Saving a User Snapshot

Snapshots can be saved at any time while you are working on them. When a Snapshot is saved, all parameters and controls are also saved.

To save a Snapshot:

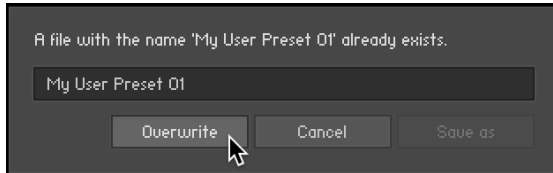
- Click the Snapshot View button (camera icon) to open Snapshot view.
- Click the **Save** button (floppy disk icon).
- Enter a name for your new Snapshot in the **Save** dialog box.
- Click **Save** to finish the process and close the dialog box.



→ Your Snapshot .nksn file is saved to the User Snapshot Library. It appears in the **User** Snapshot list.

To overwrite a Snapshot:

1. Click the Snapshot View button (camera icon) to open Snapshot view.
2. Click the **Save** button (floppy disk icon).
3. Click **Overwrite** to confirm the process.

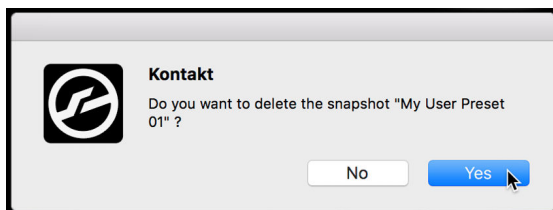


→ Your Snapshot .nksn file is saved to the User Snapshot Library, in replace of the old file.

## 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.



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

## 8. Pattern Editor

The Pattern Editor lets you create and modify advanced rhythmic patterns for your percussion ensembles. You can quickly compose complex rhythms thanks to a variety of intuitive editing tools.

In Session Percussionist, a pattern is a sequence of notes played in loop by one percussion instrument. The factory library includes dedicated sets of patterns for each of the 16 instrument categories. These patterns are available for all the instruments and variations within the category.

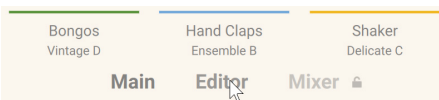
You can use factory patterns as is, or you can modify them or create new patterns from scratch and save them as user patterns for later use.

Each player in your ensemble has a dedicated octave. In this octave, the lower five keys C to E are mapped to five patterns among all the patterns available in this instrument category. This makes these five patterns available on your MIDI keyboard and in MIDI tracks in your DAW.

### Opening the Pattern Editor

The Pattern Editor can be accessed at any time at the bottom of the instrument:

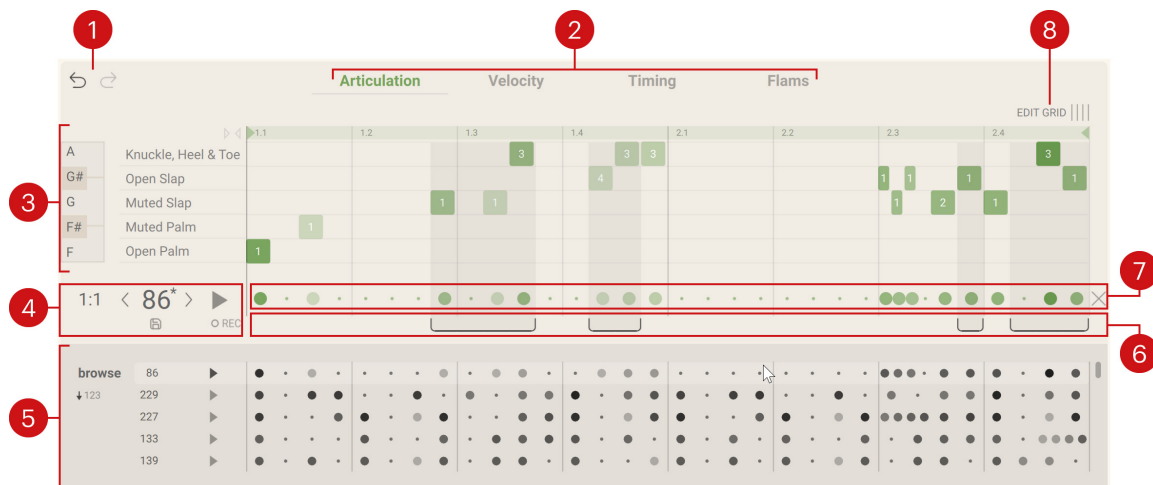
- To open the Pattern Editor, click **Editor** at the bottom of the instrument.



- The Pattern Editor shows up and displays the pattern of the selected key.

### Pattern Editor overview

The Pattern Editor contains the following areas and controls:




- 1. Undo/Redo buttons:** Let you undo or redo your last edits on the pattern. The buttons get darker to indicate that an undo or redo action is available. On every undo/redo, the affected edit is temporarily displayed above the buttons. The undo/redo works across all panels (Articulation, Velocity, Timing and Flams): If you undo an edit that was made on another panel, the Pattern Editor automatically switches to that panel so that you can see which edit has just been undone. Your actions in the Selection strip are also included in the undo history, that is, you can undo selecting steps. The undo/redo history is stored for each key separately: Even if you have switched to another key, you can return to the previous key and undo/redo your edits there.

2. **Panel selector:** Selects the Articulation, Velocity, Timing or Flams panel. Click the desired tab to display the panel below. The selected tab is highlighted. For more information on the various panels, refer to [Articulation panel](#), [Velocity panel](#), [Timing panel](#) and [Flams panel](#).
3. **Panel area:** Shows the panel selected above. While the content of this area depends on the selected panel, all panels share the same structure:
  - The right and biggest part of the panel area contains a grid of steps representing the pattern, with the timeline (in beats and bars) on the horizontal axis. The grid lets you precisely adjust various properties of the notes in the pattern. At the top of the grid, the timeline lets you edit the loop range and propagate it across the entire pattern. For more information on editing the loop, refer to [Loop range and Propagate button](#).
  - At the left of the grid, each panel provides a different set of editing controls.

For more information on the various panels, refer to [Articulation panel](#), [Velocity panel](#), [Timing panel](#) and [Flams panel](#).
4. **Pattern tools:** Display the ID number of the current pattern, and let you set the pattern's playback rate, load another pattern, save a user pattern, audition the pattern and record a new pattern live. For more information, refer to [Pattern tools](#).
5. **Pattern Browser:** Displays all the patterns available for this percussion instrument. This includes the factory patterns and the user patterns that you have saved. Among various features, the Pattern Browser can sort patterns according to their similarity to the current pattern. You can also audition patterns, change their sorting order, and load/drag them onto various targets. For more information, refer to [Pattern Browser](#).
6. **Selection strip:** Lets you select a particular set of steps from the grid. All your actions in the panels above will apply only to these steps. For more information, refer to [Selection strip](#).
7. **Step strip:** Displays a visual summary of your pattern. The Step strip lets you quickly create notes at various velocities, delete notes, and add/remove accents, no matter which panel is displayed above. For more information, refer to [Step strip](#).
8. **EDIT GRID button:** Lets you modify the underlying pattern grid by adding or removing steps at the desired locations in the grid. For more information, refer to [Edit Grid button and Grid strip](#).

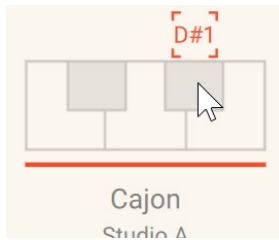
## Selecting keys

The Pattern Editor always displays the pattern mapped to the selected key. The selected key is indicated by a frame around its name in the Key selector, at the bottom of the instrument.

 The Key selector is not visible on the Mixer page. To show it, switch to the Main or Editor page by clicking **Main** or **Editor** at the bottom of the instrument.

You can click another key in the Key selector to select it and open its pattern in the Pattern Editor:

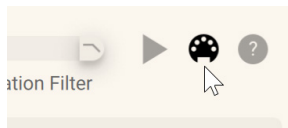
- ▶ In the Key selector, click the desired key of a player.



- The key name appears with a surrounding frame. The pattern mapped to that key is opened in the Pattern Editor above, ready for editing.

## Selecting keys via MIDI

If the Pattern Editor is open, instead of clicking keys in the Key selector, you can also select keys directly from your MIDI keyboard. To do this, you first need to activate the MIDI Follow button (showing a MIDI connector icon) in the top right corner of the instrument:



Once the MIDI Follow button is on, you can open patterns in the Pattern Editor by pressing their keys on your MIDI keyboard.

**i** As a reminder, each player in your ensemble has a dedicated octave on your MIDI keyboard. Within this octave, the first five keys (C to E) trigger five patterns for this player. These five keys are depicted for each player in the Key selector, at the bottom of the instrument window. For more information on how keys are used in Session Percussionist, click the question mark in the top right corner of the instrument to display the onboard Help page, or refer to [About Session Percussionist](#).

## Changing the key mappings

If you want to change the pattern mapped to a key, do the following:

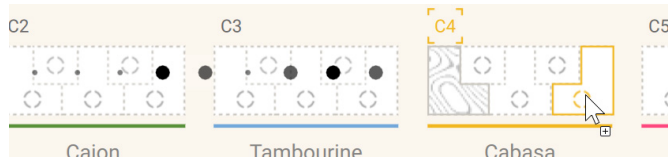
1. Select the desired key in the Key selector or from your MIDI keyboard (if the [MIDI Follow](#) button is on).
2. In the Pattern Editor, modify the current pattern or load another one, for example by using the [Pattern Browser](#), clicking the [Next/Previous Pattern buttons](#) or dragging the [Pattern switcher](#).

- The key now triggers the new or modified pattern. The list of patterns in the Pattern Browser is updated according to the new pattern.

## Remapping keys via drag and drop

When the Pattern Editor is open, you can drag a pattern from the [Pattern Browser](#) and drop it onto another key to map it to that key. For example, you can use this to assign the next key to a pattern similar to the current one.

1. In the Pattern Browser, click anywhere in the line of the pattern, hold the mouse button depressed and move your mouse onto the desired key in the Key selector.



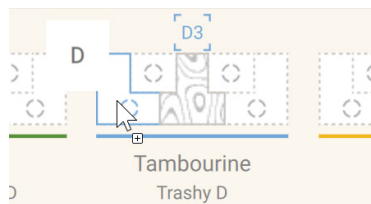
→ An overlay of the selected pattern follows the mouse movements. A little “+” appears when the mouse pointer reaches the keys, indicating that you can drop the pattern there.

2. Release the mouse button to drop the pattern onto that key.

→ The selected pattern is mapped to the key.

Alternatively, you can quickly duplicate a pattern mapping from one key to another by using drag and drop within the Key selector. For example, this can be useful to quickly map a base pattern onto multiple keys of a player, and then add rhythmic variations to the duplicates; or to create a backup of the original pattern before you modify it, ready to be dragged back in case you want to revert your changes.

- ▶ In the Key selector, click a key and hold the mouse button depressed, drag your mouse over the target key and release the mouse button.



→ The pattern mapped to the source key is now also mapped to the target key.

**i** You can also drop the pattern/key onto a key of another player. If this other player holds an instrument from a different category, an “articulation remapping” takes place under the hood that tries its best to translate the original pattern’s perceived melody for use with the articulations available in the target instrument category. While the converted pattern might not always sound totally convincing in itself, it is automatically used as source for the pattern suggestions shown in the [Pattern Browser](#), that will now offer authentic patterns for the new instrument category with a matching accent structure and vibe to the original.

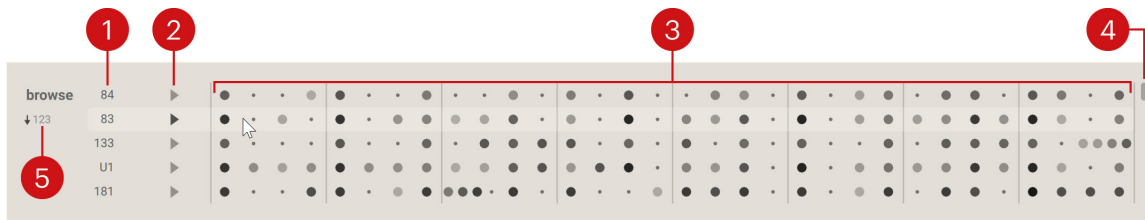
## Pattern Browser

The Pattern Browser lets you audition and load patterns from the list of all the patterns available for the current category of instruments. The Session Percussionist factory library already includes an extensive collection of patterns for each of the 16 instrument categories. In addition, the user patterns that you might have saved will also appear in the Pattern Browser marked with a letter “U.”

The Pattern Browser provides a powerful sorting feature (active by default): At any time, the list of patterns is sorted according to their similarity to the current pattern: The closest-sounding pattern will be listed first, the second closest will be second, etc. This similarity sorting is updated in real-time upon any action in the Pattern Editor: when loading another preset, adding or removing notes, changing note velocities, etc.). The similarity sorting can be useful in various situations, for example:

- You can easily find similar patterns and map them to neighboring keys.
- You can quickly enter or record a rough pattern draft which includes the essential notes and let the Pattern Browser suggest similar, more refined patterns from the factory library.
- You can select from refined factory patterns resembling a pattern that you just dragged and dropped from a different category of another player.

The Pattern Browser shows pattern as a list. It provides the following controls:



- 1. Pattern ID:** Unique identifier for the pattern. Factory patterns are numbered starting from 1, while user patterns show a letter “U” followed by numbers starting from 1.
- 2. Audition:** Click anywhere in the pattern row to audition the pattern (the playback position is indicated in the Step strip preview). Click again to stop auditioning.
- 3. Step strip preview:** Shows a picture of the pattern’s Step strip, including note positions and velocities in the pattern. Click once to audition or stop auditioning the pattern. Double-click to load the pattern. You can also drag the preview to the real [Step strip](#) above to load it. Upon loading, the list of patterns is updated according to the new pattern. You can also load the preview to any key in the [Key selector](#) below to load the pattern there.
- 4. Scroll bar:** Drag the handle vertically to access the next or previous presets in the list. Alternatively, click above or below the scroll handle to step-scroll five patterns with each click.
- 5. Numerical sorting (“123”):** Switches the pattern list between similarity (default setting) and numerical sorting.

## Deleting user patterns

When you hover the line of a user pattern with your mouse, a little trash bin icon appears next to the pattern ID:



- ▶ Click the trash bin icon to delete the user pattern.
- The user pattern is deleted and removed from the pattern list.

**i** User patterns can be created using the Save button in the [Pattern tools](#).

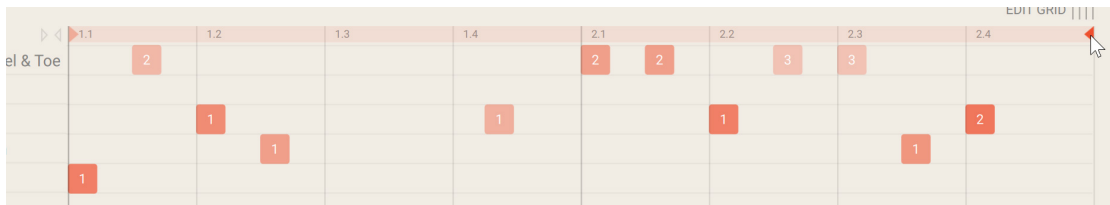
## Loop range and Propagate button

By default, the whole pattern is played in loop. In the timeline above the grid, the end points of the loop are indicated by colored triangles. The colored segment between both triangles represents the loop range. The timeline lets you adjust the loop range in various ways.

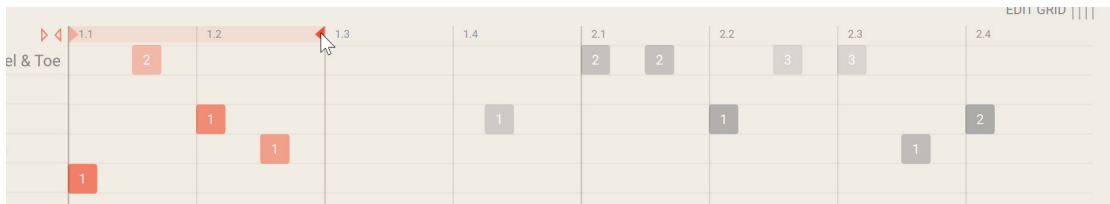
**i** You can adjust the loop range on all panels (Articulation, Velocity, Timing and Flams), and for each of the 25 player keys independently.

To move either end point of the loop:

1. Click either triangle in the timeline.



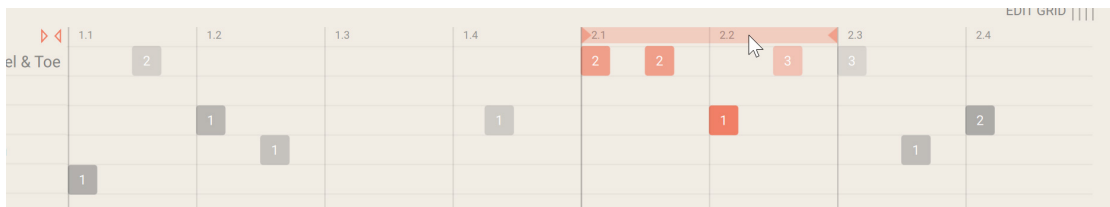
2. Drag the triangle horizontally to adjust the end point.



→ The loop range is modified accordingly. In the grid, the portions outside the loop range are grayed out and will not be played back.

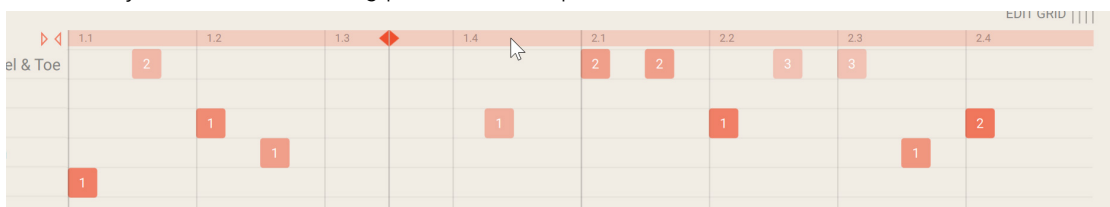
You can move the entire loop in the timeline:

- Click anywhere between both colored triangles and drag your mouse horizontally to move the loop in the timeline:



If you drag a full-length loop, it will simply move the starting point within your pattern:

- In a full-length loop, click anywhere between both colored triangles and drag your mouse horizontally to move the starting point of the loop:



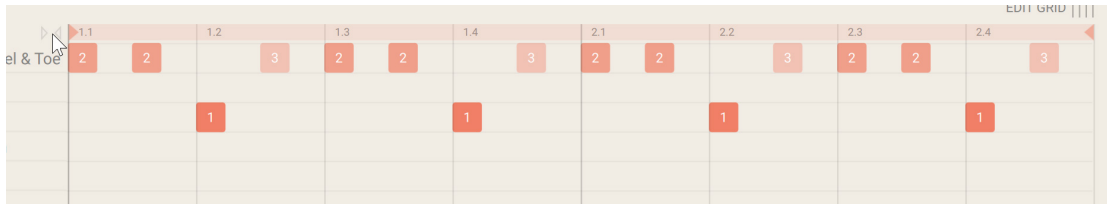
If the loop is shorter than the grid, you can propagate it throughout the grid:



- ▶ Click the Propagate button on the left of the timeline, indicated by two facing triangles.



- A new pattern is being created with the looped portion reproduced onto the entire grid. Like any other action in the Pattern Editor, this can be undone.

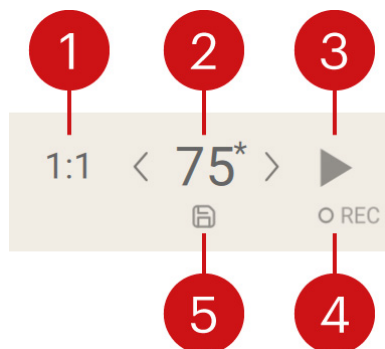


At any time, you can reset the loop range:

- ▶ In the timeline, double-click anywhere between both colored triangles to reset the loop range to the entire pattern.

## Pattern tools

The following pattern tools are available:

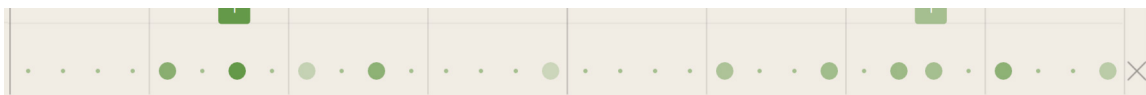


- 1. Playback Rate:** Selects the playback rate of the pattern. Click the value to cycle through the available rates. You can choose from **1:1** (original speed, default value), **x2** (double speed) and **1:2** (half speed).
- 2. Pattern switcher:** Shows the ID number of the loaded pattern. Click the number and drag your mouse vertically to fast scroll through pattern IDs, then release the mouse button to load the corresponding pattern. Click the left or right arrow to switch to the previous or next pattern. If you have modified the pattern, an asterisk appears next to the ID to remind you that the current pattern state has not been saved yet. If you want to reuse your custom pattern in the future, you have to save it using the Save button (see below).
- 3. Audition:** Starts/stops the playback of the pattern. This allows you to hear this single instrument playing the pattern. If you want to audition how this pattern sounds together with the other instruments in your ensemble, use instead the [Global Audition button](#) in the top right corner of Session Percussionist.

4. **Record:** Lets you record a pattern live on your MIDI keyboard. Click the Record button to start the recording: a metronome click is turned on at the tempo of your DAW. If the playback is stopped in your DAW, a one-bar count-in starts, during which you can already start to record. If the playback is running in your DAW, the recording position is synchronized to the DAW transport. The recording continues until you explicitly stop it: until then, you can record multiple layered loops (overdubbing). Once you have stopped the recording, you can use the Undo button to selectively cancel each additional loop you have recorded. You can also use the Record button to create a first draft of a pattern idea, and then look in the Pattern Browser for factory patterns that are similar to your recorded draft
5. **Save:** Stores the current pattern state as a user pattern. The user pattern gets its own ID starting with the letter “U” (for “user”) followed by an automatic numbering, and it will be available for all instruments and variations in this instrument category. You can save up to 20 user patterns in each instrument category. User patterns are listed in the [Pattern Browser](#) together with factory patterns. Notably, they are included in the automatic search for similar patterns. User patterns can be deleted using the [Pattern Browser](#).

## Step strip

The Step strip is located under the grid. It provides an overview of your pattern and lets you quickly create or delete notes, change note velocities on the fly, and duplicate parts of the pattern.



The Step strip stretches over the entire timeline. In the Step strip, notes are indicated by colored circles. The circles' color intensity mirrors the note velocity: stronger colors indicate higher velocities. Empty steps are indicated by a little point.

The effect of your mouse actions in the Step strip strongly depends on whether you click a step inside or outside the selected steps (if any).

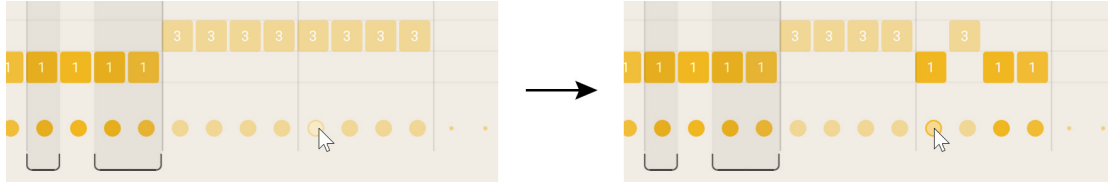
**i** To select or deselect steps, use the [Selection strip](#) located under the Step strip.

For each action, we first describe the result if you click outside the selected steps, then if you click inside. The following actions are available:

- Click an empty step to create a note. The new note will have the same velocity as the last created or edited note. To change this default velocity, just set any note velocity once, it will be remembered and used as the new default. If the step is inside the selection, a note is created on each empty step in the selection.
- Click a note to delete it. If the note is inside the selection, all selected notes are deleted.
- Double-click a note to apply a +30 velocity accent. If you double-click an empty step, it first creates a note with the same velocity as the last created or edited note, then applies a +30 velocity accent. If the step is inside the selection, the same results apply to all similar steps (with note or empty) in the selection.
- Click a note, hold the mouse button and drag your mouse vertically to adjust its velocity. The velocity temporarily appears above the note until you release the mouse button. If you click and drag an empty step, it first creates the note and adjusts its velocity on the fly. If the step is inside the selection, the velocities for all selected steps are adjusted proportionally.



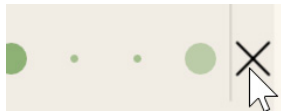
- If some steps are selected, pressing [option] + click (Mac) or [Alt] + click (Windows) on a step will duplicate the selected steps (including the empty ones) starting from the step that you have clicked. If your selection includes non-adjacent steps, the gaps between selected steps will be retained during duplication: Upon pasting, the corresponding steps will stay untouched:



**i** When duplicating steps, the grid structure is ignored: The notes are copied one by one into the target steps even if the source and target steps have different lengths due to the varying grid structure. As a consequence, the rhythm of the duplicated notes might differ from the original rhythm.

You can also delete multiple notes at once:

- ▶ Click the Delete button (little cross) at the right of the Step strip to delete the selected notes from the pattern.



→ The selected notes are deleted.

**i** If no notes or all notes are selected when you click the Delete button, all notes are deleted and the grid is additionally reset to the default 16th note grid. You start again with a fresh, empty pattern.

## Selection strip

The Selection strip is located under the grid and the Step strip. It provides various tools to select the desired steps in your pattern. Once your selection is done, you can for example edit only those selected notes while leaving the remaining steps untouched, or duplicate the selected steps to another position in the grid.



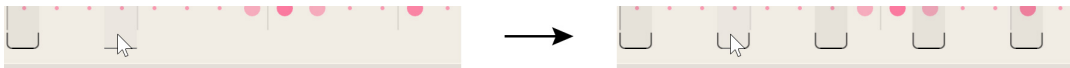
The Selection strip stretches over the entire timeline. In the Selection strip, the selected steps show upward-pointing brackets and they have a gray background that extends vertically throughout the grid.

Your step selection remains active when you switch between the Articulation, Velocity, Timing and Flams panels. Your actions in the Selection strip are stored in the undo history like any other action in the Pattern Editor: If you are not happy with your current step selection, you can always return to a previous selection.

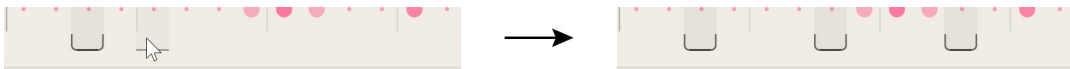
The following actions are available in the Selection strip:

- Click a step to select it. This deselects all other steps.

- Click a step to select it, then [Shift] + click another step to select all steps in between. This lets you quickly select groups of adjacent steps.
- [command] + click (Mac) or [Ctrl] + click (Windows) a step to add it to the selection or remove it from the selection. This lets you select non-adjacent steps.
- Click any selected step to deselect all steps.
- Double-click any step to select all steps.
- Replicate selection: If some steps are selected and you press [option] + click (Mac) or [Alt] + click (Windows) on a step in the Selection strip, the selection state ("selected" or "deselected") of all steps *before* the step you have clicked will be replicated onto the following steps of the pattern: The step you have clicked will mirror the selection state of step 1, its right neighbor will mirror the state of step 2, etc. This allows you to quickly select a repeating sequence of steps without having to select each of them manually:
  - Example 1: If you select the 1st step ("selected" state, noted "s"), leave the 2nd and 3rd steps deselected ("deselected" state, noted "-"), and then press [option] + click (Mac) or [Alt] + click (Windows) on the 4th step, the sequence made of the first three steps (selection states: s - -) will be replicated starting from the 4th step, thus generating a [s - - s - - s - -...] selection sequence throughout the pattern:



- Example 2: In order to select all off-beat 8th notes in the default grid, select the 3rd step and press [option] + click (Mac) or [Alt] + click (Windows) on the 5th step:



**i** Your actions in the Selection strip do not modify the notes in your pattern, only their selection state.

**💡** You can also select all notes playing a specific articulation by opening the [Articulation panel](#) and double-clicking the articulation name at the left of the grid.

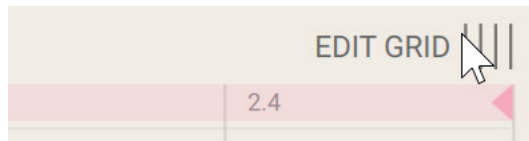
## Edit Grid button and Grid strip

By default, the steps in the grid have a length of one 16th note: four steps make a quarter note, and 32 steps fill up the two 4/4 bars of the timeline.

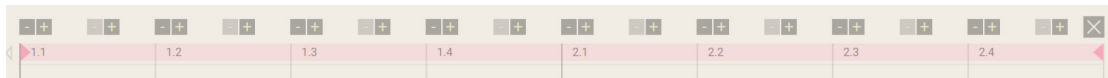
However, in some situations you might want to create notes outside the 16th-note grid or groups of notes with a different timing structure. For this, the Pattern Editor lets you locally adjust the pattern grid by inserting or removing steps as needed. This is done in the Grid strip.

The Grid strip is hidden by default. In order to show the Grid strip and modify the grid, do the following:

- ▶ Click the **EDIT GRID** button at the top right of the pattern grid.



- The Grid strip appears above the timeline.



By default, the Grid strip provides a pair of “+” and “-” buttons for every 8th note. You can click them to add or remove a step from the 8th-note division below: For example, starting from the default two 16th-note steps available in a 8th-note division, clicking the “+” button will add a third step to the division and distribute the three steps evenly, which allows you to create triplet 16th notes.

The available step lengths are: triplet 8th note, 16th note (default length), triplet 16th note, 32nd note, quintuplet 8th note, and septuplet 8th note.

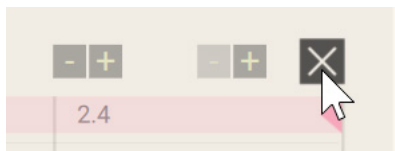


You can also focus on a portion of the grid (for example, the first quarter note), thoroughly edit the grid in that portion, and then use the [loop range and Propagate tools](#) to set the loop range to the edited portion and replicate your edits onto the entire grid.

Changes made to the grid are basically non-destructive. Notably, existing notes are not affected by your modifications to the grid: If you add or remove a step in a division that already contains notes, the notes will appear at new step positions in the grid, but their timing and flam values (as seen on the [Timing](#) and [Flams](#) panels) are automatically updated to make up for the move, so that no difference will be heard in existing notes after adding or removing the step.

The Close button at the far right lets you close the Grid strip at any time:

- ▶ To close the Grid strip, click the Close button (the little cross) at the right of the strip.



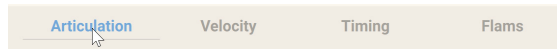
When duplicating steps, the grid structure is ignored: The notes are copied one by one into the target steps even if the source and target steps have different lengths due to the varying grid structure. As a consequence, the rhythm of the duplicated notes might differ from the original rhythm. For more information on duplicating steps, refer to [Step strip](#).

## Articulation panel

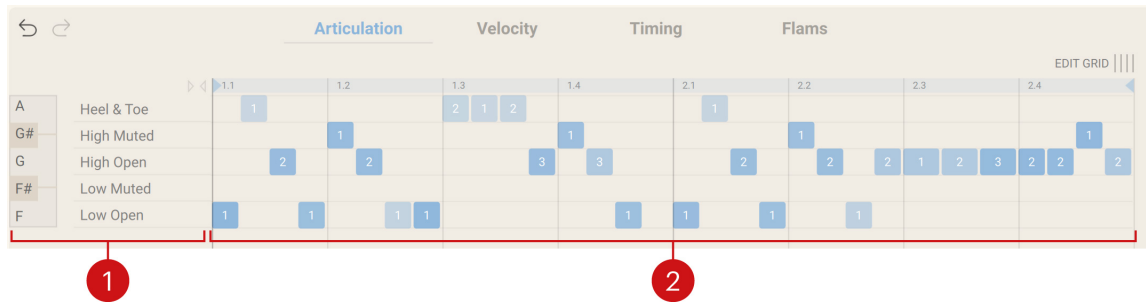
Each percussion instrument can produce different sounds depending on how it is played. These sounds are called “articulations.” In Session Percussionist, each instrument provides up to five main articulations, which are mapped to the keys F to A in the player’s octave on your MIDI keyboard. In addition, each main articulation contains a variable number of sub-articulations. The Articulation panel lets you choose the articulation played by each note in the pattern.

To open the Articulation panel:

- Click **Articulation** at the top of the Pattern Editor to open the Articulation panel.



The Articulation panel consists of the following elements and controls:



- 1. Main articulations:** Lists the main articulations for this instrument. On the left, the corresponding keys on your MIDI keyboard are displayed. Click an articulation name once to play its sound. Double-click an articulation name to add to the current selection all steps with a cell on that articulation lane.
- 2. Articulation grid:** Represents the notes in your pattern and lets you set their articulations. The grid contains a few horizontal lanes, one for each main articulation. Notes are represented by rectangle cells on the lanes: Cells on a particular lane will play the corresponding main articulation. The horizontal position of a cell indicates its step in the timeline, while its vertical position indicates which main articulation is played on that step. The color intensity of a cell mirrors the note velocity (darker colors indicate higher velocities). The little number displayed on a cell indicates the sub-articulation played by this note. The available mouse actions in the grid are described below.

## Mouse actions in the Articulation grid

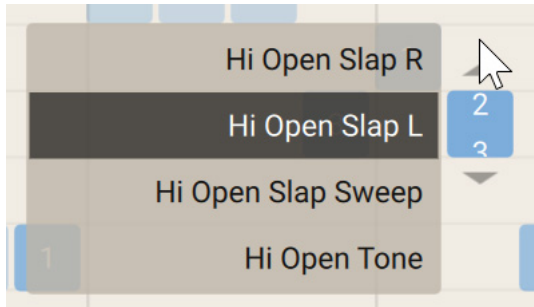
The effect of your mouse actions in the Articulation grid strongly depends on whether you click a cell inside or outside the selected steps (if any). For each action, we first describe the result if you click outside the selected steps, then if you click inside.

- i** You can quickly select all steps whose cell is on a particular lane by double-clicking the articulation name on the left. You can select steps in many other ways by using the [Selection strip](#) under the grid.

The following mouse actions are available in the grid:

- Click a cell to delete it. If the cell is inside the selection, all selected notes are deleted.
- In a column already containing a cell, click on another lane to move the cell to that lane and change the main articulation played on that step. If the step is inside the selection, all selected notes are set to that main articulation.
- In an empty column, click on a lane to create a note playing that main articulation. The new note will have the same velocity as the last created or edited note. If the step is inside the selection, all selected steps are set to this articulation (on empty steps the notes are created).
- Double-click a cell to apply a +30 velocity accent. If you double-click on a lane in an empty column, it first creates a note playing that main articulation with the same velocity as the last created or edited note, then applies a +30 velocity accent. If the step is inside the selection, the same results apply to all similar steps (with note or empty) in the selection.

- As you hover a cell with your mouse, a list appears nearby showing the available sub-articulations. Click the cell, hold the mouse button depressed and drag your mouse vertically to select another sub-articulation from the list. As you drag the mouse, you can audition the various sub-articulations when they get selected. Release the button when the desired sub-articulation is highlighted. The number on the cell is updated accordingly.



If the step is inside the selection, all cells in the selection are set to these main articulation and sub-articulation.

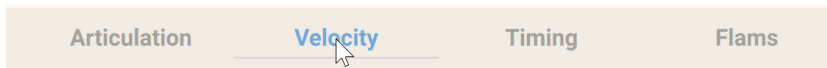
- You can also set both the main articulation and the sub-articulation in one go by clicking an empty position in the grid, holding the mouse button and dragging the mouse vertically.

## Velocity panel

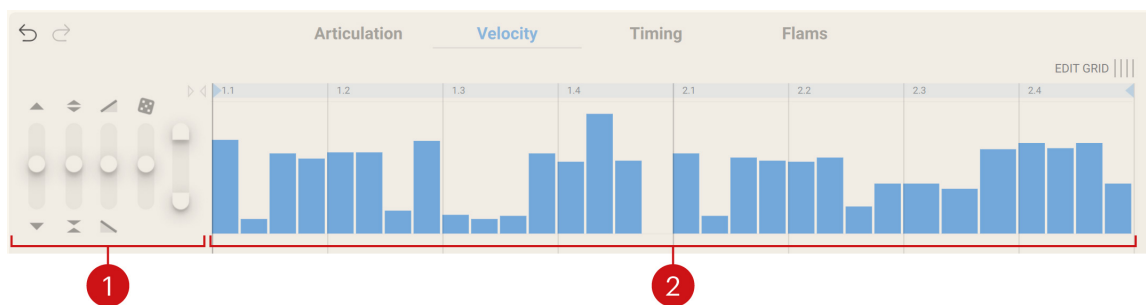
The Velocity panel lets you adjust the velocity of each individual note in the pattern. In addition, it provides a set of velocity editing tools that can affect multiple notes or the whole pattern at once.

To open the Velocity panel:

- Click **Velocity** at the top of the Pattern Editor to open the Velocity panel.



The Velocity panel consists of the following elements and controls:



**1. Velocity tools:** Provide various functions to modify the velocities. If some steps are selected, the tools affect the velocities of the selected steps, otherwise they affect the whole pattern. The Velocity tools behave relatively to the current velocities: When you move and release a slider, it returns to its default position and the new velocities will be used as starting point for your next edits. This allows you to apply the tools several times in a row. The effect of each tool is directly mirrored in the Velocity grid on the right. From left to right, the following tools are available:

- **Shift:** Adds/removes a fixed amount to/from all velocities. This velocity amount increases as you pull the slider further up or down. Hold [Shift] while dragging to scale the velocities instead of offsetting them.
- **Compress/Expand:** Amplifies or attenuates the velocity differences between notes relative to the current mean of all velocities as the imaginary “center.” Moving the slider upward amplifies the differences in velocity (expander behavior): High velocities get even higher and low velocities get even lower. Moving the slider downward attenuates the differences (compressor behavior): All velocities tend to move toward the mean velocity.
- **Tilt:** Puts the velocities on a slope. The slope is centered on the current mean of all velocities. Moving the slider upward uses a raising slope, while moving the slider downward uses a decreasing slope. The slope becomes steeper as you move the slider further away. For example, this tool is useful to create *crescendos*.
- **Randomize:** Adds or removes a random value to each velocity. The position of the slider determines the maximum value that can be added or removed.
- **Limit:** Shrinks the range of available velocity values. Moving the upper handle downward decreases the highest velocities, and moving the lower handle upward increases the lowest velocities. This is especially useful if you want to dial in only the soft ghost notes, or to tame only some loud, spiking notes.

**2. Velocity grid:** Represents the velocities of the notes in your pattern as vertical, adjustable bars. The following mouse actions are available:

- For a note outside the selection, click at the desired height in the grid to set its velocity to that value. Click and drag your mouse vertically to adjust the velocity. As you drag the mouse, the velocity value appears under the bar.
- For a note inside the selection, press [option] + click (Mac) or [Alt] + click (Windows) at the desired height to set the velocities of all selected notes to that value. Click the bar and drag your mouse vertically to shift the selected velocities by the same amount, or hold [Shift] while dragging to scale the velocities instead.
- Click at a certain height in the grid on an empty step to create a note with the corresponding velocity. If the step is inside the selection, notes are created for all empty steps in the selection.



To select or deselect steps, use the [Selection strip](#) under the grid.

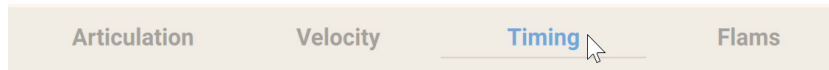
## Timing panel

The Timing panel lets you adjust the timing of each individual note in the pattern. In addition, it provides a set of timing editing tools that can affect the selected steps or the whole pattern at once.

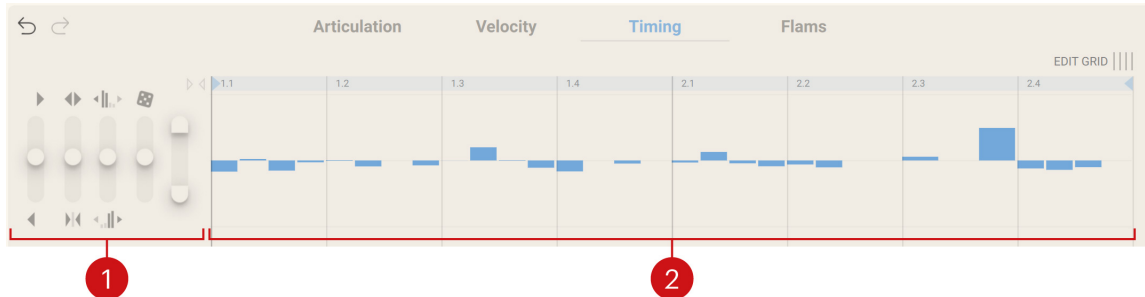
To open the Timing panel:



- Click **Timing** at the top of the Pattern Editor to open the Timing panel.



The Timing panel consists of the following elements and controls:



1. **Timing tools:** Provide various functions to modify the timings. If some steps are selected, the tools affect the timings of the selected notes, otherwise they affect all notes in the pattern. The Timing tools work relatively to the current timings: When you move and release a slider, it returns to its default position and the new timings will be used as starting point for your next edits. This allows you to apply the tools several times in a row. The effect of each tool is directly mirrored in the Timing grid on the right. From left to right, the following tools are available:
  - **Shift:** Adds/removes a fixed duration to/from all timings. This extra duration increases as you pull the slider further up or down. Please note: While it is possible to shift an entire pattern to the late or early side here, it makes more sense to have the timings generally centered around the middle line so that they can be properly scaled bipolar (instead of uni-polar) by the global **Humanize** control. If you want an entire player to play rather late or early, please use instead the **Timing** slider on the player's **channel strip** of the Mixer.
  - **Loosen/Tighten:** Amplifies or attenuates the timing differences between notes. Moving the slider upward accentuates the differences in timing: Late notes get delayed and early notes get even earlier, that is, the player gets looser. Moving the slider downward attenuates the differences: All timings tend to move toward the middle zero, in other words the player gets tighter or quantized.
  - **Velocity-based Shift:** Adds/removes a variable duration to/from each timing depending on the note velocity. Notes with high or low velocities will be more affected than notes with middle velocities. Moving the slider upward brings high-velocity notes forward and delays low-velocity notes, whereas moving the slider downward has the opposite effect. Slightly moving this slider upward can have a positive effect on the perceived groove.
  - **Randomize:** Adds or removes a random value to each timing. The position of the slider determines the maximum value that can be added or removed.
  - **Limit:** Shrinks the range of available timings. Moving the upper handle downward brings the latest notes forward, and moving the lower handle upward delays the earliest notes, the limit being in each case the quantized center position.

**2. Timing grid:** Represents the timings of the notes in your pattern as vertical, adjustable bars. The bars are bipolar: bars above the zero represent lagging notes, whereas bars below the zero represent rushed notes. The following mouse actions are available:

- On a note outside the selection, click at the desired height in the grid to set its timing to that value. Click and drag your mouse vertically to adjust the timing. As you drag the mouse, the timing value appears under the bar.
- On a note inside the selection, press [option] + click (Mac) or [Alt] + click (Windows) at the desired height to set the timings of all selected notes to that value. Click the bar and drag your mouse vertically to shift the selected timings by the same amount, or hold [Shift] while dragging to scale the timings instead.

The timings shown in the Timing grid also depend on the modifications that you make to the grid itself using the Grid strip. For more information, refer to [Edit Grid button and Grid strip](#).

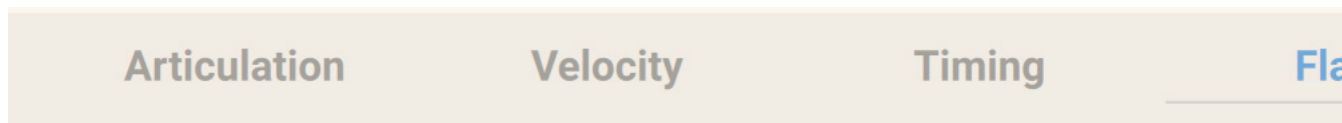
**i** To select or deselect steps, use the [Selection strip](#) under the grid.

## Flams panel

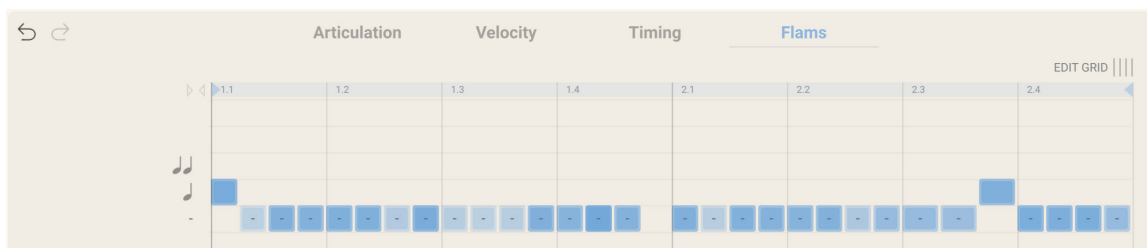
The Flams panel lets you add single or double flams to the notes in your pattern.

To open the Flams panel:

- ▶ Click **Flams** at the top of the Pattern Editor to open the Flams panel.



The Flams panel contains the Flams grid:



The Flams grid represents the notes in your pattern as square cells. The horizontal position of a cell indicates its step in the timeline, and its color intensity mirrors the note velocity (darker colors indicate higher velocities). The Flams grid contains three horizontal lanes: Notes on the bottom lane don't play any flam, notes on the middle lane play a single flam, and notes on the upper lane play a double flam.

By moving a cell vertically onto the desired lane, you can define which flams the note will play:

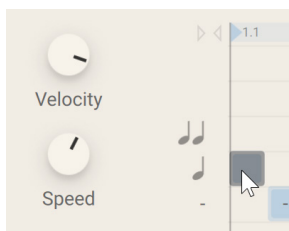
- ▶ Click in the desired free lane above or below a cell to place it onto that lane.
- The note changes its flam. If some steps are selected and you change the flam of a cell that is inside the selected steps, all selected notes will change their flam accordingly.

**i** To select or deselect steps, use the [Selection strip](#) under the grid.

When you move a cell from the bottom lane to either other lane, you activate a single or double flam for that note. As you do this, the main note itself gets slightly delayed in order to “make room” for the added flam note(s), thereby reproducing a natural playing behavior. You can see this added delay on the Timing panel. This delay will be removed if you deactivate the note’s flam by moving its cell back to the bottom lane.

**i** Each flam is considered a “locked group” of two or more coupled notes. This means that changing the timing or velocity of an existing flam will affect all corresponding notes.

When you create or select a flam, two **flam controls** appear at the left of the grid that let you adjust the flam velocity and speed for that note:



You can adjust the **Velocity** and **Speed** flam controls for each note individually. If some steps are selected and you adjust the flam controls for a cell that is inside the selected steps, your changes will affect the flam controls for all selected notes.

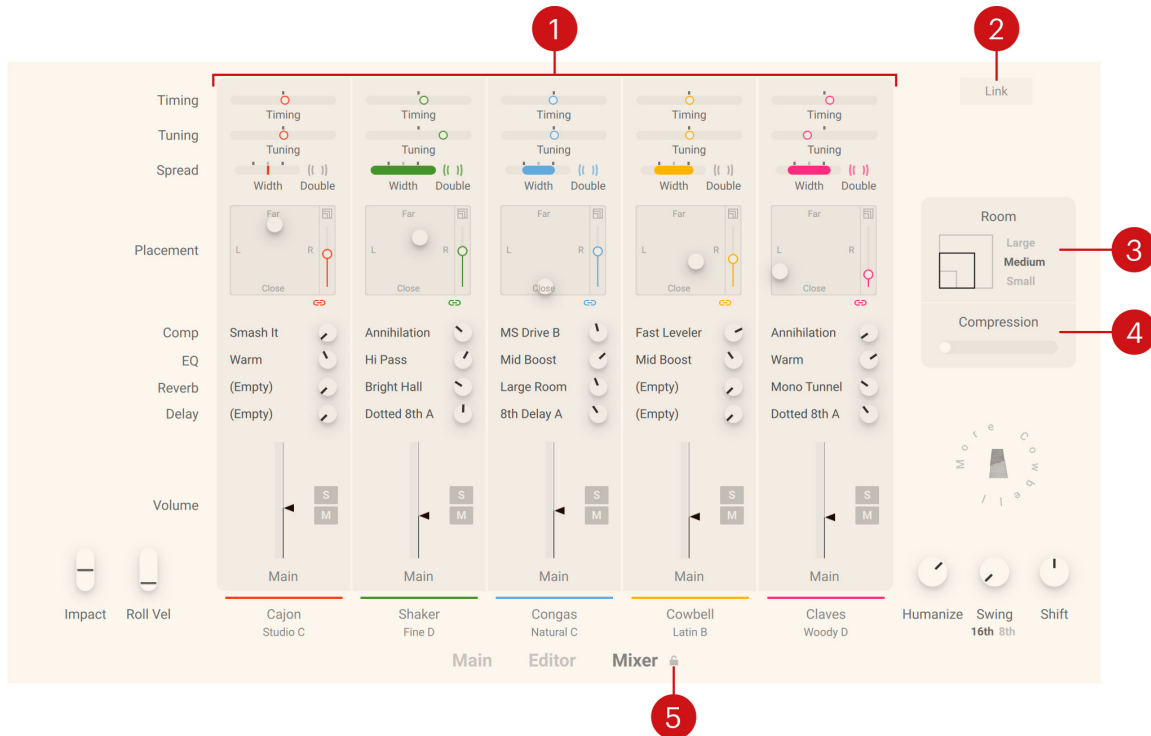
**i** If you move a cell onto another lane, its **Velocity** and **Speed** controls are reset to their default values.

The flams shown in the Flams grid and their settings also depend on the modifications that you make to the grid itself using the Grid strip. For more information, refer to [Edit Grid button and Grid strip](#).

## 9. Mixer

The Mixer enables you to mix and process the sound of the five players. Each player has its own dedicated channel strip featuring standard mixing controls as well as effects, spatialization, and musical parameters that affect pattern playback.

The Mixer consists of the following elements and controls:

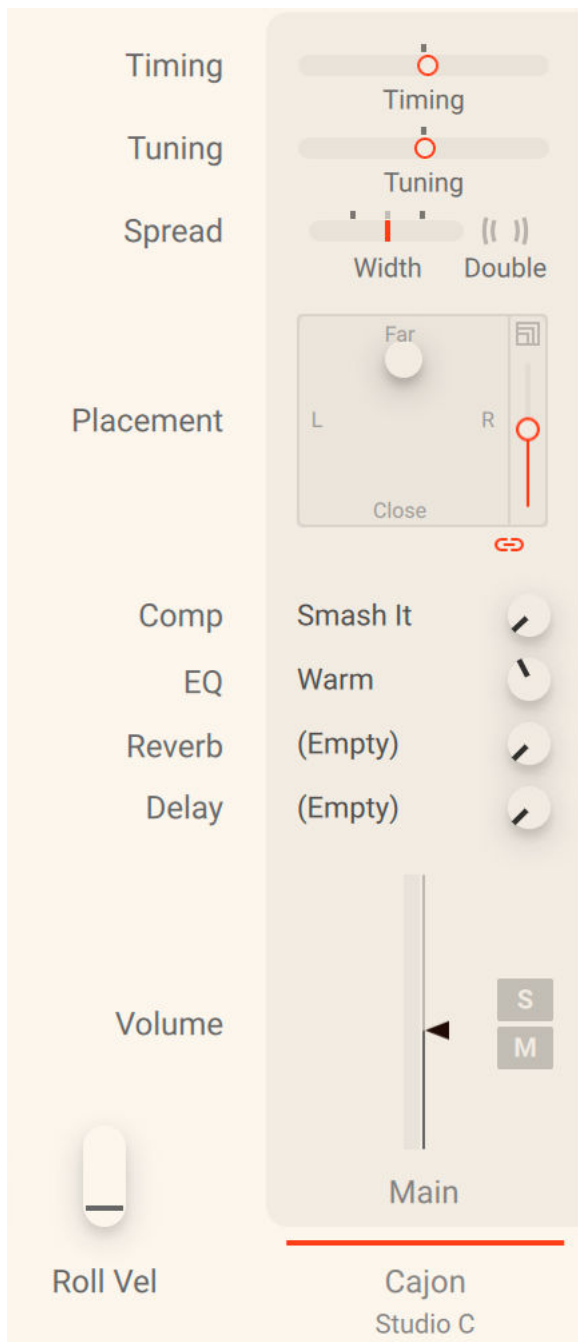


- 1. Channel strip:** Controls the mix, spatialization, and musical parameters for each of the five players. For more information, refer to [Channel strips](#).
- 2. Link:** Links the settings of the five channel strips. Adjusting a parameter on one channel strip changes the same parameter on all other channels relative to its original setting.
- 3. Room:** Switches between the three different sizes **Large**, **Medium**, and **Small** for the virtual recording room applied to the players' individual room microphones (vertical faders next to their XY pad).
- 4. Compression:** Adjusts the amount of compression applied to the players' Room Microphones faders. By increasing the amount of compression, you can make the reverb sound more present in the mix.
- 5. Mixer Lock:** Locks the settings of the five channel strips. When locked, you can switch between different instruments while retaining your channel settings. For more information, refer to [Locking the channel strip settings when browsing instrument variations](#).

### Channel strips

The channel strips enable you to control the mix, spatialization, and effects for each of the five players.


Each channel strip consists of the following controls:



- **Timing:** Adjusts the overall timing of the player relative to the musical grid and the other players in the range from -80 ticks to +80 ticks (one 16th note equals 240 ticks). At center position, the original timings are preserved (as defined on the [Timing panel](#) of the Pattern Editor). When moving the control to the right, the played notes are increasingly dragged, or lagging. When moving the control to the left, the played notes are increasingly rushed, or leading.
- **Tuning:** Adjusts the overall tuning of the instrument in the range from -12 semitones to +12 semitones.

- **Spread:** Controls the width and spread of the instrument in the stereo image.
  - **Width:** Adjusts the stereo width from mono to enhanced stereo. At middle position (gray markings), the original stereo width of the recording is preserved.
  - **Double:** Activates an additional recording layer, and spreads the two layers across the stereo image. While the strength of the stereo spread can still be adjusted using **Width**, the regular doubling sound is achieved by resetting **Width** to **100 %**.
- **Placement:** Controls the spatialization of the instrument and its position in the virtual recording room.
  - **XY pad:** Adjusts the position of the instrument in the virtual recording room. Moving the handle horizontally (x-axis) adjusts the position in the stereo image. Moving the handle vertically (y-axis) adjusts the distance between the instrument and you by blending between two differently positioned microphone setups. By pressing [Shift] while changing the position you can lock the movement to the y-axis. Clicking the **Close** or **Far** label moves the instrument to the clicked position. Clicking the **L** or **R** label moves the instrument at full left or full right while retaining its distance.
  - **Room Microphones fader:** Dial in a third pair of microphones feeding the global **Room** ambience reverb.
  - **Link:** Links the settings of the XY pad and the Room Microphones fader to achieve a natural sounding placement of the player in the room. Once the settings linked, changing the **Close/Far** mix in the XY pad also changes the amount of the Room Microphones, but not vice versa. That way it is possible to first set a desired **Close/Far** mix, then set a base value for the Room Microphones, and from that base let the Room Microphones amount follow the **Close/Far** mix.
- **Comp:** Selects the compressor preset used to process the sound of the instrument. The control next to the preset selector adjusts the strength of the compression by scaling the compressor's threshold and makeup gain parameters.
- **EQ:** Selects the equalizer preset used to process the sound of the instrument. The control next to the preset selector adjusts the strength of the equalization by scaling the EQ's boost or attenuate parameters.
- **Reverb:** Selects the reverb preset used to process the sound of the instrument. The control next to the preset selector adjusts the strength of the reverberation.
- **Delay:** Selects the delay preset used to process the sound of the instrument. The control next to the preset selector adjusts the strength of the delay effect.
- **Volume:** Adjusts the level of the instrument signal in the mix.
- **S (Solo):** Solos the respective channel strip, muting all other channel strips (exclusive solo). When solo is active on one channel strip, additional channel strips can be set to solo by clicking their **M** (Mute) buttons.
- **M (Mute):** Mutes the respective channel strip. When solo is active on any channel, the **M** (Mute) buttons toggle the solo state of the other channels.
- **Output label:** Opens a panel where you can select the outputs used for the main microphone signal (**Close/Far** mix) and for the Room Microphones signal individually. The available outputs are **Main** (default output going through the Kontakt Instrument Header) as well as any Output Channels defined in Kontakt's Outputs section (but not the Aux Channels).

**i** Changes made to the output configuration in Kontakt require a restart of the plug-in or stand-alone application in order to appear in the Kontakt instrument.

 Like anywhere else in the instrument, you can press [Ctrl] + click (Windows) or [command] + click (Mac) on any parameter in the Mixer to reset the parameter to its default value.

# 10. Credits

**Concept:** Samuel Dalferth, Daniel Scholz, Sebastian Müller

**Product Design:** Samuel Dalferth

**Kontakt Development:** Daniel Scholz

**NUI Development:** Clement Destephen, Lizzie Davis

**User Interface Design:** Samuel Dalferth, Philipp Granzin, Stefan Kummerloew, Efflam Le Bivic, Simon Janssen

**Product Management:** Grant Smith

**Project Management:** Simon Janssen, Grant Smith

**Percussionists:** Luke Batterbury, Samuel Dalferth

**Recording Engineers:** Samuel Dalferth, Chas Hunter

**Sample Post Production:** Peter Scholz, Daniel Scholz, Samuel Dalferth

**Library Concept:** Samuel Dalferth, Aurid Gjini, Marlon Scholz, Justin Bandy, Joschi Joachimsthaler, Luke Batterbury, Chas Hunter, Dimitris Kordis, Cameron Harris

**Sound Design:** Samuel Dalferth, Chas Hunter, Luke Batterbury, Aurid Gjini

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**Documentation:** Nicolas Sidi, Jan Ola Korte

**Marketing:** Samuel Hora, Geoff Wright, Rose Rutledge, Guillermo Frapolli, Shane Mason