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Software version: 2.4.7 (09/2016)
Hardware Version: All controllers
Special thanks to the Beta Test Team, who were invaluable not just in tracking down bugs, but in making this a better product.
Table of Contents

1 Welcome to the MASCHINE Manual Addendum ................................................................. 12
  1.1 Where to Start? ................................................................................................................ 12
  1.2 Conventions in This Document .................................................................................... 12
2 MASCHINE 2.4.7 ........................................................................................................... 16
  2.1 Managing Scenes ............................................................................................................ 17
    2.1.1 Scene Linking Basics .............................................................................................. 19
    2.1.2 Setting Scene Options in the Preferences .............................................................. 19
    2.1.3 Duplicating Scenes ............................................................................................... 22
      2.1.3.1 Duplicating Scenes in the Software .............................................................. 22
      2.1.3.2 Duplicating Scenes on MASCHINE STUDIO ............................................. 23
      2.1.3.3 Duplicating Scenes on MASCHINE and MASCHINE MK2 ....................... 24
      2.1.3.4 Duplicating Scenes on MASCHINE MIKRO ............................................... 24
    2.1.4 Link when Duplicating Scenes .............................................................................. 24
      2.1.4.1 Link when Duplicating Scenes in the Software ............................................ 24
      2.1.4.2 Link when Duplicating Scenes on MASCHINE STUDIO ......................... 25
      2.1.4.3 Link when Duplicating Scenes on MASCHINE MK1 and MK2 ................. 25
      2.1.4.4 Link when Duplicating Scenes on MASCHINE MIKRO MK1 and MK2 ....... 26
    2.1.5 Making Scenes Unique ......................................................................................... 26
      2.1.5.1 Making Scenes Unique in the Software ......................................................... 26
      2.1.5.2 Making Scenes Unique on MASCHINE STUDIO ...................................... 27
      2.1.5.3 Making Scenes Unique on MASCHINE MK1 and MK2 .............................. 27
      2.1.5.4 Making Scenes Unique on MASCHINE MIKRO MK1 and MK2 ............... 27
  2.2 Sample Slicer Mono Option ....................................................................................... 27
    2.2.1 Activating the Sample Slicer Mono Option in the Software ................................. 28
    2.2.2 Activating the Sample Slicer Mono Option on MASCHINE STUDIO and MASCHINE ..... 29
<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.2.3</td>
<td>Activating the Sample Slicer Mono Option on MASCHINE MIKRO</td>
<td>30</td>
</tr>
<tr>
<td>2.3</td>
<td>Auto-Snap</td>
<td>33</td>
</tr>
<tr>
<td>2.3.1</td>
<td>Using Auto-Snap on MASCHINE STUDIO</td>
<td>33</td>
</tr>
<tr>
<td>2.3.2</td>
<td>Using Auto-Snap on MASCHINE MIKRO</td>
<td>36</td>
</tr>
<tr>
<td>2.3.3</td>
<td>Using Auto-Snap on MASCHINE and MASCHINE MK2</td>
<td>38</td>
</tr>
<tr>
<td>2.4</td>
<td>Mono Audio Inputs</td>
<td>40</td>
</tr>
<tr>
<td>2.4.1</td>
<td>Configuring External Inputs for Sounds in Mix View</td>
<td>41</td>
</tr>
<tr>
<td>2.4.2</td>
<td>Configuring External Inputs for Sounds in MASCHINE STUDIO</td>
<td>45</td>
</tr>
<tr>
<td>2.4.3</td>
<td>Configuring External Inputs for Sounds in MASCHINE and MASCHINE MK2</td>
<td>45</td>
</tr>
<tr>
<td>2.4.4</td>
<td>Configuring External Inputs for Sounds in MASCHINE MIKRO and MIKRO MK2</td>
<td>46</td>
</tr>
<tr>
<td>2.5</td>
<td>MIDI and Audio Activity Indicators</td>
<td>47</td>
</tr>
<tr>
<td>2.6</td>
<td>Usage Data Tracking</td>
<td>48</td>
</tr>
<tr>
<td>3</td>
<td>MASCHINE 2.4.6</td>
<td>50</td>
</tr>
<tr>
<td>3.1</td>
<td>Live Slicing</td>
<td>52</td>
</tr>
<tr>
<td>3.1.1</td>
<td>Live Slicing Using MASCHINE STUDIO</td>
<td>52</td>
</tr>
<tr>
<td>3.1.2</td>
<td>Live Slicing Using MASCHINE</td>
<td>53</td>
</tr>
<tr>
<td>3.1.3</td>
<td>Live Slicing Using MASCHINE MIKRO</td>
<td>53</td>
</tr>
<tr>
<td>3.2</td>
<td>Delete All Slices</td>
<td>54</td>
</tr>
<tr>
<td>3.2.1</td>
<td>Delete All Slices Using MASCHINE STUDIO</td>
<td>54</td>
</tr>
<tr>
<td>3.2.2</td>
<td>Delete All Slices Using MASCHINE</td>
<td>55</td>
</tr>
<tr>
<td>3.2.3</td>
<td>Delete All Slices Using MASCHINE MIKRO</td>
<td>56</td>
</tr>
<tr>
<td>3.3</td>
<td>Adjustable Scene Length</td>
<td>57</td>
</tr>
<tr>
<td>3.3.1</td>
<td>Adjusting the Length of a Scene Using the Software</td>
<td>58</td>
</tr>
<tr>
<td>3.3.2</td>
<td>Adjusting the Length of a Scene Using MASCHINE STUDIO</td>
<td>59</td>
</tr>
<tr>
<td>3.3.3</td>
<td>Adjusting the Length of a Scene Using MASCHINE</td>
<td>60</td>
</tr>
<tr>
<td>3.3.4</td>
<td>Adjusting the Length of a Scene Using MASCHINE MIKRO</td>
<td>60</td>
</tr>
</tbody>
</table>
3.4 Enabling Scene Auto Length

3.4.1 Enabling Scene Auto Length Using the Software
3.4.2 Enabling Scene Auto Length Using MASCHINE STUDIO
3.4.3 Enabling Scene Auto Length Using MASCHINE
3.4.4 Enabling Scene Auto Length Using MASCHINE MIKRO

3.5 Plug-in Configuration

3.5.1 Saving Plug-in Presets
3.5.2 Recalling Plug-in Presets
3.5.3 Removing a Default Plug-in Preset

3.6 Exporting Audio

3.6.1 Exporting Audio in WAV or AIFF Format
3.6.2 Exporting Audio by Scene Option
3.6.3 Exporting Audio Range Option
3.6.4 Exporting Audio Custom Name Option

3.7 Filtering Instruments by Category or Vendor in the Browser

3.7.1 Selecting an Product Category

3.8 Browsing by Product Category Using MASCHINE STUDIO
3.9 Browsing by Product Vendor Using MASCHINE STUDIO

3.10 Looping

3.10.1 Setting the Loop Range in the Software
3.10.2 Setting the Loop Range Using MASCHINE STUDIO
3.10.3 Setting the Loop Range Using MASCHINE
3.10.4 Setting the Loop Range Using MASCHINE MIKRO

3.11 Adjusting Pattern Length in Fine Increments

3.11.1 Adjusting Pattern Length in Fine Increments Using MASCHINE STUDIO
3.11.2 Adjusting Pattern Length in Fine Increments Using MASCHINE
3.11.3 Adjusting Pattern Length in Fine Increments Using MASCHINE MIKRO .......... 78
3.12 Audio & MIDI Settings in Preferences ................................................................. 79
  3.12.1 Audio Settings in Preferences ........................................................................ 79
  3.12.2 MIDI Settings in Preferences ......................................................................... 81
3.13 The Arrange Grid ................................................................................................. 83
  3.13.1 Applying the Arrange Grid in the Software .................................................... 84
  3.13.2 Applying the Arrange Grid Using MASCHINE STUDIO ............................... 85
  3.13.3 Applying the Arrange Grid Using MASCHINE .............................................. 85
  3.13.4 Applying the Arrange Grid Using MASCHINE MIKRO ................................. 85
3.14 Quick Grid ........................................................................................................... 86
  3.14.1 Enabling Quick Grid Using MASCHINE STUDIO ......................................... 86
  3.14.2 Enabling Quick Grid Using MASCHINE ....................................................... 86
  3.14.3 Enabling Quick Grid Using MASCHINE MIKRO ........................................... 87
3.15 Timeline and Scene Header Swapped ................................................................. 87
3.16 Deleting the Last Group ...................................................................................... 87

4 MASCHINE 2.4 ........................................................................................................ 88
  4.1 Native Kontrol Standard ...................................................................................... 88
    4.1.1 Selecting or Loading a Product and Selecting a Bank from the Browser ...... 90
    4.1.2 Loading NKS and Third-party Plug-ins from the Plug-in Menu ................... 95
  4.2 Support for KOMPLETE KONTROL S88 ............................................................. 96

5 MASCHINE 2.3.1 ...................................................................................................... 98
  5.1 Using Favorites in the Browser .......................................................................... 99
    5.1.1 Using Favorites with MASCHINE STUDIO ................................................. 103
    5.1.2 Using Favorites with MASCHINE Controllers ......................................... 105
    5.1.3 Using Favorites with MASCHINE MIKRO Controllers ............................... 106
  5.2 Preferences – Plug-ins Page .............................................................................. 108
# 6 MASCHINE 2.3

- Drumsynth Features ............................................................................................................................................ 112
  - 6.1.1 Breaker Engine for the Snare Drumsynth .................................................................................. 112
  - 6.1.2 High Engine for the Tom Drumsynth ......................................................................................... 115
  - 6.1.3 Hybrid Engine for the Hi-hat Drumsynth ................................................................................... 118
  - 6.1.4 Crash Engine for the Cymbal Drumsynth .................................................................................... 120
  - 6.1.5 Ride Engine for the Cymbal Drumsynth ...................................................................................... 123

- New Effects ......................................................................................................................................................... 126
  - 6.2.1 Cabinet Emulation ......................................................................................................................... 126
  - 6.2.2 Reverb Room ................................................................................................................................. 128
  - 6.2.3 Reverb Hall ....................................................................................................................................... 130
  - 6.2.4 Analog Distortion ............................................................................................................................. 132
  - 6.2.5 Limiter Transparent Mode .............................................................................................................. 134

- KOMPLETE KONTROL S-SERIES integration features .................................................................................. 136
  - 6.3.1 Modulation Strip ............................................................................................................................. 137
  - 6.3.2 Arp Hold mode. ............................................................................................................................... 140
    - 6.3.2.1 MASCHINE STUDIO ........................................................................................................... 140
    - 6.3.2.2 MASCHINE MK1 / MK2 ....................................................................................................... 140
    - 6.3.2.3 MASCHINE MIKRO ............................................................................................................... 141

- Miscellaneous changes ..................................................................................................................................... 141
  - 6.4.1 File Format for Native Instruments Plug-ins ............................................................................... 141
  - 6.4.2 Assignment Area ............................................................................................................................. 141
  - 6.4.3 Browser Plug-in Slot Selection ......................................................................................................... 144
    - 6.4.3.1 Changing the Focus Plug-in Slot from the Browser on MASCHINE STUDIO .................. 144
    - 6.4.3.2 Changing the Focus Plug-in Slot from the Browser on MASCHINE MK2 .................. 144
    - 6.4.3.3 Changing the Focus Plug-in Slot from the Browser on MASCHINE .......................... 145
7.2.7 Recording Modulation from Your Keyboard ................................................................. 212
7.2.8 Adjusting the Settings for Your Keyboard in the MASCHINE Preferences .................. 215
7.3 Touch-Sensitive Knobs on MASCHINE STUDIO ............................................................... 217
  7.3.1 List Overlay for Selectors ........................................................................................... 219
  7.3.2 List and Tag Overlays in the Browser ....................................................................... 220
  7.3.3 Touch Auto-Write Option ......................................................................................... 222
  7.3.4 Zoom and Scroll Overlays ....................................................................................... 225
  7.3.5 Adjusting the Knobs’s Touch Sensitivity ................................................................. 226
7.4 Minor Changes in MASCHINE 2.2 .................................................................................... 228
  7.4.1 MIDI Thru for Sounds and Groups .......................................................................... 229
  7.4.2 Controller Menu in the Hardware Page of the Preferences Panel ......................... 230
  7.4.3 KOMPLETE 10 Integration: Section Names in Parameter Pages ............................ 232
  7.4.4 MASCHINE Library Improvements ....................................................................... 232
8  MASCHINE 2.1 .................................................................................................................. 235
  8.1 New Drumsynth Features ............................................................................................... 236
    8.1.1 New Grit Engine for the Kick Drumsynth .............................................................. 236
    8.1.2 New Performer Mode for the Shaker Engine of the Percussion Drumsynth ............. 239
  8.2 New MIDI Features ........................................................................................................ 243
    8.2.1 Triggering Scenes via MIDI in Stand-Alone Mode .................................................. 244
    8.2.2 Group MIDI Batch Setup ..................................................................................... 246
  8.3 Improved Sound and Group Management ..................................................................... 248
    8.3.1 New Copy/Paste Procedure for Sounds and Groups in the Software ....................... 249
    8.3.2 Management Commands on Multiple Sounds and Groups .................................... 249
    8.3.3 Adjusting the Key, Choke, and Link Parameters for Multiple Sounds ................... 251
  8.4 Extended Navigate Mode on MASCHINE, MASCHINE MK2 and MASCHINE STUDIO .... 253
    8.4.1 Software Navigation Mode: Adjusting the Look of the Software Interface ............... 254
8.4.2  Page Navigation Mode: Navigating Channel properties, Plug-ins, and their Parameter Pages ................................................................................................................... 257
8.5  New Mix Mode on MASCHINE and MASCHINE MK2 ................................................................. 257
8.6  Minor Changes in MASCHINE 2.1 .......................................................................................... 259
8.6.1  Quantization While Playing ............................................................................................ 260
  8.6.1.1  Choosing an Input Quantization Mode in the Software ............................................. 260
  8.6.1.2  Choosing an Input Quantization on Your Controller .............................................. 260
8.6.2  Duplicating Sounds, Groups, Patterns, Scenes, and Plug-ins via Drag-and-Drop .... 261
8.6.3  Auto-Enabling the Metronome when Recording Patterns .............................................. 264
  8.6.3.1  Activating/Deactivating the Auto-Enable Option in the Software ............................ 265
  8.6.3.2  Activating/Deactivating the Auto-Enable Option from Your Controller ............... 266
8.6.4  Deleting Events for the Entire Group at Playback Position ............................................ 267
8.6.5  Recording Samples from Your Controller: Switching the Pads Between the Sounds
      and the Recording History .............................................................................................. 267
9  Erratum .................................................................................................................................... 269
  9.1  Editing Events with the Mouse in Paint Mode ................................................................. 269
  9.2  Hardware Control Reference: [1]-[8] Key Shortcuts ....................................................... 269
1 Welcome to the MASCHINE Manual Addendum

This manual addendum provides information about changes and new features introduced in the various updates of MASCHINE 2.

1.1 Where to Start?

In this manual addendum we assume that you are already familiar with MASCHINE 2. For general information on using MASCHINE 2, please refer to the following documents:

- MASCHINE 2.0 Setup Guide
- MASCHINE 2.0 Getting Started
- MASCHINE 2.0 Manual
- MASCHINE 2.0 Hardware Control Reference

The whole documentation set is available in PDF format and located within the MASCHINE 2 installation folder on your hard disk. You can also access these documents from the Help menu in the Application Menu Bar or from the Help submenu in the MASCHINE menu.

1.2 Conventions in This Document

This section introduces you to the signage and text highlighting used in this document.

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

Whenever this exclamation mark icon appears, you should read the corresponding note carefully and follow the instructions and hints given there if applicable.
Furthermore, the following formatting is used:

- Text appearing in (drop-down) menus (such as *Open...*, *Save as...* etc.) in the software and paths to locations on your hard disk or other storage devices is printed in *italics*.

- Text appearing elsewhere (labels of buttons, controls, text next to checkboxes etc.) in the software is printed in *blue*. Whenever you see this formatting applied, you will find the same text appearing somewhere on the screen.

- Text appearing on displays of the controller is printed in *light grey*. Whenever you see this formatting applied, you will find the same text on a controller display.

- Text appearing on labels of the hardware controller is printed in *orange*. Whenever you see this formatting applied, you will find the same text on the controller.

- Important names and concepts are printed in *bold*.

- References to keys on your computer’s keyboard you’ll find put in square brackets (e.g., “Press [Shift] + [Enter]”).

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

→ Results of actions are introduced by this smaller arrow.

**Naming Convention**

Throughout the documentation we will refer to **MASCHINE controller** (or just **controller**) as the hardware controller and **MASCHINE software** as the software installed on your computer.

The term “effect” will sometimes be abbreviated as “**FX**” when referring to elements in the MASCHINE software and hardware. These terms have the same meaning.

**Button Combinations and Shortcuts on Your Controller**

Most instructions will use the “+” sign to indicate buttons (or buttons and pads) that must be pressed *simultaneously*, starting with the button indicated first. E.g., an instruction such as:

“Press **SHIFT + PLAY**”
means:

1. Press and hold `SHIFT`.
2. While holding `SHIFT`, press `PLAY` and release it.

**Unlabeled Buttons and Knobs on MASCHINE, MASCHINE MK2 and MASCHINE STUDIO**

The buttons and knobs above and below the displays on your MASCHINE, MASCHINE MK2 and MASCHINE STUDIO controller do not have labels.

For better reference, we applied a special formatting here: throughout the document, the elements are capitalized and numbered, so the buttons above the displays are written Button 1 to Button 8, while the knobs under the displays are written Knob 1 to Knob 8. E.g., whenever you see an instruction such as “Press Button 2 to open the `EDIT` page,” you’ll know it’s the second button from the left above the displays.
Screenshots from MASCHINE MK1 and MK2 Controllers

In the MASCHINE Addendum information regarding first generation and second generation controllers (MK1 and MK2) has been merged. As a result the color of the controller screenshots may differ slightly for MASCHINE MK1 users only. However, in this instance please be assured that all information and instructions are the same for both MASCHINE MK1 and MASCHINE MK2 controllers.
This chapter describes the new features introduced in MASCHINE 2.4.7.

Here is a brief overview of the most important changes and additions. For more detailed information, please follow the links:

- **Improvements to Scene Management**: Various improvements have been introduced to the way Scenes are handled. This includes
  - **Linked Scenes in Arranger**: Duplicating a Scene creates an identical linked copy on the timeline. Each copy of the Scene on the timeline can be reflected multiple times, or just once. When selecting a linked Scene, any other instances of the Scene will also be highlighted on the Timeline. For more information read ↑2.1.1, Scene Linking Basics and following chapters.
  - **Convert Linked Scenes into Unique Scenes**: You can create a unique copy of a linked Scene that you can edit independently without affecting any other Scene. For more information read ↑2.1.5, Making Scenes Unique.

- **Sample Slicer Mono Option**: The Sample Slicer now includes a MONO preference button which, when activated, will cause the newly-created Slices to play monophonically so that only one Slice will play at a time (Sampler voices are set to 1, as well as a Choke Group applied to all slices when slicing to a Group). The Mono option can also be found at the bottom of the Slicer window of the software interface. For more information read ↑2.2, Sample Slicer Mono Option.

- **Auto-Snap**: The Slicer Manual mode now has a new Snap-to-Transient behavior which will automatically align Slice points to the nearest transient as you trigger the Slicing from the pads. However, it can be turned off so that Slice points are instead placed exactly where you trigger them (which was MASCHINE's normal behavior prior to the introduction of this feature). In order to use the Snap-to-Transient feature, you must wait for analysis to be performed on the sample you’re slicing—the analysis is quick but will take longer for longer samples. For more information read ↑2.3, Auto-Snap.
• **Mono Audio Inputs**: Individual L and R channels can be found at the bottom of the input selection drop-down menus and used as individual mono inputs. Pressing the IN button on MASCHINE STUDIO will toggle through Stereo, Left, and Right inputs, and metering of mono inputs is shown as dual-mono. For more information read ↑2.4, Mono Audio Inputs.

• **MIDI and Audio Activity Indicators**: The MASCHINE software displays audio indicators for each Group in the Arrangement view, and audio and MIDI indicators for each sound in the Pattern view. For more information read ↑2.5, MIDI and Audio Activity Indicators.

• **Anonymous Usage Data Tracking**: Anonymous usage data tracking has been added to help Native Instruments gain an overview of the types of systems and hardware configurations used with MASCHINE. This information is completely anonymous, but transmission can be disabled if desired in the Preferences ↑2.6, Usage Data Tracking.

## 2.1 Managing Scenes

Sequencing music in MASCHINE is done in a multi-tiered manner, the tiers being Patterns, Scenes, and Timeline. The most basic building block in the MASCHINE sequencer is the Pattern. This is where you program notes (events) and control information that trigger the sounds, instruments, and effects loaded into a Group. You can have multiple Groups in your MASCHINE project, and each Group has its own unique set of Patterns.

Each Group will usually correspond to a musical element in your composition, such as Drums, Bassline, and Melody. You will then use the Patterns in these Groups to create motifs, riffs, or grooves for each part. For example, in the case of the drums, you might have a Pattern for the intro groove, a Pattern for the verse groove, and a third Pattern for the chorus groove. You can then make similar Patterns for the Bassline and Melody.

Once you’ve created these various musical motifs, you’ll probably want to group them together to create “sections” in your composition. For example, the intro section of your song would probably include the intro Drum Pattern, the intro Bassline Pattern, and the intro Melody Pattern all playing together. This is the purpose of a Scene, which is essentially just a “snapshot” of what Patterns should be playing on the Groups at any given time. You can have multiple Scenes in your project which correspond to multiple sections in your song, though only one Scene can play at a time. For example, you can have a Scene for the intro (as was just described), another Scene for the verse (which contains all the verse Patterns) and a third Scene for
the chorus (which contains all the chorus Patterns). This now gives you the ability to play your composition live by triggering these various Scenes as you wish. You could for example, begin playing the intro Scene, let it play for 8 bars, then trigger the verse Scene and allow it to play for 32 bars. When it feels like it’s time for the chorus, you trigger the chorus Scene and all the assigned chorus Patterns will play. If you want, after 16 bars, you could then trigger the verse Scene again to perform the second verse of your song.

The Timeline is where you arrange the Scenes so that MASCHINE will trigger them automatically instead of requiring you to trigger them by hand. Following our previous example, you can put the intro Scene at the start of the Timeline and set its length to 8 bars. You can then place the verse Scene after it and give it a length of 32 bars. The chorus Scene would follow with a length of 16 bars. Now, when you play MASCHINE from the start of its Timeline, you’ll hear your entire arrangement play back automatically. This is how you build a basic song structure in MASCHINE’s sequencer.

However, once you have the basic structure in place, you may want to start introducing variations to the notes inside the Patterns, or to the Patterns used in a Scene. MASCHINE’s sequencer offers a number of functions that help this process by either creating new data or by re-using existing data. Each approach has its own benefits and pitfalls, so you should familiarize yourself with all the methods so that you can choose the one that is most appropriate for what you are trying to do at any given time.

**The Scene Context Menu in the Software**

The Scene context menu in the MASCHINE software Arranger Timeline contains a number of entries that allow you to manage your Scenes. These features work in connection with settings made in the Default section of the Preferences.

Together they offer you options to:

- duplicate Scenes,
- duplicate Scenes and Patterns,
- link Scenes, and
- link when duplicating.
2.1.1 Scene Linking Basics

To create new Scenes in MASCHINE’s Timeline, click the + button just to the right of the last Scene. This will create a new empty Scene which you can then program with whatever combination of Patterns you want.

Scenes can be duplicated either as new Scenes, or as linked Scenes. Linked Scenes are helpful when you realize you need to change something in all instances of the verse, for example—you make one change and it automatically appears in all instances of the Scene. This is further emphasized by the fact that, when you select this Scene in the Timeline, you will also see the other linked Scenes become highlighted, too. This reminds you that any change you make to this Scene will be made to all the highlighted Scenes, too.

To duplicate a Scene and a Pattern:

1. Right-click the Scene you want to duplicate in the Timeline.
2. Click Duplicate.

⇒ The Scene will be duplicated according to the setting in the Preferences. See ↑2.1.2, Setting Scene Options in the Preferences for more information.

2.1.2 Setting Scene Options in the Preferences

The Duplicate option in the Default page’s Scene section of the Preferences panel determines what should be copied when Scenes are duplicated.

1. To open the Preferences panel, click Preferences… in the MASCHINE menu (OS X) or File menu (Windows) of the Application Menu Bar, or in the File submenu of the MASCHINE menu. The Preferences panel will open:
2. To display the Default page holding the Scene options, click the Default tab on the left of the Preferences panel.
You can now access the Scene options and set the desired behavior.

The Scene settings will affect the Duplicate and Link when Duplicating functionality as detailed below:

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scene</td>
<td></td>
</tr>
<tr>
<td>Duplicate</td>
<td>Scene Only</td>
</tr>
<tr>
<td></td>
<td>Only the Scene is duplicated. The result is a new un-linked Scene with the same Patterns referenced.</td>
</tr>
</tbody>
</table>
### Setting

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Scene and Patterns</em></td>
</tr>
<tr>
<td></td>
<td>The Scene itself and additionally all Patterns are duplicated. The new Scene and Patterns are now completely independent from the originals.</td>
</tr>
<tr>
<td>Link when Duplicating</td>
<td>When enabled, the <em>Duplicate</em> option discussed in chapter ↑2.1.3, Duplicating Scenes will create a linked copy of a Scene. A linked copy will automatically be updated when any instance of a linked Scene is edited. This way, you don’t need to keep track of which Scene is the “original.”</td>
</tr>
<tr>
<td></td>
<td>By default this feature is disabled. Click the check box to enable <em>Link when Duplicating</em>.</td>
</tr>
</tbody>
</table>

### 2.1.3 Duplicating Scenes

#### 2.1.3.1 Duplicating Scenes in the Software

By right-clicking on a Scene in the Timeline, a context menu appears which has a *Duplicate* option.

![Duplicate option]

This *Duplicate* option has two results depending on the Scene settings in the Preferences. See ↑2.1.2, Setting Scene Options in the Preferences for more information.
**Duplicating Scenes Only**

With *Scene Only* enabled in the Preferences, *Duplicate* will create a new Scene just to the right and it will still contain the old Patterns of the original Scene. Use this when you want to have a new Scene which is like the first one, but only has different Patterns playing. You can change the Patterns being played in the new Scene without affecting the original Scene (for example, you could change the verse Drum Pattern to the chorus Drum Pattern in this Scene, and the original scene will still contain the verse Drum Pattern).

**Duplicating Scenes and Patterns**

With *Scene and Pattern* enabled in the Preferences, duplicating a Scene will create a new Scene just to the right as well as new Patterns which are copies of the original Patterns. This new Scene will sound the same as the original, but you will now have the freedom to edit the notes and controller information inside the Patterns without affecting the Patterns of any other Scene. This is useful when you want to add only slight variations, such as putting in a unique drum fill, or changing the melody slightly to fit the flow of lyrics.

To duplicate a Scene in the MASCHINE software:

1. **Right-click the Scene you want to duplicate in the Timeline.**
2. **Click Duplicate.**

![Duplicate Scene in MASCHINE software]

⇒ The Scene will be duplicated according to the setting in the Preferences. See ↑2.1.2, Setting Scene Options in the Preferences for more information.

**2.1.3.2 Duplicating Scenes on MASCHINE STUDIO**

To duplicate a Scene on MASCHINE STUDIO:
1. Press the SCENE button.
2. Press button 4 DUPLICATE.

⇒ The Scene will be duplicated according to the setting in Preferences. See ↑2.1.2, Setting Scene Options in the Preferences for more information.

2.1.3.3 Duplicating Scenes on MASCHINE and MASCHINE MK2

To duplicate a Scene on MASCHINE MK1 and MK2:

1. Press the SCENE button.
2. Press button 4 DUPLICATE.

⇒ The Scene will be duplicated according to the setting in Preferences. See ↑2.1.2, Setting Scene Options in the Preferences for more information.

2.1.3.4 Duplicating Scenes on MASCHINE MIKRO

To duplicate a Scene on MASCHINE MIKRO MK1 and MK2:

1. Press the SCENE button.
2. Press the F2 button.

⇒ The Scene will be duplicated according to the setting in Preferences. See ↑2.1.2, Setting Scene Options in the Preferences for more information.

2.1.4 Link when Duplicating Scenes

Enabling the Link When Duplicating preference will make MASCHINE create linked Scenes instead of new Scenes when using the afore-mentioned Duplicate feature. For example, with this option turned on, right-clicking on the chorus Scene and choosing Duplicate will create a linked instance of the same Scene again in the Timeline as opposed to making a new Scene. Therefore, any changes you make to the Scene will be reflected in the other Scenes of the same name.

Enable Link when Duplicating in the Default page of the Preferences. See ↑2.1.2, Setting Scene Options in the Preferences for more information.

2.1.4.1 Link when Duplicating Scenes in the Software

To link when duplicating a Scene in the MASCHINE software:
1. Right-click the Scene you want to link and duplicate in the Timeline.
2. Click *Duplicate*.

![Scene Options Menu]

⇒ The Scene will be duplicated and linked according to the setting in the Preferences. See ↑2.1.2, *Setting Scene Options in the Preferences* for more information.

### 2.1.4.2 Link when Duplicating Scenes on MASCHINE STUDIO

To link when duplicating a Scene on MASCHINE STUDIO:

1. Press and hold the **DUPLICATE** button then press the **SCENE** button.
2. Select the Scene you want to link and duplicate by pressing the Pad.
3. Press button 2 **LINK**.
4. Press the Pad that you want to duplicate the Scene to.

⇒ A linked duplicate copy will automatically be updated when the original Scene or Pattern is changed. See ↑2.1.2, *Setting Scene Options in the Preferences* for more information.

### 2.1.4.3 Link when Duplicating Scenes on MASCHINE MK1 and MK2

To link when duplicating a Scene on MASCHINE MK1 and MK2:

1. Press and hold the **DUPLICATE** button then press the **SCENE** button.
2. Select the Scene you want to link and duplicate by pressing the Pad.
3. Press button 2 **LINK**.
4. Press the Pad that you want to duplicate the Scene to.

⇒ A linked duplicate copy will automatically be updated when the original Scene or Pattern is changed. See ↑2.1.2, *Setting Scene Options in the Preferences* for more information.
2.1.4.4  Link when Duplicating Scenes on MASCHINE MIKRO MK1 and MK2

To link when duplicating a Scene on MASCHINE MIKRO MK1 and MK2:

1. Press and hold the DUPLICATE button then press the SCENE button.
2. Select the Scene you want to link and duplicate by pressing the Pad.
3. Press the F1 button LINK.
4. Press the Pad that you want to duplicate the Scene to.
   ⇒ A linked duplicate copy will automatically be updated when the original Scene or Pattern is changed. See ↑2.1.2, Setting Scene Options in the Preferences for more information.

2.1.5  Making Scenes Unique

At any time, you can make a linked Scene totally unique. This will create a new Scene in the same location, and will also create new Patterns. You are then free to edit the Patterns in the Scene, or the data in the Patterns, without affecting any of the original Scenes. This is great for when you want to introduce variations into a song structure that’s been made with linked Scenes.

2.1.5.1  Making Scenes Unique in the Software

To make a Scene unique in the MASCHINE software:

1. Right-click the Scene you want to make unique in the Timeline. The context menu will open.
2. Click Unique.
The Scene will become independent of any Scenes it was linked to and the Patterns can be edited without affecting any the original Scenes.

2.1.5.2 Making Scenes Unique on MASCHINE STUDIO

To make a Scene unique on MASCHINE STUDIO:

1. Press the **SCENE** button.
2. Select the Scene you want to make unique by pressing the Pad.
3. Press button 2 **UNIQUE**.

The Scene will become independent of any Scenes it was linked to and the Patterns can be edited without affecting any the original Scenes.

2.1.5.3 Making Scenes Unique on MASCHINE MK1 and MK2

To make a Scene unique on MASCHINE MK1 and MK2:

1. Press the **SCENE** button.
2. Select the Scene you want to make unique by pressing the Pad.
3. Press button 2 **UNIQUE**.

The Scene will become independent of any Scenes it was linked to and the Patterns can be edited without affecting any the original Scenes.

2.1.5.4 Making Scenes Unique on MASCHINE MIKRO MK1 and MK2

To make a Scene unique on MASCHINE MIKRO MK1 and MK2:

1. Press the **SCENE** button.
2. Select the Scene you want to make unique by pressing the Pad.
3. Press button **F1 UNIQUE**.

The Scene will become independent of any Scenes it was linked to and the Patterns can be edited without affecting any the original Scenes.

2.2 Sample Slicer Mono Option

The Sample Slicer Mono option when activated automatically sets the Voice and Choke Group of all sample slices to 1 when slicing to a Group.
This time saving feature is useful when you don’t want to have lots of samples triggered or repeating at the same time, for example, when you slice a drum loop and trigger the individual hits to form a new pattern. When Mono is selected and the slices are applied to a group, the sampler polyphony is automatically set to 1 so only one voice will play at a time. The Choke Group is also automatically set to 1 so each new pad that is hit will always take priority over the previous one by cancelling it out. This behavior can be found on vintage drum machines (typically used to “choke” the open hi-hat with the closed one), but also in monophonic synthesizers that are only capable of playing one note at a time.

### 2.2.1 Activating the Sample Slicer Mono Option in the Software

In the MASCHINE software, the Mono option can be found on the Sample’s Slice page:

![Stompers](image)

**MONO** toggle on the Sample Slice page.

- To switch the Mono option on or off, click the **MONO** toggle in the Sample Slice page.

MASCHINE will remember the state of the Mono option: If you enable the Mono option, it will be enabled automatically the next time you use the Sample Slicer.
2.2.2 Activating the Sample Slicer Mono Option on MASCHINE STUDIO and MASCHINE

After adding slices to your sample (using one of the slicing modes; Detect, Split Grid, or Manual) and fine adjusting the sample start and end points, you can select the Mono option on page three before you press apply the sample to a group or sound.

When activated, the Mono on option will cause the newly-created Slices to play monophonically (Sampler voices are set to 1, as well as a Choke Group applied to all slices when slicing to a Group).

To access the Sample Slicer Mono Option:

1. Press the **SAMPLING** button to edit an existing sample or record a new one.

2. Press button 3 **SLICE**.

⇒ You are now in the Sample Slice page and can add slices using one of the Slice modes (Detect, Split Grid, or Manual). Once you are satisfied with your slices you can then access the Sample Slicer Mono option before applying the changes.
1. Press the right Page button to access page three of the Slicer and turn knob 1 to select MONO on.

2. Turn knob 1 to select MONO on.

3. Hold button 8 APPLY… and select a Group (A-H) to select where you want to apply your slices.

4. Press button 8 OK to confirm.

⇒ When slicing to a Group the Sampler voices and Choke Group are automatically set to 1.

The new Slices now play monophonically.

MASCHINE will remember the state of the Mono option: If you enable the Mono option, it will be enabled automatically the next time you use the Sample Slicer.

### 2.2.3 Activating the Sample Slicer Mono Option on MASCHINE MIKRO

After adding slices to your sample (using one of the slicing modes; Detect, Split Grid, or Manual) and fine adjusting the sample start and end points, you can select the Mono option on page three before you press apply the sample to a group or sound.
When activated, the Mono on option will cause the newly-created Slices to play monophonically (Sampler voices are set to 1, as well as a Choke Group applied to all slices when slicing to a Group).

To access the Sample Slicer Mono option:

1. Press the **SAMPLING** button.

2. Press and hold **NAV** then turn the Control encoder to select **SLICE**.

⇒ You are now in the Sample Slice page and can add slices and edit your sample as required. Once you are satisfied with your edits you can then access the Sample Slicer Mono option before applying the chances.

1. Press the right Page button to access the Apply page.
2. Turn the control encoder to select **MONO** on.

3. Step

4. Press button **F3 APPLY** to activate your selection to the slices.

→ When slicing to a Group the Sampler voices and Choke Group are automatically set to 1.

The new Slices now play monophonically.

MASCHINE will remember the state of the Mono option: If you enable the Mono option, it will be enabled automatically the next time you use the Sample Slicer.
2.3 Auto-Snap

The Sample Slicer Manual mode Auto-Snap feature automatically aligns Slice points to the nearest transient as you manually trigger the slicing from the pads. It can be turned off so that slice points are instead placed exactly where you trigger them. In order to use Auto-Snap, you must wait for analysis to be performed on the sample you’re slicing—the analysis is very quick but will take longer for long audio files.

When analyzing long audio files, the Auto-Snap control will read Analyzing... instead of AUTO SNAP, and a progress indicator will count up to 100%. Once audio analysis is finished, the Auto-Snap control will be available again.

In the MASCHINE software, Auto-Snap can be found at the bottom of the Sampler’s Slice page:

![Auto-Snap option in the Software](image)

2.3.1 Using Auto-Snap on MASCHINE STUDIO

To use Auto-Snap on MASCHINE STUDIO:

...
1. Press the **SAMPLING** button to enter the Sampling page.

![Sampling Page](image1)

2. Press Button 3 to select **SLICE** to open the Slice tab.

![Slice Tab](image2)

3. Turn Knob 1 to select **Manual** mode.

![Manual Mode](image3)
4. Turn Knob 2 to select Auto-Snap On.

⇨ Pad 1 will begin to flash to indicate that the first Slice can be added.

5. Press Pad 1 to add the first Slice to the sample.

⇨ Playback of the sample will begin and the next pad will begin to flash to indicate that the next slice point can be added.

6. Press Pad 2 to add the second slice point.
7. Continue to press subsequent pads as they flash to add more slices.

→ When playback of the sample stops you may fine-tune the start and end points of your slices by entering EDIT mode.

When analyzing long audio files, the Auto-Snap control will read Analyzing... instead of AUTO SNAP, and a progress indicator will count up to 100%. Once audio analysis is finished, the Auto-Snap control will be available again.

2.3.2 Using Auto-Snap on MASCHINE MIKRO

To use Auto-Snap on MASCHINE MIKRO:

1. Press the SAMPLING button to enter the Sampling page.
2. Press NAV and turn the Control encoder to select SLICE.

3. Press an Arrow button below the display screen and turn the Control encoder to select Manual mode.

4. Press an Arrow button again and turn the Control encoder to select Auto-Snap to ON.

⇒ Pad 1 will begin to flash to indicate that the first Slice can be added.

5. Press Pad 1 to add the first Slice to the sample.
6. Press Pad 2 to add the second slice point.

7. Continue to press subsequent pads as they flash to add more slices.

→ When playback of the sample stops you may fine-tune the start and end points of your slices by entering EDIT mode.

Press SHIFT + MUTE if you want to stop playback of a long sample.

Press SHIFT + Arrow buttons to access each bank of Slices.

When analyzing long audio files, the Auto-Snap control will read Analyzing... instead of AUTO SNAP, and a progress indicator will count up to 100%. Once audio analysis is finished, the Auto-Snap control will be available again.

2.3.3 Using Auto-Snap on MASCHINE and MASCHINE MK2

To use Auto-Snap on MASCHINE and MASCHINE MK2:
1. Press the **SAMPLING** button to enter the Sampling page.

2. Press Button 3 to select **SLICE** to open the Slice tab.

3. Turn Knob 1 to select **Manual** mode.

4. Turn Knob 2 to select **Auto-Snap On**.

   ⇒ Pad 1 will begin to flash to indicate that the first Slice can be added.

5. Press Pad 1 to add the first Slice to the sample.

   ⇒ Playback of the sample will begin and the next pad will begin to flash to indicate that the next slice point can be added.
6. Press Pad 2 to add the second slice point.

7. Continue to press subsequent pads as they flash to add more slices.

→ When playback of the sample stops you may fine-tune the start and end points of your slices by entering EDIT mode.

When analyzing long audio files, the Auto-Snap control will read Analyzing... instead of AUTO SNAP, and a progress indicator will count up to 100%. Once audio analysis is finished, the Auto-Snap control will be available again.

2.4 Mono Audio Inputs

Each Sound can be configured to receive external stereo or mono audio signals. You may use audio signals from outside MASCHINE (from your audio interface if MASCHINE is used in stand-alone mode, or from your host if MASCHINE is used in plug-in mode).

MASCHINE offers either 4 stereo inputs or 8 mono inputs, so each Sound can use one external mono or stereo input. The same external signal can be fed into any number of Sounds.

For example, this allows you to process any external audio signal using the plug-ins loaded in a Sound, and more generally, integrate external audio signals into the MASCHINE routing and processing system.

The external audio inputs for a Sound can be configured on the Audio page of the Sound’s Input properties.
For more information on audio routing and sending external audio to sounds, please read chapter 8 of the MASCHINE Manual.

### 2.4.1 Configuring External Inputs for Sounds in Mix View

You can also easily send stereo or mono external audio to Sounds in MASCHINE's Mixer:

1. Click the Mix View button on the left of the Arranger to switch from Arrange view to Mix view:
2. Open the extended view of the Mixer by clicking the down-pointing arrow on the left of the Mixer:

3. Check that the IO button is active on the left of the Mixer — if not, click it to enable it and display the input/output settings of each channel strip.

4. If the Mixer currently displays the Group channels, in the top row of the Mixer double-click the header of the Group containing the Sound you want to configure. If the Mixer currently displays the Sound channels, single-click the header of the desired Group.
The Mixer displays the channel strips of all Sounds in the selected Group.
5. At the top of the channel strip of the Sound you want to configure, click the first field under the Sound name and select the desired external input in the menu.

⇨ This is equivalent to setting the Source parameter described above.

6. Turn the little knob on its left to adjust the input gain.
2.4.2 Configuring External Inputs for Sounds in MASCHINE STUDIO

All input channels, including Individual mono L and R channels can be found at the bottom of the input selection drop-down menus. Pressing the IN button on MASCHINE STUDIO will toggle through Stereo, Left, and Right inputs, and metering of mono inputs is shown as dual-mono.

To configure an external input for a Sound:

1. Select the Group and Sound for external sound source input.
2. Press CHANNEL.
3. Press button 5 repeatedly to select INPUT.
4. Press button 3 SOUND.
5. Turn knob 1 to select the input source.

⇨ The list of stereo and mono inputs are available for selection.

2.4.3 Configuring External Inputs for Sounds in MASCHINE and MASCHINE MK2

All input channels, including Individual mono L and R channels can be found at the bottom of the input selection drop-down menus. The metering of mono inputs is shown as dual-mono.

To configure an external input for a Sound:

1. Select the Group and Sound for external sound source input.
2. Press the CONTROL button.
3. Press button 3 SOUND.
4. Press button 5 CHANNEL.
5. Press button 7 repeatedly to select **INPUT**.
6. Turn knob 1 to select the input source.

![Input Selection Menu](image)

⇒ The list of stereo and mono inputs are available for selection.

### 2.4.4 Configuring External Inputs for Sounds in **MASCHINE MIKRO** and **MIKRO MK2**

All input channels, including Individual mono **L** and **R** channels can be found at the bottom of the input selection drop-down menus. The metering of mono inputs is shown as dual-mono.

To configure an external input for a Sound:

1. Select the Group and Sound for external sound source input.
2. Press the **F3** button to select **SOUND**.
3. Press and hold the **NAV** button.
4. Press the **F2** button to select **CHNL**. (Channel).
5. Turn the Control encoder to select **IN** or press pad 13.
6. Release the **NAV** button.
7. Turn the control encoder to select the input source.

![Input Selection Menu](image)

⇒ The list of stereo and mono inputs are available for selection.
2.5 MIDI and Audio Activity Indicators

The MASCHINE software displays audio indicators for each Group in the Arrange view and MIDI and Sound indicators in the Pattern Editor. These provide instant feedback on the status of MIDI and audio activity.

MIDI activity is visualized on the left-hand side of each Sound. As MASCHINE receives external MIDI information or event information from the pattern editor the Sound will blink.

Audio activity is vitalized on the right-hand side of each Sound and Group. As audio is triggered during playback the audio levels are displayed.

Audio activity indicators in the Arrange View for each Group.

Audio activity indicators in the Pattern Editor for each Sound.
2.6 Usage Data Tracking

Usage Data Tracking technology enables MASCHINE to automatically track anonymous usage data that you can choose to share with us.

Usage Data Tracking can be enabled or disabled in the General page of the Preferences panel in the MASCHINE software. However, we encourage all users to keep Data Tracking enabled as it provides a valuable tool for understanding the performance of Native Instruments applications when they are used in real life situations. The data sent to Native Instruments is one hundred percent anonymous and will not affect performance.

For more detailed information about Usage Data Tracking, please refer to the following Knowledge Base article on the Native Instruments website:
https://support.native-instruments.com/hc/en-us/articles/209545029

To enable or disable Usage Tracking:

1. Open the Preferences panel, click Preferences… in the Maschine menu (Mac OS X) or File menu (Windows) of the Application Menu Bar, or in the File submenu of the MASCHINE menu.
2. Click the Allow usage data tracking checkbox to enable or disable user data tracking.
Usage Data Tracking in the MASCHINE Preferences.
This chapter describes the new features introduced in MASCHINE 2.4.6.

Here is a brief overview of the most important changes and additions. For more detailed information, please follow the links:

- **Improvements to the Sampler**
  - **Live Slicing**: The Sample slicer Manual mode has been extended to allow slicing a sample in real-time via the controller pads, so slice points can be created in a more intuitive way. For more information, read §3.1, Live Slicing.
  - **Delete All Slices**: Remove all slices from a sample at once using the hardware. For more information, read §3.2, Delete All Slices.
  - **SLICE Button Renamed**: The SLICE button has been renamed SPLIT (as it splits a sample in two) and turns into Slice when a Slice is played back.
  - **Slicer Default Mode**: Manual mode is now the default mode for the Sample Slicer.
  - **Playhead Removed from Slice Edit Views**: The Slice Edit views no longer display the Playhead when slices are triggered from MASCHINE's internal sequencer.
  - **Improved Audio Playback of Slices**: The audio playback of slices has been improved by removing clicking at the end of Slices.

- **Adjustable Scene Length**: The length of Scenes can now be set manually independent of the lengths of Patterns in the Scene. For more information, read §3.3, Adjustable Scene Length.

- **User Default Presets for Internal Plug-ins**: It is now possible to save the current state of an internal plug-in as its default state. The Save As Default option is now enabled for Internal Plugins. For more information, read §3.5, Plug-in Configuration.

- **Loop button** has been added to the Transport to enable and disable Loop playback.

- **Browse by Category / Vendor**: You can now browse by Product Group (Category / Vendor) via the software and MASCHINE STUDIO controller.

- **Exporting Audio**: Improvements have been made to features in the Export Audio dialogue box.
- **Split By Scene**: It is possible to export scenes so that you can easily use them as audio loops using an additional option in the Options tab in the Export Audio dialog. For more information, read 3.6.2, Exporting Audio by Scene Option.

- **AIFF Export**: It is possible to export audio in AIFF format using an additional option in the Export tab in the Export Audio dialog. For more information please read 3.6.1, Exporting Audio in WAV or AIFF Format.

- **Range Option**: The Export Audio dialog now includes an option to export the whole song range. For more information, read 3.6.3, Exporting Audio Range Option.

- **Custom Name Option**: The Audio Export dialog now includes a field to specify a custom name for export items. For more information, read 3.6.4, Exporting Audio Custom Name Option.

- **Audio and MIDI Settings Moved**: Audio and MIDI settings are now merged into the Preferences dialogue. For more information, read 3.12, Audio & MIDI Settings in Preferences.

- **Adjusting Pattern Length in Fine Increments**: It is now possible to adjust the Pattern Length in fine increments to create irregular Pattern lengths. For more information, read 3.11, Adjusting Pattern Length in Fine Increments.

- **Minor Changes in MASCHINE 2.4.6**
  - **Pattern Grid Renamed to Arrange Grid**: The Pattern Grid renamed to Arrange Grid and moved to the area below the Group List in the software interface. For more information, read 3.13, The Arrange Grid.
  
  - **Quick Setting Removed from Software**: The Quick setting for Pattern Grid has been removed from the software interface; the feature is now only on the hardware controllers. For more information, read 3.14, Quick Grid.

  - **Timeline and Scene Header Swapped**: The positions of the Timeline and Scene header have been swapped. For more information, read 3.15, Timeline and Scene Header Swapped.

  - **Last Group**: It is no longer possible to have a Project without any Groups; attempting to delete the last remaining Group in a project will simply reset the Group to default. For more information, read 3.16, Deleting the Last Group.

  - **Eraser Tool Update**: The Eraser tool now deletes a divider between Slices rather than merging two Slices.
- **Aux Sends Default Value**: Aux sends have a new default of \(-\infty\) (minus infinity); previously the default was 0dB (unity).

- **Log Files Moved**: Log files have been moved to `/Users/<username>/Library/Logs/Native Instruments/` on OS X and `\Users\<username>\AppData\Local\Temp\Native Instruments\` on Windows.

### 3.1 Live Slicing

Live Slicing is a quick and intuitive way to add slices to a sample using the pads on your controller. The first pad is used to trigger the sample and the subsequent pads are used to add slice points as required. If necessary, the start and end points of the slices can then be fine-tuned using Edit mode.

*Live Slicing is only available from your MASCHINE controller.*

#### 3.1.1 Live Slicing Using MASCHINE STUDIO

To manually add Slices to a sample using the pads on your controller:

1. Press the **SAMPLING** button to enter the Sampling page.
2. Press Button 3 to select **SLICE** to open the SLICE tab.
3. Turn Knob 1 to select **Manual** mode.

⇨ Pad 1 will begin to flash to indicate that the first Slice can be added.

4. Press Pad 1 to add the first Slice to the sample.

⇨ Playback of the sample will begin and the next pad will begin to flash to indicate that the next slice point can be added.

5. Press Pad 2 to add the second slice point.
6. Continue to press subsequent pads as they flash to add more slices.

→ When playback of the sample stops you may fine-tune the start and end points of your slices by entering **EDIT** mode.
3.1.2 Live Slicing Using MASCHINE

To manually add Slices to a sample using the pads on your controller:

1. Press the SAMPLING button to enter the Sampling page.
2. Press Button 3 to select SLICE to enter the Slice mode.
3. Turn Knob 1 to select Manual mode.

⇒ Pad 1 will begin to flash to indicate that the first slice can be added.
4. Press Pad 1 to add the first slice to the sample.

⇒ Playback of the sample will begin and the next pad will begin to flash to indicate that the next slice point can be added.
5. Press Pad 2 to add the second slice point.
6. Continue to press subsequent pads as they flash to add more slices.

→ When playback of the sample stops you may fine-tune the start and end points of your slices by entering EDIT mode.

Press SHIFT + MUTE if you want to stop playback of a long sample.

Press SHIFT + Button 7 and 8 to access each bank of Slices.

3.1.3 Live Slicing Using MASCHINE MIKRO

To manually add Slices to a sample using the pads on your controller:

1. Press the SAMPLING button to enter the Sampling page.
2. Press NAV and turn the Control encoder to select SLICE.
3. Press an Arrow button below the display screen to select Manual mode.

⇒ Pad 1 will begin to flash to indicate that the first Slice can be added.
4. Press Pad 1 to add the first Slice to the sample.

⇒ Playback of the sample will begin and the next pad will begin to flash to indicate that the next slice point can be added.
5. Press Pad 2 to add the second slice point.
6. Continue to press subsequent pads as they flash to add more slices.
→ When playback of the sample stops you may fine-tune the start and end points of your slices by entering EDIT mode.

Press SHIFT + MUTE if you want to stop playback of a long sample.

Press SHIFT + Arrow buttons to access each bank of Slices.

### 3.2 Delete All Slices

The DELETE ALL option in SAMPLING EDIT mode is a quick and convenient way to delete all Slices at once from a sample using your controller.

#### 3.2.1 Delete All Slices Using MASCHINE STUDIO

Use the DELETE ALL option to delete all slices at once from a sample.

To delete all Slices from a sample:
1. Press the SAMPLING button to enter the Sampler.
2. Press Button 3 to select SLICE to enter the Slice mode.
3. Turn Knob 1 to select Manual mode.
4. Press Button 4 EDIT.
5. Press Button 8 to select **DELETE ALL** to delete all slices.

→ All slices are deleted from the current sample.

**Deleting All Slices after They Have Been Applied to the Pattern Editor**

If you have committed your Slices using the **APPLY** option, you must return to Edit mode and apply the **DELETE ALL** option to fully remove them from the Keyzone and Pattern.

To delete all Slices after they have been applied:

1. Press the **SAMPLING** button to enter the Sampler.
2. Press button 4 **EDIT** to return to Edit mode.
3. Press Button 8 to select **DELETE ALL** to delete all slices.
4. Press Button 4 **EDIT** to exit **EDIT** Mode.
5. Press **APPLY** to remove the Slices from the Sound or Group.

→ All extra Slices and Keyzones will be deleted leaving just the first Keyzone in place.

### 3.2.2 Delete All Slices Using MASCHINE

Use the **DEL ALL** option to delete all slices at once from a sample.

To delete all Slices from a sample:

1. Press the **SAMPLING** button to enter the Sampler.
2. Press Button 3 to select **SLICE** to enter the Slice mode.
3. Turn Knob 1 to select **Manual** mode.
4. Press Button 8 to select **DEL ALL** to delete all slices.

→ All slices are deleted from the current sample.

**Deleting All Slices after They Have Been Applied to the Pattern Editor**

If you have committed your Slices using the **APPLY** option, you must return to Edit mode and apply the **DELETE ALL** option to fully remove them from the Keyzone and Pattern.

To delete all Slices after they have been applied:

1. Press the **SAMPLING** button to enter the Sampler.
2. Press button 4 EDIT to return to Edit mode.
3. Press Button 8 to select DELETE ALL to delete all slices.
4. Press Button 4 EDIT to exit EDIT Mode.
5. Press APPLY to remove the Slices from the Sound or Group.

→ All extra Slices and Keyzones will be deleted leaving just the first Keyzone in place.

3.2.3 Delete All Slices Using MASCHINE MIKRO

Use the DEL ALL option to delete all slices at once from a sample.

To delete all Slices from a sample:
1. Press the SAMPLING button to enter the Sampler.
2. Press NAV and turn the Control encoder to select SLICE.
3. Press F1 to select EDIT mode.
4. Press SHIFT + F3 to select DEL ALL to delete all slices.

→ All slices are deleted from the current sample.

Deleting All Slices after They Have Been Applied to the Pattern Editor

If you have committed your Slices using the APPLY option, you must return to Edit mode and apply the DELETE ALL option to fully remove them from the Keyzone and Pattern.

To delete all Slices after they have been applied:
1. Press the SAMPLING button to enter the Sampler.
2. Press NAV and turn the Control encoder to select SLICE.
3. Press F1 to select EDIT mode.
4. Press SHIFT + F3 to select DEL ALL to delete all slices.
5. Press F1 EDIT to exit EDIT Mode.
6. Press F3 APPLY to remove the Slices from the Sound or Group.

→ All extra Slices and Keyzones will be deleted leaving just the first Keyzone in place.
3.3 Adjustable Scene Length

Scenes and Clips obey following rules:

By default the length of a Scene is automatically set to the longest Clip used within the Scene (Auto Length), unless the length of the Scene is manually set to a specific bar range (Manual Length).

- **Auto Length**: By default, the length of a Scene corresponds to the longest Clip used in the Scene. Inserting a new Clip that is longer than the Scene automatically extends the Scene. Removing the longest Clip from the Scene automatically shrinks the Scene. Extending/shrinking the longest Clip automatically extends/shrinks the Scene accordingly.

- **Manual Length**: A Scene can be manually adjusted to a set length. This can be shorter or longer than the Clips contained within the Scene. Inserting or removing Clips from the Scene will not alter the length of the Scene, however the length of a Scene can be altered by dragging the mouse directly in the timeline or by using your MASCHINE controller.

- If a Clip is shorter than the Scene it is placed in, it is automatically repeated until the end of the Scene (the last repetition might be shortened). These repetitions are automatically generated and cannot be edited. They reference the same Pattern as the original Clip placed at the beginning of the Scene. Repetitions of a Clip are indicated by darker blocks in the Arranger, and a Truncated Clip marker will appear on the right-hand side of the Scene to indicate that a section of the Clip is hidden:

- If a Scene has been manually shortened, only the visible part of the Clip within the set length will be audible.

- Clips always start at the beginning of the Scene.
3.3.1 Adjusting the Length of a Scene Using the Software

Variable Scene length allows you to lengthen or shorten a Clip without altering the referenced Pattern. This is particularly useful as it avoids the need to create a new version of a pattern when you only want to extend or truncate a Pattern to make it fit an arrangement.

When the right Scene end marker is extended beyond the length of the Clips, the referenced Patterns are repeated. When the right Scene end marker is dragged so it is shorter than the Clips, only the part visible part of the Clips are audible.

To lengthen a Scene:

► Click and drag the Scene end marker to the right.

→ The Clip will be repeated if the adjustment is longer than the referenced Pattern.

To shorten a Scene:

► Click and drag the Scene end marker to the left.
The Clip will be shortened, and if the adjustment is shorter than the referenced Pattern a small Truncated Clip marker will appear on the right-hand side of the Scene to indicate that a section of the Clip is hidden. Only the visible part of the Clip will be audible during playback.

When adjusting the size of a Scene the following rules apply:

- The value set in the Arrange Grid is used for length increments.
- When [Shift] is pressed while changing the length, the value set in the Step Grid is used.
- The minimum length a Scene marker can be dragged without modifier is one Arrange Grid increment.
- When [Shift] is pressed, the minimum length a Scene marker can be dragged is one Step Grid increment.
- The minimum length of a Scene equals the minimum Pattern length. This can only be achieved if Arrange Grid or Step Grid is set to Off.

3.3.2 Adjusting the Length of a Scene Using MASCHINE STUDIO

To adjust the length of a Scene using your hardware controller:

1. Press the SCENE button to enter the Scene page.
2. Press Button 1 to pin the page if required.
3. Turn Knob 4 to adjust the length of the Scene as required. Turning the knob left will shorten the Scene, turning it right will lengthen the Scene.
4. Press SHIFT and turn Knob 4 to change the Scene length in smaller increments.

The Scene length is adjusted accordingly.
3.3.3 Adjusting the Length of a Scene Using MASCHINE

To adjust the length of a Scene using your hardware controller:

1. Press the **SCENE** button to enter the Scene page.
2. Press Button 1 to pin the page if required.
3. Turn Knob 4 to adjust the length of the Scene as required. Turning the Knob left will shorten the Scene, turning it right will lengthen the Scene.
4. Press **SHIFT** and turn Knob 4 to change the Scene length in smaller increments.

→ The Scene length is adjusted accordingly.

3.3.4 Adjusting the Length of a Scene Using MASCHINE MIKRO

To adjust the length of a Scene using your hardware controller:

1. Press the **SCENE** button to enter the Scene page.
2. Press **MAIN/CONTROL (PIN)** to pin the page if required.
3. Press the right arrow below the display to select **LENGTH**.
4. Turn the Control encoder to adjust the length of the Scene as required. Turning the Knob left will shorten the Scene, turning it right will lengthen the Scene.
5. Press and turn the Control encoder to change the Scene length in smaller increments.

→ The Scene length is adjusted accordingly.

3.4 Enabling Scene Auto Length

By default a Scene is set to Auto Length allowing it to resize automatically to the content within the Scene. If the length of a Scene is manually adjusted by truncating or lengthening the Scene end marker, Auto Length is discarded and the Scene automatically set to Manual Length.
Using the software or controller it is possible to quickly reset a Scene to back to Auto Length in order to return to the Scene to its default state and reveal any truncated (hidden) content. When Auto Length is enabled, the Manual Length settings are discarded and the Scene is resized according to the Clips placed inside, and will continue to resize with the content unless the length is again manually adjusted.

3.4.1 Enabling Scene Auto Length Using the Software

To enable Auto Length for a Scene in the software:

1. Right-click on the Scene.
2. Click Auto Length in the menu.

→ Auto Length is enabled and the selected Scene is automatically resized to fit the content of the Clips within the Scene. Any manual adjustments that were previously made are discarded.

3.4.2 Enabling Scene Auto Length Using MASCHINE STUDIO

To enable Auto Length for a Scene using your controller:

1. Press SCENE to access the Scene page.
2. Press the corresponding pad to select a Scene.
3. Press Button 3 AUTO LENGTH to enable Auto Length.

→ The selected Scene is automatically resized to fit the content of the Clips within the Scene. Any manual adjustments that were previously made are discarded.
3.4.3   Enabling Scene Auto Length Using MASCHINE

To enable Auto Length for a Scene using your controller:

1. Press SCENE to access the Scene page.
2. Press the corresponding pad to select a Scene.
3. Press Button 3 AUTO LENGTH to enable Auto Length.

→ Auto Length is enabled and the selected Scene is automatically resized to fit the content of the Clips within the Scene. Any manual adjustments that were previously made are discarded.

3.4.4   Enabling Scene Auto Length Using MASCHINE MIKRO

To enable Auto Length for a Scene using your controller:

1. Press SCENE to access the Scene page.
2. Press the corresponding pad to select a Scene.
3. Press SHIFT + F3 AUT LEN to enable Auto Length.

→ Auto Length is enabled and the selected Scene is automatically resized to fit the content of the Clips within the Scene. Any manual adjustments previously made are discarded.

3.5   Plug-in Configuration

Settings and assignments of a Plug-in can be saved as a preset. Once saved, a Plug-in preset can be accessed from the Browser, both in the software and from your controller. This is a very quick and convenient way to recall Plug-ins with their parameters already set to specific values. In addition a Plug-in preset can be assigned as the default preset for a plug-in so that the plug-in opens with that preset automatically loaded.

3.5.1   Saving Plug-in Presets

Saving Plug-in presets can only be done in the software via the Plug-in menu. To access the Plug-in menu, click the drop-down arrow on the right-hand side of the Plug-in slot in the Plug-in List:
Opening the Plug-in menu.

The commands for saving Plug-in presets are found at the bottom of the Plug-in menu.

The commands for saving and recalling Plug-in presets in the Plug-in menu.

<table>
<thead>
<tr>
<th>Plug-in Menu Entry</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Save</td>
<td>Saves your changes to the preset currently loaded.</td>
</tr>
<tr>
<td>Save As...</td>
<td>Saves the current Plug-in settings as a new preset on your hard disk.</td>
</tr>
</tbody>
</table>
### 3.5.2 Recalling Plug-in Presets

All Plug-in presets you saved using the Plug-in menu are available in the Browser, both in the software and from your controller. You can find each Plug-in preset automatically placed in the corresponding “Instrument” or “Effect” category in the File Type selector of the Browser’s LIBRARY pane. Furthermore, user presets are available when selecting the User content in the Content selector of the Browser’s LIBRARY pane.

For more information on how to load Plug-in presets in the Browser, and how to assign tags to the Plug-in presets that you saved, please refer to chapter 3 of the Manual, available from the Help menu.

The MASCHINE library provides a collection of Plug-in presets for MASCHINE Internal Plug-ins. Furthermore, any Native Instruments product installed on your computer has its own factory library already imported into the MASCHINE Browser so that you can browse and load its presets.

KOMPLETE products and MASCHINE EXPANSIONS must be updated to the latest version to ensure their full integration into the MASCHINE Library. To update any Native Instruments product installed on your computer, please start Service Center.

You can also load a Plug-in preset from the Plug-in menu by selecting the Open... command, then navigating your file system and selecting the desired preset file (extension “.mxinst” for Instrument Plug-in presets, “.mxfx” for Effect Plug-in presets, or “.mfxp” for MASCHINE 1.x Module presets).
3.5.3 Removing a Default Plug-in Preset

For each plug-in you can set a default preset that is loaded automatically every time the plug-in is opened. If the default plug-in preset is no longer required, use the Plug-in menu to remove the saved default preset.

To remove the default preset of a plug-in using the Plug-in menu:

1. Click the Sound containing the Plug-in.
2. Click the Plug-in drop-down menu.
3. Click Remove Default Preset in the menu to remove the default preset.

→ The default plug-in preset is removed and the plug-in will load with its initialized settings next time it is opened.

You can also use the Plug-in Manager in the Preferences panel to gain an overview of your default plug-in presets and also remove them if required.

Removing the default preset for a plug-in is a software only feature.
3.6 Exporting Audio

MASCHINE 2.4.6 contains several new features for exporting audio, as follows:

• Exporting Audio in AIFF Format
• Exporting Audio by Scene Option
• Exporting Audio Range Option
• Exporting Audio Custom Name Option

3.6.1 Exporting Audio in WAV or AIFF Format

In some cases you might want to render your Groups, Sounds or complete Project as audio files in order to edit them further in other applications or burn a CD. Audio can be exported in WAV or AIFF format. This function is only available in the software.

The Options tab of the Export Audio dialogue box allows you to adjust various settings for the export process.

To export audio in WAV or AIFF format:

1. Click File > Export Audio to access the Export Audio dialogue box.
2. Click the Options tab.
3. Click the drop-down menu in the Type option and select WAV or AIFF.

When you click the Export button, audio will be exported in the selected format.

Changing the audio type here will also change the format of the audio released from the Audio Dragger icon in the Pattern Editor.

3.6.2 Exporting Audio by Scene Option

The Export Audio dialogue contains Split by Scene option. When selected, this option exports audio Scene by Scene from within the range of the loop markers. If the loop spans multiple Scenes, individual audio files for each Scene within the selected area will be created. Use in combination with the other export settings to achieve the desired output format and file type. Please note, if you only select one Scene and export, you will not gain any advantage by using this feature.
To export audio Scene by Scene:

1. Click *File > Export Audio* to access the *Export Audio* dialogue box.
2. Click the *Options* tab.
3. Check the *Split By Scene* option.
4. Click the *Export* button.

→ The audio is split into Scenes as it is exported to the selected destination folder.

When used in combination with *Export Audio > Export > Source* you can select the *Master Outputs, Group Outputs or Sound Outputs* to export individually Scene by Scene.
3.6.3 Exporting Audio Range Option

The Export Audio dialogue contains an All option in the Range menu. This can be quickly and conveniently used to export the audio of a whole song, regardless of the position of the Loop Braces or state of the Loop button in the Transport. Use in combination with the other export settings to achieve the desired output format, file type and destination folder.

To export a whole song:

1. Click File > Export Audio to access the Export Audio dialogue box.
2. Click the Export tab.
3. Click the Range drop-down menu and select All.
4. Click the Export button.
The audio of the whole song is exported to the selected folder destination in the required format.

### 3.6.4 Exporting Audio Custom Name Option

The Export Audio dialogue contains a Name field so an audio export can be given a custom name.

To enter a custom name for an audio export:

1. Click *File > Export Audio* to access the Export Audio dialogue box.
2. Click the Export tab.
3. Click the Range drop-down menu and select *All*.
4. Click the Export button.
The audio of the whole song is exported to the selected destination folder with the given name.

### 3.7 Filtering Instruments by Category or Vendor in the Browser

The Product selector allows you to limit your search to a certain product category, vendor, a particular product, a specific bank, or even a sub-bank of the product. You can also load a product along with its default preset file directly from the Product selector.

By default there is no particular selection in the Product selector; it reads All Instruments:

![The closed Product selector header.](image)

### 3.7.1 Selecting an Product Category

- Click on the Product selector header to open it.

→ The Product selector opens up to show all products available in your MASCHINE Library.
(1) **Instrument selector header:** The header shows the selected product—if there is no selection it shows a generic label (All Instruments). Click on the header to close the Product selector.

(2) **Category/Vendor selector:** Allows you to sort the Product list by Category or by Vendor.

(3) **Product list:** Shows all products that are available in your MASCHINE Library.

If **Category** is selected in the **Category/Vendor selector**, the Product list is sorted by the following categories:

- Drums & Percussion
- Sampled Instruments
- Synthesizers
- Other

If **Vendor** is selected in the **Category / Vendor** selector, the Product list is sorted by the names of the manufacturers.

► To select a product and show only the preset files associated with it, click on the product in the list.
Upon your selection, the Product selector automatically closes, the product name and icon appear in the header, and the tag filter and results list below will be filtered accordingly.

Products are shown in the Product selector only if the Library contains files for them. If a particular product does not show up, make sure that you have installed the latest updates using Service Center.

3.8 Browsing by Product Category Using MASCHINE STUDIO

The MASCHINE Browser can filter your search by product category.

To filter products by Category in the Browser using MASCHINE STUDIO:

1. Press BROWSE to show the Browser.
2. Press Button 2 to select a product.

⇒ The Browser will now display instrument or effect plug-in presets only depending on your choice.

3. Press and hold SHIFT to access the filters for CATEGORIES / VENDORS.
4. Press Button 1 to select CATEGORIES if you want to browse by product Category.
5. Turn Knob 1 to select a category from the All Categories list.
6. Turn Knob 2 to filter your selection further by choosing a particular product.

⇒ After selecting a category and product the list of available presets appear on the right-hand display.

7. Turn Knob 8 to select a preset.
8. Press Button 8 to load the selected preset.

3.9 Browsing by Product Vendor Using MASCHINE STUDIO

The MASCHINE Browser can filter your search by product vendor.

To filter products by Vendor in the Browser using MASCHINE STUDIO:
1. Press **BROWSE** to show the Browser.
2. Press Button 2 to select a product.

   ⇒ The Browser will now display instrument or effect plug-in presets only depending on your choice.

3. Press and hold **SHIFT** to access the filters for **CATEGORIES / VENDORS**.
4. Press Button 2 to select **VENDORS** if you want to browse by Vendors.
5. Turn Knob 1 to select a vendor from the **All Vendors** list.
6. Turn Knob 2 to filter your selection further by choosing a particular product.

   ⇒ After selecting a vendor and product the list of available presets appear on the right-hand display.

7. Turn Knob 8 to select a preset.
8. Press Button 8 to load a preset.

### 3.10 Looping

Activate a Loop to repeatedly play a section of the Arrangement. Once a loop is activated the Scenes within the range of the Loop play until the loop is deactivated. You can use the range to repeatedly play a particular part of a song. This can be good for composing, practicing a part before recording, recording multiple takes, etc. The loop range is permanently visible, (even when it is deactivate) and the range of the loop can be altered at any time using the left and right end points.

#### 3.10.1 Setting the Loop Range in the Software

Set the start, end and position of the loop using the dedicated Loop range in the Timeline. The value set in the Arrange Grid is used for Loop range increments and movement of the loop range itself.

To adjust the Loop range using the software:
Drag the left or right end of the Loop marker to make it longer.

The Loop range is elongated.

To move the Loop using the software:

Click and drag the Loop range left or right.

The whole Loop range is moved.

**Activating or Deactivating a Loop in the Software**

To activate a Loop using the software:

Click the Loop button in the header to activate or deactivate the loop.

When the Loop is activated the Scenes within the Loop range are repeated.

**3.10.2 Setting the Loop Range Using MASCHINE STUDIO**

Set the start, end and position of the loop using the dedicated Loop page.

To set the loop range using MASCHINE STUDIO:
1. Press and hold **SHIFT + RESTART (LOOP)** to access the Loop screen.
2. Press Button 5 **LOOP** to activate the loop.
3. Turn Knob 3 **START** to set the start point of the loop.
4. Turn Knob 4 **LENGTH** to set the length of the loop.
   → The start and end points of the loop range are set.
   ▶ Turn Knob 1 **POSITION** to alter the position of the whole loop.
   → The position of the loop range is adjusted.
   ▶ Press Button 4 **ALL** to loop the whole song.
→ The start and end points of the loop range are set to the range of the whole song.

**Activating or Deactivating a Loop Using MASCHINE STUDIO**

To activate a Loop using the controller:

▶ Press **SHIFT + RESTART (LOOP)** to activate or deactivate the loop.

When the loop is activated the Scenes within the Loop range are repeated.

### 3.10.3 Setting the Loop Range Using MASCHINE

Set the start, end and position of the loop using the dedicated Loop page.

To set the loop range using MASCHINE:

1. Press and hold **SHIFT + RESTART (LOOP)** to access the Loop screen.
2. Press Button 5 **LOOP** to activate the loop.
3. Turn Knob 3 **START** to set the start point of the loop.
4. Turn Knob 4 **LENGTH** to set the length of the loop.
   → The start and end points of the loop range are set.
   ▶ Turn Knob 1 **POSITION** to alter the position of the whole loop.
   → The position of the loop range is adjusted.
Press Button 4 ALL to loop the whole song.

The start and end points of the loop range are set to the range of the whole song.

Activating or Deactivating a Loop Using MASCHINE

To activate a Loop using the controller:

Press SHIFT + RESTART (LOOP) to activate or deactivate the loop.

When the loop is activated the Scenes within the Loop range are repeated.

3.10.4 Setting the Loop Range Using MASCHINE MIKRO

Set the start, end and position of the loop using the dedicated Loop page.

To set the loop range using MASCHINE MIKRO:

1. Press and hold SHIFT + RESTART to access the Loop screen.
2. Press F3 LOOP to activate the loop.
3. Press the right arrow below the display to select START.
4. Turn the Control encoder to set the start point of the loop.
5. Press the right arrow below the display to select LENGTH.
6. Turn the Control encoder to set the length of the loop.

The start and end points of the loop range are set.

Press the left arrow below the display to select POSITION and turn the Control encoder to alter the position of the whole loop.

The position of the loop range is adjusted.

Activating or Deactivating a Loop Using MASCHINE MIKRO

To activate a Loop using the controller:

Press SHIFT + RESTART to activate or deactivate the loop.

When the loop is activated the Scenes within the Loop range are repeated. When the loop is deactivated the Scenes in the loop will play once only.
3.11 Adjusting Pattern Length in Fine Increments

Pattern Length can be adjusted in fine increments to create irregular pattern lengths by temporarily pressing the [Shift] button on your computer keyboard or SHIFT on the MASCHINE controller while adjusting the Pattern Length. The size of fine increments are defined using the Step Grid.

3.11.1 Adjusting Pattern Length in Fine Increments Using MASCHINE STUDIO

1. Press GRID and then Button 4 to access STEP.
2. Use Buttons 5 to 8 to select the required Step Grid size.
3. Press PATTERN to access the pattern page, and pin it if required by pressing Button 1.
4. Press the corresponding pad to select the pattern you want to edit.
5. Press SHIFT and turn Knob 4 LENGTH to adjust Pattern Length in fine increments.

→ Pressing SHIFT temporarily allows the Pattern Length to be adjusted in finer increments according the value of the Step Grid.

3.11.2 Adjusting Pattern Length in Fine Increments Using MASCHINE

1. Press GRID and then Button 4 to access STEP.
2. Use Buttons 5 to 8 to select the required Step Grid size.
3. Press PATTERN to access the pattern page, and pin it if required by pressing Button 1.
4. Press the corresponding pad to select the pattern you want to edit.
5. Press SHIFT and turn Knob 4 LENGTH to adjust Pattern Length in fine increments.

→ Pressing SHIFT temporarily allows the Pattern Length to be adjusted in finer increments according the value of the Step Grid.

3.11.3 Adjusting Pattern Length in Fine Increments Using MASCHINE MIKRO

1. Press GRID and then F3 to access STEP.
2. Turn the Control encoder to select the required Step Grid size.
3. Press PATTERN.
4. Press and turn the Control encoder to adjust Pattern Length in fine increments.
   → Pressing the Control encoder temporarily allows the Pattern Length to be adjusted in fine
   increments according the value of the Step Grid.

3.12 Audio & MIDI Settings in Preferences

3.12.1 Audio Settings in Preferences

The Audio page holds settings related to your audio interface.

The Routing section allows you to configure the connections between the virtual inputs/outputs
of MASCHINE and the physical inputs/outputs of your audio interface.

► To display the Audio page click the Audio tab on the left of the Preferences panel.
### Preferences – Audio page.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interface</strong></td>
<td></td>
</tr>
<tr>
<td>Driver</td>
<td>Select your audio driver here.</td>
</tr>
<tr>
<td>Device</td>
<td>This allows you to choose from the available devices if you have connected more than one audio interface.</td>
</tr>
<tr>
<td>Status</td>
<td>This shows you whether your audio interface is currently running.</td>
</tr>
</tbody>
</table>
### Sample Rate
This displays the selected sample rate of your audio interface. Please restart MASCHINE after changing the sample rate.

### ASIO Config (Windows only)
Click Open Panel to access specific controls related to your Soundcard. Please consult the documentation that came with your Soundcard for more information.

### Latency
**Mac OS X:** This slider allows you to adjust the latency of your audio interface in samples. Lower values result in a more immediate playing response but are heavier on both the CPU and the audio driver, and may result in audible clicks and pops. Larger values are easier on the CPU, but introduce a larger latency (i.e., there may be a very small delay between when you hit a pad and when you actually hear it). You should therefore experiment with this setting so that it is as low as possible without overloading your CPU or introducing any audio artifacts.

**Windows:** When using an ASIO driver, the Audio and MIDI Settings panel shows an ASIO Config button instead of the Latency slider. Click this button to open the settings window of the selected ASIO driver.

### Routing

#### Inputs
By clicking Inputs, you can define which inputs on your audio interface should be used for the four stereo inputs of MASCHINE. Select the inputs of your audio interface on the right column by clicking the fields: you will be presented with a drop-down menu with all the available Inputs. The choices made here will determine which inputs can be used when sampling external sources, for example.

#### Outputs
By clicking Outputs, you will be presented with a list of the 16 stereo outputs from MASCHINE: In the right column, you can assign them to the outputs of your audio interface. Click the fields in the right column to select the desired outputs via a drop-down menu.

### 3.12.2 MIDI Settings in Preferences
The MIDI page allows you to set up the MIDI input and output ports that you want to use with MASCHINE.

- To display the MIDI page click the MIDI tab on the left of the Preferences panel.
Preferences – MIDI page.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sync</strong></td>
<td></td>
</tr>
</tbody>
</table>
## Mode

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off: No MIDI sync mode is selected.</td>
<td></td>
</tr>
<tr>
<td>Master (Send Clock): If MASCHINE is running as a stand-alone application, it can also send a MIDI Clock signal to any device that is capable of receiving MIDI Clock. This could be hardware such as a drum machine, another groovebox, or even another software sequencer.</td>
<td></td>
</tr>
<tr>
<td>Slave (Receive Clock): If MASCHINE is running as a stand-alone application, it can be controlled externally via MIDI Clock by any device that is capable of sending MIDI Clock. This could be hardware such as a drum machine, another groovebox or sequencer, or even another software sequencer.</td>
<td></td>
</tr>
</tbody>
</table>

## Clock Offset (appears when **Mode** is set to *Slave*)

<table>
<thead>
<tr>
<th>Clock Offset (appears when <strong>Mode</strong> is set to <em>Slave</em>)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use the Clock Offset control to compensate delay that may occur during MIDI data transmission. Delayed MIDI Clock data will cause external devices to respond too late, thus making your track sound out of sync.</td>
<td></td>
</tr>
<tr>
<td>By adjusting the Clock Offset value you can set an amount of latency to be compensated (in milliseconds). MASCHINE will then send MIDI Clock events ahead of time as defined.</td>
<td></td>
</tr>
</tbody>
</table>

## Devices

<table>
<thead>
<tr>
<th>Devices</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inputs</strong></td>
<td>Clicking Inputs displays a list of all the available MIDI inputs of your system. You can activate/deactivate each input by clicking the fields in the Status column, which displays the current status of the corresponding port.</td>
</tr>
<tr>
<td><strong>Outputs</strong></td>
<td>Clicking Outputs displays a list of all the available MIDI outputs of your system. You can activate/deactivate each output by clicking the fields in the Status column, which displays the current status of the corresponding port.</td>
</tr>
</tbody>
</table>

### 3.13 The Arrange Grid

The Arrange Grid is used to quantize all modifications related to the timeline. The value set here is used for following features:

- Loop start / length
- Loop position
• Pattern length
• Scene length
• Song Clip start / length
• Playhead relocation

The Arrange Grid setting is located at the bottom left corner of the Arranger area and can be activated/deactivated by toggling the Grid symbol.

### 3.13.1 Applying the Arrange Grid in the Software

1. Click the Grid symbol next to the value to enable the Arrange Grid.

   ![Grid Symbol](image1)

2. Click the current Arrange Grid value to open the drop-down menu.

   ![Drop-down Menu](image2)

3. Select a new value for the Arrange Grid.

   The selected Arrange Grid value is applied.
3.13.2 Applying the Arrange Grid Using MASCHINE STUDIO

1. Press the GRID button to access the Grid page.
2. Press Button 3 to select ARRANGE.
3. Press Button 5, or the corresponding pad to select an Arrange Grid value.
   → The selected Arrange Grid value is applied.

To Disable the Arrange Grid

► Press Button 8 or pad 16 to select OFF.
   → The Arrange Grid is disabled.

3.13.3 Applying the Arrange Grid Using MASCHINE

1. Press the GRID button to access the Grid page.
2. Press Button 3 to select ARRANGE.
3. Press Button 5, or the corresponding pad to select an Arrange Grid value.
   → The selected Arrange Grid value is applied.

To Disable the Arrange Grid

► Press Button 8 or pad 16 to select OFF.
   → The Arrange Grid is disabled.

3.13.4 Applying the Arrange Grid Using MASCHINE MIKRO

1. Press the GRID button to access the Grid page.
2. Press \texttt{F2} to select ARNG (Arrange).
3. Press the left arrow to step through the menu to select \texttt{VALUE}.
4. Turn the Control encoder to select an Arrange Grid value.
   → The selected Arrange Grid value is applied.
To enable/disable the Arrange Grid

1. Press the right arrow to step through the menu to select ENABLE.
2. Turn the Control encoder to select ON or OFF.

→ The Arrange Grid is enabled or disabled.

3.14 Quick Grid

The Quick Grid setting allows you to quickly and conveniently set the most common Pattern lengths using your controller. When the Quick Grid is used, the following rules apply:

- The available Pattern lengths are as follows: 1 bar, 2 bars, 4 bars, 8 bars, 12 bars, 16 bars, etc. (+ 4 bars each time starting from 4 bars).

- The Quick Grid is exclusively applied to Pattern Length. For all other features related to the Grid (for example, adjusting the playback position or the Loop Range), the Arrange Grid is used.

- The Quick Grid setting is global and applies to all Patterns.

- When the Quick Grid is set to OFF, the Arrange Grid is used.

- Quick Grid is only accessible from your controller.

3.14.1 Enabling Quick Grid Using MASCHINE STUDIO

To enable the Quick Grid on your controller:

1. Press GRID to access the Grid page.
2. Press Button 3 to select ARRANGE.
3. Turn Knob 4 to enable the QUICK Grid.

→ Quick Grid is enabled and globally applied to all Patterns.

3.14.2 Enabling Quick Grid Using MASCHINE

To enable the Quick Grid on your controller:

1. Press GRID to access the Grid page.
2. Press Button 3 to select ARRANGE.
3. Turn Knob 4 to enable the QUICK Grid.

→ Quick Grid is enabled and globally applied to all Patterns.

3.14.3 Enabling Quick Grid Using MASCHINE MIKRO

To enable the Quick Grid on your controller:

1. Press GRID to access the Grid page.
2. Press F2 to select ARNG (Arrange).
3. Press the right arrow to step through the menu to select QUICK.
4. Turn the Control encoder to select ON.

→ Quick Grid is enabled and globally applied to all Patterns.

3.15 Timeline and Scene Header Swapped

The positions of the timeline and Scene header have been swapped. This is only a cosmetic change and all functionality remains the same. All other changes are described in this document.

3.16 Deleting the Last Group

It is no longer possible to have a project without any Groups; attempting to delete the last remaining Group in a project will simply reset the Group to the default values.
4  MASCHINE 2.4

This chapter describes the new features introduced in MASCHINE 2.4.

Here is a brief overview of the most important changes and additions:

- **NKS.** Native Kontrol Standard (NKS) is a software instrument format that allows third-party developers to integrate with MASCHINE and KOMPLETE KONTROL hardware and software at the same deep level as KOMPLETE Instruments. As a result, the Browser, and Plug-in menu, has been refined to accommodate these new features. For more information please read ↑4.1, Native Kontrol Standard.

- **KOMPLETE KONTROL S88.** MASCHINE provides support for the flagship KOMPLETE KONTROL S88. For more information please read ↑4.2, Support for KOMPLETE KONTROL S88.

4.1  Native Kontrol Standard

Native Kontrol Standard (NKS) is a software instrument format that allows third-party developers to integrate with MASCHINE and KOMPLETE KONTROL hardware and software at the same deep level as KOMPLETE Instruments.

The Native Kontrol Standard includes:

- Seamless integration into the MASCHINE and KOMPLETE KONTROL Browser for a unified browsing experience.

- Full parameter mapping for instant hands-on control.

- Support of KOMPLETE KONTROL S-SERIES features such as the Light Guide.

This means that instruments supporting NKS can be found in the MASCHINE Browser next to your KOMPLETE Instruments. All of their presets are fully tagged, so you can use filters to search for sounds from all of your NKS and KOMPLETE Instruments. When you load a preset from an NKS instrument, all of its parameters are mapped to the controls on your MASCHINE hardware in a meaningful way, just like any preset from your KOMPLETE Instruments.
NKS instruments are automatically added to your Library when you start MASCHINE for the first time after installing the instrument (except KONTAKT instruments with NKS support, see below).

The folders containing the preset files for NKS support can be managed in the Factory pane on the Library page of the Preferences.

**Installing KONTAKT Instruments with NKS Support**

Third-party developers of KONTAKT instruments provide you with a folder that contains all instrument files, including presets and samples. Instead of running an installer, this folder needs to be stored on the hard drive and added to the KONTAKT Browser by using KONTAKT's Add Library function.

As a MASCHINE user, you can add KONTAKT instruments with NKS support to your MASCHINE Library by dragging the folder onto the MASCHINE Browser. If you are using KONTAKT, the instrument is automatically added to your KONTAKT Browser, too.
To add a KONTAKT instrument with NKS support to your MASCHINE Library, drag the instrument folder onto the MASCHINE Browser.

The KONTAKT instrument is now available in the Library pane of the MASCHINE Browser.

The MASCHINE Library and the KONTAKT Browser reference the instrument files contained in the folder. Do not delete or move the folder afterwards, otherwise MASCHINE and KONTAKT will not be able to access the instrument files.

4.1.1 Selecting or Loading a Product and Selecting a Bank from the Browser

The Product selector allows you to limit your search to a certain product category, a particular product, or a specific bank of the product. You can also load a product along with its default preset file directly from the Product selector (see below).
By default there is no particular selection in the Product selector; it reads All Instruments:

The closed Product selector header.

**Selecting a Product**

- Click on the Product selector header to open it.

  → The Product selector opens up, showing you all products available in your MASCHINE Library.
The opened Product selector.

(1) **Product selector header:** The header shows the selected product—if there is no selection it shows a generic label (All Instruments). Click on the header to close the Product selector.

(2) **Product list:** Shows all products that are available in your MASCHINE Library.

The Products are sorted by the following categories:

- DRUMS & PERCUSSION
- SAMPLED INSTRUMENTS
- SYNTHESIZERS
- NO CATEGORY

To select a product and show only the preset files associated with it, click on the product in the list.

Upon your selection the Product selector automatically closes, the product name and icon appear in the header, and the tag filter and results list below will be filtered accordingly.

![Warning: Products are shown in the Product selector only if the Library contains files for them. If a particular product does not show up, make sure that you have installed the latest updates.]

Resetting the Product Selection

To reset the selection made in the Product selector, click the little cross at the right of the product name:

![Image of Product selector with All Instruments highlighted]

The product selection is cancelled. The Product selector displays the generic label **All Instruments**. The tag filter and the results list under the Product selector now include files for all products.

Selecting a Bank

When you select specific products in the Product list (see description above), an additional **Bank menu** appears under the closed Product selector:
The Bank menu showing All Banks for POLYPLEX

The Bank menu allows you to select a particular bank of files for the selected product (POLYPLEX in the picture above).

Banks can be additional Libraries (for example MASSIVE Expansions), different versions of the original Factory Library (for example FM7 Legacy and FM8 Factory Library), or any other content categorization specific to a particular product (for example different sets of drum sounds for POLYPLEX, as shown above).

► To select a particular bank for the selected product, click the Bank menu under the product icon and choose a bank from the available entries.

→ Upon your selection the Bank menu closes and displays the selected bank. The tag filter and results list underneath further narrow their content accordingly.
As with the product selection, you can remove the selected bank by clicking the little cross next to the bank name in the closed menu.

**Loading a Product from the Product Selector**

If you wish to not only filter the results list by selecting a product, but also load the product along with its default preset file, you can do so directly from the Product selector.

To load a product with its default preset file, place the mouse over the product entry in the Product selector and click on the arrow symbol that appears in the upper right corner of the product entry.

The product and the first preset from the results list for this product are loaded, and the result list only displays preset files only associated with this product.

### 4.1.2 Loading NKS and Third-party Plug-ins from the Plug-in Menu

The plug-in menu has been updated to display NKS and third-party plug-ins in submenus sorted by vendor in alphabetical order, both within the software and hardware.

The plug-in menu lists installed plug-ins in the following format:

<table>
<thead>
<tr>
<th>Instrument Plug-ins</th>
<th>Effect Plug-ins</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internal Plug-ins</strong></td>
<td>MASCHINE internal effects</td>
</tr>
<tr>
<td>Sampler, Drumsynths</td>
<td></td>
</tr>
<tr>
<td><strong>Native Instruments Plug-ins</strong></td>
<td>VST/AU effect plug-ins from Native Instruments’ range of products</td>
</tr>
<tr>
<td>VST/AU instrument plug-ins from Native Instruments’ range of products</td>
<td></td>
</tr>
<tr>
<td><strong>NKS and Third-party Plug-ins</strong></td>
<td>Third-party VST/AU effect plug-ins</td>
</tr>
<tr>
<td>NKS and Third-party VST/AU instrument plug-ins</td>
<td></td>
</tr>
</tbody>
</table>
For more information on using Plug-ins and accessing the plug-in menu please refer to chapter 6 “Working with Plug-ins” in the MASCHINE manual.

4.2 Support for KOMPLETE KONTROL S88

MASCHINE 2.4 supports the new flagship of the S-Series keyboard line, KOMPLETE KONTROL S88 from Native Instruments. KOMPLETE KONTROL S88 delivers an expansive, professional-grade Fatar keybed for true piano feel across 88 fully-weighted, hammer-action keys.

The KOMPLETE KONTROL S-SERIES keyboards are tightly integrated into the MASCHINE workflows.

Connected the KOMPLETE KONTROL S88 will appear in the header and will become available for selection from the Controller menu.
Controller menu with KOMPLETE KONTROL S88 and MASCHINE STUDIO selected

For further information on KOMPLETE KONTROL S-SERIES keyboard integration with MASCHINE see ↑7.2, KOMPLETE KONTROL Integration.
5  MASCHINE 2.3.1

This chapter describes the new features introduced in MASCHINE 2.3.1.

Here is a brief overview of the most important changes and additions:

• **Browser Favorites.** Favorites in the MASCHINE browser allow you to quickly view and browse your most frequently used items. This includes projects, groups, sounds, instrument presets, effect presets, and samples.

• **Set Plug-in Preferences.** The Plug-ins page allows you to define the loading behavior of NI plug-ins in MASCHINE.
5.1 Using Favorites in the Browser

Favorites in the MASCHINE browser allow you to quickly view and browse your most frequently used items. This includes projects, groups, sounds, instrument presets, effect presets, and samples. Any of these items can be assigned as a Favorite. The Favorites serve as an additional
filter in the Browser. When activated, the results list will only show items that have been assigned as a Favorite, and also match all other selected filters, including the search query entered into the search field. Favorites are available for both the factory content and the user content.

Here are some important notes regarding the use of Favorites:

- Favorites are automatically shared across MASCHINE and KOMPLETE KONTROL browser databases on one computer.
- Favorites are independent of the file's location: if a file is moved, it retains its favorite tag.
- Favorites are persistent: If a file location is rescanned or deleted and later added again to the database, all files retain their favorite tags.

To activate the Favorites filter:

1. Click on the Filter Favorites control next to the search field to filter the results by Favorites:
2. The Filter Favorites control is now lit and the results list shows all Favorites that match the selected search criteria:

![Favorites list]

Adding an Item to the Favorites list

To add an item to the Favorites, follow the instructions below:

1. Place the mouse cursor over an entry in the results list to show the Set Favorite icon.

![Set Favorite icon]

2. Click on the Set Favorite icon to add the corresponding item to the Favorites.
The item is added to the Favorites, indicated by the lit Set Favorite icon next to its name:

You can add any item in the results list to the Favorites, no matter if it is selected or not. The Set Favorites icon will appear as soon as you place the mouse cursor over the entry.

Removing a Preset from the Favorites list

To remove a preset from the Favorites, follow the instructions below:

1. Click on the lit Set Favorite icon to remove the corresponding item from the Favorites.
2. The item is removed from the Favorites, indicated by the hidden Set Favorite icon. The next time you select the Favorites filter, the item will not be shown in the results list.

5.1.1 Using Favorites with MASCHINE STUDIO

You can view and add Favorites directly using your controller. This lets you access your most frequently used items without touching the computer's mouse and keyboard.

Activating the Favorites filter from MASCHINE STUDIO

To activate the Favorites filter from your controller:

1. Press the BROWSE button.
2. Press the button 7 to activate the Favorites filter.
3. To filter the list of Favorites, use knobs 5 to 8.

→ The Favorites filter is now activated and the results list shows all Favorites that match the search criteria:
Adding an Item to the Favorites using MASCHINE STUDIO

To add an item to the Favorites using follow the instructions below:

1. Press the BROWSE button.
2. Press button 1 or 2 to select the type of item you want to set as a Favorite.
3. Turn the Control encoder to select the item you want to set as a Favorite.
4. Press SHIFT + Control encoder or SHIFT + button 7 to set the selected item as a Favorite.

→ The item is added to the Favorites, indicated by the Favorite icon next to its name:

Removing an Item from the Favorites using MASCHINE STUDIO

To remove an item from the Favorites use the following instructions:

1. Press the BROWSE button.
2. Turn the Control encoder to select the item you want to remove from the Favorites list.
3. Press SHIFT + Control encoder or SHIFT + button 7 to remove the selected item from the Favorites list.
The item is removed from the Favorites list.

5.1.2 Using Favorites with MASCHINE Controllers

You can view and add Favorites directly using MASCHINE MK1 and MK2 controllers. This lets you access your most frequently used items without touching the computer's mouse and keyboard.

Activating the Favorites filter from MASCHINE Controllers

To activate the Favorites filter from your controller:

1. Press the BROWSE button.
2. Press the button 7 to activate the Favorites filter.
3. To filter the list of Favorites, turn knobs 5 to 8.
   ► The Favorites filter is now activated and the results list shows all Favorites that match the selected search criteria.

Adding an Item to the Favorites using MASCHINE Controllers

To add a preset to the Favorites follow the instructions below:

1. Press the BROWSE button.
2. Select the item you want to set as a Favorite by turning the Control encoder.
3. Press SHIFT +Control encoder or button 5 to set the selected item as a Favorite.
Removing an Item from the Favorites using MASCHINE Controllers

To remove an item from the Favorites list follow the instructions below:

1. Press the BROWSE button.
2. Select the item you want to remove from the Favorites list by turning the Control encoder.
3. Press SHIFT + Control encoder or button 5 to remove the selected item from the Favorites list.

The item is removed from the Favorites list.

5.1.3 Using Favorites with MASCHINE MIKRO Controllers

You can view and add Favorites directly using MASCHINE MIKRO MK1 and MK2 controllers. This lets you access your most frequently used items without touching the computer’s mouse and keyboard.

Activating the Favorites filter from MASCHINE MIKRO Controllers

To activate the Favorites filter from your controller:

1. Press the BROWSE button.
2. Press F1 to select FILTER.
3. Press the Left/Right Arrow button under the display to select page FAVORITES.
4. Turn the encoder to turn Favorites **ON**.

![Filter List User]

5. Press **F2** to select **LIST**.

![Filter List New Project]

► The Favorites filter is now activated and the results list shows all Favorites that match the selected search criteria.

**Adding an Item to the Favorites using MASCHINE MIKRO Controllers**

To add an item to the Favorites using follow the instructions below:

1. Press the **BROWSE** button.
2. Press **F1** to select **FILTER**.
3. Press the Left/Right Arrow buttons under the display to select **FILETYPE**.
4. Using the encoder, select the file type containing the item you want to set as a Favorite.
5. Press **F2** to select **LIST**.
6. Using the encoder, scroll through the list and find the item you want to set as a Favorite.
7. Press **SHIFT** + Control encoder to set the selected preset as a Favorite.

8. Press **F1** to select **FILTER**.
9. Press the Left/Right Arrow button under the display to select page **FAVORITES**.
10. Turn the encoder to turn Favorites **ON**.

► The Favorites filter is now activated and the results list shows all Favorites that match the selected search criteria.

**Removing an Item from the Favorites using MASCHINE MIKRO Controllers**

To remove a item from the Favorites list follow the instructions below:

1. Press the **BROWSE** button.
2. Press **F2** to select **LIST**.
3. Using the encoder, scroll through the list and find the item you want to remove from the Favorites list.
4. Press **SHIFT** + Control encoder to remove the selected preset as a Favorite.

→ The item is removed from the Favorites list.

### 5.2 Preferences – Plug-ins Page

The Plug-ins page allows you to define the loading behavior of NI plug-ins in MASCHINE.

To display the Plug-ins page click the Plug-ins tab on the left of the Preferences panel.

The option to Always use latest version of NI Plug-ins selects whether or not your Library content is always loaded with the latest version of the associated plug-in. If this option is disabled, your Library content is loaded with the lowest required version of the associated plug-in found on the computer.
The Preferences panel — Plug-ins page

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
</table>
| Always use latest version of NI Plug-ins    | If this option in enabled (default), Library content is loaded with the latest version of the associated plug-in.  
|                                              | If this option is disabled, Library content is loaded with the lowest required version of the associated plug-in. |
This chapter describes the new features and changes to existing features introduced in MA-
SCHINE 2.3.

Here is a brief overview of the most important changes and additions:

- **New Drumsynths**: several new Drumsynth engines and one new module have been added:
  - A **Breaker** engine is available for the Snare.
  - A **High** engine is available for Tom.
  - A **Hybrid** engine is available for Hi-hat.
  - A **Crash** and **Ride** engine are available for the new Cymbal module.

  For detailed information about the new Drumsynths. See section ↑7.1, New Perform Features.

- **New and improved Effects**: the following improvements have been made to the effects:
  - **Cabinet Emulation**: The new "Cabinet Emulation" is a cabinet and microphone compo-
    nent that provides full control over all the (post-amp) stages of recording a guitar tone.
    Cabinet Emulation includes the four cabinet types, and the variable positioning of six
    different microphones. See section: ↑6.2.1, Cabinet Emulation.
  - **Reverb Room and Hall Mode**: Two new high-quality reverb modes: "Room" and "Hall"
    have been add along with the existing Plate reverb mode to form a new Reverb engine.
    The original Reverb engine containing reverb modes: General, Guitar, Bright, and
    Shatter has been renamed in the plug-in menu to Reverb (Legacy), and projects which
    use these reverb modes will still load and function as normal. See section: ↑6.2.3, Reverb Hall.
  - **Distortion Analog mode**: A new distortion mode named "Analog" has been added to the
    Distortion effect. The original distortion effect is still available as a mode and has
    been named "Mulholland". See section: ↑6.2.4, Analog Distortion.
  - **Limiter Transparent mode**: A new limiter mode named "Transparent" has been added to
    the Limiter effect. The original limiter effect is still available as a mode and has been
    named "Legacy". See section: ↑6.2.5, Limiter Transparent Mode.
• **KOMPLETE KONTROL S-SERIES integration features**: MASCHINE 2.3 introduces more integration functionality. This includes:
  - Touch Strip modes from Controller Editor are now directly available from the MASCHINE Preferences page, with the addition of a new "Tempo" mode.
  - A "Hold" feature is available for the Arpeggiator.

For detailed information about the new KOMPLETE KONTROL S-SERIES integration features. See section ↑6.3, KOMPLETE KONTROL S-SERIES integration features.

• **Minor changes in MASCHINE 2.3:**
  - **Improved file handling for Native Instruments plug-ins**: MASCHINE can now save in the native file format of all Native Instruments instrument plug-ins. See section ↑6.4.1, File Format for Native Instruments Plug-ins.
  - **Assignment area improvements**: For convenience, the improved right-click context menu in the Assignment area now provides Cut and Paste for setting external plug-ins parameters, and additionally Copy for setting up MASCHINE Macros. See section ↑6.4.2, Assignment Area.
  - **Browser plug-in focus**: It's now possible to change the selected Plug-in slot from within the Browser. See section ↑6.4.6, Library Browser.
  - **Quantizing Notes from the software**: The Pattern editor right-click context menu now includes Quantize and Quantize 50%. See section ↑6.4.4, Quantizing Events via the Pattern Editor Context Menu.
  - **MIDI Export**: The MIDI export feature has been refined to include Sounds which do not contain notes events in a Group Pattern as empty MIDI tracks. This provides consistency by always exporting 16 channels See section ↑6.4.5, MIDI Export.
  - **Library browser**: The Attributes sections (TYPES and MODES) in the Library Browser can now be collapsed to make more room for the results list, which is particularly useful on smaller display resolutions. See section ↑6.4.6, Library Browser.
  - **Sample Slicing**: When applying a sliced sample to a Sound in an otherwise empty Group, the root note of the Sounds in that Group is set to C-2, matching the key zones of the slices. See section ↑6.4.7, Sample Slicing.
MIDI Input modes: The revised MIDI input modes now allow you to set a Sound to receive no MIDI input, and define a default setting for MIDI input using the Preferences page. See section 6.4.8, MIDI Input Modes.

Triggering Scenes via MIDI: The MASCHINE hardware SCENE mode sends out MIDI which can be used to record a Scene performance to a host application. See section 6.4.9, Triggering Scenes via MIDI.

All these additions and improvements are described in detail in the following sections.

6.1 Drumsynth Features

In MASCHINE 2.3 the Drumsynths include several new features:

- A Breaker engine is available for the Snare.
- A High engine is available for Tom.
- A Hybrid engine is available for Hi-hat.
- A Crash engine is available for the new Cymbal module.
- A Ride engine is available for the new Cymbal module.

For general information on the Drumsynths, please refer to chapter 10 “Using the Drumsynths” in the MASCHINE 2.0 Manual. In particular, for more information on the various engines please see section 10.1.1 “ Engines: Many Different Drums per Drumsynth” in the MASCHINE 2.0 Manual.

6.1.1 Breaker Engine for the Snare Drumsynth

The Breaker snare is an acoustic high pitched snare drum that cuts through perfectly into mixes containing heavy bass. The adjustment of the wires spectrum provides a great range of snares. It also works very well with the Rasper Kick.
The Breaker engine selected on the Snare panel in the Plug-in Strip.

The Breaker engine selected for the Snare in the Control area (Main page depicted).

⚠️ The parameters described below are presented as they appear in the Control area (Arrange view). The same parameters are available in the Plug-in panel within the Plug-in Strip (Mix view) — for more information please refer to section 9.4 “The Plug-in Strip” in the MASCHINE 2.0 Manual.
### Main Page

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MAIN Section</strong></td>
<td></td>
</tr>
<tr>
<td>Engine</td>
<td>Selects the engine used in the Snare plug-in. For more information on the available engines, please refer to section 10.3 “The Snares” in the MASCHINE 2.0 Manual.</td>
</tr>
<tr>
<td>Tune</td>
<td>Adjusts the pitch of the drum played by the middle C, measured in MIDI note numbers and cents. Available values range from 61.00 (NOTE C#3) to 85.00 (NOTE C#5). The default value is 73.00 (NOTE C#4).</td>
</tr>
<tr>
<td>Decay</td>
<td>Adjusts the duration of the sound’s tail, measured as a percentage. Available values range from 0.0 to 100.0% (default: 50.0%).</td>
</tr>
<tr>
<td>Skin Tune</td>
<td>Adjusts the fine-tuning of the skin of the drum, measured as a percentage. Available values range from 0.0 to 100.0% (default: 50.0%).</td>
</tr>
<tr>
<td>Impact</td>
<td>Adjusts the amount of click or initial attack, measured as a percentage. Available values range from 0.0 to 100.0% (default: 75.0%).</td>
</tr>
</tbody>
</table>

### Advanced Page

For this engine the **Advanced** page does not contain any parameters.

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SPECTRA Section</strong></td>
<td></td>
</tr>
<tr>
<td>Mode</td>
<td>Selects from two different noise types that simulate the wires of the drum. Available modes are A (default) and B.</td>
</tr>
<tr>
<td>Tune</td>
<td>Provides an independent tuning of the snare noise. It relates to the tension of the snare wires on a real snare drum. Available values range from 0.0 to 100.0% (default: 50.0%).</td>
</tr>
<tr>
<td>Decay</td>
<td>Adjusts the length of the sound of the snare wires, independently from the main Decay parameter on the Main page. Available values range from 0.0% to 100.0% (default: 40.0%).</td>
</tr>
<tr>
<td>Amount</td>
<td>Adjusts the amount of snare wire sound applied to the drum, measured as a percentage. Available values range from 0.0 to 100.0% (default: 75.0%).</td>
</tr>
</tbody>
</table>
Modulation Page

Like with all other engines and Drumsynths, the Modulation page contains one parameter: Velocity.

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCALE Section</td>
<td></td>
</tr>
<tr>
<td>Velocity</td>
<td>Adjusts the velocity response of the drum. Available values range from -100.0% to 100.0% (default value). At zero (mid course), the drum is played at full velocity, no matter how hard you hit the keys (or pads). From that mid position, by turning the knob to the right you increase the positive velocity response and make the drum more sensitive to the velocity at which you hit the keys/pads. From the mid position, turning the knob to the left as the inverse effect: the harder you hit the key/pad, the softer the resulting drum sound will be.</td>
</tr>
</tbody>
</table>

6.1.2 High Engine for the Tom Drumsynth

The High Tom is an acoustic tom that complements the Floor Tom. With very few parameters it provides a wide range of tom rolls and fills.
The High engine selected on the Tom panel in the Plug-in Strip.

The High engine selected for the Tom in the Control area (Main page depicted).

⚠️ The parameters described below are presented as they appear in the Control area (Arrange view). The same parameters are available in the Plug-in panel within the Plug-in Strip (Mix view) — for more information please refer to section 9.4 “The Plug-in Strip” in the MASCHINE 2.0 Manual.
### Main Page

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MAIN Section</strong></td>
<td></td>
</tr>
<tr>
<td>Engine</td>
<td>Selects the engine used in the Tom plug-in. For more information on the available engines, please refer to section 10.5 “The Toms” in the MASCHINE 2.0 Manual.</td>
</tr>
<tr>
<td>Tune</td>
<td>Adjusts the pitch of the drum played by the middle C, measured in MIDI note numbers and cents. Available values range from 57.00 (NOTE A2) to 71.00 (NOTE B3). The default value is 57.00.</td>
</tr>
<tr>
<td>Decay</td>
<td>Adjusts the duration of the sound’s tail, measured as a percentage. Available values range from 0.0 to 100.0% (default: 50.0%).</td>
</tr>
<tr>
<td>Tension</td>
<td>Adjusts the tension of the drum skin, measured as a percentage, allowing for a longer and bigger pitch bend. Available values range from 0.0 to 100.0% (default).</td>
</tr>
<tr>
<td>Impact</td>
<td>Adjusts the amount of click or initial attack, measured as a percentage. Available values range from 0.0 to 100.0% (default: 80.0%).</td>
</tr>
</tbody>
</table>

### Advanced Page

For this engine the Advanced page does not contain any parameters.

### Modulation Page

Like with all other engines and Drumsynths, the Modulation page contains one parameter: **Velocity**.

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SCALE Section</strong></td>
<td></td>
</tr>
<tr>
<td>Velocity</td>
<td>Adjusts the velocity response of the drum. Available values range from -100.0% to 100.0% (default value). At zero (mid course), the drum is played at full velocity, no matter how hard you hit the keys (or pads). From that mid position, by turning the knob to the right you increase the positive velocity response and make the drum more sensitive to the velocity at which you hit the keys/pads. From the mid position, turning the knob to the left as the inverse effect: the harder you hit the key/pad, the softer the resulting drum sound will be.</td>
</tr>
</tbody>
</table>
6.1.3 Hybrid Engine for the Hi-hat Drumsynth

The Hybrid hi-hat is an acoustic emulation with a distinctive sound, crossing over from acoustic to electronic timbres. It provides authentic acoustic features such as sizzling available through the Rattle parameter, and special electronic characteristics provided by the Metallic parameter. By automating these parameters you can create great sounding hi-hat figures.

The Hybrid engine selected on the Hi-hat panel in the Plug-in Strip.
The Hybrid engine selected for the Hi-hat in the Control area (Main page depicted).

The parameters described below are presented as they appear in the Control area (Arrange view). The same parameters are available in the Plug-in panel within the Plug-in Strip (Mix view) — for more information please refer to section 9.4 “The Plug-in Strip” in the MASCHINE 2.0 Manual.

### Main Page

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MAIN Section</strong></td>
<td></td>
</tr>
<tr>
<td>Engine</td>
<td>Selects the engine used in the Hybrid plug-in. For more information on the available engines, please refer to section 10.4 “The Hi-hats” in the MASCHINE 2.0 Manual.</td>
</tr>
<tr>
<td>Tune</td>
<td>Adjusts the pitch of the cymbal played by the middle C, measured as a percentage. Available values range from 0.0% to 100.0% (default: 50.0%).</td>
</tr>
<tr>
<td>Decay</td>
<td>Adjusts the duration of the sound’s tail, measured as a percentage. Available values range from 0.0 to 100.0% (default: 65.0%).</td>
</tr>
<tr>
<td><strong>TONE Section</strong></td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Adjusts the cutoff frequency of several low-pass filters in order to achieve the desired timbre. Available values range from 0.0 to 100% (default: 71.5%).</td>
</tr>
<tr>
<td>Metallic</td>
<td>Adjusts an enharmonic metallic character, measured as a percentage. Available values range from 0.0 to 100.0% (default: 0.0%).</td>
</tr>
<tr>
<td>Strike</td>
<td>Adjusts the amount of click or initial attack, measured as a percentage. Available values range from 0.0 to 100.0% (default: 80.0%).</td>
</tr>
<tr>
<td>Character</td>
<td>Adjusts a wider range of timbers from noisy to metallic, measured as a percentage. Available values range from 0.0 to 100.0% (default: 25.0%).</td>
</tr>
</tbody>
</table>
### Advanced Page

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HYBRID Section</td>
<td></td>
</tr>
<tr>
<td>Bend</td>
<td>Adjusts the amount of a pitch envelope for sound design purposes. It is a bipolar control ranging from -100.0 to 100.0% (default: 0.0%)</td>
</tr>
<tr>
<td>Rattle</td>
<td>Adjusts the amount of sizzling from the hi-hat. It is more noticeable with long decays. Available values range from 0.0 to 100.0% (default: 50.0%).</td>
</tr>
</tbody>
</table>

### Modulation Page

Like with all other engines and Drumsynths, the Modulation page contains one parameter: Velocity.

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCALE Section</td>
<td></td>
</tr>
<tr>
<td>Velocity</td>
<td>Adjusts the velocity response of the drum. Available values range from -100.0% to 100.0% (default value). At zero (mid course), the drum is played at full velocity, no matter how hard you hit the keys (or pads). From that mid position, by turning the knob to the right you increase the positive velocity response and make the drum more sensitive to the velocity at which you hit the keys/pads. From the mid position, turning the knob to the left as the inverse effect: the harder you hit the key/pad, the softer the resulting drum sound will be.</td>
</tr>
</tbody>
</table>

### 6.1.4 Crash Engine for the Cymbal Drumsynth

The Crash engine creates a wide range of cymbals: from a typical 909-like crash to more acoustic sounding timbres. Its parameters provide a great range of expression and spectral variation.
The Crash engine selected on the Cymbal panel in the Plug-in Strip.

The Crash engine selected for the Cymbal in the Control area (Main page depicted).
The parameters described below are presented as they appear in the Control area (Arrange view). The same parameters are available in the Plug-in panel within the Plug-in Strip (Mix view) — for more information please refer to section 9.4 “The Plug-in Strip” in the MASCHINE 2.0 Manual.

**Main Page**

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MAIN Section</strong></td>
<td></td>
</tr>
<tr>
<td>Engine</td>
<td>Selects the engine used in the Cymbal plug-in. Available engines include Crash and Ride.</td>
</tr>
<tr>
<td>Tune</td>
<td>Adjusts the pitch of the drum played by the middle C, measured in MIDI note numbers and cents. Available values range from 0.00 to 100.0% (default value is 30.0%).</td>
</tr>
<tr>
<td>Decay</td>
<td>Adjusts the duration of the sound’s tail, measured as a percentage. Available values range from 0.0 to 100.0% (default: 70.0%).</td>
</tr>
<tr>
<td>Impact</td>
<td>Adjusts the amount of click or initial attack, measured as a percentage. Available values range from 0.0 to 100.0% (default: 70.0%).</td>
</tr>
<tr>
<td>Width</td>
<td>Adjusts the perceived stereo image, measured as a percentage. At zero the sound is mono, at 100.0% the sound is a wide stereo image, replicating the effect of recording with overhead stereo microphones. Available values range from 0.0 to 100.0% (default: 50.0%).</td>
</tr>
<tr>
<td><strong>COLOR Section</strong></td>
<td></td>
</tr>
<tr>
<td>Density</td>
<td>Adjusts the more complexity to the sound, measured as a percentage. Available values range from 0.0 to 100.0% (default: 100.0%)</td>
</tr>
<tr>
<td>Tone</td>
<td>Adjusts the balance of the spectral content, measured as a percentage. Available values range from 0.0 to 100.0% (default: 50.0%).</td>
</tr>
<tr>
<td>Mode</td>
<td>Selects from three different modes Metallic, Normal, or Soft (default: Metallic).</td>
</tr>
</tbody>
</table>

**Advanced Page**

For this engine the Advanced page does not contain any parameters.
Modulation Page

Like with all other engines and Drumsynths, the Modulation page contains one parameter: Velocity.

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCALE Section</td>
<td></td>
</tr>
<tr>
<td>Velocity</td>
<td>Adjusts the velocity response of the drum. Available values range from -100.0% to 100.0% (default value). At zero (mid course), the drum is played at full velocity, no matter how hard you hit the keys (or pads). From that mid position, by turning the knob to the right you increase the positive velocity response and make the drum more sensitive to the velocity at which you hit the keys/pads. From the mid position, turning the knob to the left as the inverse effect: the harder you hit the key/pad, the softer the resulting drum sound will be.</td>
</tr>
</tbody>
</table>

6.1.5 Ride Engine for the Cymbal Drumsynth

The Ride engine is an acoustic emulation that allows the cymbal to be hit in many different ways through the use of the Edge and Bell parameters. The sonic palette ranges from soft Jazz-like rides to more noisy cymbals.
The Ride engine selected on the Cymbal panel in the Plug-in Strip.

The Ride engine selected for the Cymbal in the Control area (Main page depicted).
The parameters described below are presented as they appear in the Control area (Arrange view). The same parameters are available in the Plug-in panel within the Plug-in Strip (Mix view) — for more information please refer to section 9.4 “The Plug-in Strip” in the MASCHINE 2.0 Manual.

## Main Page

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MAIN Section</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Engine</strong></td>
<td>Selects the engine used in the Cymbal plug-in. Available engines include Crash and Ride.</td>
</tr>
<tr>
<td><strong>Tune</strong></td>
<td>Adjusts the pitch of the drum played by the middle C, measured in MIDI note numbers and cents. Available values range from 0.00 to 1.00. The default value is 0.30.</td>
</tr>
<tr>
<td><strong>Decay</strong></td>
<td>Adjusts the duration of the sound’s tail, measured as a percentage. Available values range from 0.0 to 100.0% (default: 70.0%).</td>
</tr>
<tr>
<td><strong>Impact</strong></td>
<td>Adjusts the amount of click or initial attack, measured as a percentage. Available values range from 0.0 to 100.0% (default: 70.0%).</td>
</tr>
<tr>
<td><strong>Width</strong></td>
<td>Adjusts the perceived stereo image, measured as a percentage. At zero the sound is mono, at 100.0% the sound is a wide stereo image, replicating the effect of recording with overhead stereo microphones. Available values range from 0.0 to 100.0% (default: 50.0%).</td>
</tr>
<tr>
<td><strong>STRIKE Section</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Edge</strong></td>
<td>Adjusts the point where the cymbal is hit, measured as a percentage. Hitting the edge of the cymbal (100%) creates a more chaotic sound, hitting it near the center (0.0%) creates a more high-pitched sound. Available values range from 0.0 to 100.0% (default: 50.0%).</td>
</tr>
<tr>
<td><strong>Bell</strong></td>
<td>Adjusts the high-frequencies on a narrow band, measured as a percentage. (default: 0.0%)</td>
</tr>
</tbody>
</table>
Advanced Page

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HYBRID Section</td>
<td>Adjusts a wider range of timbers between more noisy to more metallic ones, measured as a percentage. Available values range from 0.0 to 100.0% (default: 20.0%).</td>
</tr>
<tr>
<td>Character</td>
<td></td>
</tr>
<tr>
<td>Tail</td>
<td>Adjusts the length of the sound tail through an envelope. Available values range from 0.0 to 100.0% (default: 100.0%).</td>
</tr>
</tbody>
</table>

Modulation Page

Like with all other engines and Drumsynths, the Modulation page contains one parameter: Velocity.

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCALE Section</td>
<td></td>
</tr>
<tr>
<td>Velocity</td>
<td>Adjusts the velocity response of the drum. Available values range from -100.0% to 100.0% (default value). At zero (mid course), the drum is played at full velocity, no matter how hard you hit the keys (or pads). From that mid position, by turning the knob to the right you increase the positive velocity response and make the drum more sensitive to the velocity at which you hit the keys/pads. From the mid position, turning the knob to the left as the inverse effect: the harder you hit the key/pad, the softer the resulting drum sound will be.</td>
</tr>
</tbody>
</table>

6.2 New Effects

6.2.1 Cabinet Emulation

The Cabinet Emulation is a cabinet and microphone component that proves full control over all the (post-amp) stages of recording a guitar tone. Cabinet Emulation includes the four cabinet types, and the variable positioning of six different microphones.
The Cabinet Emulation effect in the Plug-in Strip.

The Cabinet Emulation in the Control area (Main page depicted).

## Main Page

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CABINET Section</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Cabinet</strong></td>
<td>Selects from four different cabinet types, which includes:</td>
</tr>
<tr>
<td></td>
<td>• American Cabinet</td>
</tr>
<tr>
<td></td>
<td>• British Cabinet</td>
</tr>
<tr>
<td></td>
<td>• Vintage Cabinet</td>
</tr>
<tr>
<td></td>
<td>• Modern Cabinet</td>
</tr>
<tr>
<td><strong>MICROPHONE Section</strong></td>
<td></td>
</tr>
<tr>
<td>Element</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Microphone</td>
<td>Selects from six different microphone types, which includes:</td>
</tr>
<tr>
<td></td>
<td>• Dynamic 57</td>
</tr>
<tr>
<td></td>
<td>• Dynamic 421</td>
</tr>
<tr>
<td></td>
<td>• Dynamic 441</td>
</tr>
<tr>
<td></td>
<td>• Ribbon 121</td>
</tr>
<tr>
<td></td>
<td>• Condenser 47</td>
</tr>
<tr>
<td></td>
<td>• Condenser 67</td>
</tr>
<tr>
<td>Distance</td>
<td>Adjusts the distance of the microphone from the cabinet. Available values range from 0.0 to 100.0% (default: 0.0%).</td>
</tr>
</tbody>
</table>

**OUTPUT Section**

| Mix         | Adjusts the ratio between the effect (wet) signal and original (dry) signals. Available values range from 0.0 to 100.0% (default: 100.0%). |

### 6.2.2 Reverb Room

The Room mode is suited to drum and percussive sounds, and particularly sounds good when used on snares. Modulate the **Room Size**, and **Pre Delay** parameters to create special effects.

![The Reverb effect in the Plug-in Strip.](image-url)
### Main Page

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ROOM Section</strong></td>
<td></td>
</tr>
<tr>
<td>Mode</td>
<td>Allows you to choose one of three basic modes of Reverb: Room, Hall, and Plate (default: Room).</td>
</tr>
<tr>
<td>Reverb Time</td>
<td>Adjusts the reverb decay time. Turn clockwise to increase decay. Available values range can be adjusted in seconds from 0.5s to 20.2s (default: 1.0s).</td>
</tr>
<tr>
<td>Reverb Size</td>
<td>Adjust the size of the simulated room. Turn clockwise to increase the perceived size of the room and reverb reflections. Available values range from 0.0 to 100.0% (default: 20.0%).</td>
</tr>
<tr>
<td><strong>COLOR Section</strong></td>
<td></td>
</tr>
<tr>
<td>Damping</td>
<td>Adjusts damping of the high frequencies in the reverb signal. Damping refers to the rate at which the high frequencies decay. This effect causes the sound to become gradually muffled and warmer. Available values range from 0.0 to 100.0% (default: 50.0%).</td>
</tr>
<tr>
<td>Modulation</td>
<td>Sets the modulation amount. A value of 0 turns the delay modulation off. Available values range from 0.0 to 100.0% (default: 50.0%).</td>
</tr>
<tr>
<td>Diffusion</td>
<td>Controls the density of the reflections in the virtual room. A low diffusion setting makes the reflections sound more distinct, like closely spaced echoes. A high diffusion setting creates reflections so close they sound more like noise, in which echoes are indistinguishable. Available values range from 0.0 to 100.0% (default: 80.0%).</td>
</tr>
<tr>
<td>Pre Delays</td>
<td>Adjusts the initial delay between the original signal and the first reverberant sound. At higher values this can also be used in many creative ways. Available values can be adjusted in milliseconds from 0.0ms to 250.0ms (default: 0.0ms).</td>
</tr>
<tr>
<td>Element</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>OUTPUT Section</td>
<td></td>
</tr>
<tr>
<td>Mix</td>
<td>Adjusts the ratio between the effect (wet) signal and original (dry) signals. Available values range from 0.0 to 100.0% (default: 50.0%).</td>
</tr>
</tbody>
</table>

**EQ page**

The EQ page contains parameters to adjust the EQ of the reverb.

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EQ Section</td>
<td></td>
</tr>
<tr>
<td>High Cut</td>
<td>Adjusts the high frequencies in the reverberated signal. Available values range in kilohertz from 20.0 kHz to 2.0 kHz (default: 20.0 kHz).</td>
</tr>
<tr>
<td>Low Shelf</td>
<td>Adjusts the low-frequency content in the reverberated signal. Available values range in decibels from -0.0 dB to -12.0 dB (default: -0.0 dB).</td>
</tr>
</tbody>
</table>

**6.2.3 Reverb Hall**

The Reverb Hall mode is a spacious and natural reverb that is particularly suited to tonal sounds. When used with a high Reverb Time setting it provides a very lush reverb making it also suitable for ambient or experimental music. Modulate the Room Size, and Pre Delay parameters to create special effects.

The Reverb effect in the Plug-in Strip.
The Reverb in the Control area (Main page depicted).

### Main Page

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ROOM Section</strong></td>
<td></td>
</tr>
<tr>
<td>Mode</td>
<td>Allows you to choose one of three basic modes of Reverb: Room, Hall, and Plate (default: Room).</td>
</tr>
<tr>
<td>Reverb Time</td>
<td>Adjusts the reverb decay time. Turn clockwise to increase decay. Available values range can be adjusted in seconds from 0.5s to 20.2s (default: 2.2s).</td>
</tr>
<tr>
<td>Reverb Size</td>
<td>Adjust the size of the simulated room. Turn clockwise to increase the perceived size of the room and reverb reflections. Available values range from 0.0 to 100.0% (default: 10.0%).</td>
</tr>
<tr>
<td><strong>COLOR Section</strong></td>
<td></td>
</tr>
<tr>
<td>Damping</td>
<td>Adjusts damping of the high frequencies in the reverb signal. Damping refers to the rate at which the high frequencies decay. This effect causes the sound to become gradually muffled and warmer. Available values range from 0.0 to 100.0% (default: 50.0%).</td>
</tr>
<tr>
<td>Modulation</td>
<td>Sets the modulation amount. A value of 0 turns the delay modulation off. Available values range from 0.0 to 100.0% (default: 40.0%).</td>
</tr>
<tr>
<td>Softness</td>
<td>Alters the balance between early reflections and the late reverb tail. It also changes the amount of diffusion present. It allows you to soften the attack of the reverb and push it more into the background, so it doesn't muddy the dry sound so much. Available values range from 0.0 to 100.0% (default: 90.0%).</td>
</tr>
<tr>
<td>Pre Delays</td>
<td>Adjusts the initial delay between the original signal and the first reverberant sound. At higher values this can also be used in many creative ways. Available values can be adjusted in milliseconds from 0.0ms to 250.0ms (default: 0.0ms).</td>
</tr>
</tbody>
</table>
### OUTPUT Section

**Mix**  
Adjusts the ratio between the effect (wet) signal and original (dry) signals. Available values range from 0.0 to 100.0% (default: 50.0%).

### EQ page

The **EQ** page contains parameters to adjust the EQ of the reverb.

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EQ Section</strong></td>
<td></td>
</tr>
<tr>
<td><strong>High Cut</strong></td>
<td>Adjusts the high frequencies in the reverberated signal. Available values range in kilohertz from 20.0 kHz to 2.0 kHz (default: 20.0 kHz).</td>
</tr>
<tr>
<td><strong>Low Shelf</strong></td>
<td>Adjusts the low-frequency content in the reverberated signal. Available values range in decibels from -0.0 dB to -12.0 dB (default: -0.0 dB).</td>
</tr>
</tbody>
</table>

### 6.2.4 Analog Distortion

The Analog Distortion be used to add grit to Drums and Percussion, Lead Synths and Guitars.

The Analog Distortion panel in the Plug-in Strip.
The Analog Distortion in the Control area (Main page depicted).

### Main Page

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MODE Section</strong></td>
<td></td>
</tr>
<tr>
<td>Mode</td>
<td>Select between two distortion modes: Analog and Mulholland (default: Mulholland).</td>
</tr>
<tr>
<td><strong>DISTORTION Section</strong></td>
<td></td>
</tr>
<tr>
<td>Saturation</td>
<td>Sets the amount of saturation applied to the signal. Available values range from 0.0 to 100.0% (default: 25.0%).</td>
</tr>
<tr>
<td>Bass</td>
<td>Attenuates the low frequencies of the distortion effect. Available values range from 0.0 to 100.0% (default: 100.0%).</td>
</tr>
<tr>
<td>Tone</td>
<td>Sets the frequency for the high cut filter. Filtering the harmonically rich distorted signal produces a softer tone. Available values range from 0.0 to 100.0% (default: 100.0%).</td>
</tr>
<tr>
<td>Focus</td>
<td>Switches the frequency range of the processed signal, pulling it slightly further forwards in the mix. The effect is more pronounced when Definition is set to lower values.</td>
</tr>
<tr>
<td>Definition</td>
<td>Determines how pronounced the distortion effect is. Available values range from 0.0 to 100.0% (default: 50.0%).</td>
</tr>
<tr>
<td><strong>OUTPUT Section</strong></td>
<td></td>
</tr>
<tr>
<td>Mix</td>
<td>Mix lets you adjust the amount of the effect in relation to the dry original audio signal. Available values range from 0.0 to 100.0% (default: 100.0%).</td>
</tr>
</tbody>
</table>
6.2.5  **Limiter Transparent Mode**

The Limiter does two things: firstly it ensures that the signal level stays below 0 dB, thus preventing digital clipping. But it can also increase the overall perceived volume by reducing the threshold. It is recommended to place the Limiter in a Master Plug-in slot.

If this effect is used in a Sound or a Group, it also provides a Side-Chain Input page (in the Control area and on your controller).

![The Limiter panel in the Plug-in Strip.](image)

![The Transparent mode selected in the Limiter in the Control area (Main page depicted).](image)

### Main Page

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MODE Section</strong></td>
<td></td>
</tr>
<tr>
<td>Mode</td>
<td>Selects from two different compressor types. The available modes are <strong>Legacy</strong> and <strong>Transparent</strong>.</td>
</tr>
</tbody>
</table>
### DEPTH Section

**Threshold**
This value determines the threshold where the Limiter kicks in. If you use it to prevent your signal from clipping, leave it at 0 dB; if you want to make your signal louder, dial the Knob to the left. Available values range in decibels from -40.0 dB to 0.0 dB (default: 0.0 dB).

**Release**
The time the limiter will take to stop limiting after the input signal falls below the threshold. With longer release times it takes more time to get back to normal. Available values can be adjusted in milliseconds from 1.0ms to 500.0ms (default: 1.0ms).

### OUTPUT Section

**Ceiling**
Adjusts the maximum output level, or ceiling. The signal will not rise above this. Available values range in decibels from -40.0 dB to -0.3 dB (default: -0.3 dB).

### Side-Chain Input
Like with all other engines and Drumsynths, the Modulation page contains one parameter: Velocity.

### SCALE Section

**Source**
Selects the audio signal you want to use as side-chain signal to control the Plug-in. Available options are None (side-chain disabled, default setting), the outputs of all (other) Sounds, and the outputs of all (other) Groups.

In the menu these outputs are labeled as follows:

- For Groups: [Group name] (e.g., Drums)
- For Sounds: [Group name]: [Sound name] (e.g., Drums: Kick)
- In the selector display these outputs are labeled as follows:
  - For Groups: [Group name] (e.g., Drums)
  - For Sounds: [Group letter+number]:S[Sound number] (e.g., A1:S4 for the Sound 4 of Group A1)
### Element Description

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gain</td>
<td>Adjusts the input level of the side-chain signal fed into the Plug-in. Available values range from 0.00 dB to 1.00 (default: 1.00).</td>
</tr>
</tbody>
</table>

**FILTER SECTION**

<table>
<thead>
<tr>
<th>Filter</th>
<th>Activates a filter on the side-chain input. This filter can be useful to select only a specific frequency range of the side-chain signal to control the Plug-in. Available values range from off to on (default: off).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center Freq</td>
<td>Adjusts the center frequency of the filter. Available values range in kilohertz from 20.0 Hz to 20.0 kHz (default: 632.5 kHz).</td>
</tr>
<tr>
<td>Width</td>
<td>Adjusts the bandwidth of the filter. Available values range from 0.0 to 100.0% (default: 50.0%).</td>
</tr>
</tbody>
</table>

## 6.3 KOMPLETE KONTROL S-SERIES integration features

The Native Instruments KOMPLETE KONTROL S-SERIES keyboards provide a tight integration with the MASCHINE workflows, making them ideal add-on controllers for the melodic parts of your MASCHINE Projects. MASCHINE 2.3 introduces improved integration functionality, as follows:
6.3.1 Modulation Strip

The right touch strip on your KOMPLETE KONTROL S-SERIES keyboard is a highly versatile modulation control. It has five distinct modes that can be set with the Mode menu found on the Hardware page of the Preferences panel in the MASCHINE software:
• **Standard**: This is the default mode for the modulation strip on your KOMPLETE KONTROL S-SERIES keyboard and corresponds to the usual behavior for a modulation control. In this mode the touch strip reads the position of your finger and applies the value to the assigned instrument parameter. Wherever you put your finger on the strip, the value instantly jumps to the corresponding position and remains there. In Standard mode, the following additional settings are available for the modulation strip:
  
  ◦ **Display menu**: Lets you select one of two ways to display the current state of the modulation strip: Bar or Dot. Bar displays a bar of lit LEDs from the default position of the strip to the current value; whereas Dot displays a dot of lit LEDs at the current value.

• **Spring**: This mode simulates a simple spring that can be deflected both up and down from its default position, which is the middle of the pitch strip. The current position of the spring (the parameter value) is indicated by a blue LED. If you put your finger on the strip, the value instantly jumps to the corresponding position and stays there as long as you keep your finger on the strip. When you remove your finger, the value moves back to the default position. In Spring mode, the following additional settings are available for the modulation strip:
  
  ◦ **Display menu**: Lets you select one of two ways to display the current state of the modulation strip: Bar or Dot. Bar displays a bar of lit LEDs from the default position of the strip to the current value; whereas Dot displays a dot of lit LEDs at the current value.

  ◦ **Strength slider**: Adjusts the rate at which the spring rebounds to its default position. The higher the Strength setting, the quicker the value will spring back.

• **Ball**: This mode simulates a ball that is attracted by the gravity of your finger pressing on the surface of the touch strip. The current position of the ball (the parameter value) is indicated by a blue LED. If you put your finger on the strip, the ball will move towards your finger and stop as it reaches the finger's position. If you remove your finger before, the ball sustains its momentum and continues to move along the modulation strip until the friction of the surface causes it to slow down and stop. Alternatively, you can “throw” the ball by putting your finger on the ball's current position, dragging it in any direction, and removing your finger. The faster you drag your finger, the faster the ball will get. In Ball mode, the following additional settings are available for the modulation strip:
  
  ◦ **Display menu**: Lets you select one of two ways to display the current state of the modulation strip: Bar or Dot. Bar displays a bar of lit LEDs from the default position of the strip to the current value; whereas Dot displays a dot of lit LEDs at the current value.
- **Friction** slider: Adjusts the friction of the surface that slows down the ball once you have removed your finger. The higher the Friction value, the quicker the ball will decelerate and stop. When fully left, the ball never stops. When fully right, the ball stops instantly.

- **Gravity** slider: Adjusts the attraction of your finger on the ball: The higher the Gravity value, the faster the ball will move. This parameter doesn't affect the ball movement if you throw the ball with your finger (see above).

- **Walls** button: Sets the behavior of the ball when it reaches the range limits. If Walls is set to on, the ball bounces off the range limit and continues its trip in the opposite direction. If Walls is set to off, the ball jumps to the opposite range limit and continues from there in the same direction.

- **Tempo**: Just like Ball mode, Tempo mode simulates a ball that is attracted by the gravity of your finger. The current position of the ball (the parameter value) is indicated by a blue LED. You can play it in the same way as Ball mode (see above), however in this case the ball adopts its movement to a steady beat instead of slowing down and stopping. This enables you to create tempo-synced modulations with the modulation strip. When using KOMPLETE KONTROL with MASCHINE, the tempo is defined by the MASCHINE software. When using the KOMPLETE KONTROL stand-alone application, you can set the tempo in the header of the software interface. In Ball mode, the following additional settings are available for the modulation strip:
  - **Display** menu: Lets you select one of two ways to display the current state of the modulation strip: Bar or Dot. Bar displays a bar of lit LEDs from the default position of the strip to the current value; whereas Dot displays a dot of lit LEDs at the current value.
  - **Rate** menu: Lets you select one of 13 time signatures to set the beat of the ball's movement relative to the tempo, from 1/8 to 4/1, including triplet and dotted time signatures.
  - **Friction** slider: Adjusts the rate at which the ball movement catches up with the tempo. The higher the Friction value, the quicker the ball will match the beat as set in the Rate menu. When fully right, the ball matches the given beat instantly.
  - **Gravity** slider: Adjusts the attraction of your finger on the ball: The higher the Gravity value, the faster the ball will move. This parameter doesn't affect the ball movement if you throw the ball with your finger (see above).
• **Walls** button: Sets the behavior of the ball when it reaches the range limits. If Walls is set to on, the ball bounces off the range limit and continues its trip in the opposite direction. If Walls is set to off, the ball jumps to the opposite range limit and continues from there in the same direction.

• **Stepped**: This mode divides the modulation strip into two to five sections, indicated by white LEDs. When being pressed with a finger, each section triggers one of two to five evenly spaced parameter values across the whole modulation range. The currently active section (parameter value) is indicated by three blue LEDs. In Stepped mode, the following additional settings are available for the modulation strip:
  
  • **Divisions** menu: Lets you select the number of sections the modulation strip is divided into.

### 6.3.2 Arp Hold mode.

The arpeggiator "Hold" function allows you to latch the notes played by the arpeggiator.

To use the Hold function from your hardware:

#### 6.3.2.1 MASCHINE STUDIO

1. Press **SHIFT + PAD MODE** to enter keyboard mode.
2. Press and hold **NOTE REPEAT** to access the arpeggiator.
3. Press Button 3 **HOLD** to use enable the arpeggiator latch function.
4. Press Button 2 **LOCK** if you want the arpeggiator to continue while you access other modes.

→ The arpeggiated notes are held. Press the Button 3 again to disable **HOLD**.

![Press SHIFT Button 3 to access FOLLOW.](image)

#### 6.3.2.2 MASCHINE MK1 / MK2

1. Press **SHIFT + PAD MODE** to enter keyboard mode.
2. Press and hold **NOTE REPEAT** to access the arpeggiator.
3. Press Button 3 **HOLD** to use enable the arpeggiator latch function.
4. Press Button 2 **LOCK** if you want the arpeggiator to continue while you access other modes.
The arpeggiated notes are held. Press the Button 3 again to disable HOLD.

6.3.2.3 MASCHINE MIKRO
1. Press SHIFT + PAD MODE to enter keyboard mode.
2. Press and hold NOTE REPEAT to access the arpeggiator.
3. Press the Right Arrow button under the display to select the HOLD parameter.
4. Turn the Control encoder to enable the arpeggiator latch function.
5. Press F3 LOCK if you want the arpeggiator to continue while you access other modes.
   The arpeggiated notes are held. Turn the Control encoder again to disable HOLD.

6.4 Miscellaneous changes

6.4.1 File Format for Native Instruments Plug-ins
MASCHINE 2.3 includes an improved file format for Native Instruments plug-in user presets. The file format allows you to save a preset in the format native to the plug-in and freely exchange files between the plug-in instrument in stand-alone mode, MASCHINE, and KOMPLETE KONTROL.

To use this feature you must ensure all installed Native Instruments plug-ins are up-to-date. Please check Service Center or log-in to your Native Instruments account to find the latest updates.

6.4.2 Assignment Area
The improved right-click context menu in the Assignment area now provides Cut and Paste for setting external plug-ins parameters, and additionally Copy for setting up MASCHINE Macros. The Assignment Area pages also both contain a Delete and Delete All entries in the context menu.
Macros

Macro Controls enable you to control in one location a selection of parameters from different sources. Available in every channel (Sounds, Groups, and Master), Macro Controls are very useful for use when playing live because you can choose a set of parameters from various sources to manipulate on one screen without having to switch screens.

![Macro properties context menu.](image)

When the Assignment area is opened and the Pages tab is selected, right-click on an assigned or unassigned Macro slot to access the context menu.

The context menu contains following items:

<table>
<thead>
<tr>
<th>Menu Item</th>
<th>Description</th>
<th>Keyboard Shortcuts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rename</td>
<td>Rename the Macro.</td>
<td>Ctrl + R / Cmd + R</td>
</tr>
<tr>
<td>Reset</td>
<td>Reset the Macro.</td>
<td></td>
</tr>
<tr>
<td>Cut</td>
<td>Cut the Macro to paste it in another position.</td>
<td>Ctrl + X / Cmd + X</td>
</tr>
<tr>
<td>Copy</td>
<td>Copy the Macro.</td>
<td>Ctrl + C / Cmd + C</td>
</tr>
<tr>
<td>Paste</td>
<td>Paste the a cut or copied Macro to a new position.</td>
<td>Ctrl + V / Cmd + V</td>
</tr>
</tbody>
</table>

**Assignment Area Plug-in Pages**

When the Assignment area is opened and the Pages tab is selected, right-click on an assigned and unassigned Parameter slot brings up a context menu.
The Plug-in Parameters context menu.

The context menu contains following items:

<table>
<thead>
<tr>
<th>Menu Item</th>
<th>Description</th>
<th>Keyboard Shortcuts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rename</td>
<td>Rename the Macro.</td>
<td>Ctrl + R / Cmd + R</td>
</tr>
<tr>
<td>Learn</td>
<td>Activates the Learn Mode.</td>
<td>Ctrl + X / Cmd + X</td>
</tr>
<tr>
<td>Reset</td>
<td>Reset the Macro.</td>
<td>Ctrl + C / Cmd + C</td>
</tr>
<tr>
<td>Cut</td>
<td>Cut the Macro to paste it in another position.</td>
<td>Ctrl + V / Cmd + V</td>
</tr>
<tr>
<td>Copy</td>
<td>Copy the Macro.</td>
<td></td>
</tr>
<tr>
<td>Paste</td>
<td>Paste the a cut or copied Macro to a new position. Paste is only available if an applicable Parameter is in the clipboard: Paste is only available on the same Plug-in, this Plug-in can be placed somewhere else.</td>
<td></td>
</tr>
</tbody>
</table>

**Assignment Area Pages (Parameter and Macros)**

When the Assignment Area is opened and the Pages tab is selected, right-click on a Page opens a context menu.
The context menu contains the following items:

<table>
<thead>
<tr>
<th>Menu Item</th>
<th>Description</th>
<th>Keyboard Shortcuts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delete</td>
<td>Deletes current Page with all assignments.</td>
<td></td>
</tr>
<tr>
<td>Clear All</td>
<td>Clears all the assignments, and deletes all of</td>
<td></td>
</tr>
<tr>
<td></td>
<td>the Pages.</td>
<td></td>
</tr>
</tbody>
</table>

### 6.4.3 Browser Plug-in Slot Selection

Select a plug-in slot directly from the Browser using the **SHIFT** button. The **SHIFT** button provides temporary access to the Plug-in mode allowing you to select a plug-in slot from the Plug-in List. This can be accomplished from the Browser when loading content into all three levels of the MASCHINE audio routing system: in Sounds, in Groups, and in the Master.

#### 6.4.3.1 Changing the Focus Plug-in Slot from the Browser on MASCHINE STUDIO

To change the focus of the plug-in slot from the Browser:

1. Press the **BROWSE** button.
2. Press **SHIFT**, then press button 5 or 6 to select to a plug-in slot.

→ The focus slot can be selected from the browser.

#### 6.4.3.2 Changing the Focus Plug-in Slot from the Browser on MASCHINE MK2

To change the focus of the plug-in slot from the Browser:

1. Press the **BROWSE** button.
2. Press **SHIFT**, then press button 7 or 8 to select a plug-in slot.
→ The focus slot can be selected from the browser.

### 6.4.3.3 Changing the Focus Plug-in Slot from the Browser on MASCHINE

To change the focus of the plug-in slot from the Browser:

1. Press the **BROWSE** button.
2. Press **SHIFT**, then press button 7 or 8 to select a plug-in slot.
→ The focus slot can be selected from the browser.

### 6.4.4 Quantizing Events via the Pattern Editor Context Menu

Quantize and Quantize 50% is available from the Pattern Editor context menu. This menu provides the same functionality as pressing Quantize and Quantize 50% on the MASCHINE hardware.

Quantize and Quantize 50% in the Pattern Editor context menu.

To apply full or half quantization using the MASCHINE software:

1. Select the events in the Pattern Editor you want to quantize. If nothing is selected, the whole Pattern will be quantized.
2. To apply full quantization to the selected events, right-click the mouse and select Quantize from the context menu.
3. To apply only a small amount of quantization to keep the groove you created after recording your pattern, right-click the mouse and select Quantize 50% from the context menu.
4. To undo/redo Quantize use hotkeys: Ctrl+Z/Ctrl+Y (Cmd+Z/Cmd+Y on Mac).

For more information on Quantization, and selecting events, refer to the MASCHINE Manual available from the Help menu in the MASCHINE software.

6.4.5 MIDI Export

Sounds which do not contain note events in a Group Pattern are exported as empty MIDI tracks. This way, if you are exporting multiple Patterns and some Sounds in the Group only have notes in some of these Patterns, you will get a consistent assignment of notes to MIDI tracks across all exported Patterns. Also, when you export a Pattern and then re-import it into MASCHINE, the notes will always be mapped to the correct Sounds.

6.4.6 Library Browser

The Attributes sections (TYPES and MODES) in the Browser Library can be collapsed to make more room for the results list on smaller display resolutions.

To collapse the Attributes sections:

► Click the small triangle located to the left of the Attributes (TYPES or MODES).

→ The Attribute sections will collapse results will be shown depending on the amount of space available. Click the triangle again to reopen the sections.
6.4.7 Sample Slicing

When applying a sliced sample to a Sound in an otherwise empty Group, the root note of the Sounds in that Group is set to C-2, matching the key zones of the slices.

The root note parameter is shared among all Sounds in a Group. However, when applying slices to a Sound, these slices will always start at the lowest possible note, to make room for the maximum number of slices. If you already have Sounds in a Group, the root note is not
changed after applying slices, in order to not change the behavior of the existing Sounds. This will, however, lead to a mismatch in how you accessed slices across Pads in the Sampling / Slice tab and how they are laid out in the Sound you applied them to. You will typically play a root note of C3 with Pad 1, while the lowest slice will start at C-2. To avoid this mismatch, and to access slices on a Sound exactly as you created them in the Sampling / Slice screen, apply slices to a Sound in a Group where you have not loaded anything to the other Sounds. This also works when you start by loading a Sample into a Sound in a Group where you have not yet loaded anything else.

6.4.8 MIDI Input Modes

MASCHINE lets you play your Sound(s) via MIDI notes, for example, from a MIDI keyboard. By default and without any configuration, incoming MIDI notes on any MIDI port and any MIDI channel will trigger the pitch of the focused Sound. In addition, you can select that a Sound receives no MIDI input, and also define the default setting for MIDI input by using the MASCHINE Preferences.

MIDI input may be configured in the following ways:

- **Default**: Sets the default setting as defined in the MASCHINE Preferences panel. The default setting can be set in the MIDI section of the General page. The default setting can be defined as **Focus** or **None**.
- **Focus**: MIDI input from any connected controller can be used to trigger the focused (selected) Sound slot.

- **None**: The Sound can not receive MIDI data.

- **All**: The Sound can receive data from all connected MIDI devices.

- **Device Name**: The Sound will only receive MIDI data from the connected device selected from the MIDI input settings menu, for example, this could be any MIDI device that sends pitch messages such as a Native Instruments KOMPLETE KONTROL S-Series keyboard.

### Configuring the Default MIDI Input Mode

To select the default MIDI input mode:

1. Open the **Preferences** panel: click *Preferences*... in the *Maschine* menu (Mac OS X) or *File* menu (Windows) of the Application Menu Bar, or in the *File* submenu of the *Maschine* menu.

2. Click the **General** tab on the left of the Preferences panel to select the General page.

3. In the **MIDI** section select your preferred MIDI Input Mode:
   - **Focus**: MIDI input from any connected controller can be used to trigger the focused (selected) Sound slot.  
   - **None**: The selected Sound can not receive MIDI data.
   - ![►](https://via.placeholder.com/15) When **Default** is selected as the MIDI input the setting, the MIDI input mode in the Preferences panel is used.
6.4.9 Triggering Scenes via MIDI

The MASCHINE hardware SCENE mode can be configured to send out MIDI (Notes/Program Changes) which can be used to trigger scenes. When MASCHINE runs as a Plug-in this MIDI data is sent to the host application. When MASCHINE runs as a stand-alone application this MIDI data is send out to all activated MIDI output devices.
MIDI Scene Change program change messages can be used to record a Scene performance to a host application, and all recorded Scene performances can be then be saved within your DAW and sent back to MASCHINE for playback and trigger Scenes in the recorded order.

To send MIDI Scene Change messages:

1. Click the cog wheel Icon in the Header of the MASCHINE software.
2. Select MIDI Scene Change.
3. Click Program Change.

MASCHINE will send Program Change messages when Scenes are triggered from the MASCHINE hardware SCENE page.
7 MASCHINE 2.2

This chapter describes the new features and changes to existing features introduced in MASCHINE 2.2.

Here is a brief overview of the most important changes and additions:

- **Perform features**: MASCHINE 2.2 introduces advanced chord, scale, and arpeggio capabilities when your pads are in Keyboard mode. These new features vastly expand the melodic possibilities when playing/recording live on your pads! See section ↑7.1, New Perform Features.

- **KOMPLETE KONTROL S-SERIES integration**: The new Native Instruments KOMPLETE KONTROL S-SERIES keyboards provide a tight integration with the MASCHINE workflows, making them ideal add-on controllers for the melodic parts of your MASCHINE Projects. See section ↑7.2, KOMPLETE KONTROL Integration.

- **Touch-sensitive knobs on the MASCHINE STUDIO controller**: Now Knobs 1–8 under the displays of your MASCHINE STUDIO controller are touch-sensitive: They not only respond when you turn them, but also when you simply put your fingers on them. This allows a whole range of handy and intuitive control features in many MASCHINE workflows! See section ↑7.2.8, Adjusting the Settings for Your Keyboard in the MASCHINE Preferences.

- **Minor changes in MASCHINE 2.2**:
  - MIDI Thru can be enabled for any Sound or Group, allowing a better integration of MASCHINE into host environments. See section ↑7.4.1, MIDI Thru for Sounds and Groups.
  - A Controller menu is added to the Hardware page of the Preferences panel to quickly adjust settings for the desired device. See section ↑7.4.2, Controller Menu in the Hardware Page of the Preferences Panel.
  - Tight integration of KOMPLETE 10 Instruments and Effects: The Control area in the software and the display(s) of your controller show the available sections within Parameter pages for the entire KOMPLETE 10 Factory Library. See section↑7.4.3, KOMPLETE 10 Integration: Section Names in Parameter Pages.
· MASCHINE Library improvements: KONTAKT Snapshots are included in the MASCHINE Library and appear as Instruments in the Library Browser. The Native Instruments “User Content” folder is included in the user paths. The Standard User Directory cannot be removed from the user paths. Library rescan can be cancelled. See section 7.4.4, MASCHINE Library Improvements.

All these additions and improvements are described in detail in the following sections.

7.1 New Perform Features

The new Perform features are one of the biggest additions to MASCHINE 2.2. Inspired by similar features available in KOMPLETE KONTROL and on the KOMPLETE KONTROL S-SERIES keyboards, these Perform features vastly expand the playing tools already available in previous MASCHINE versions.

The features described in this section supplement the playing tools already available in previous MASCHINE versions, in particular Note Repeat, the various pad modes, the Base Key, the Groove, etc. If you feel unsure about any of these topics, we recommend you to read chapter 5 “Playing on Your Controller” in the MASCHINE 2.0 Manual.

7.1.1 Overview of the Perform Features

The new Perform features include the following engines:

- The **Scale and Chords engine** allows you to assign the pads to notes within specific scales, and to play chords according to the selected scale by hitting single pads.

- The **Arp engine** allows you to create arpeggios based on the pads you press or the chord currently triggered.

Designed to enrich the melodic content of your Projects, these engines are available when your pads are in **Keyboard mode**. Furthermore, they are designed to be used live and, as such, they are available only from your hardware controller (like Note Repeat).

When your pads are in Group mode, you can use the Note Repeat engine, Choke groups, and Link groups as in previous MASCHINE versions.
The Control Signal Flow—Pads in Keyboard Mode

The following diagram illustrates MASCHINE 2.2’s signal flow between your hits on the pads in Keyboard mode and the resulting sounds:

The signal flow including the new Perform features (Scale, Chord, and Arp) when your pads are in Keyboard mode.

In this picture, blue cells represent modules sending “control” signals, i.e. triggering messages (e.g., the note messages sent by the pads as you press them), whereas red cells represent modules sending audio signals (e.g., the sounds produced by the Instrument loaded in the Sound slot as it receives the aforementioned note messages).

In this diagram you will notice the following:

- The Scale and Chord modules can feed the Arp module, the Scale module can also affect the Chord module, as we will see later.

- The notes played on your pads are first sent to the Perform features (Scale, Chord, and Arp engines), which send the resulting notes to the Pattern Editor. In other terms, you can record the generated scales, chords or arpeggiated notes into your Patterns. However, the Perform features do not process the content of your Patterns.
The Control Signal Flow—Pads in Group Mode

The following diagram illustrates MASCHINE 2.2’s signal flow between your hits on the pads in Group mode and the resulting sounds:

In this picture you will notice the following:

- Note Repeat takes the place of the Scale, Chord, and Arp modules between the live input on the pads and the Pattern Editor. In other terms, Note Repeat won’t process your Patterns but you can record its output into a Pattern.

- The Choke Group and Link Group modules affect both your hits on the pads and the content of your Patterns, but their result cannot be recorded into Patterns.
7.1.2 Selecting a Scale and Creating Chords

MASCHINE 2.2 comes equipped with a vast amount of scales and chords that you can select and use to play your Sounds. This opens up possibilities to play an instrument such as a piano according to, e.g., the minor pentatonic scale without hitting a “false” pad (note) on your controller, or to play chords that always fit by hitting single pads.

⚠️ The Scale and Chord engine is available only when your pads are in Keyboard mode.

On your controller, Pad Mode has been reworked to include parameters for the new Scale and Chord engine available in Keyboard mode:

- Choke group and Link group parameters are replaced with Scale and Chord parameters.
- The Base Key parameter turns into a Root Note parameter.

All changes introduced in Pad Mode relate to Keyboard mode, all other modes and settings (Group mode, 16 Velocities mode, Fixed Velocity option and Fix Velocity parameter, as well as Choke groups, Link groups, and Base Key in Group mode) are identical to those in previous MASCHINE versions. For more information on these, please refer to the MASCHINE 2.0 Manual.

⚠️ These changes affect the Pad Mode of your controller. In the Pad View of the software, the Key, Choke, and Link parameters are still visible and affect Sound slots as in previous MASCHINE versions, with one difference: Key (which controls the Base Key parameter) only affects the pad of the Sound slot when your pads are in Group mode, its effect will not be audible as long as your pads are in Keyboard mode (and the Pattern Editor in Keyboard view).

This section provides a hands-on introduction to the use of scales and chords from your controller. The corresponding parameters will be described in detail in section 7.1.3, Scale and Chord Parameters.

7.1.2.1 Selecting a Scale and Playing Chords on MASCHINE STUDIO

Let’s choose a particular scale, say, minor pentatonic. On your controller, do the following:

1. Switch the focus to a Sound slot containing a polyphonic instrument, or load one into the desired Sound slot.
2. Hold the **PAD MODE** button to enter Pad Mode (or press **PAD MODE + Button 1** to pin it).

3. Press Button 2 (**KEYBOARD**) to enable Keyboard mode.

4. Check that the first page of parameters are selected (1/2 displayed at the bottom right of the left display), if it’s not the case press the dimmed left Page button to select it.

5. Turn Knob 1 (**Scale TYPE**) to select **Minor Pentatonic**.

   ![Scale Selection](image)

   → Hit a few pads: They trigger only notes from the selected scale. The right display shows the particular note played by each pad. Furthermore the root note (C3 by default) and its octaves are highlighted and the corresponding pads on your controller are fully lit.

Now let’s start the scale on D3 instead of C3:

- Press Button 8 (**SEMITONE+**) twice.

   → Hit a few pads: They trigger the notes from the minor pentatonic scale based on D. Furthermore all your pads were shifted two semitones up so that pad 1 still triggers the root note of the selected scale.

Now we want the pads to trigger chords instead of single notes. First we want chords based on the minor pentatonic scale currently selected:

1. Turn Knob 3 (**Chord MODE**) to select **Harmonizer**.
2. Turn Knob 4 (Chord TYPE) to select 1-3.

   ![Chord Display](image)

   → Hit a few pads: Each pad triggers a chord containing the pad’s original note (the “1” in 1-3) and the note two pads above (the “3” in 1-3). No matter which pads you hit, all chords use notes within the scale we have specified (the minor pentatonic scale based on D).

Finally, let’s try the other chord mode available:

1. Turn Knob 3 (Chord MODE) to select Chord Set.

   ![Chord Display](image)

   → In the left display the Scale TYPE parameter (Knob 1) disappears and the Chord TYPE parameter (Knob 4) offers other entries. The light from the pads on the top row of your controller go off and the pads are disabled. The other 12 pads trigger various chords indicated in the right display. You can switch to another set of 12 chords by turning Knob 4 (Chord TYPE). These chords are not bound to the minor pentatonic scale anymore, however they are still based on the selected root note (indicated in the top right of the left display).
7.1.2.2 Selecting a Scale and Playing Chords on MASCHINE and MASCHINE MK2

Let’s choose a particular scale, say, minor pentatonic. On your controller, do the following:

1. Switch the focus to a Sound slot containing a polyphonic instrument, or load one into the desired Sound slot.
2. Hold the PAD MODE button to enter Pad Mode (or press PAD MODE + Button 1 to pin it).
3. Press Button 2 (KEYBOARD) to enable Keyboard mode.
4. Check that the first page of parameters is selected (1/2 displayed at the bottom right of the left display), if it’s not the case press the dimmed left Page button to select it.
5. Turn Knob 1 (SCALE TYPE) to select MIN PENT.

→ Hit a few pads: They trigger only notes from the selected scale. The right display shows the particular note played by each pad. Furthermore the root note (C3 by default) and its octaves are highlighted and the corresponding pads on your controller are fully lit.

Now let’s start the scale on D3 instead of C3:

► Press Button 8 (SEMI+) twice.

→ Hit a few pads: They trigger the notes from the minor pentatonic scale based on D. Furthermore all your pads were shifted two semitones up so that pad 1 still triggers the root note of the selected scale.

Now we want the pads to trigger chords instead of single notes. First we want chords based on the minor pentatonic scale currently selected:

1. Turn Knob 3 (CHORD MODE) to select HARM.
2. Turn Knob 4 (CHORD TYPE) to select 1-3.
→ Hit a few pads: Each pad triggers a chord containing the pad’s original note (the “1” in 1-3) and the note two pads above (the “3” in 1-3). No matter which pads you hit, all chords use notes within the scale we have specified (the minor pentatonic scale based on D).

Finally, let’s try the other chord mode available:

1. Turn Knob 3 (CHORD MODE) to select CHD SET.

→ In the left display the SCALE TYPE parameter (Knob 1) disappears and the CHORD TYPE parameter (Knob 4) offers other entries. The light from the pads on the top row of your controller go off and the pads are disabled. The other 12 pads trigger various chords indicated in the right display. You can switch to another set of 12 chords by turning Knob 4 (CHORD TYPE). These chords are not bound to the minor pentatonic scale anymore, however they are still based on the selected root note (indicated in the top right of the left display).

### 7.1.2.3 Selecting a Scale and Playing Chords on MASCHINE MIKRO MK2

Let’s choose a particular scale, say, minor pentatonic. On your controller, do the following:

1. Switch the focus to a Sound slot containing a polyphonic instrument, or load one into the desired Sound slot.
2. Hold the PAD MODE button to enter Pad Mode (or pin it via the usual method).
3. Press F1 (KEYBD) to enable Keyboard mode.
4. If necessary, use the Left/Right Arrow buttons to display the 2/4: SCALE TYPE parameter.
5. Turn the Control encoder to select MIN PENT.
Hit a few pads: They trigger only notes from the selected scale. The pads corresponding to the root note (C3 by default) and its octaves are fully lit.

Now let’s start the scale on D3 instead of C3:

1. Press the Left Arrow button to select the **1/4: ROOT NOTE** parameter.
2. Turn the Control encoder to set the root note to D3.

Hit a few pads: They trigger the notes from the minor pentatonic scale based on D. Furthermore all your pads were shifted two semitones up so that pad 1 still triggers the root note of the selected scale.

Now we want the pads to trigger chords instead of single notes. First we want chords based on the minor pentatonic scale currently selected:

1. Press the Right Arrow button twice to select the **3/4: CHORD MODE** parameter.
2. Turn the Control encoder to select **HARM**.

3. Press the Right Arrow button to select the **4/5: CHORD TYPE** parameter.
4. Turn the Control encoder to select **1-3**.

Hit a few pads: Each pad triggers a chord containing the pad’s original note (the “1” in 1-3) and the note two pads above (the “3” in 1-3). No matter which pads you hit, all chords use notes within the scale we have specified (the minor pentatonic scale based on D).
Finally, let’s try the other chord mode available:

1. Press the Left Arrow button to select the 3/5: CHORD MODE parameter.
2. Turn the Control encoder to select CHD SET.

→ The light from the pads on the top row of your controller go off and the pads are disabled. The other 12 pads trigger various chords. You can switch to another set of 12 chords by selecting the 3/4: CHORD TYPE parameter and turning the Control encoder. These chords are not bound to the minor pentatonic scale anymore, however they are still based on the selected root note (indicated in the middle right of the display).

7.1.3 Scale and Chord Parameters

This section describes the Scale and Chord engine and its parameters, and provides a list of all scales and chords available on your controller.

General Notes on Scales and Chords

- The Scale and Chord parameters are the same for all Sound slots in a particular Group, you can have different Scale and Chord parameters for each Group. The Scale and Chord parameters of each Group are saved with the Project. However, when you save a Group the Scale and Chord parameters are not saved with the Group.

- The Scale and Chord engine processes live input from the pads of your controller only. Input from third-party MIDI controllers and data recorded in the Pattern Editor are not processed by the Scale and Chord engine.

KOMPLETE KONTROL S-SERIES owners: Input from your KOMPLETE KONTROL S-SERIES keyboard can also be processed by the Scale and Chord engine. This is described in section ↑7.2.5, Using the Perform Features.

- The output of the Scale and Chord engine is recorded into the Pattern Editor.
• The Scale and Chord parameters cannot be modulated nor automated in MASCHINE.
• Of course, if a Sound slot contains a KOMPLETE instrument providing control notes (e.g.,
  key switches) on particular keys, these notes will not be triggered by the Scale and Chord
  engine.

Available Scales

The Scale engine is controlled via two parameters:

• **Root Note** (C3 by default): Defines both the root note of the scale and the particular key
  triggered by pad 1. As a direct consequence, pad 1 always triggers the root note of the
  selected scale.

  The Root Note parameter replaces the Base Key parameter found in the Keyboard mode of
  previous MASCHINE versions and still available in Group mode. Although the Root Note is
  edited in the same way as the Base Key on your controller, keep in mind that both are in-
  dependent of each other. Compared to the Base Key, the Root Note additionally defines the
  starting note of the selected scale. Furthermore, like all Scale and Chord parameters, the
  Root Note is common to all Sound slots in the Group, whereas the Base Key is set for each
  Sound slot independently.

• **Scale Type** (Chromatic by default): Selects the scale pattern whose notes will be mapped
  onto the pads of your controller: The Root Note is on pad 1, the 2nd note of the selected
  Scale Type is on pad 2, etc. Once all notes are mapped, the next pad triggers the root
  note in the next octave. The Root Note and its octaves are indicated by fully lit pads,
  while other pads are dimmed.

Following scale types are available:

<table>
<thead>
<tr>
<th>Scale Type</th>
<th>Degrees (1 = Root Note)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chromatic (default)</td>
<td>1  #1  2  #2  3  4  #4  5  #5  6  #6  7</td>
</tr>
<tr>
<td>Major</td>
<td>1  2  3  4  5  6  7</td>
</tr>
<tr>
<td>Minor</td>
<td>1  2  b3  4  5  b6  b7</td>
</tr>
<tr>
<td>Harmonic Minor</td>
<td>1  2  b3  4  5  b6  b7</td>
</tr>
<tr>
<td>Major Pentatonic</td>
<td>1  2  3  5  6</td>
</tr>
<tr>
<td>Minor Pentatonic</td>
<td>1  b3  4  5  b7</td>
</tr>
</tbody>
</table>
### Scale Type

<table>
<thead>
<tr>
<th>Scale Type</th>
<th>Degrees (1 = Root Note)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blues</td>
<td>1  b3  4  #4  5  b7</td>
</tr>
<tr>
<td>Japanese</td>
<td>1  2  b3  5  b6</td>
</tr>
<tr>
<td>Freygish</td>
<td>1  b2  3  4  5  b6  b7</td>
</tr>
<tr>
<td>Gypsy</td>
<td>1  2  b3  #4  5  b6  7</td>
</tr>
<tr>
<td>Flamenco</td>
<td>1  b2  3  4  5  b6  7</td>
</tr>
<tr>
<td>Altered</td>
<td>1  b2  b3  b4  b5  b6  b7</td>
</tr>
<tr>
<td>Whole Tone</td>
<td>1  2  3  #4  #5  #6</td>
</tr>
<tr>
<td>Half-Whole Diminished</td>
<td>b2  #2  3  #4  5  6  b7</td>
</tr>
<tr>
<td>Whole-Half Diminished</td>
<td>1  2  b3  #3  #4  #5  6  7</td>
</tr>
</tbody>
</table>

By default, the Chromatic scale is selected — in other terms, by default your pads play every semitone as in previous MASCHINE versions.

⚠️ The Scale Type parameter is not available if the Chord Mode parameter is set to Chord Set — see below for more information.

### Available Chords

The Chord engine can automatically generate chords depending on the pad you hit and possibly the selected scale. The Chord engine is controlled via two parameters:

- **Chord Mode** (Off by default): Selects from three different modes for generating chords:
  - **Off**: No chords will be generated. Only the notes corresponding to the pads that you hit will be played.
  - **Harmonizer**: Generates chords based on the pads you hit and using notes from the selected scale, as specified by the Root Note and Scale Type parameters (see above). Use the Chord Type parameter to choose the particular notes to be used in the chord (see below). As the chord is triggered, pads of all included notes flash.
- **Chord Set**: This special mode maps a set of chords onto the first 12 pads of your controller. These chords are not bound to any scale type, they are only affected by the selected Root Note. Use the Chord Type parameter to choose a particular set of chords to be mapped onto the pads (see below). In this mode, only the pad you actuate flashes.

- **Chord Type**: Selects which chords will be mapped to your pads. The available chord types depend on the selected Chord Mode and Scale Type:
  - If Chord Mode is set to Harmonizer, the Chord Type parameter offers different chords depending on whether Scale Type is set to Chromatic or to any other scale. All available chords are listed in the tables below.
  - If Chord Mode is set to Chord Set, the Chord Type parameter provides 16 different sets of 12 chords each (8 major sets and 8 minor sets): Major 1, Major 2, ..., Major 8, and Minor 1, Minor 2, ..., Minor 8. The 12 chords are mapped onto the first 12 pads. Pads 13–16 are disabled.

When Chord Mode is set to **Harmonizer** and Scale Type is set to **Chromatic**, since this scale includes all semitones the chords can use any of them. Chord Type offers following chords:

<table>
<thead>
<tr>
<th>Chord Type</th>
<th>Semitones Added above Played Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Octave</td>
<td>12</td>
</tr>
<tr>
<td>Perfect 4</td>
<td>5</td>
</tr>
<tr>
<td>Perfect 5</td>
<td>7</td>
</tr>
<tr>
<td>Major</td>
<td>4 and 7</td>
</tr>
<tr>
<td>Minor</td>
<td>3 and 7</td>
</tr>
<tr>
<td>Suspended 4</td>
<td>5 and 7</td>
</tr>
<tr>
<td>Major 7</td>
<td>4, 7, and 11</td>
</tr>
<tr>
<td>Minor 7</td>
<td>3, 7, and 10</td>
</tr>
<tr>
<td>Dominant 7</td>
<td>4, 7, and 10</td>
</tr>
<tr>
<td>Dominant 9</td>
<td>4, 7, 10, and 14</td>
</tr>
<tr>
<td>Minor 7♭5</td>
<td>3, 6, and 10</td>
</tr>
<tr>
<td>Diminished 7</td>
<td>3, 6, and 9</td>
</tr>
<tr>
<td>Chord Type</td>
<td>Semitones Added above Played Note</td>
</tr>
<tr>
<td>------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>Augmented</td>
<td>4 and 8</td>
</tr>
<tr>
<td>Quartal</td>
<td>5, 10, and 15</td>
</tr>
<tr>
<td>Trichord</td>
<td>5 and 11</td>
</tr>
</tbody>
</table>

When Chord Mode is set to **Harmonizer** and Scale Type is set to **any other scale than Chromatic**, the chords are bound to the particular notes included in the specified scale. Chord Type offers following chords:

<table>
<thead>
<tr>
<th>Chord Type</th>
<th>Notes Added to Played Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Octave</td>
<td>Octave</td>
</tr>
<tr>
<td>1-3</td>
<td>3rd</td>
</tr>
<tr>
<td>1-5</td>
<td>5th</td>
</tr>
<tr>
<td>1-3-5</td>
<td>3rd and 5th</td>
</tr>
<tr>
<td>1-4-5</td>
<td>4th and 5th</td>
</tr>
<tr>
<td>1-3-5-7</td>
<td>3rd, 5th, and 7th</td>
</tr>
<tr>
<td>1-4-7</td>
<td>4th and 7th</td>
</tr>
</tbody>
</table>

**Scales and Chords: Visual Feedback on the Pads**

When scales and/or chords are enabled, the LEDs of the pads keep you informed at any time on the current scale and chord configuration. The default lighting behavior of your pads is modified by the Scale and Chord engine as follows:

When **Chord Mode** is set to **Off** or **Harmonizer**, pads of root notes are fully lit:

<table>
<thead>
<tr>
<th>Type of Pad (for Selected Scale)</th>
<th>LED in Default State</th>
<th>LED when Pad Triggered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Root notes</td>
<td>Fully lit</td>
<td>Flash</td>
</tr>
<tr>
<td>Other pads</td>
<td>Dimly lit</td>
<td>Flash</td>
</tr>
</tbody>
</table>

Note that if Chord Mode is set to Harmonizer, pads triggered as part of the chord will also flash.

When **Chord Mode** is set to **Chord Set**, pad 1 is fully lit:
<table>
<thead>
<tr>
<th>Type of Pad</th>
<th>LED in Default State</th>
<th>LED when Pad Triggered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pad 1</td>
<td>Fully lit</td>
<td>Flash</td>
</tr>
<tr>
<td>Pads 2–12</td>
<td>Dimly lit</td>
<td>Flash</td>
</tr>
<tr>
<td>Pads 13–16</td>
<td>Off (pad inactive)</td>
<td></td>
</tr>
</tbody>
</table>

**Enharmonic Spelling of the Root Note**

On your controller, depending on the Scale Type, Chord Mode, and Chord Type you have selected, the enharmonic spelling of the Root Note will vary in order to optimize the spelling of the entire scale / chord set:

<table>
<thead>
<tr>
<th>Condition</th>
<th>Enharmonic Spelling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale Type is set to Chromatic</td>
<td>All Keys C C# D D# E F F# G G# A A#</td>
</tr>
<tr>
<td>Scale Type is <em>not</em> set to Chromatic</td>
<td>C C# D E♭ E F F# G A♭ A B♭ B</td>
</tr>
<tr>
<td>Chord Mode is set to Chord Set and Chord Type is set to Major 1–8</td>
<td>C D♭ D E♭ E F F# G A♭ A B♭ B</td>
</tr>
<tr>
<td>Chord Mode is set to Chord Set and Chord Type is set to Minor 1–8</td>
<td>C C# D D# E F F# G G# A B♭ B</td>
</tr>
</tbody>
</table>

**Erasing Notes**

When *erasing notes* from your controller, the notes effectively deleted vary with the Chord Mode currently selected:

- If Chord Mode is set to Off, the notes with the pitch corresponding to the pressed pad are deleted.
- If Chord Mode is set to Harmonizer, only the notes with the pitch of the pressed pad are deleted. The other notes in the triggered chord are *not* deleted.
- If Chord Mode is set to Chord Set, no notes are deleted, in other words erasing is disabled.
7.1.4 Creating Arpeggios and Repeated Notes

MASCHINE 2.2 introduces a flexible and versatile **Arp engine**, an arpeggiator that effectively lets you play your Sounds in note sequences. The arpeggios are created according to both the pads you hold and the chords configured with the Scale and Chord engine (see section ↑7.1.2, Selecting a Scale and Creating Chords).

If you have enabled chords, you can even press more than one pad to include the notes of all corresponding chords into your arpeggio!

Like the Scale and Chord engine, the Arp engine is dedicated to Keyboard mode.

The Arp engine can be seen as a melodic extension of the Note Repeat engine already available in previous MASCHINE versions: Actually, Arp replaces and extends Note Repeat in Keyboard mode. Instead of playing repeated notes at a constant pitch you can now play sequences of notes at different pitches.

For a detailed description of Note Repeat, please refer to section 5.2.1 “Note Repeat” in the MASCHINE 2.0 Manual.

Arp and Note Repeat have similar modes on your controller: Depending on whether your pads are in Group mode or Keyboard mode, pressing **NOTE REPEAT** on your controller will switch to Note Repeat mode or Arp mode, respectively. Arp mode simply adds a few parameters to those found in Note Repeat mode.

**General Notes on the Note Repeat and Arp Engine**

- The Note Repeat / Arp parameters are the same for all Sound slots in all Groups of your Project. These parameters are saved with the Project.

- The Note Repeat / Arp engine processes live input from the pads of your controller only. Input from third-party MIDI controllers and data recorded in the Pattern Editor are not processed by the Scale and Chord engine.

**KOMPLETE KONTROL S-SERIES** owners: Input from your KOMPLETE KONTROL S-SERIES keyboard can also be processed by the Arp engine. This is described in section ↑7.2.5, Using the Perform Features.
• The Note Repeat / Arp engine detects and makes use of any changes in the pressure you apply on each single pad you hold (Polyphonic Aftertouch). This allows you to generate arpeggios and repeated notes with varying velocities!

• The output of the Note Repeat / Arp engine is recorded into the Pattern Editor.

• The Note Repeat / Arp parameters cannot be modulated nor automated in MASCHINE.

• You can use Note Repeat and Arp even if the transport is not running: In this case the Note Repeat / Arp engine will use its own central clock. This clock will be reset as soon as you start the playback.

KOMPLETE KONTROL S-SERIES owners: The central clock is shared by all connected devices, so that e.g. repeated notes triggered from your MASCHINE controller and arpeggios triggered from your KOMPLETE KONTROL S-SERIES keyboard will be synchronized even if the transport is not running.

7.1.4.1 Using Note Repeat and Arp on Your MASCHINE STUDIO Controller

Pads in Group mode: Note Repeat

If your pads are in Group mode, pressing NOTE REPEAT will switch your controller to Note Repeat mode.

This mode is identical to that in previous MASCHINE versions except for the following:
• Button 2 (LOCK) allows you to keep the Note Repeat feature enabled even when you leave Note Repeat mode. If Note Repeat is locked, when you switch to another controller mode the NOTE REPEAT button remains dimly lit to remind you that Note Repeat is on. You can also use the shortcut SHIFT + NOTE REPEAT at any time to enable/disable LOCK.

Even if Note Repeat is locked, it won’t be applied to your pads when your controller is displaying the SLICE page of Sampling mode.

• RATE was moved to Knob 3.
• TYPE is now called UNIT and was moved to Knob 4.
• GATE was moved to Knob 8.

Additionally, because of the parameter reordering, Knobs 5 and 6 are no longer used to scroll/zoom into the display.

All other Note Repeat features remain unchanged.

Note Repeat mode seamlessly switches to Arp mode as soon as you switch your pads from Group mode to Keyboard mode (see below): All current values (including the LOCK state) are retained.

**Pads in Keyboard mode: Arp**

If your pads are in Keyboard mode, pressing NOTE REPEAT switches your controller to Arp mode:

The Arp mode on your controller.
In Arp mode you can customize the way the notes of the played chord will be arpeggiated by adjusting following settings:

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LOCK (Button 2)</strong></td>
<td>Keeps the Arp feature enabled even when you leave Arp mode. For example, this can be useful to adjust the chord settings, switch to another Pattern, adjust Plug-in parameters, etc., while keeping arpeggios running. If Arp is locked, when you switch to another controller mode the NOTE REPEAT button stays dimly lit to remind you that Arp is on. You can also use the shortcut SHIFT + NOTE REPEAT at any time to enable/disable LOCK.</td>
</tr>
<tr>
<td><strong>FOLLOW (Button 3)</strong></td>
<td>(same functionality as in previous MASCHINE versions) Let's the right display follow the playhead as it travels through your arrangement. This mirrors the FOLLOW option available in Arrange mode as well as the Follow function in the MASCHINE software. For more information please refer to the MASCHINE 2.0 Manual.</td>
</tr>
<tr>
<td><strong>Button 5–8</strong></td>
<td>(same functionality as in previous MASCHINE versions) Selects between four different presets, even during playing. Each preset can store particular values for the TYPE; RATE, UNIT, SEQUENCE, and OCTAVES parameters at the bottom of the displays (see below). The rate currently assigned to each button is indicated below on the display along with the UNIT value (“T” for triplet values or “D” for dotted values). The selected preset is highlighted.</td>
</tr>
<tr>
<td><strong>TYPE (Knob 2)</strong></td>
<td>Sets the sequential order of the arpeggiated notes. You can choose from following settings: Up starts from the root note and plays the notes up through the chord. Down plays the notes the other way around. Up &amp; Down plays the notes in both directions alternatively. Order Played plays the notes in the order you pressed down the corresponding pads on your controller. If you have configured chords, the arpeggio will first play all notes of the chord triggered by the first pad you pressed, then all notes of the chord triggered by the second pad you pressed, etc. Chord plays all notes of the chord together repeatedly.</td>
</tr>
</tbody>
</table>
### Element | Description
---|---
**RATE (Knob 3)** | (same functionality as in previous MASCHINE versions)
Adjusts the note length, hence the rate of the arpeggio. Available values are **1 BAR** and a series of note values going from **1/2 (half note)** until **1/128 (a hundred twenty-eighth note)**.

**UNIT (Knob 4)** | (same functionality as the **TYPE** parameter in previous MASCHINE versions)
Selects from three variations of the original note length defined by the **RATE** parameter: **NORMAL** plays the original note length (default setting), **TRIPLET** plays triplets of the original note length (faster, three notes in the duration of two original notes), and **DOTTED** plays dotted versions of the original note length (slower, two notes in the duration of three original notes). Under Button 5–8, triplet values are indicated by a “T” and dotted values by a “D” next to the note value.

**SEQUENCE (Knob 5)** | Allows you to add interesting rhythms to your arpeggiated notes. Select one of eight different sequences and apply it to the arpeggio you are playing. Select **Off** to use the default regular sequence.

**OCTAVES (Knob 6)** | Adjusts the spread of the arpeggiated sequence. You can choose to play back your sequence within the octave of the pads you pressed on your controller only, or you can select up to eight octaves and let the notes of your chord (or the single note of your pad) be played back in as many octaves.

**DYNAMIC (Knob 7)** | Amplifies or reduces the velocity derived from the pressure you apply on each single pad you hold (Polyphonic Aftertouch). Available values range from **1%** to **200%**. This setting applies globally to all rate presets.

**GATE (Knob 8)** | (same functionality as in previous MASCHINE versions)
Adjusts the ratio between the duration of the notes and the duration of the silences between them, measured as a percentage of the note value set by **RATE** (see above). Available values range from **0%** to **200%**: At low values the notes are very short. At **50%** notes and silences are equal. At **100%** (midcourse) each note last exactly until the next note is triggered. At higher values notes overlap (provided that the selected Sound is polyphonic). This setting applies globally to all rate presets.

**GATE RESET (Button 4)** | (same functionality as in previous MASCHINE versions)
Press this button at any time to reset the **GATE** parameter to its default value **100%**.
Arp mode seamlessly switches to Note Repeat mode as soon as you switch your pads from Keyboard mode to Group mode (see above): All current values (including the LOCK state) are retained.

To reproduce a Note Repeat using Arp mode, set TYPE to CHORD, SEQUENCE to Off, and OCTAVES to 1. To repeat single notes, additionally make sure that chords are disabled (in Pad Mode, check that Chord MODE is set to Off).

7.1.4.2 Using Note Repeat and Arp on Your MASCHINE MK2 Controller

Pads in Group mode: Note Repeat

If your pads are in Group mode, pressing NOTE REPEAT will switch your controller to Note Repeat mode:

The Note Repeat mode on your controller.

This mode is identical to that in previous MASCHINE versions except for the following:

• Button 2 (LOCK) allows you to keep the Note Repeat feature enabled even when you leave Note Repeat mode. If Note Repeat is locked, when you switch to another controller mode the NOTE REPEAT button stays dimly lit to remind you that Note Repeat is on.

Even if Note Repeat is locked, it won’t be applied to your pads when your controller is displaying the SLICE page of Sampling mode.

• RATE was moved to Knob 3.
• TYPE is now called UNIT and was moved to Knob 4.
• GATE was moved to Knob 8.

All other Note Repeat features remain unchanged.
Note Repeat mode seamlessly switches to Arp mode as soon as you switch your pads from Group mode to Keyboard mode (see below): All current values (including the LOCK state) are retained.

**Pads in Keyboard mode: Arp**

If your pads are in Keyboard mode, pressing NOTE REPEAT switches your controller to Arp mode:

![The Arp mode on your controller.](image)

In Arp mode you can customize the way the notes of the played chord will be arpeggiated by adjusting following settings:

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOCK (Button 2)</td>
<td>Keeps the Arp feature enabled even when you leave Arp mode. For example, this can be useful to adjust the chord settings, switch to another Pattern, adjust Plug-in parameters, etc., while keeping arpeggios running. If Arp is locked, when you switch to another controller mode the NOTE REPEAT button stays dimly lit to remind you that Arp is on.</td>
</tr>
<tr>
<td>Button 5–8</td>
<td>(same functionality as in previous MASCHINE versions)</td>
</tr>
<tr>
<td></td>
<td>Selects between four different presets — also while playing. Each preset can store particular values for the TYPE, RATE, UNIT, SEQUENCE, and OCTAVES parameters at the bottom of the displays (see below). The rate currently assigned to each button is indicated below on the display along with the UNIT value (“T” for triplet values or “D” for dotted values). The selected preset is highlighted.</td>
</tr>
<tr>
<td>Element</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>TYPE (Knob 2)</td>
<td>Sets the sequential order of the arpeggiated notes. You can choose from following settings:&lt;br&gt;<strong>UP</strong> starts from the root note and plays the notes up through the chord.&lt;br&gt;<strong>DOWN</strong> plays the notes the other way around.&lt;br&gt;<strong>UP-DOWN</strong> plays the notes in both directions alternatively.&lt;br&gt;<strong>PLAYED</strong> plays the notes in the order you pressed down the corresponding pads on your controller. If you have configured chords, the arpeggio will first play all notes of the chord triggered by the first pad you pressed, then all notes of the chord triggered by the second pad you pressed, etc.&lt;br&gt;<strong>CHORD</strong> plays all notes of the chord together repeatedly.</td>
</tr>
<tr>
<td>RATE (Knob 3)</td>
<td>(same functionality as in previous MASCHINE versions)</td>
</tr>
<tr>
<td></td>
<td>Adjusts the note length, hence the rate of the arpeggio. Available values are <strong>1 BAR</strong> and a series of note values going from <strong>1/2</strong> (half note) until <strong>1/128</strong> (a hundred twenty-eighth note).</td>
</tr>
<tr>
<td>UNIT (Knob 4)</td>
<td>(same functionality as the TYPE parameter in previous MASCHINE versions)</td>
</tr>
<tr>
<td></td>
<td>Selects from three variations of the original note length defined by the RATE parameter: <strong>NORMAL</strong> plays the original note length (default setting), <strong>TRIPLET</strong> plays triplets of the original note length (faster, three notes in the duration of two original notes), and <strong>DOTTED</strong> plays dotted versions of the original note length (slower, two notes in the duration of three original notes). Under Button 5–8, triplet values are indicated by a “T” and dotted values by a “D” next to the note value.</td>
</tr>
<tr>
<td>SEQUENCE (Knob 5)</td>
<td>Allows you to add interesting rhythms to your arpeggiated notes. Select one of eight different sequences and apply it to the arpeggio you are playing. Select <strong>OFF</strong> to use the default regular sequence.</td>
</tr>
<tr>
<td>OCTAVES (Knob 6)</td>
<td>Adjusts the spread of the arpeggiated sequence. You can choose to play back your sequence within the octave of the pads you pressed on your controller only, or you can select up to eight octaves and let the notes of your chord (or the single note of your pad) be played back in as many octaves.</td>
</tr>
<tr>
<td>DYNAMIC (Knob 7)</td>
<td>Amplifies or reduces the velocity derived from the pressure you apply on each single pad you hold (Polyphonic Aftertouch). Available values range from <strong>1%</strong> to <strong>200%</strong>. This setting applies globally to all rate presets.</td>
</tr>
</tbody>
</table>
### Element | Description
--- | ---
GATE (Knob 8) | (same functionality as in previous MASCHINE versions)
  Adjusts the ratio between the duration of the notes and the duration of the silences between them, measured as a percentage of the note value set by RATE (see above). Available values range from 0% to 200%: At low values the notes are very short. At 50% notes and silences are equal. At 100% (midcourse) each note lasts exactly until the next note is triggered. At higher values notes overlap (provided that the selected Sound is polyphonic). This setting applies globally to all rate presets.

GATE RESET (Button 4) | (same functionality as in previous MASCHINE versions)
  Press this button at any time to reset the GATE parameter to its default value 100%.

---

**Arp mode** seamlessly switches to Note Repeat mode as soon as you switch your pads from Keyboard mode to Group mode (see above): All current values (including the LOCK state) are retained.

To reproduce a Note Repeat using Arp mode, set TYPE to CHORD, SEQUENCE to OFF, and OCTAVES to 1. To repeat single notes, additionally make sure that chords are disabled (in Pad Mode, check that Chord MODE is set to OFF).

### 7.1.4.3 Using Note Repeat and Arp on Your MASCHINE MIKRO MK2 Controller

**Pads in Group mode: Note Repeat**

If your pads are in Group mode, pressing **NOTE REPEAT** will switch your controller to Note Repeat mode:

![The Note Repeat mode on your controller.](image)

MASCHINE 2.2

New Perform Features
This mode is identical to that in previous MASCHINE versions except for the following:

- The F3 button above the display is not assigned to any preset anymore. Instead, pressing F3 (LOCK) allows you to keep the Note Repeat feature enabled even when you leave Note Repeat mode. If Note Repeat is locked, when you switch to another controller mode the NOTE REPEAT button stays dimly lit to remind you that Note Repeat is on.

  Even if Note Repeat is locked, it won’t be applied to your pads when your controller is displaying the SLICE page of Sampling mode.

- TYPE is now called UNIT.

All other Note Repeat features remain unchanged.

Note Repeat mode seamlessly switches to Arp mode as soon as you switch your pads from Group mode to Keyboard mode (see below): All current values (including the LOCK state) are retained.

**Pads in Keyboard mode: Arp**

If your pads are in Keyboard mode, pressing NOTE REPEAT switches your controller to Arp mode:

![The Arp mode on your controller.](image)

In Arp mode you can customize the way the notes of the played chord will be arpeggiated by adjusting following settings:
<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOCK ((F3))</td>
<td>Keeps the Arp feature enabled even when you leave Arp mode. For example, this can be useful to adjust the chord settings, switch to another Pattern, adjust Plug-in parameters, etc., while keeping arpeggios running. If Arp is locked, when you switch to another controller mode the <strong>NOTE REPEAT</strong> button stays dimly lit to remind you that Arp is on.</td>
</tr>
<tr>
<td>F1–F2</td>
<td>(same functionality as in previous MASCHINE versions) Selects between four different presets — also while playing. By default F1 and F2 select the 1st and 2nd preset, respectively. To switch to the 3rd and 4th presets, press <strong>SHIFT + F3</strong> (&gt;&gt;). To switch back to the first two presets, press <strong>SHIFT + F3</strong> (&lt;&lt;) again. Each preset can store particular values for the <strong>TYPE</strong>, <strong>RATE</strong>, <strong>UNIT</strong>, <strong>SEQUENCE</strong>, and <strong>OCTAVES</strong> parameters (see below). The rate currently assigned to each button is indicated below on the display along with the <strong>UNIT</strong> value (“T” for triplet values or “D” for dotted values). The selected preset is highlighted.</td>
</tr>
<tr>
<td>TYPE</td>
<td>Sets the sequential order of the arpeggiated notes. You can choose from following settings: - <strong>UP</strong> starts from the root note and plays the notes up through the chord. - <strong>DOWN</strong> plays the notes the other way around. - <strong>UP-DOWN</strong> plays the notes in both directions alternatively. - <strong>PLAYED</strong> plays the notes in the order you pressed down the corresponding pads on your controller. If you have configured chords, the arpeggio will first play all notes of the chord triggered by the first pad you pressed, then all notes of the chord triggered by the second pad you pressed, etc. - <strong>CHORD</strong> plays all notes of the chord together repeatedly.</td>
</tr>
<tr>
<td>RATE</td>
<td>(same functionality as in previous MASCHINE versions) Adjusts the note length, hence the rate of the arpeggio. Available values are 1 <strong>BAR</strong> and a series of note values going from 1/2 (half note) until 1/128 (a hundred twenty-eighth note).</td>
</tr>
<tr>
<td>Element</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>UNIT</td>
<td>(same functionality as the TYPE parameter in previous MASCHINE versions) Selects from three variations of the original note length defined by the RATE parameter: NORMAL plays the original note length (default setting), TRIPLET plays triplets of the original note length (faster, three notes in the duration of two original notes), and DOTTED plays dotted versions of the original note length (slower, two notes in the duration of three original notes). Under Button 5–8, triplet values are indicated by a “T” and dotted values by a “D” next to the note value.</td>
</tr>
<tr>
<td>SEQUENCE</td>
<td>Allows you to add interesting rhythms to your arpeggiated notes. Select one of eight different sequences and apply it to the arpeggio you are playing. Select OFF to use the default regular sequence.</td>
</tr>
<tr>
<td>OCTAVES</td>
<td>Adjusts the spread of the arpeggiated sequence. You can choose to play back your sequence within the octave of the pads you pressed on your controller only, or you can select up to eight octaves and let the notes of your chord (or the single note of your pad) be played back in as many octaves.</td>
</tr>
<tr>
<td>DYNAMIC</td>
<td>Amplifies or reduces the velocity derived from the pressure you apply on each single pad you hold (Polyphonic Aftertouch). Available values range from 1% to 200%. This setting applies globally to all rate presets.</td>
</tr>
<tr>
<td>GATE</td>
<td>(same functionality as in previous MASCHINE versions) Adjusts the ratio between the duration of the notes and the duration of the silences between them, measured as a percentage of the note value set by RATE (see above). Available values range from 0% to 200%: At low values the notes are very short. At 50% notes and silences are equal. At 100% (midcourse) each note last exactly until the next note is triggered. At higher values notes overlap (provided that the selected Sound is polyphonic). This setting applies globally to all rate presets.</td>
</tr>
</tbody>
</table>

Arp mode seamlessly switches to Note Repeat mode as soon as you switch your pads from Keyboard mode to Group mode (see above): All current values (including the LOCK state) are retained.

To reproduce a Note Repeat using Arp mode, set TYPE to CHORD, SEQUENCE to OFF, and OCTAVES to 1. To repeat single notes, additionally make sure that chords are disabled (in Pad Mode, check that Chord MODE is set to OFF).
7.1.5 Swing Also Applied to Note Repeat / Arp Output

In previous MASCHINE versions, the Swing modules at the Sound, Group, and Master levels were adding swing only to notes coming from the Pattern Editor. In MASCHINE 2.2 the Swing engines (at the Master, Group, and Sound level) process notes coming from the Pattern Editor and from the Arp engine (pads in Keyboard mode) or Note Repeat engine (pads in Group mode). In other terms, the swing is applied not only to your Patterns but also to any live sequence generated by the Arp or Note Repeat engine.

The applied swing is not recorded in the Pattern Editor. For an overview of the signal flow starting from your pads, have a look at the diagrams in section ↑7.1.1, Overview of the Perform Features.

For example, when you play live beats on top of a running Pattern, you can use Note Repeat without destroying the Pattern’s groove: the repeated notes will be processed using the same swing parameters as the playing Pattern.

When the playback is not running, the swing is still applied to the output of Arp (Keyboard mode) or Note Repeat (Group mode). If you press PLAY on your controller, the playback starts immediately and the swing cycle is reset.

7.2 KOMPLETE KONTROL Integration

MASCHINE 2.2 supports the new KOMPLETE KONTROL S-SERIES keyboards from Native Instruments. The KOMPLETE KONTROL S-SERIES keyboards are tightly integrated into the MASCHINE workflows. From your KOMPLETE KONTROL S-SERIES keyboard you can do the following in MASCHINE:

- Switch the focus of your keyboard to/from any MASCHINE instance: ↑7.2.1, Switching the Keyboard Focus to/from a MASCHINE Instance.
- Control the transport: ↑7.2.2, Controlling the Transport in MASCHINE.
- Navigate and control your Sounds in any Group: ↑7.2.3, Navigating and Controlling Your Sounds in any Group.
- Browse and load files from your MASCHINE Library: ↑7.2.4, Browsing Your MASCHINE Library.
• Control the Perform features: ↑7.2.5, Using the Perform Features.
• Use both Touch Strips: ↑7.2.6, Using the Touch Strips.
• Record modulation: ↑7.2.7, Recording Modulation from Your Keyboard.

In addition, you can adjust settings for your keyboard via MASCHINE’s Preferences panel, as described in section ↑7.2.8, Adjusting the Settings for Your Keyboard in the MASCHINE Preferences.

Some of these features are similar to those available in the KOMPLETE KONTROL application. However keep in mind that these features are distinct. For more information on how to use your KOMPLETE KONTROL S-SERIES keyboard with KOMPLETE KONTROL, please refer to the KOMPLETE KONTROL Manual.

7.2.1 Switching the Keyboard Focus to/from a MASCHINE Instance

Your KOMPLETE KONTROL S-SERIES device can be running in various modes, according to what it is focused on your computer:

• KOMPLETE KONTROL mode: Your keyboard focuses on a running KOMPLETE KONTROL instance (standalone or plug-in). For more details on this mode, please refer to the KOMPLETE KONTROL manual.

• MIDI mode: Your keyboard acts as a MIDI controller. You can adjust your keyboard’s MIDI assignments via the Controller Editor. For more details, please refer to the Controller Editor manual.

• MASCHINE mode: Your keyboard focuses on a running MASCHINE instance (standalone or plug-in).

You can switch the focus of your keyboard at any time via various ways:

• When loading a new instance of MASCHINE or KOMPLETE KONTROL, your keyboard can automatically switch to that new instance under certain circumstances.

• From your keyboard, you can choose which instance to focus on.

• From any instance, you can “call” your keyboard so that it focuses on this particular instance/software.

These various situations are described in the following paragraphs.
Default Focus for New Instances

When you load a new instance (standalone or plug-in) of MASCHINE or KOMPLETE KONTROL, your KOMPLETE KONTROL S-SERIES keyboard can automatically switch its focus to that new instance depending on the current situation:

- If your keyboard is currently focused on a MASCHINE instance or is in MIDI mode, it will automatically switch to the new MASCHINE or KOMPLETE KONTROL instance.
- If your keyboard is currently focused on a KOMPLETE KONTROL instance, it will automatically switch to a new KOMPLETE KONTROL instance. If you load a new MASCHINE instance, your keyboard will remain focused on its current KOMPLETE KONTROL instance.

Switching the Focus from the MASCHINE Instance: Controller Menu

You can call the connected KOMPLETE KONTROL S-SERIES keyboard from any running MASCHINE instance, may it run as a standalone application or as a plug-in in your DAW.

You can also call your keyboard from any KOMPLETE KONTROL instance (plug-in or standalone) and from the Controller Editor. To know how to do this, please refer to the KOMPLETE KONTROL manual and the Controller Editor manual, respectively.

To connect your KOMPLETE KONTROL S-SERIES keyboard to a particular instance of MASCHINE:

1. Bring the desired MASCHINE instance to the front in your operating system (or open its user interface in your DAW).
2. Open the *Controller* submenu in the MASCHINE menu and select your KOMPLETE KONTROL S-SERIES device from the menu:

![Controller Menu Screenshot]

If MASCHINE is running as a standalone application you can also use the *Controller* menu in the Application Menu Bar:

![Controller Menu Screenshot]

→ The MASCHINE instance takes the focus of your KOMPLETE KONTROL S-SERIES keyboard.

In MASCHINE 2.2 the *Controller* menu (or *Controller* submenu) has been expanded compared to previous MASCHINE 2 versions:

- The first section (above the separator line) is the same as in previous MASCHINE 2 versions:
- The section lists all devices of the MASCHINE controller family.
- Grayed out entries indicate controllers that are not connected to your computer. You cannot select them.
- Black entries indicate connected controllers. Select any of them to bring its focus to this MASCHINE instance.
- Only one item can be selected at a time. It is indicated by the check mark. Selecting another controller automatically deselected the one previously selected in this section — in other words, only one controller from the MASCHINE controller family can focus on a particular MASCHINE instance at a time.

- The second section (below the separator line) lists all KOMPLETE KONTROL S-SERIES devices. It works in exactly the same way as the first section described above, with the same features and restrictions.

Note that you can have both a MASCHINE device and a KOMPLETE KONTROL S-SERIES device focused on the same MASCHINE instance. To do this, simply select the desired entry in the upper section, and the desired entry in the lower section of the menu/submenu. You will see a check mark in both sections (as in the pictures above).

⚠️ The Connect button (the little controller icon in the MASCHINE Header) only supports controllers from the MASCHINE family. Hence, it’s functionality is unchanged.

Switching the Focus from Your Keyboard

You can also select a particular MASCHINE instance to focus on directly from your KOMPLETE KONTROL S-SERIES keyboard. This procedure makes use of an On-Screen Overlay on your computer screen. This On-Screen Overlay is common to the MASCHINE and KOMPLETE KONTROL applications: All instances of both applications will be listed here.

With one or more MASCHINE and/or KOMPLETE KONTROL instance(s) running, do the following on your KOMPLETE KONTROL S-SERIES keyboard:
1. Press **INSTANCE**. The On-Screen Overlay appears on your computer screen with all available MASCHINE and KOMPLETE KONTROL instances:

![On-Screen Overlay Image]

2. Turn the Control encoder to select the desired instance, and press the encoder to switch the focus to that instance.

→ Now your KOMPLETE KONTROL S-SERIES keyboard focuses on the selected instance. If another KOMPLETE KONTROL S-SERIES keyboard was already focused on that instance, its focus is automatically removed from that instance.

In this On-Screen Overlay, the focused instance is highlighted. As you turn the Control encoder, the selection is indicated by a white bar underneath. Instances are organized into distinct sections according to their host environment:
• Each host (that includes MASCHINE and/or KOMPLETE KONTROL plug-ins loaded) has its own section. Within that section, every instance is represented by a picture and two fields:

  ◦ The overview picture illustrates the instance via a generic picture of the corresponding NI product (a picture of MASCHINE for MASCHINE instances, or of the particular NI product loaded in each KOMPLETE KONTROL instance).

  ◦ The Instrument name: For MASCHINE instances this reads Maschine. For KOMPLETE KONTROL instances this shows the particular NI product loaded into that KOMPLETE KONTROL instance.

  ◦ The Project/Preset name: For MASCHINE instances this reads the name of the Project loaded in that instance. For KOMPLETE KONTROL instances this shows the name of the preset currently loaded in the NI product within the KOMPLETE KONTROL instance.

• The STANDALONE section displays the instances of MASCHINE and KOMPLETE KONTROL running in standalone mode, if any.

• At the bottom, the MIDI MODE section allows you to switch your keyboard to MIDI mode. Note that, under certain circumstances, you can also do it by pressing SHIFT + INSTANCE on your keyboard: This will directly switch your keyboard to/from MIDI mode without opening the On-Screen Overlay. See next paragraph for more information on this.

**Keyboard Auto-Focus in Supported Hosts**

In particular hosts, your KOMPLETE KONTROL S-SERIES keyboard automatically switches its focus depending on the track selected in your host.

For more information on the auto-focus feature in supported hosts, please refer to the KOMPLETE KONTROL manual.

In these hosts, the INSTANCE button of your keyboard is disabled. If your keyboard is currently focused on a MASCHINE instance, pressing SHIFT + INSTANCE disconnects your keyboard from that MASCHINE instance and re-enables auto-focus:

• If the currently selected track contains an instance of KOMPLETE KONTROL, your keyboard focuses on that instance.
• If the currently selected track does not contain any instance of KOMPLETE KONTROL, your keyboard switches to MIDI mode.

You can also do this by clicking the desired track in the window of your host:

• Clicking on a host track that contains a KOMPLETE KONTROL instance disconnects your keyboard from its MASCHINE instance and sets its focus to that KOMPLETE KONTROL instance.

• Clicking on a host track that doesn’t contain any KOMPLETE KONTROL instance disconnects your keyboard from its MASCHINE instance and switches it to MIDI mode, re-enabling auto-focus.

In all following sections we will assume that your KOMPLETE KONTROL S-SERIES keyboard is focused on a MASCHINE instance!

### 7.2.2 Controlling the Transport in MASCHINE

When your KOMPLETE KONTROL S-SERIES keyboard is focused on the MASCHINE software, the buttons in the TRANSPORT section of your keyboard can control various transport functions in MASCHINE.

Transport in MASCHINE Running as a Standalone Application

If your keyboard is focused on a MASCHINE instance running as a standalone application and no KOMPLETE KONTROL instance is loaded in any host application, all six buttons in the TRANSPORT section of your keyboard control the transport in MASCHINE.
If a host application with at least one KOMPLETE KONTROL instance loaded is also running on your computer, the TRANSPORT section on your keyboard will control the host transport instead of the MASCHINE transport. If the running host application doesn’t contain any KOMPLETE KONTROL instance, the TRANSPORT section on your keyboard will control both the MASCHINE and host transports. To avoid this, you can disable the control of the MASCHINE transport in the Preferences panel, as described at the end of this section.

In some cases they are used in combination with the Control encoder and the Navigate Left/Right buttons in the NAVIGATE section (see table below). At any time the button states are synchronized with the MASCHINE software (and with any MASCHINE controller also focused on that MASCHINE instance).

More precisely, the buttons of the TRANSPORT section trigger the following commands in the MASCHINE instance:

<table>
<thead>
<tr>
<th>Element (or Combination)</th>
<th>Command in MASCHINE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Basic Transport</strong></td>
<td></td>
</tr>
<tr>
<td>PLAY</td>
<td>Play/Stop</td>
</tr>
<tr>
<td>SHIFT + PLAY (RESTART)</td>
<td>Restart playback at the beginning of the Loop Range</td>
</tr>
<tr>
<td>REC</td>
<td>Record</td>
</tr>
<tr>
<td>SHIFT + REC (COUNT-IN)</td>
<td>Record with Count-in</td>
</tr>
<tr>
<td>STOP</td>
<td>Stop</td>
</tr>
<tr>
<td>SHIFT + STOP</td>
<td>Metronome on/off</td>
</tr>
<tr>
<td><strong>Loop Range</strong></td>
<td></td>
</tr>
<tr>
<td>LOOP + Control encoder</td>
<td>Move the whole Loop Range</td>
</tr>
<tr>
<td>LOOP + Navigate Left + Control encoder</td>
<td>Move the Loop Range’s start point</td>
</tr>
<tr>
<td>LOOP + Navigate Right + Control encoder</td>
<td>Move the Loop Range’s end point</td>
</tr>
<tr>
<td>SHIFT + LOOP</td>
<td>Include all Scenes in the Loop Range</td>
</tr>
<tr>
<td><strong>Playhead Jumps</strong></td>
<td></td>
</tr>
<tr>
<td>Control encoder (turn)</td>
<td>Moves the playhead by Pattern Grid increments</td>
</tr>
<tr>
<td>SHIFT + Control encoder (turn)</td>
<td>Moved the playhead by Step Grid increments</td>
</tr>
<tr>
<td>RWD</td>
<td>Moves the playhead backwards by Pattern Grid increments</td>
</tr>
</tbody>
</table>
### Transport in MASCHINE Running as a Plug-in

If keyboard is focused on MASCHINE plug-in, Komplete Kontrol S Transport controls control the host rather than Maschine - none of them control Maschine plug-in.

### Transport in MASCHINE with On-Screen Overlay Displayed

If the on-screen overlay is currently displayed, the commands listed above are still valid both in standalone and plug-in case except those involving the Control encoder (used for focusing and selecting items in the on-screen overlay):

- Control encoder.
- **SHIFT** + Control encoder.
- **LOOP** (+ Navigate Left/Right) + Control encoder.

For more information on the on-screen overlay, see section [7.2.1, Switching the Keyboard Focus to/from a MASCHINE Instance and 7.2.4, Browsing Your MASCHINE Library](#).

### Disabling MASCHINE Transport Functions on Your Keyboard

If needed, you can disable your keyboard’s transport functions in MASCHINE (they are enabled by default). This is done in the Transport Control section of the Hardware page in the Preferences panel:
To enable or disable the transport functions of your keyboard in MASCHINE, click the **Enabled** check box in the **Transport Control** section of the **Hardware** page in the **Preferences** panel.
7.2.3 Navigating and Controlling Your Sounds in any Group

This section describes how your KOMPLETE KONTROL S-SERIES keyboard integrates into your MASCHINE Project and its various Sounds and Groups.

Your Keyboard Controls the Focused Sound in the Focused Group

When it is connected to a MASCHINE instance, your KOMPLETE KONTROL S-SERIES keyboard always controls the focused Sound slot in the focused Group of your Project:

- The keys trigger notes in the focused Sound. The Pitch and Modulation strips affect that Sound as well.

- If your keyboard is in Instrument mode (the default mode), Knobs 1–8 control the parameters in the Parameter pages of the selected Plug-in in the focused Sound.

Besides Instrument mode, your KOMPLETE KONTROL S-SERIES keyboard can be in Scale Edit mode or Arp Edit mode, which is indicated by the PAGE field in the leftmost display reading SCALE or ARP, respectively. In order to use Knobs 1–8 to control the Plug-in parameters of the focused Sound, switch back to the default Instrument mode by pressing BACK. For more information on Scale Edit and Arp Edit mode, see section 7.2.5, Using the Perform Features.

The focus of Knobs 1–8 on your KOMPLETE KONTROL S-SERIES keyboard is synchronized with the focus at the Sound level in the MASCHINE software (and on any connected controller from the MASCHINE family) as follows:

- If the Control area in the MASCHINE software currently displays the Plug-ins of the focused Sound, Knobs 1–8 on your keyboard mirror the parameters of the selected Parameter page.
• If the Control area in the MASCHINE software currently displays the Channel properties of the focused Sound, or if it displays another level (MASTER or GROUP tab active), Knobs 1–8 on your keyboard continue to control the selected Parameter page in the selected Plug-in of the (possibly underlying) focused Sound.

Since your keyboard remains focused on the Sound level, you can for example focus your MASCHINE device on the parent Group (or the Master) and control parameters at both levels simultaneously using both devices! You can also switch your MASCHINE device to another mode (Pattern mode, Scene mode, etc.) and keep controlling the focused Sound from your keyboard.

The displays under Knobs 1–8 indicate the parameters controlled by the Knobs: the first row contains the parameter names, and the second row contains the section names, if any — section names are displayed under the first parameter of each section.

Any parameter change made via your keyboard is instantly mirrored in the MASCHINE software and on any connected controlled from the MASCHINE family, and inversely.

You can hold SHIFT while turning any of the Knobs 1–8 to adjust the parameter value in finer increments.

Adjusting the Velocity Scale of the Keybed

You can adjust how the keys of your KOMPLETE KONTROL S-SERIES keyboard should react to the hits of your fingers. This can be of importance depending on the Sound(s) you plan to control from your keyboard. This is done via the Velocity Scaling menu in the Hardware page of the Preferences panel when your keyboard is connected and focused on that MASCHINE instance:
Use the Velocity Scaling menu to adjust the behavior of keys.

The **Velocity Scaling** menu lets you determine how your playing is translated into velocity values: starting from **Soft 3** (a soft touch is enough to get a big velocity value) through **Linear** (default) to **Hard 3** (you really have to press the key hard to get a big velocity value). If you select **Fixed**, all notes will be played at the maximum velocity, no matter how hard you hit the keys.

To access the settings for your KOMPLETE KONTROL S-SERIES keyboard in the Hardware page of the Preferences panel, your keyboard must be connected to your computer and controlling the MASCHINE instance. Moreover if a controller from the MASCHINE family is also focused on the MASCHINE instance, make sure that your keyboard is selected in the Controller menu at the top of the Hardware page in order to see its settings! For more information, see section [7.4.2, Controller Menu in the Hardware Page of the Preferences Panel](#).

**Visual Feedback on the Leftmost Display**

When your keyboard is in Instrument mode, the leftmost display shows you at any time the Parameter page / Plug-in / Sound slot / Group currently selected:
• By default the leftmost display indicates which Parameter page of which Plug-in is currently controlled by Knobs 1–8:

![Page Preset Display](image)

- The **PRESSET** field shows the name of the Plug-in currently selected. If the Plug-in slot is empty, the field is blank.
- The **PAGE** field shows the number of the current Parameter page in the form `[page number]/[total number of pages]`. If the Plug-in slot is empty, the field reads **EMPTY**, and **PRESS BROWSE** appears in the other displays. Press **BROWSE** and select the desired Plug-in preset from the MASCHINE Library to load it in this Plug-in slot.

• If you hold **SHIFT** the leftmost display indicates the focused Sound and Group:

![Page Preset Display](image)

- The **PRESSET** field shows the name of the focused Sound.
- The **PAGE** field shows the index of the selected Sound slot in the form `[Group letter and number].[Sound slot number]`. For example, if the first Sound slot of Group B1 is under focus, the **PAGE** field reads **B1.1**.

**Navigating Parameter Pages, Plug-ins, Sounds, and Groups**

You can quickly switch to another Parameter page, Plug-in, Sound or Group directly from your KOMPLETE KONTROL S-SERIES keyboard:
<table>
<thead>
<tr>
<th>Switch to the previous/next...</th>
<th>Shortcut</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parameter page</td>
<td>Page buttons (above the leftmost display)</td>
<td>The <strong>PAGE</strong> field in the leftmost display indicates the selected Parameter page (see above).</td>
</tr>
<tr>
<td>Plug-in</td>
<td>Navigate Left/Right buttons</td>
<td>The <strong>PRESET</strong> field in the leftmost display indicates the selected Plug-in (see above). If the last Plug-in is already selected and you press the Navigate Right button, the <strong>PAGE</strong> field reads <strong>EMPTY</strong>, and <strong>PRESS BROWSE</strong> appears in the other displays. Press <strong>BROWSE</strong> and select the desired Plug-in preset from the MASCHINE Library to load it at the end of the Plug-in List.</td>
</tr>
<tr>
<td>Switch to the previous/next...</td>
<td>Shortcut</td>
<td>Notes</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Sound slot</td>
<td>Navigate Up/Down buttons</td>
<td>In the leftmost display, the PAGE field shortly reads the index of the selected Sound slot in the form [Group letter and number],[Sound slot number]), and the PRESET field shortly reads the name of the selected Sound. After that, the display indicates the selected Plug-in name and Parameter page number as usual (see above). If the selected Sound slot is empty, the PAGE field reads EMPTY, and PRESS BROWSE appears in the other displays. Press BROWSE and select the desired Plug-in preset or Sound from the MASCHINE Library to load it into this Sound slot.</td>
</tr>
<tr>
<td>Group</td>
<td>SHIFT + Navigate Up/Down buttons</td>
<td>If the last Group is already selected and you press SHIFT + Navigate Down button, the PAGE field reads EMPTY, and PRESS BROWSE appears in the other displays. Additionally, the MASCHINE software (and any connected MASCHINE device) automatically switches to the MASTER tab. Press BROWSE and select the desired file from the MASCHINE Library to load it as follows: If you load a Project, it will replace the current Project (as usual). If you load a Group, it will be appended to the Group List. If you load a Sound, Instrument preset or Sample, it will be loaded into Sound slot 1 of a new Group appended to the Group List. If you load an Effect preset, it will be loaded into the selected Plug-in slot of the Master.</td>
</tr>
</tbody>
</table>

⚠️ For more information on browsing your MASCHINE Library from your KOMplete Kontrol S-SERIES keyboard, see section 7.2.4, Browsing Your MASCHINE Library.

**Visual Feedback on the Light Guide**

The LEDs of the Light Guide above the keybed provide a useful feedback on the state of each key underneath. The LEDs’ behavior depends on the content of the focused Sound slot:
• If the focused Sound slot is empty:
  ◦ The LEDs of the Light Guide mirror the color of the Sound slot and are dimmed.
  ◦ When a key is played (whether because you press it or because your keyboard receives a MIDI note corresponding to that key), its LED turns fully on.

• If the focused Sound slot contains a non-KOMPLETE Instrument or a KOMPLETE Instrument that does not provide any colors:
  ◦ The LEDs of the Light Guide mirror the color of the Sound slot and are dimmed.
  ◦ When a key is played (whether because you press it or because your keyboard receives a MIDI note corresponding to that key), its LED turns fully on.

• If the focused Sound slot contains a KOMPLETE Instrument providing key colors:
  ◦ The LEDs of the Light Guide mirror the colors provided by the KOMPLETE Instrument.
  ◦ When you press a key, its LED turns fully on.
  ◦ When your keyboard receives a MIDI note, the LED of the corresponding key turns fully on unless this key is a control key (e.g., a keyswitch) in the loaded KOMPLETE Instrument.

⚠️ When SCALE is on, the Light Guide additionally shows the modifications induced by the Scale and Chord engine. This is described in section ↑7.2.5, Using the Perform Features.

You can also disable the Light Guide completely — all LEDs above the keybed will be off. The Light Guide can be enabled/disabled via the Enabled check box available in the Light Guide section of the Hardware page in the Preferences panel:
The Enabled check box in the Light Guide section allows you to completely disable the LEDs above the keybed.

To access and modify the settings for your KOMPLETE KONTROL S-SERIES keyboard, it must be currently connected to your computer and controlling the MASCHINE software, and it must be selected in the Controller menu at the top of the Hardware page. See section 7.4.2, Controller Menu in the Hardware Page of the Preferences Panel for more information on this.

### 7.2.4 Browsing Your MASCHINE Library

You can browse your MASCHINE Library directly from your KOMPLETE KONTROL S-SERIES and load the desired files into the focused MASCHINE instance. For this, your KOMPLETE KONTROL S-SERIES keyboard makes use of an on-screen overlay displaying the browser on top of your applications that you can control via the NAVIGATE section of your keyboard.

When your KOMPLETE KONTROL S-SERIES keyboard is focused on a MASCHINE instance:

- Press **BROWSE** in the NAVIGATE section of your keyboard to open an on-screen overlay and browse your MASCHINE Library.

When the on-screen overlay is open, pressing **BROWSE** again will close it without loading anything.
Browsing the Effect presets of your MASCHINE Library directly from your KOMPLETE KONTROL S-SERIES keyboard (here a S25, as shown in the header).

The on-screen overlay browser in MASCHINE is very similar to that in the KOMPLETE KONTROL software, both in appearance and use. We will focus here on the few differences between both. For all details and procedures on using the on-screen overlay browser from your KOMPLETE KONTROL S-SERIES keyboard, please refer to the KOMPLETE KONTROL Manual.
Synchronization Between On-Screen Overlay and MASCHINE Browser

The MASCHINE Browser and the on-screen overlay browser are always synchronized: Any selection you make in the on-screen overlay browser will be mirrored in the LIBRARY pane of the MASCHINE software’s Browser (as well as on any connected controller from the MASCHINE family in Browse mode), and inversely, selections made in the LIBRARY pane of the software or in the Browse mode of your controller will be mirrored in the on-screen overlay next time you call it up.

Selecting a File Type

The main difference between the MASCHINE Library and the KOMPLETE KONTROL Library is that the latter only contains Instrument presets whereas the former contains many more file types: Projects, Groups, Sounds, Instrument presets, Effect presets, and Samples. As a consequence, the on-screen overlay browser used in MASCHINE provides a File Type selector equivalent to that found in the LIBRARY pane of the MASCHINE Browser:

![The open File Type selector in the on-screen overlay browser.](image)

If no query has been made in the MASCHINE Browser, the File Type selector is under focus in the on-screen overlay.

You can also open the File Type selector via the usual navigation method in the on-screen overlay, i.e. pressing the appropriate arrow buttons at the bottom of the NAVIGATE section (see the KOMPLETE KONTROL Manual for more details).

Reminder: At any time, dim lit arrow buttons on the keyboard indicate possible movements within the on-screen overlay!
There is always one file type selected. When the File Type selector is open, the selected file type is highlighted. You can turn the control encoder to move the focus (indicated by the white underline) to another file type, and once the focus is on the desired file type, select it by pressing the control encoder. The File Type selector then closes, its header shows the icon and name of the selected file type, and the Product selector underneath opens.

Note that, as in the MASCHINE Browser, the File Type selector and the Content selector on its right are mutually independent: For example, if the File Type selector is set to Sounds and the Content selector is set to user content, if you select another file type, say, Groups, the Content selector will stay untouched, and the browser will show you Groups from the User Content. Furthermore, upon your selection in the Content selector, the focus is not automatically moved to the next section.

Selecting a Product

If only one product has files available for the selected file type, this product is automatically selected in the Product selector and the focus of the control encoder directly moves to the next available section (e.g., the Bank selection or the TYPES filter).

This handy feature allows you to quickly narrow your search: E.g., if you have no MASCHINE EXPANSIONS installed, the only product offering in Groups will be MASCHINE. If you just set the File Type selector to Groups, MASCHINE will be automatically selected in the Product selector and you can directly select a Bank or a set of Types to further narrow your search.

Selecting a Type at the Third Level

In the MASCHINE Library, Projects, Groups, Sounds, and Samples can be tagged by up to three hierarchical levels of Types. Accordingly, the on-screen overlay lets you progressively narrow your search by selecting tags in these three levels. The procedure remains the same as in KOMPLETE KONTROL: When you select a Type at an upper level, a tag cloud appears underneath with all Sub-Types available at the next level, and this new tag cloud is automatically focused to speed up your search.

Reminder: You can select multiple tags at a particular level by holding SHIFT when you press the control encoder, thereby widening your search to files tagged with any of the selected tags. Note that in this case the focus won’t automatically move to the next section.
Reminder: You can deselect tags by moving the focus onto them and pressing the control encoder.

If the on-screen overlay is not big enough to display all tags, the tag cloud under focus is displayed entirely. When the focus moves to another level of Types, the section scrolls so that the cloud at this new level can be displayed entirely.

**Resetting the Search Query**

Each time you open the on-screen overlay browser, it mirrors the current state of the MASCHINE Browser. Furthermore the focus is on the section where it was left when closing it (e.g., the result list). Your keyboard provides shortcuts to **start from the beginning** and optionally **reset the search query** in the on-screen overlay:

- Press **BACK** to bring the focus directly to the File Type selector without modifying any selection in the on-screen overlay.

or

- Press **SHIFT + BACK** to bring the focus directly to the File Type selector, keep the current selection in the File Type and Content selectors, and remove all other selections.

**Loading a File from the Result List**

In the on-screen overlay browser, the result list appears in the right part. If it is not focused, press the Navigate Right button to bring it into focus. To load a file from the result list:

- Turn the Control encoder to select the desired file from the result list, and press the Control encoder (or the **ENTER** button) to load it into MASCHINE.

Depending on what file type you have selected, the file will be loaded to different locations within MASCHINE:

- If it is a Project it will load all associated files replacing all files in memory. If your current Project contains unsaved changes a dialog will appear asking you if you want to save them. This is to prevent you from losing changes by accidentally loading a new Project without saving the old one.

- If it is a Group, it will be loaded into the Group in focus.

- If it is a Sound, it will be loaded into the Sound slot in focus.
• If it is an Instrument preset, it will be loaded into the first Plug-in slot of the Sound slot in focus.

• If it is an Effect preset, it will be loaded into the selected Plug-in slot.

• If it is a Sample, it will be loaded into the Sound slot in focus. The Sampler Plug-in will be automatically loaded in the first Plug-in slot in order to play the Sample. The Sample will spread over the entire velocity and note range.

You can also use the Browser when creating a new Group. In this case, the locations in which the selected file will be loaded slightly differ from the general rules described above. For more information, see section 7.2.3, Navigating and Controlling Your Sounds in any Group.

**Loading the Previous/Next File from the Result List**

► Press the **PRESET** buttons (right of the control encoder) to load the previous/next item from the result list.

The result list does not wrap. When the first item in the result list is selected, the upper **PRESET** button is unlit and inactive; similarly, when the last item in the result list is selected, the lower **PRESET** button is unlit and inactive.

**Quick Browse**

You can access Quick Browse directly from your KOMPLETE KONTROL S-SERIES keyboard:

► Press **SHIFT + BROWSE** to recall the search query that was used to find and load the focused Filetype.

**7.2.5 Using the Perform Features**

Your KOMPLETE KONTROL S-SERIES keyboard provides a dedicated **PERFORM** section, and of course it perfectly integrates into the Perform features introduced in MASCINE 2.2!
General Notes on the Perform Features on Your KOMPLETE KONTROL S-SERIES Keyboard

- The Perform features (Scale, Chord, and Arp) on your KOMPLETE KONTROL S-SERIES keyboard and on controllers from the MASCHINE family are very similar and share most of their parameters: If you modify a shared parameter on a device, your changes will be automatically mirrored on the other device(s).

- Although the Perform features on your keyboard and on MASCHINE controllers are very similar and share most of their parameters, they can be used independently from each other. For example, you can set up and activate scales, chords, and/or arpeggios on your keyboard without affecting the current pad behavior, mode and displays on your MASCHINE controller, and inversely.

- The Scale, Chord, and Arp features are not available on your keyboard if it is focused on a MASCHINE instance running as a plug-in in a host environment. In that case, the SCALE and ARP buttons are off and disabled, and pressing SHIFT + SCALE / SHIFT + ARP will not work either.

Note that this does not affect the Perform features on controllers from the MASCHINE family. These are available when MASCHINE is running both as a standalone application and as a plug-in in a host.

- The Scale, Chord, and Arp parameters cannot be modulated or automated in MASCHINE.

For general information on the Perform features and how to use them on controllers from the MASCHINE family, see section ↑7.1, New Perform Features.

Setting Up Scales and Chords on Your Keyboard

On your KOMPLETE KONTROL S-SERIES keyboard:

- Press SCALE to enable or disable the Scale and Chord engine.

The SCALE button is fully lit when the Scale and Chord engine is enabled, otherwise it is dimly lit.

The state of the SCALE button and of the Scale and Chord engine is saved for each Group separately in the Project. It is independent of the state of the Scale and Chord engine on any controller from the MASCHINE family (but the Scale and Chord parameters are synchronized between all devices). If you disconnect and re-connect your keyboard, the state of the Scale and Chord engine and SCALE button is recalled for each Group.
Since your KOMPLETE KONTROL S-SERIES keyboard always controls notes of one particular Sound, the Scale and Chord features can be used regardless of whether the focused Group is in Group or Keyboard mode.

To adjust the Scale and Chord parameters and configure the scale and/or chords you want to use, switch your keyboard to **Scale Edit mode**:

- Press **SHIFT + SCALE** to switch Knobs 1–8 to Scale Edit mode and access the Scale and Chord parameters.

  The displays below Knobs 1–8 switch to the Scale and Chords parameters. When you release **SHIFT**, the **PAGE** field in the leftmost display reads **SCALE**. Note that the **PRESET** field underneath keeps indicating the selected Plug-in in the focused Sound slot, if any (the Sampler in the picture below):

![Displays showing SCALE and PRESET fields]

As long as you hold **SHIFT**, the leftmost display shows instead the index letter and number of the focused Sound slot (**PAGE** field) along with its name (**PRESET** field). For more information, see section ↑7.2.3, Navigating and Controlling Your Sounds in any Group.

When your keyboard is connected to a MASCHINE instance, Scale Edit mode shows the same Knob layout and parameters as when it is connected to a KOMPLETE KONTROL instance:

- **Knob 1** controls the **Root Note**. Please note that this Root Note is defined as in KOMPLETE KONTROL, i.e. it only sets the note on which the selected scale is based: You can choose from the 12 available notes (C to B). On the other hand, the Root Note on MASCHINE controllers in Keyboard mode additionally sets the pitch played by pad 1: You additionally choose a particular octave (C1, C2, C3, etc.) in order to define the mapping of pad 1 (all other pads are then mapped accordingly). Nevertheless, modifying the Root Note on either device will update that of the other device accordingly (ignoring the octave number). For more information on the Root Note on controllers from the MASCHINE family, see section ↑7.1.3, Scale and Chord Parameters.

- **Knob 2** controls the **Scale Type**. This parameter is shared with MASCHINE controllers.
• Knob 3 controls the **Key Mode**. This parameter is specific to your keyboard. As a reminder, **KEY MODE** lets you choose from two operating modes: In **STANDARD** mode, keys outside the current scale are off and inactive. In **EASY** mode, notes within the current scale are spread over white keys, and black keys trigger the closest note within the scale. For more details, please refer to the KOMPLETE KONTROL Manual.

• Knob 5 controls the **Chord Mode**. This parameter is shared with MASCHINE controllers.

• Knob 6 controls the **Chord Type**. This parameter is shared with MASCHINE controllers.

To sum up, **all Scale and Chord parameter values are always synchronized** between your KOMPLETE KONTROL S-SERIES keyboard and the connected controller from the MASCHINE family (except the **KEY MODE** parameter, which is specific to your keyboard) — only the on/off states on each device are independent of each other. Again, all these parameters are described in section ↑7.1.3, Scale and Chord Parameters.

! For consistency, the enharmonic spelling of the Root Note in the displays of your keyboard mirrors the spelling used on MASCHINE controllers — see section ↑7.1.3, Scale and Chord Parameters for all details.

---

**Scales and Chords: Visual Feedback on the Light Guide**

When **SCALE** is on, the LEDs of the Light Guide above the keybed keep you informed at any time on the current scale and chord configuration. The LEDs’ behavior is the same as when your keyboard is focussed on the KOMPLETE KONTROL software.

When **Chord Mode** is set to **Off** or **Harmonizer**: 

<table>
<thead>
<tr>
<th>Type of Key for Selected Scale</th>
<th>LED in Default State</th>
<th>LED when Key Triggered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Root notes</td>
<td>Fully lit</td>
<td>White</td>
</tr>
<tr>
<td>Keys in the scale except root notes</td>
<td>Dimly lit</td>
<td>Fully lit</td>
</tr>
<tr>
<td>Keys outside the scale</td>
<td>Off *</td>
<td>Off **</td>
</tr>
</tbody>
</table>

* This has priority over the information coming from the loaded KOMPLETE 10 Instrument (if any), except for control notes, which are never hidden by the Scale engine.

** If Key Mode is set to Standard, since the “off” keys are re-mapped to keys within the selected scale, when you press an “off” key its target key will light up (fully lit or white, depending on the key), showing you which note was effectively triggered.
Note that if Chord Mode is set to Harmonizer, the notes triggered as part of the chord will also light up.

When **Chord Mode** is set to **Chord Set**:

<table>
<thead>
<tr>
<th>Type of Key</th>
<th>LED in Default State</th>
<th>LED when Key Triggered</th>
</tr>
</thead>
<tbody>
<tr>
<td>C keys</td>
<td>Fully lit</td>
<td>White</td>
</tr>
<tr>
<td>Other keys</td>
<td>Dimly lit</td>
<td>Fully lit</td>
</tr>
</tbody>
</table>

This lighting behavior comes on top of the default LED behavior (when SCALE is off). You can also disable the Light Guide completely. For more information on these topics, see section 7.2.3, Navigating and Controlling Your Sounds in any Group.

### Setting Up Arpeggios on Your Keyboard

On your KOMplete Kontrol S-SERIES keyboard:

- Press **ARP** to enable or disable the Arp engine.

The **ARP** button is fully lit when the Arp engine is enabled, otherwise it is dimly lit.

The state of the **ARP** button and of the Scale and Chord engine is saved globally for the session. It is independent of the state of the Arp engine on any controller from the MASCHINE family. If you close and re-open the Project, if you disconnect and re-connect your keyboard, or if you switch the focus to another device, the state of the Arp engine and **ARP** button is reset to its default value (disabled).

Since your KOMplete Kontrol S-SERIES keyboard always controls notes of one particular Sound, the Arp feature can be used regardless of whether the focused Group is in Group or Keyboard mode (and the Note Repeat feature is not available as such).

To adjust the Arp parameters and configure the arpeggio you want to use, do the following:

- Press **SHIFT + ARP** to switch Knobs 1–8 to Arp Edit mode and access the Arp parameters.
The displays below Knobs 1–8 switch to the Arp parameters. When you release **SHIFT**, the **PAGE** field in the leftmost display reads **ARP**. Note that the **PRESET** field underneath keeps indicating the selected Plug-in in the focused Sound slot (the Sampler in the picture below):

![Display showing ARP and Sampler](image)

As long as you hold **SHIFT**, the leftmost display shows instead the index letter and number of the focused Sound slot (**PAGE** field) along with its name (**PRESET** field). For more information, see section ↑7.2.3, Navigating and Controlling Your Sounds in any Group.

When your keyboard is connected to a MASCHINE instance, Arp Edit mode shows the same Knob layout and section names as on the MASCHINE STUDIO or MASCHINE (MK2) controller except for the Preset selection (Knob 1), which is included in the **MAIN** section:

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MAIN</strong> Section</td>
<td></td>
</tr>
<tr>
<td>Knob 1</td>
<td>Selects between the four available <strong>presets</strong>, labeled <strong>PRESET 1–4</strong>. The presets are the same as on MASCHINE controllers.</td>
</tr>
<tr>
<td>Knob 2</td>
<td>Selects the <strong>Type</strong> of arpeggio. This parameter is shared with MASCHINE controllers.</td>
</tr>
<tr>
<td><strong>RHYTHM</strong> Section</td>
<td></td>
</tr>
<tr>
<td>Knob 3</td>
<td>Adjusts the <strong>Rate</strong> of the arpeggio. This parameter is shared with MASCHINE controllers.</td>
</tr>
<tr>
<td>Knob 4</td>
<td>Selects the <strong>Unit</strong> of the arpeggio. This parameter is shared with MASCHINE controllers.</td>
</tr>
<tr>
<td>Knob 5 (<strong>SEQUENCE</strong>)</td>
<td>Selects a <strong>Sequence</strong> for the arpeggio. This parameter is shared with MASCHINE controllers.</td>
</tr>
<tr>
<td><strong>OTHER</strong> Section</td>
<td></td>
</tr>
<tr>
<td>Knob 6 (<strong>OCTAVES</strong>)</td>
<td>Adjusts the <strong>Octaves</strong> parameter. This parameter is shared with MASCHINE controllers.</td>
</tr>
</tbody>
</table>
### Element  Description

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knob 7 (<strong>DYNAMIC</strong>)</td>
<td>Adjusts the <strong>Dynamic</strong> parameter. This parameter is shared with MASCHINE controllers.</td>
</tr>
<tr>
<td>Knob 8 (<strong>GATE</strong>)</td>
<td>Adjusts the <strong>Gate</strong> parameter. This parameter is shared with MASCHINE controllers.</td>
</tr>
</tbody>
</table>

As when your KOMPLETE KONTROL S-SERIES keyboard is connected to the KOMPLETE KONTROL software, the displays below the first four Knobs always show the parameter values — as opposed to other Knobs whose displays show the parameter name by default and the parameter value when touched. This allows a quicker check of these important parameters in a live situation, since their values are quite self-explanatory.

To sum up, **all Arp parameter values are always synchronized** between your KOMPLETE KONTROL S-SERIES keyboard and the connected controller from the MASCHINE family. Again, all these parameters are described in section [7.1.3, Scale and Chord Parameters](#).

### 7.2.6 Using the Touch Strips

When your keyboard is focused on a MASCHINE instance, its left and right touch strips always send Pitch and Modulation data to the focused Sound, respectively.

The way Pitch and Modulation data is interpreted can vary with the Plug-in loaded in the focused Sound. For example, MASCHINE’s Sampler Plug-in lets you configure various destinations for the Modulation data (in the **MODWHEEL DESTINATION** section of the **Velocity / Modwheel** page, in the Control area).

When you record a Pattern in your MASCHINE Project, your actions on the left and right touch strips are recorded as Pitch and Modulation (CC1) MIDI data for the focused Sound, respectively. You will be able to see and edit these tracks in the MIDI Pane of the Control Lane under the Pattern Editor — please refer to the MASCHINE 2.0 Manual for more information on this.

### Touch Strip Behavior

You can adjust the behavior of each touch strip, i.e. how it reacts to your actions. These behaviors can be selected and adjusted in the **Pitch Strip** and **Modulation Strip** sections of the **Hardware** page in the **Preferences** panel:
The touch strip settings in the Hardware page of the Preferences panel.

To access the settings for your KOMPLETE KONTROL S-SERIES keyboard in the Hardware page of the Preferences panel, your keyboard must be connected to your computer and controlling the MASCHINE instance. Moreover if a controller from the MASCHINE family is also focused on the MASCHINE instance, make sure that your keyboard is selected in the Controller menu at the top of the Hardware page in order to see its settings! For more information, see section 7.4.2, Controller Menu in the Hardware Page of the Preferences Panel.
The **Pitch strip** (left strip) behaves like a typical Pitchbend wheel: It simulates a simple spring holding back the current pitch value when it moves away from its default position, which is in the middle of the strip. When you put your finger somewhere on the strip, the value instantly jumps to the corresponding position and stays there as long as you keep your finger on the strip. When you remove your finger, the value moves back to the default position. The strip’s LED chain illustrates this behavior (the blue LED indicates the pitch value). One parameter is available:

<table>
<thead>
<tr>
<th>Pitch Strip Section</th>
<th>Parameter Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring Strength</td>
<td>Adjusts the speed at which the pitch returns back to its default position when you remove your finger: the higher the <strong>Spring Strength</strong> setting, the quicker the pitch value will return to its default position.</td>
</tr>
</tbody>
</table>

The **Modulation Strip** (right strip) can have two different behaviors, selected via the **Mode** parameter at the top of the **Modulation Strip** section:

- **Standard** (default): Usual behavior for a modulation control. In this mode the touch strip directly translates the position of your finger onto the modulation value. When you put your finger somewhere on the strip, the value instantly jumps to the corresponding position and remains there once you remove your finger.

- **Ball**: Simulates a ball (the current value) that would be attracted by the gravity of your finger. If you put your finger at a particular location on the strip, the ball will move from its current position towards your finger. If you keep your finger in place until the ball reaches it, the ball stops there. If you remove your finger before, the ball sustains its momentum and continues on its way beyond your finger. Note that the longer you keep your finger on the strip, the faster the ball will get. Alternatively, you can “throw” the ball by putting your finger on the ball’s current position (blue LED), dragging it in any direction, and removing your finger. The faster you drag your finger, the faster the ball will get. The movement of the ball is also affected by the **Friction**, **Gravity**, and **Walls** parameters (see table below).

The parameters available in the section depend on the selected behavior:
<table>
<thead>
<tr>
<th>Modulation Strip Section</th>
<th>Parameter Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mode</td>
<td>Selects from the two available behaviors: Standard and Ball (see description above).</td>
</tr>
</tbody>
</table>
| Display                  | Defines how the value is indicated on the strip’s LED chain:  
  *Dot*: The blue LED indicates the current value. White LEDs are disabled.  
  *Bar*: The blue LED indicates the current value. Additionally, white LEDs fill the distance between the current value (in blue) and the zero. |
| Ball mode                |                        |
| Friction                 | Adjusts the air friction that slows down the ball once you have removed your finger. The higher the Friction value, the quicker the ball will decelerate and stop. When the slider is set fully left, the ball never stops. When fully right, the ball stops instantly. |
| Gravity                  | Adjusts the attraction of your finger on the ball: The higher the Gravity value, the faster the ball will move. This parameter doesn’t affect the ball movement if you throw the ball with your finger (see the description of the Ball mode above). |
| Walls                    | Adjusts the behavior of the ball when it reaches the range limits. If Walls is set to On, the ball bounces off the range limit and continues its trip in the opposite direction. If Walls is set to Off, the ball jumps to the opposite range limit and continues from there in the same direction. |

### 7.2.7 Recording Modulation from Your Keyboard

You can record modulation in MASCHINE from your KOMPLETE KONTROL S-SERIES keyboard. To do this, your keyboard must be in Instrument mode.

You cannot record modulation when your keyboard is in Scale Edit or Arp Edit mode. For more information on these modes, see section ↑7.2.5, Using the Perform Features.

In order to record modulation, your keyboard provides an **Auto-write mode** similar to the one found on the various MASCHINE controllers, except that on your keyboard Auto-write mode is always pinned (it is never a temporary mode).

To record modulation from your keyboard, do as follows:

1. Check that MASCHINE’s playback is on.
2. On your keyboard, press **SHIFT + Page Left + Page Right** simultaneously to enter Auto-write mode.

   The leftmost display reads **AUTO ON**. While you are holding **SHIFT**, both Page buttons are fully lit to indicate that Auto-write mode is active.

   In the displays under Knobs 1–8 parameters that cannot be modulated disappear and the corresponding Knobs above are disabled. For modulatable parameters the bars switch to bipolar mode and the values (appearing only when you touch the Knobs) indicate the deviations to the actual values, measured in percentage:

   ![Display Showing Deviation](image)

3. Turn the desired Knobs 1–8 above the displays to record deviations to the actual values.

   Your modulation gets recorded now. Each Knob movement is stored in your Pattern as a modulation event. It will be automatically played with your Pattern upon its next cycle.

4. When you’re done, press **SHIFT + Page Left + Page Right** again to quit Auto-write mode.

   The leftmost display shortly reads **AUTO OFF**. While you are holding **SHIFT**, both Page buttons are dimmed to indicate that Auto-write mode is inactive.

   At any time you can check whether Auto-write mode is active or not by holding **SHIFT** on your keyboard: If Auto-write is enabled both Page buttons will be fully lit, otherwise both Page buttons will be dimly lit.

   ![](image)

   The Auto-write mode of your keyboard and that of any MASCHINE controller simultaneously connected are independent from each other: You can enable and use Auto-write mode on either device without affecting the functionality of the other device.

**Using the Touch Sensitivity of Knobs 1–8**

Modulation recording also benefits from the touch sensitivity of Knobs 1–8 via the **Touch Auto-write option**.

Enabled by default, the Touch Auto-write option allows you to record modulation events as soon as you touch Knobs 1–8, even if you don’t rotate them. In particular, this allows you to overwrite existing modulation events while keeping the last modulation value you have recorded.
This option is the same as for MASCHINE STUDIO. For all details, please refer to section 7.3.3, Touch Auto-Write Option.

The Touch Auto-write option can be enabled or disabled in the Hardware page of the Preferences panel when your keyboard is connected and focused on that MASCHINE instance:

![The Touch Auto-write check box in the Hardware page of the Preferences panel.]

- To enable or disable the Touch Auto-write option, click the Touch Auto-write check box in the Touch-Sensitive Knobs section of the Hardware page in the Preferences panel.
To access the settings for your KOMPLETE KONTROL S-SERIES keyboard in the Hardware page of the Preferences panel, your keyboard must be connected to your computer and controlling the MASCHINE instance. Moreover, if a controller from the MASCHINE family is also focused on the MASCHINE instance, make sure that your keyboard is selected in the Controller menu at the top of the Hardware page in order to see its settings! For more information, see section ↑7.4.2, Controller Menu in the Hardware Page of the Preferences Panel.

### 7.2.8 Adjusting the Settings for Your Keyboard in the MASCHINE Preferences

When your KOMPLETE KONTROL S-SERIES keyboard is focused on a MASCHINE instance, the Hardware page of MASCHINE's Preferences panel allows you to adjust a few settings for your keyboard.

If a controller from the MASCHINE family is also focused on that MASCHINE instance, make sure that your KOMPLETE KONTROL S-SERIES keyboard is selected in the Controller menu at the top of the Hardware page in order to see its settings! For more information, see section ↑7.4.2, Controller Menu in the Hardware Page of the Preferences Panel.
The Hardware page of the Preferences panel for the KOMPLETE KONTROL S-SERIES keyboards.

The available parameters are listed in the table below. Each of them is described in detail in the corresponding section.

<table>
<thead>
<tr>
<th>Section/Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Keyboard</strong></td>
<td></td>
</tr>
<tr>
<td>Velocity Scaling menu</td>
<td>Adjusts how your playing is translated into velocity values. See section 7.2.3, Navigating and Controlling Your Sounds in any Group.</td>
</tr>
</tbody>
</table>
### 7.3 Touch-Sensitive Knobs on MASCHINE STUDIO

MASCHINE 2.2 enables a powerful feature on your MASCHINE STUDIO controller: Under the displays of your controller, **Knobs 1–8 are touch-sensitive**: They can react to the slight pressure of your fingers touching them. This pressure is detected before you actually rotate the knobs or without rotating them at all!

Following sections describe the various MASCHINE contexts in which touch sensitivity comes into play.

You can adjust the touch sensitivity of Knobs 1–8 — see section 7.3.5, Adjusting the Knobs’s Touch Sensitivity for more on this.

**Important: Update the Controller Firmware to the Latest Version!**

The touch-sensitive features will work on your MASCHINE STUDIO controller only if its firmware is in version 22 or greater.
If the MASCHINE software is running and the connected MASCHINE STUDIO controller has a firmware version lower than 22, the touch-sensitive features will not be enabled. Furthermore, in the Hardware page of the Preferences panel, the new Touch-Sensitive Knobs section won’t provide any settings but instead show a message indicating how to update the firmware of your controller:

To update the firmware of your MASCHINE STUDIO controller, do the following:

1. Connect your MASCHINE STUDIO controller to your computer and switch it on.
2. Open your favorite internet browser and open the following page of the Native Instruments website:
3. Click the “Drivers and other files” link and, in the “Maschine Controller” section, click the Device Updater for your operating system to download it.
4. Once the archive has been downloaded, extract it to the desired folder.
5. In the Explorer (Windows) or Finder (Mac OS X), navigate to the extracted folder and open it.
6. Within that folder, double-click the “DeviceUpdater.exe” file (Windows) or the “DeviceUpdater” file (Mac). The Device Updater starts up.
7. Follow the instructions of the Device Updater to complete the firmware update.
In the rest of this section, we assume that the firmware of your MASCHINE STUDIO controller is in version 22 or greater.

### 7.3.1 List Overlay for Selectors

Many MASCHINE parameters are presented in the form of a selector providing a list of possible values for the parameter (e.g., the Mode parameter of the Saturator Plug-in or the Dest. parameter in the Audio page of the Sound’s/Group’s Output Channel settings).

![A selector.](image)

From your controller, you can adjust such a parameter by turning the corresponding Knob under the display of your controller.

When you touch the Knob of that parameter, a list appears above the parameter on the display of your controller. This list shows you at a glance all possible values for the parameter you are touching along with the value currently selected, making the value selection much more intuitive.
Touch the Knob under a selector (here the MODE parameter under the left display) to open a list with the values available for selection.

The list is displayed as long as you touch or turn the corresponding Knob. When you release the Knob, the list disappears after a short delay.

Only one list can be displayed at a time. If you actuate two or more Knobs that control selectors, only the list for the last-touched Knob will be shown.

### 7.3.2 List and Tag Overlays in the Browser

When browsing your Library from the MASCHINE STUDIO controller in Browse mode, the touch-sensitive Knobs 1–8 provide you with handy browsing aids.

For general information on how to use the Browse mode of your controller to browse the MASCHINE Library, please refer to section 3.2 “Searching and Loading Files from the Library” in the MASCHINE 2.0 Manual.

### List Overlays for Product Category, Bank, and Sub-Bank

As you select a product category, bank or sub-bank via Knobs 1, 3, and 4 under the left display, respectively), the corresponding list overlay appears above. These overlays are similar to those for selectors described in section 7.3.1, List Overlay for Selectors. In each list, the selected item is highlighted.
The left display, here when browsing Effects: Selecting the Creative Effects category via Knob 1 (on the left), the 2.0 Library bank via Knob 3 (in the middle), and all sub-banks via Knob 4 (on the right).

Like in the software, each of these lists includes an All... entry at the top allowing you to deselect any selected item. Turn the corresponding Knob at full left to select this entry.

**Tag Overlays for Type, Sub-Type, and Mode**

As you select a Type, Sub-Type(s), and/or Mode via Knobs 5–7 under the right display, a tag cloud appears above. This tag cloud mirrors that of the Browser in the software. It shows all tags for which items have been found in the Library. In this cloud, the selected tag is highlighted.

Like in the software, the Type and Sub-Type tags share the same tag cloud, while the Mode tag has its own cloud.

A little down-pointing arrow under the cloud indicates which tag cloud is currently displayed.

The right display, here when browsing Instruments: Selecting the Bass Type via Knob 5 (left picture) and the Digital Bass Sub-Type via Knob 6 (on the right).
Using the Jog Wheel with the List and Tag Overlays

When your MASCHINE STUDIO controller is in Browse mode, you can also make use of the jog wheel and FUNCTION buttons to navigate the Library (for all details, see the MASCHINE 2.0 Manual):

- Press the FUNCTION buttons to put the jog wheel’s focus on the desired field at the bottom of the displays (the focused field is indicated by the surrounding brackets).
- Turn the jog wheel to change the value in the focused field. If the result field (last field on the right) is focused, turning the jog wheel will navigate the result list, and pressing it will load the selected item.

These functions stay valid in MASCHINE 2.2, but now the jog wheel also interacts with the list and tag overlays described above:

- When the jog wheel is focused on a field providing a list overlay (product category, bank, and sub-bank) or tag overlay (type, sub-type, and mode), pressing and holding the jog wheel opens that overlay. The overlay disappears as you release the jog wheel. If you turn the jog wheel without pressing it, no overlay will show up and the value of the focused field will be changed as in previous MASCHINE versions.
- When the jog wheel is focused on the product field (Knob 2), nothing happens when you press it.
- When the jog wheel is focused on the result field (default focus, Knob 8), turning the jog wheel closes any displayed overlay.

7.3.3 Touch Auto-Write Option

Modulation recording also benefits from the touch sensitivity of Knobs 1–8 via the Touch Auto-write option.

Reminder: To record modulation from your MASCHINE STUDIO controller, activate playback, switch your controller to Auto-write mode by pressing and holding AUTO (or by pressing SHIFT + AUTO, which will pin Auto-write mode), and turn the Knobs 1–8 as you see fit. For more information, please refer to section 7.5.2 “Recording Modulation” in the MASCHINE 2.0 Manual.

Enabled by default, the Touch Auto-write option allows you to record modulation events as soon as you touch Knobs 1–8, even if you don’t rotate them:
• If Touch Auto-write is disabled, modulation events are recorded only when you rotate the Knobs 1–8 (as in previous MASCHINE versions).

• If Touch Auto-write is enabled, modulation events are recorded as soon as you touch the Knobs 1–8, whether you actually rotate them or not:
  ◦ If you rotate the Knobs, the new modulation values are recorded for the corresponding parameters.
  ◦ If you touch the Knobs but don’t rotate them, the last modulation values for these parameters keep being recorded as new events as the playhead moves forward, thereby overwriting any existing modulation events at the playhead position. Modulation stops being recorded when you release the Knob(s).

**Enabling/Disabling Touch Auto-Write**

The Touch Auto-write option can be enabled or disabled in the Hardware page of the Preferences panel:
To enable or disable the Touch Auto-write option, click the Touch Auto-write check box in the Touch-Sensitive Knobs section of the Hardware page in the Preferences panel.

To access the Touch-Sensitive Knobs section in the Hardware page, your MASCHINE STUDIO controller must be connected to your computer and controlling the MASCHINE instance. Moreover if a KOMplete Kontrol S-Series keyboard is also focused on that MASCHINE instance, make sure that your MASCHINE STUDIO controller is selected in the Controller menu at the top of the Hardware page in order to see its settings! For more information, see section 7.4.2, Controller Menu in the Hardware Page of the Preferences Panel.
The Touch Auto-write option is also available on the KOMPLETE KONTROL S-SERIES keyboards. See section 7.2.6, Using the Touch Strips for more information.

**Example of Use**

Touch Auto-write can be very handy if a parameter already has some modulation recorded in the Pattern, and you want to re-record modulation for this parameter, this time at a constant value:

- With Touch Auto-write disabled (and in previous MASCHINE versions), you have to constantly rotate the Knob to ensure that the old modulation events are actually replaced by the new ones. To simulate a new constant modulation value, you had no other choice than slightly rotate the Knob incessantly around the desired value.

- With Touch Auto-write enabled, you just need to keep a finger on the Knob: The current modulation value is recorded in new modulation events as long as you touch the Knob, automatically replacing any old modulation events at these positions.

**7.3.4 Zoom and Scroll Overlays**

Since MASCHINE 2.0, when your MASCHINE STUDIO controller is in particular modes, you can use Knob 5 and 6 to respectively zoom and scroll horizontally through the content shown in the right display. In some cases (e.g., in Keyboard mode) you can additionally use Knob 7 to scroll vertically through this content.

In MASCHINE 2.2, the zooming and scrolling functions are indicated, when available, by little icons that appear as overlays above the relevant Knobs as soon as you touch any of them. This way, in case of doubt, a simple touch on any Knob below the right display will indicate if some zooming and scrolling functions are available.
When you touch any of the Knobs 5–8, little icons appear above the Knobs used for zooming/scrolling in the display.

7.3.5 Adjusting the Knobs’s Touch Sensitivity

You can adjust the touch sensitivity of Knobs 1–8 to your liking. Your setting will affect all the features involving touch-sensitive knobs (see previous sections).

The touch sensitivity can be adjusted via the Touch Sensitivity slider available in the Touch-Sensitive Knobs section of the Hardware page in the Preferences panel:
The Touch Sensitivity slider in the Touch-Sensitive Knobs section allows you to adjust the touch sensitivity of Knobs 1–8.

► In the Touch-Sensitive Knobs section at the bottom of the Hardware page in the Preferences panel, drag the Touch Sensitivity slider to the left to decrease the touch sensitivity of Knobs 1–8, or drag the slider to the right to increase it.

To access and modify the settings for your MASCHINE STUDIO controller, it must be currently connected to your computer and controlling the MASCHINE software, and it must be selected in the Controller menu at the top of the Hardware page. See section 7.4.2, Controller Menu in the Hardware Page of the Preferences Panel for more information on this.

The Touch Sensitivity values range from 1 to 8 (3 by default).
At low sensitivity values (slider to the left), you will need to apply a stronger pressure on Knobs 1–8 for MASCHINE to detect it. At high sensitivity values (slider to the right), MASCHINE will detect a softer pressure on the knobs.

The current sensitivity value is indicated by the number left of the slider. Additionally, this number provides a visual feedback that helps you quickly find the sensitivity that best fits your needs:

On the left, your touch is not detected; on the right, it is detected!

1. While looking at this sensitivity value, touch any Knob 1–8 under the controller displays. As soon as your pressure on the Knob is detected by MASCHINE, the number is highlighted.

2. Apply various pressures on the Knob and readjust the slider accordingly until you are satisfied with the sensitivity.

For example, you could set the sensitivity high enough to avoid that slight, unwanted touches on the Knobs disturb your workflow, but still low enough to give the touch features a “natural” feel — the best setting will depend on your fingers and needs!

In the Hardware page of the Preferences panel, the other setting of the Touch-Sensitive Knobs section is described in section 7.3.3, Touch Auto-Write Option.

7.4 Minor Changes in MASCHINE 2.2

This section describes smaller workflow improvements introduced in MASCHINE 2.2.
7.4.1 MIDI Thru for Sounds and Groups

MIDI Thru determines if incoming MIDI events are copied from the MIDI input to the MIDI output of MASCHINE 2. In previous versions of MASCHINE 2, MIDI events arriving to MASCHINE were always copied to its MIDI output (i.e. MIDI Thru was always on). In some situations this could lead to unwanted feedback loops, for example when using MASCHINE as a plug-in in your host environment and recording your pads as MIDI notes in your host.

In MASCHINE 2.2 you can enable or disable MIDI Thru for each Channel (Sound or Group) individually:

- When MIDI Thru is enabled on a Channel, incoming MIDI events are copied to the Channel’s MIDI outputs.
- When MIDI Thru is disabled on a Channel, incoming MIDI events are not copied to the Channel’s MIDI outputs.

By default, the MIDI Thru option is disabled for Groups, and enabled for Sounds.

The MIDI Thru option is available via the Thru button in the MIDI page of the Sound’s or Group’s Input properties:
To enable or disable MIDI Thru for a Group or a Sound, click the Thru button in the MIDI page of its Input properties.

As usual, you can also access the MIDI Thru option from your controller by navigating to the Input properties of the desired Sound or Group. For more information on how to do this, please refer to section 2.3.3 “Navigating Channel Properties, Plug-ins, and Parameter Pages in the Control Area” in the MASCHINE 2.0 Manual.

**Notes on MIDI Thru**

- In MASCHINE 2, Groups and Sounds can receive MIDI events independently (as defined in the MIDI page of their respective Input properties):
  - If a Group receives a MIDI event, it sends the MIDI event to all its Sounds, regardless of the MIDI settings of its Sounds.
  - If a Sound receives a MIDI event, it plays the MIDI event, regardless of the MIDI settings of its parent Group.

- Although a Group cannot generate its own MIDI events (no MIDI page in the Group’s Output properties), it can “echo” the MIDI events it receives if its MIDI Thru is on.

- MIDI Thru options for Sounds and Groups are independent from each other: The MIDI Thru option for a particular Channel only determines if the MIDI events arriving to that Channel will be copied to its output.

- If you have loaded MASCHINE as an instrument plug-in in your host environment and want to record your pads as a MIDI part in your host that will in return play back your MASCHINE instrument, disable MIDI Thru for all Sounds and Groups you want to record in order to avoid feedback loops.

**7.4.2 Controller Menu in the Hardware Page of the Preferences Panel**

In previous MASCHINE versions you could have only one device focused on a particular MASCHINE instance, and the Hardware page of the Preferences panel showed the settings for that particular controller. With the integration of the KOMPLETE KONTROL S-SERIES keyboards in MASCHINE 2.2, you can have two devices simultaneously focused on a MASCHINE instance: a controller from the MASCHINE family and a KOMPLETE KONTROL S-SERIES keyboard.
For this reason, the **Hardware** page of the **Preferences** panel provides you with a new **Controller menu** at the top allowing you to select the device of which you want to see and modify the settings:

The Controller menu allows you to display the settings for the desired device.

This menu can hold up to two entries, depending on the device(s) focused on that MASCHINE instance:

- **No device focused on that instance:** The Controller menu is empty and all settings in the **Hardware** page are grayed out and inactive. To modify the settings of a device from that MASCHINE instance, the device must be connected to your computer and focused on that instance.

- **One device (MASCHINE or KOMPLETE KONTROL S-SERIES) focused on that instance:** The Controller menu holds only one entry for that device. This entry is always selected and you can adjust the settings for that device.

- **Two devices (one controller from the MASCHINE family and one KOMPLETE KONTROL S-SERIES keyboard) focused on that instance:** The Controller menu holds an entry for each focused device and you can choose which settings you want to edit.

**► When two devices are focused on the MASCHINE instance, click the Controller menu at the top of the **Hardware** page in the **Preferences** panel and select the particular device of which you want to edit the settings.**
Upon your selection all settings underneath are updated accordingly.

### 7.4.3 KOMPLETE 10 Integration: Section Names in Parameter Pages

![Parameter Page Screenshot](image)

ROUNDS loaded in a Sound slot: The current Parameter page shows its VOICING, PROGRESS, and OUTPUT sections.

When KOMPLETE 10 Instruments and Effects are loaded in MASCHINE 2.2, their Parameter pages can provide distinct sections of parameters (as MASCHINE Internal Plug-ins did in previous MASCHINE 2 versions). These sections group the parameters according to their function, making the KOMPLETE 10 Factory Library even more accessible from your MASCHINE controller or KOMPLETE KONTROL S-SERIES keyboard.

### 7.4.4 MASCHINE Library Improvements

MASCHINE 2.2 introduces a few improvements in the MASCHINE Library and Browser.

#### KONTAKT Snapshot Support

KONTAKT 5.4 introduces a new feature: KONTAKT Snapshots. These Snapshots allow you to store the current settings of any KONTAKT Instrument for later use. When you load a Snapshot, the KONTAKT Instrument it belongs to is loaded with the parameters values stored in that Snapshot.

In MASCHINE 2.2, KONTAKT Snapshots are included in the MASCHINE Library: Upon your search in the MASCHINE Browser, KONTAKT Snapshots will appear in the Result list next to KONTAKT Instruments, allowing you to directly load KONTAKT Instruments with particular settings.

For more information on KONTAKT Snapshots, please refer to the KONTAKT 5 Manual Addendum.
User Content Folder Included in MASCHINE’s User Paths

New NI products will store user-generated content in a centralized User Content folder. In MASCHINE 2.2 this User Content folder is automatically added to the list of user directories in the User pane of the Library page in the Preferences panel, and as a consequence its files are available in the MASCHINE Browser.

The User Content folder can neither be renamed nor removed from the list. You can modify its path in the Location column.

For more information on managing your user directories, please refer to section 2.5.3 “Preferences – Library Page” in the MASCHINE 2.0 Manual.

Standard User Directory Cannot Be Removed

The Standard User Directory can neither be renamed nor removed from the list in the User pane of the Library page in the Preferences panel. You can modify its path in the Location column.

For more information on the Standard User Directory, please refer to section 2.5.3 “Preferences – Library Page” in the MASCHINE 2.0 Manual.

Cancelling Library Rescan

In the Library page of the Preferences panel, the Rescan button allows you to rescan the selected library (or all your libraries if none is selected) so that the MASCHINE Browser mirrors any changes you have made to the files. Clicking this Rescan button triggers the scan and an Updating Database dialog shows you the progress of the scan.

The Updating Database dialog includes a CANCEL button allowing you to interrupt the scanning process without harming the database permanently:
The Updating Database dialog now includes a Cancel button.

1. Click **CANCEL** in the **Updating Database** dialog to interrupt the scan.
   A **Cancel Rescan** dialog opens up asking you to confirm that you want to cancel the scan:

   ![Cancel Rescan Dialog]

   The dialog warns you that cancelling the scan may lead to inconsistencies or missing items in your MASCHINE Library.

2. If you still want to cancel the scan, click **CANCEL RESCAN** at the bottom right, and the scan will be cancelled.

3. If you prefer instead *not* to cancel the scan, click **CONTINUE** or press [Esc] on your computer keyboard, and the scan will go on.

   If you cancelled the scan, any inconsistencies or missing items in your MASCHINE Library will be solved by rescanning the same path(s) again (via the **Rescan** button mentioned above).

   ![Warning]

   In opposition to the rescan process described here, you cannot cancel the import of files into the MASCHINE Library (via the **FILES** pane of the Browser or via the **Library** page of the **Preferences** panel) nor the process of applying changes to the file tags and properties (via the Attribute Editor in the Browser).
This chapter describes the new features and changes to existing features introduced in MASCHINE 2.1.

Here is a brief overview of the most important changes and additions:

- **Drumsynths**: New Grit engine in the Kick and new Performer mode for the Shaker engine of the Percussion Drumsynth.

- **MIDI**: You can now trigger Scenes via MIDI in stand-alone mode, and configure MIDI settings for all Sounds in a Group at once.

- **Sound and Group management** includes various workflow improvements, notably regarding the copy/paste commands in the software and applying commands to multiple Sounds/Groups.

- On the MASCHINE STUDIO controller and MASCHINE MK2/MK1 controllers, the Navigate mode now includes a Software Navigation submode that allows you to adjust the user interface of the MASCHINE software.

- The MASCHINE MK2/MK1 controllers now provide a Mix mode to adjust the level and panoramic position of the various Sounds or Groups in one go.

- **Quantization** while playing on your controller.

- **Duplicating Sounds/Groups/Patterns/Scenes/Plug-ins** via drag-and-drop in the software.

- **Auto-enabling** the metronome when recording Patterns.

- **Deleting events** for the entire Group at the playback position from your controller.

- **Sampling**: When the RECORD page is displayed on your controller you can switch the pads between the Recording History and the other Sounds in the Group.

- Floating windows for Native Instruments plug-ins can be pinned in order to stay visible when you switch the focus to another Sound or Group.

- Level and pan knobs only appear when hovering the Sound List and the Group List in the software.
• Loading a Plug-in into the first position in the Plug-in List of a Sound updates the Sound’s name.

• Quick Edit shortcuts are disabled on your controller in certain modes.

• Fast scroll on your controller in Browse mode.

All these additions and improvements are described in detail in the following sections.

# 8.1 New Drumsynth Features

In MASCHINE 2.1 the Drumsynths include two new features:

- A new **Grit** engine is available for the Kick: [8.1.1, New Grit Engine for the Kick Drumsynth.](

- A new **Performer** mode is available for the envelope of the Shaker engine in the Percussion: [8.1.2, New Performer Mode for the Shaker Engine of the Percussion Drumsynth.](

For general information on the Drumsynths, please refer to chapter 10 “Using the Drumsynths” in the MASCHINE 2.0 Manual. In particular, for more information on the various engines please see section 10.1.1 “Engines: Many Different Drums per Drumsynth” in the MASCHINE 2.0 Manual.

## 8.1.1 New Grit Engine for the Kick Drumsynth

The Grit kick is a modern electronic kick drum to suit a wide range of styles. It’s quite versatile: with a long decay it has a deep, boomy and airy tonality, but tightened up, it can thump with the best of them. At high tunings, especially with extreme “Aero Grind” and “Aero Amount” values, it becomes very gritty and bitcrushed, great for IDM and electro.
The Grit engine selected on the Kick panel in the Plug-in Strip.

The Grit engine selected for the Kick in the Control area (Main page depicted).
The parameters described below are presented as they appear in the Control area (Arrange view). The same parameters are available in the Plug-in panel within the Plug-in Strip (Mix view) — for more information please refer to section 9.4 “The Plug-in Strip” in the MASCHINE 2.0 Manual.

## Main Page

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MAIN Section</strong></td>
<td></td>
</tr>
<tr>
<td>Engine</td>
<td>Selects the engine used in the Kick Plug-in. If you change this setting, please refer to section 10.2 “The Kicks” in the MASCHINE 2.0 Manual.</td>
</tr>
<tr>
<td>Tune</td>
<td>Adjusts the pitch of the drum played by the middle C, measured in MIDI note numbers and cents. Available values range from 31.00 to 55.00. The default value is 43.00.</td>
</tr>
<tr>
<td>Decay</td>
<td>Adjusts the duration of the sound’s tail, measured as a percentage. Available values range from 0.0 to 100.0% (default: 50.0%).</td>
</tr>
<tr>
<td>Bend</td>
<td>Adjusts the amount of pitch envelope applied to the kick, measured as a percentage. Available values range from 0.0 to 100.0% (default: 6.8%).</td>
</tr>
<tr>
<td>Impact</td>
<td>Adjusts the amount of click or initial attack, measured as a percentage. Available values range from 0.0 to 100.0% (default: 75.0%).</td>
</tr>
<tr>
<td>Gate</td>
<td>When enabled, the decay of the drum is choked by the end of the note. When disabled, the drum plays as a one-shot sound, i.e. until the end of its tail, no matter when the note is released, although the sound duration will still depend on the Decay parameter (see above). Switching Gate on and setting the Decay parameter to a high value while playing short notes can result in a punchier, more aggressive character than simply using short Decay values with Gate off.</td>
</tr>
<tr>
<td><strong>AERO Section</strong></td>
<td></td>
</tr>
<tr>
<td>Grind</td>
<td>Adjusts the grittiness of the “aero” component of the sound, measured as a percentage. Available values range from 0.0 to 100.0% (default: 45.0%). Low values produce a boomy reverberation. High values result in a crushed, digital “air” squashed into the drum sound. Note that this parameter will only have an effect if Amount is set to a non-zero value (see below).</td>
</tr>
<tr>
<td>Amount</td>
<td>Controls the amount of air or grit in the kick sound, measured as a percentage. Available values range from 0.0 to 100.0% (default: 20.0%).</td>
</tr>
</tbody>
</table>
**Advanced Page**

For this engine the Advanced page does not contain any parameters.

**Modulation Page**

Like with all other engines and Drumsynths, the Modulation page contains one parameter: Velocity.

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCALE Section</td>
<td></td>
</tr>
<tr>
<td>Velocity</td>
<td>Adjusts the velocity response of the drum. Available values range from -100.0% to 100.0% (default value). At zero (mid course), the drum is played at full velocity, no matter how hard you hit the keys (or pads). From that mid position, by turning the knob to the right you increase the positive velocity response and make the drum more sensitive to the velocity at which you hit the keys/pads. From the mid position, turning the knob to the left has the inverse effect: the harder you hit the key/pad, the softer the resulting drum sound will be.</td>
</tr>
</tbody>
</table>

**8.1.2 New Performer Mode for the Shaker Engine of the Percussion Drumsynth**

When the Shaker engine is selected in the Percussion Drumsynth, a new Performer mode is available in the Mode parameter of the ENVELOPE area. In this mode the Shaker engine creates natural-sounding shaker patterns when you hold down a note. This allows you to tweak the feel of the groove in real time, as well as add fills and syncopated riffs.

For more information on the Percussion’s Shaker engine, please refer to section 10.6.3 “Percussion – Shaker” in the MASCHINE 2.0 Manual.
The new Performer mode available for the Shaker engine in the Percussion panel of the Plug-in Strip.

The new Performer mode available for the Shaker engine of the Percussion in the Control area.
The parameters for the Performer mode of the Shaker engine are as follows:

**Main Page**

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MAIN Section</strong></td>
<td>This section is the same as in MASCHINE 2.0. For more details please refer to section 10.6.3 “Percussion – Shaker” in the MASCHINE 2.0 Manual.</td>
</tr>
<tr>
<td><strong>ENVELOPE Section</strong></td>
<td></td>
</tr>
</tbody>
</table>
| Mode        | Selects from three envelope modes: **Realistic** (default), **Machine**, and **Performer**.  
**Realistic** and **Machine** mode are described in the MASCHINE 2.0 Manual.  
In **Performer** mode, instead of producing a one-shot sound like most drums, the shaker plays a rhythmic pattern like a real shaker. In this mode, simply hold the note for as long as you want the pattern to play. |
| Accent      | Controls the amount of emphasis on certain notes within the shaker pattern, measured as a percentage. At low values, the groove is static and the notes rather quiet, as if the shaker were being shaken very gently and uniformly. As the parameter is increased, key notes in the pattern are emphasized, creating a classic shaker groove. High values simulate a shaker that is being shaken by someone who is having a lot of fun! Available values range from 0.0 to 100.0% (default: 70.0%). |
### Fill

The Fill parameter is designed to be set to None by default and played manually during performance or automated in the sequencer. By default, the shaker plays a pattern according to the Rate parameter on the Advanced page (see below).

When the Fill parameter is set to Double, the speed of the pattern is doubled. When set to Triple, the shaker plays rapid triplets. Use this to insert improvised fills into your shaker parts to add variety and interest.

### Release

In Performer mode, the Release parameter controls the length of the individual “shakes” in the pattern, measured as a percentage. Lower values result in a staccato shaker pattern. Higher values result in looser, more relaxed notes.

The Release parameter is shared with the other envelope modes. Available values range from 0.0 to 100.0% (default: 35.0%).

If a parameter is shared between two engines or between two modes, the parameter knob keeps its position when you switch to another engine or another mode. For more information on this, please refer to section 10.1.3 “Shared Parameters” in the MASCHINE 2.0 Manual.

### Advanced Page

The Advanced page contains parameters only when the Shaker engine is in Performer mode (see Mode parameter above). These parameters further adjust the envelope.

**ENVELOPE Section**

#### Sync

The Sync parameter has two options: Lock and Retrig.

In Lock mode, the shaker pattern is synced to the song position; that is, it is always in time regardless of when a note is pressed.

In Retrig mode, the shaker pattern (including accents) is retriggered on every note on, without quantizing to the nearest beat.

In both cases, the tempo of the pattern remains correct for the song.

#### Rate

Sets the note division of the shaker pattern. For example, 1/16 (default value) will result in a shaker pattern that plays 16th notes, and so on.
Length

Adjusts the length of the pattern that is accented by the Accent parameter on the Main page (see above). By default, Length is set to 4, so the pattern will appear to repeat every 4 “shakes” (the note length of which can be set with the Rate parameter above). Syncopated patterns can be created by selecting a value other than 4 or 8 (or 3 or 6 if the Rate parameter is set to a triplet note division).

Offset

Adjusts the timing offset of the shaker pattern. Fine adjustment will shift the pattern slightly, by less than one note division, affecting the feel of the shaker pattern in relation to the beat. Coarse adjustment will shift the pattern by entire note divisions, allowing you to rapidly introduce syncopated variations to the shaker pattern during performance or using automation. Available values range from -4.00 to 4.00 (default: 0.00).

On your controller, coarse adjustment (changing the value in steps of 1.0) occurs by default when the knob is moved. Fine-tuning can be achieved by holding the SHIFT button while turning the knob.

Swing

Adjusts the amount of swing or shuffle in the shaker pattern. Higher values will result in a pattern with more swing. Note that Swing alone will result in quite a mechanical feel — for a more human feel it is recommended to add some Twist as well (see below). Available values range from 0.0 to 100.0% (default: 0.0%).

Twist

The Twist parameter “skews” the groove of the shaker pattern. On its own, with the Swing parameter set to zero, it can sound very strange and lopsided. However, used sparingly in conjunction with Swing, the Twist parameter gives the pattern a flowing, natural groove, just like a real person playing a shaker. Available values range from 0.0 to 100.0% (default: 0.0%).

Modulation Page

The Modulation page is the same as in MASCHINE 2.0. For more details please refer to section 10.6.3 “Percussion – Shaker” in the MASCHINE 2.0 Manual.

8.2 New MIDI Features

MASCHINE 2.1 introduces two new MIDI features:

- You can now trigger Scenes via MIDI when the software is running as a stand-alone application: §8.2.1, Triggering Scenes via MIDI in Stand-Alone Mode.
You can now configure the MIDI settings of all Sounds in a Group at once: \[8.2.2, \text{Group MIDI Batch Setup}\].

### 8.2.1 Triggering Scenes via MIDI in Stand-Alone Mode

You can now trigger and change Scenes in MASCHINE using MIDI Note or MIDI Program Change messages also when MASCHINE is running as a stand-alone application.

In MASCHINE 2.0 triggering Scenes via MIDI was possible only with MASCHINE running as a plug-in in a host environment. For more information, please refer to section 13.4 “Triggering Scenes via MIDI (MASCHINE Plug-in Only)” in the MASCHINE 2.0 Manual.

When MASCHINE is running as a stand-alone application, do the following to enable, disable, and configure the Scene change via MIDI:

1. In the MASCHINE Header, click the cog wheel icon. This opens the following menu:

2. Click \textit{MIDI Scene Change} from the menu. This opens a submenu allowing you to configure the Scene MIDI Change.
3. In this *MIDI Scene Change* submenu, select *Source* to choose the desired MIDI source. The *Source* submenu shows the *None* entry (Scene changes via MIDI are disabled, default setting) as well as all enabled MIDI input ports. Select the MIDI input port you want to use to trigger Scenes.

4. If necessary, reopen the *MIDI Scene Change* submenu and select *MIDI Note* to trigger your Scenes via MIDI notes, *Program Change* to trigger your Scenes via MIDI Program Change messages, or *None* (default setting) to disable Scene changes via MIDI completely.

5. If necessary, reopen the *MIDI Scene Change* submenu and select the MIDI channel the Scenes should receive messages from (channel 1 by default).

The entries available in the *Source* submenu of the *MIDI Scene Change* submenu mirror the MIDI input ports that you have enabled in the *Audio and MIDI Settings* panel. To know how to enable or disable particular MIDI input ports in MASCHINE, please refer to section 2.6.3 “Audio and MIDI Settings – MIDI Page” in the MASCHINE 2.0 Manual.

The selected MIDI input port is saved with the Project. If this MIDI input port is not available the next time you open the Project, the unavailable MIDI input port remains selected in the *Source* submenu but is grayed out. The grayed out entry will vanish as soon as you select another MIDI input port in the submenu.

The selected MIDI input port is saved with the Project. If this MIDI input port is not available the next time you open the Project, the unavailable MIDI input port remains selected in the *Source* submenu but is grayed out. The grayed out entry will vanish as soon as you select another MIDI input port in the submenu.
8.2.2  Group MIDI Batch Setup

You can now configure the MIDI output of all Sounds in a Group at once. This is done via the new Group MIDI Batch Setup entry available in the Group’s context menu:

![Group MIDI Batch Setup in Pattern Editor and Arranger](image)

The Group MIDI Batch Setup entry in the Group’s context menu: in the Pattern Editor (on the left) and in the Arranger (on the right).

Using the Group MIDI Batch Setup feature saves you from having to set the Channel and/or Transpose parameters in the MIDI page of the Output properties manually for each Sound in the Group. For more information on these parameters, please refer to section 8.2.4 “Sending MIDI from Sounds” in the MASCHINE 2.0 Manual.

To set the MIDI Output properties of all Sounds in a Group at once, do the following:

1. Right-click ([Ctrl]-click on Mac OS X) the Group name in the Arranger or above the Sound List in the Pattern Editor to open the Group’s context menu.
2. Select the Group MIDI Batch Setup entry.
   A submenu opens with two entries: Sounds to MIDI Channels and Sounds to MIDI Notes.
   A check mark indicates the current setting.
3. Select the desired entry in the submenu (see their description below).
   → The check mark moves to the selected entry and the MIDI Output properties of all Sounds in the Group are configured accordingly.

Sounds to MIDI Channels

If you select Sounds to MIDI Channels (default setting), the following happens:
• For each Sound in the Group, the **Channel** parameter in the MIDI Output properties is set as follows:
  ◦ Sound 1: MIDI channel 1.
  ◦ Sound 2: MIDI channel 2.
  ◦ ...
  ◦ Sound 16: MIDI channel 16.

• For all Sounds in the Group, the **Transpose** parameter in the MIDI Output properties is set to 0.

• The MIDI export logic remains the same as in MASCHINE 2.0: for each Sound the exported MIDI notes will retain the events’ pitches.

  If you manually change the MIDI output channel of a particular Sound after you have selected *Sounds to MIDI Channels*, this Sound might be exported on the same MIDI channel as another Sound. In that case events of both Sounds will be merged in the exported MIDI.

**Sounds to MIDI Notes**

If you select *Sounds to MIDI Notes*, the following happens:

• For all Sounds in the Group, the **Channel** parameter in the MIDI Output properties is set to the same value as the **Channel** parameter in the MIDI **Input** properties of the **Group**. If the Group’s MIDI input channel is set to **All**, the Sounds’ MIDI output channels are set to 1.

• For each Sound in the Group, the **Transpose** parameter in the MIDI Output properties is set as follows:
  ◦ Sound 1: **Transpose** set to 0.
  ◦ Sound 2: **Transpose** set to 1.
  ◦ ...
  ◦ Sound 16: **Transpose** set to 15.

• The MIDI export logic is as follows:
Each Sound is exported at a distinct note value: 
[Root Note value of the Group’s MIDI Input properties] + [Transpose value of that particular Sound].

All exported events for a Sound are flattened to that note value.

Additional Comments

When using the Group MIDI Batch Setup, please keep in mind the following:

- After having used the Group MIDI Batch Setup feature, if you manually change the Channel and/or Transpose parameter in the MIDI Output properties of any individual Sound the check mark in front of the selected setting in the Group MIDI Batch Setup submenu will be grayed out to indicate that this setting is not valid for all Sounds. To reset the MIDI Output properties of all Sounds, you can select the same entry again in the submenu — the MIDI Output properties of all Sounds will be set accordingly and the check mark will return.

- The Group MIDI Batch Setup notably lets you to configure how your Pattern will be exported to MIDI, but it does not actually export the Pattern to MIDI! You can export your Pattern to MIDI via drag-and-drop and via the Group’s or Sound’s context menu — for more information please refer to section 7.8.2 “Exporting MIDI from Patterns” in the MASCHINE 2.0 Manual.

When exporting your Pattern, the setting selected in the Group MIDI Batch Setup submenu will be taken into account only if the Pattern Editor is in Group view: If the Pattern Editor is in Keyboard view only the Pattern content for the focused Sound will be exported and all notes will be exported at their respective pitches (even if the Group MIDI Batch Setup is set to Sounds to MIDI Notes).

- The setting selected in the Group MIDI Batch Setup submenu is saved with the Group. This notably means that you can have different settings for different Groups in your Project.

8.3 Improved Sound and Group Management

Managing Sounds and Groups has been improved by the following:
• When you copy/paste a Sound or a Group in the software, its events (for Sounds) or Clips (for Groups) are copied as well: §8.3.1, New Copy/Paste Procedure for Sounds and Groups in the Software.

• You can now apply various management commands to multiple Sounds or Groups at once: §8.3.2, Management Commands on Multiple Sounds and Groups.

• When adjusting the pad parameters for multiple Sounds, MASCHINE 2.1 indicates whether the selected Sounds have different parameter values, and you can adjust these values once more consistently: §8.3.3, Adjusting the Key, Choke, and Link Parameters for Multiple Sounds.

### 8.3.1 New Copy/Paste Procedure for Sounds and Groups in the Software

In MASCHINE 2.0, when copying/pasting Sounds and Groups in the software, events (for Sounds) and Clips (for Groups) were not copied. This has changed in MASCHINE 2.1: **Now when you copy/paste Sounds or Groups in the software, the entire content of the copied Sound(s) or Group(s) is pasted, including their events and Clips.** Notably, pasting a Sound into a Sound slot of a different Group will create the needed Patterns if they do not exist, and replace the events for that Sound slot in an existing Patterns.

In the sentence above, “existing Patterns” means the Patterns with the same IDs (i.e. the same position in the Pattern List) as in the source Group. **Example:** If the source Sound contains events in Pattern 1, 2, and 3 of its Group and you paste that Sound into another Group that only has Pattern 1 and 4, Pattern 2 and 3 will be automatically created to host the events of the pasted Sound.

To copy/paste Sounds and Groups from your controller you can press and hold the DUPLICATE button to enter Duplicate mode. In Duplicate mode, Button 2 (+EVNT) lets you decide whether events (for Sounds) and Clips (for Groups) should also be copied. For more information, please refer to section 4.2.6 “Copying and Pasting Sounds” and 4.3.6 “Copying and Pasting Groups,” respectively.

### 8.3.2 Management Commands on Multiple Sounds and Groups

You can now apply the following commands to multiple selections of Sounds or Groups:

- **Sounds:**
  - Changing the selected Sounds’ color.
• Cutting, copying, and pasting the selected Sounds.
• Resetting the selected Sounds.

• **Groups:**
  • Changing the selected Groups’ color.
  • Cutting, copying, and pasting the selected Groups.
  • Deleting the selected Groups.

These commands are available in the Sounds’ or Groups’ context menu.

For more information on these commands, please refer to section 4.2 “Managing Sounds” and 4.3 “Managing Groups” in the MASCHINE 2.0 Manual, respectively.

**Notes on Changing the Color of Multiple Sounds/Groups**

When opening the Color Palette (in order to set a new color setting for the selected Sounds/Groups):

• If the selected Sounds/Groups have the same color setting (a particular color or the default color), this color is highlighted in the Color Palette.

• If the selected Sounds/Groups have different color settings, no setting is highlighted in the Color Palette.

When you select a new color setting from the Color Palette it is applied to all selected Sounds/Groups.

**Cutting, Copying, and Pasting Logic for Multiple Sounds/Groups**

The **cutting procedure** for multiple Sounds and Groups is as follows:

• When you cut a selection of Groups, they are placed into the clipboard and removed from the Group List. All following Groups in the list are shifted up to fill the gap.

• When you cut a selection of Sounds, they are placed into the clipboard and removed from the Sound List. Their Sound slots are reset to their default state.

The **copying procedure** for multiple Sounds and Groups is as follows:

When you copy a selection of Sounds or Groups, they are both placed into the clipboard and kept in the Sound List or Group List.
The *pasting procedure* for multiple Sounds and Groups is as follows:

- When you paste a selection of Groups onto an existing Group, the pasted Groups replace that Group and the following Groups. **Example:** If you paste the Groups A1 and B1 onto the Group E2, the duplicates of A1 and B1 will replace the Groups E2 and F2, respectively (if, say, F2 didn’t exist it is automatically created).

- When you paste a selection of Sounds onto a Sound slot, the pasted Sounds replace the current Sound in that slot and in the following slots — if the last Sound slot is reached, the remaining copied Sounds won’t be pasted at all. Note that this is not affected by any multiple selection you might have made when pasting. **Example:** If you paste the Sounds 1, 2, 4, and 7 onto the Sound slot 14, the duplicates of the Sounds 1, 2, and 4 will replace any existing Sounds in the Sound slots 14, 15, and 16, respectively, while the Sound 7 won’t be pasted at all.

### 8.3.3 Adjusting the Key, Choke, and Link Parameters for Multiple Sounds

In the software, if you select multiple Sounds with different *Key*, *Choke* and/or *Link* values, the corresponding parameters in Pad view now display **MULTI**. On your controller in Pad Mode, the corresponding parameters now display (**MULTI**).

Moreover, you can adjust these parameters for the selected Sounds as described below.

For general information on the Pad view of the software, the Pad Mode on your controller, and the *Key*, *Choke*, and *Link* parameters, please refer to section 5.1 “Adjusting Your Pads” in the MASCHINE 2.0 Manual.

**Adjusting the Key Parameter for Multiple Sounds with different Key Values**

- Click and drag the **MULTI** label next to *Key* to transpose the base key of all selected Sounds. While dragging, the field displays a +/-x value indicating the transposition that will apply to all Sounds as you release the mouse button.
Sound slots 1 to 4 are selected. If they have different Key values, a MULTI label appears (left). When you drag it (middle), a transpose value appears (right) that will be applied to all selected Sounds when you will release the mouse button.

This is also true when adjusting the parameter from your controller.

**Adjusting the Choke or Link Parameter for Multiple Sounds with different Choke or Link Values**

► Click the MULTI label next to Choke or Link and select the desired value from the list to set all selected Sounds to that same Choke or Link group, respectively. This also applies to the Master/Slave setting next to it.
Sound slots 1 to 4 are selected. If they have different Choke values, a MULTI label appears (left). When you click it and select a new Choke or Link group from the list (middle), this new group is applied to all selected Sounds.

This is also true when adjusting the parameter from your controller.

### 8.4 Extended Navigate Mode on MASCHINE, MASCHINE MK2 and MASCHINE STUDIO

The Navigate mode on your controller has been extended: Now you can both navigate the Parameter pages of Channel properties and Plug-ins (like in MASCHINE 2.0) and adjust the view settings of specific areas in the software interface (like in MASCHINE 1.8).

Press and hold NAVIGATE to enter Navigate mode. You can also pin Navigate mode by pressing NAVIGATE + Button 1 above the left display so that your controller stays in Navigate mode when you release NAVIGATE — see section 2.3.5 “Pinning a Mode on Your Controller” in the MASCHINE 2.0 Manual.

The Navigate mode now has two distinct submodes:

- **The default Software Navigation mode** lets you adjust the look of the software interface: You can show/hide specific elements and change zoom/scroll settings.
• The **Page Navigation mode** allows you to navigate Channel properties, Plug-ins along with their Parameter pages.

You can switch between Software Navigation and Page Navigation mode at any time:

► When your controller is in Navigate mode, press Button 2 (PAGE NAV) to switch between Software Navigation and Page Navigation mode.

→ When PAGE NAV is off (default setting) your controller is in Software Navigation mode. When PAGE NAV is on your controller is in Page Navigation mode.

### 8.4.1 Software Navigation Mode: Adjusting the Look of the Software Interface

By default, when you enter Navigate mode Button 2 (PAGE NAV) is off and your controller shows the Software Navigation mode:

![The Software Navigation mode on your controller.](image)

The Software Navigation mode allows you to customize the user interface of the MASCHINE software by showing or hiding specific parts of the interface (via Button 5–7 above the right display) and changing the zoom and scroll settings in the Arranger and the Pattern Editor (via Knob 1–2 and 5–7 or using the pads):

<table>
<thead>
<tr>
<th>Action</th>
<th>Shortcut</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show/hide the Browser</td>
<td>Press Button 5 (BROWSER)</td>
</tr>
<tr>
<td>Show/hide the Control Lane</td>
<td>Press Button 6 (MOD)</td>
</tr>
<tr>
<td>Maximize/minimize the Mixer</td>
<td>Press Button 7 (MIXER)</td>
</tr>
<tr>
<td>Action</td>
<td>Shortcut</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Zoom Arranger in/out</td>
<td>Turn Knob 1 or press pad 14/10</td>
</tr>
<tr>
<td>Scroll Arranger left/right</td>
<td>Turn Knob 2 or press pad 9/11</td>
</tr>
<tr>
<td>Zoom Pattern Editor in/out</td>
<td>Turn Knob 5 or press pad 6/2</td>
</tr>
<tr>
<td>Scroll Pattern Editor left/right</td>
<td>Turn Knob 6 or press pad 1/3</td>
</tr>
<tr>
<td>Scroll Pattern Editor up/down (Keyboard mode only)</td>
<td>Turn Knob 7 or press pad 8/4</td>
</tr>
</tbody>
</table>

These shortcuts affect the software layout in either Arrange view or Mix view (except for the Browser, which is shown/hidden in both views). Hence, depending on the current view the effect of some shortcuts might not be directly visible. Reminder: You can quickly switch the software between Arrange and Mix view by pressing SHIFT + NAVIGATE on your controller.

**Using the Pads**

In Software Navigation mode the pads provide a convenient way of zooming/scrolling the Arranger and the Pattern Editor:
• Fully lit pads indicate available actions.
• Dim lit pads indicate actions currently not available (e.g., scrolling left in the Pattern Editor when it is already at full left).
• Unlit pads have no function.
8.4.2 Page Navigation Mode: Navigating Channel properties, Plug-ins, and their Parameter Pages

When your controller is in Navigate mode and Button 2 (PAGE NAV) is enabled, your controller shows the Page Navigation mode:

![Page Navigation mode on your controller.](image)

The Page Navigation mode allows you to navigate the Parameter pages available in the Channel properties and Plug-ins of the various channels (Sounds, Groups, and Master) in your Project.

Except for the Button 2 (PAGE NAV) — which allows you to switch back to Software Navigation mode — the Page Navigation mode is strictly identical to the Navigate mode in MASCHINE 2.0. For more information, please refer to section 2.3.3 “Navigating Channel Properties, Plug-ins, and Parameter Pages in the Control Area” in the MASCHINE 2.0 Manual.

8.5 New Mix Mode on MASCHINE and MASCHINE MK2

Your controller now provides a dedicated Mix mode. The Mix mode allows you to see and adjust the Level and Pan parameters for all your Groups and Sounds.

Press **SHIFT + SAMPLING** to enter or leave Mix mode on your controller.

When Mix mode is active, the **SAMPLING** button is lit.

To leave Mix mode you can also simply press the lit **SAMPLING** button.
In Mix mode the displays show the Level or Pan values for your Sounds or Groups:

The Mix mode on your controller, here showing the Level of Sound slots 1–8.

The Mix mode on your controller and the Mix view in the software are independent from each other: Switching views in the software does not switch the mode on your controller, and inversely — for example, you can use your controller in Mix mode while displaying the Arrange view in the software. For more information on the Mix view in the software, please refer to chapter 9 “Controlling Your Mix” in the MASCHINE 2.0 Manual.

Switching the Displays Between Group or Sound Parameters

Like the Mixer in the software, the Mix mode lets you choose to display channel parameters at the Group level (i.e. for all your Groups) or at the Sound level (i.e. for all Sound slots of the focused Group).

► To display Group parameters, press Button 2 (GROUP) above the left display.

→ You can now control the Level and Pan parameters of all your Groups (see description below).

► To display Sound parameters, press Button 3 (SOUND) above the left display.

→ You can now control the Level and Pan parameters of all Sounds in the focused Group (see description below).

To switch the displays to the Sounds of another Group, simply set the focus onto this Group by pressing its Group button A–H (and using SHIFT to switch to another Group bank if necessary) as you would do in Control mode. As in Control mode, the name of the focused channel (Group or Sound) is always shown in the left part of the Information Bar in the left display.

Navigating Groups and Sounds

At both levels channels are organized into sets of eight channels (four on each display).
Use the Page buttons at the left of the displays to show the next/previous eight channels (Sounds: 1–8 and 9–16; Groups: A1–H1, A2–H2, etc.).

If you set the focus to a Sound or Group not visible on the displays, these automatically switch to the relevant set of eight channels: for example if you are viewing Sound channels 1–8 and press pad 11, the displays automatically jump to Sound channels 9–16 in order to show the Sound 11 you just selected.

The focus is strictly equivalent in Mix mode and in Control mode: The Sound or Group focused in Mix mode will also be focused in Control mode, and inversely.

Adjusting the Level and Pan Parameters

Once you have selected the desired channels for display (see above), do the following to adjust the channels’ Level or Pan parameter:

1. Press Button 5 and 6 to switch the displays between Level and Pan parameters.
   The label (LEVEL or PAN) under Button 5 and 6 indicates the parameter currently displayed.
2. Turn the desired Knobs 1–8 to adjust the displayed parameter for the corresponding channels.

As usual you can hold SHIFT while turning Knobs 1–8 to make finer adjustments.

The parameters displayed in Mix mode correspond to the Level and Pan parameters in the Audio page of the channel’s Output properties, respectively. For more information, please refer to section 8.1.2 “Configuring the Main Output of Sounds and Groups” in the MASCHINE 2.0 Manual.

8.6 Minor Changes in MASCHINE 2.1

This section describes smaller workflow improvements introduced in MASCHINE 2.1.
8.6.1 Quantization While Playing

A new Input Quantization mode called **Play/Rec** has been introduced that allows you to quantize events also *as you play them* on the pads.

This feature is similar to that found in MASCHINE 1.8.

The Input Quantization settings previously available have been renamed to include the new Input Quantization mode — now Input Quantization can be set to following modes:

- **None**: Input Quantization is disabled. Events you play or record on the pads are not quantized.
- **Record**: Input Quantization is applied only when you record the pads.
- **Play/Rec**: Input Quantization is applied both when you play on the pads and when you record them.

In Play/Rec mode the quantization applied while playing is slightly different from the quantization applied while recording: When recording, all events are quantized to the closest step — possibly ahead of the event. When playing, on the other hand, events occurring in the first half of the steps are left untouched (since you cannot bring them forward in the timeline!) whereas events occurring in the second half of the steps are quantized to the next step.

8.6.1.1 Choosing an Input Quantization Mode in the Software

In the software the Input Quantization can be configured via the Quantize setting available in the Input section at the bottom of the General page in the Preferences panel:

- Click the Quantize menu and select the desired Input Quantization mode from the three modes available (see their description above).

8.6.1.2 Choosing an Input Quantization on Your Controller

**On MASCHINE, MASCHINE MK2 and MASCHINE STUDIO**

On your controller the Input Quantization can be configured via the recording settings:
1. Press **SHIFT + GRID** to show the recording settings.
2. Turn Knob 5 (**Quantize MODE**) to select the desired Input Quantization mode from the three modes available (see their description above).

**On MASCHINE MIKRO and MASCHINE MIKRO MK2**

On your controller the Input Quantization can be configured via the recording settings:

1. Press **SHIFT + GRID** to show the recording settings.
2. Press the Right Arrow button repeatedly to display the **QUANTIZE MODE** parameter (the last parameter).
3. Turn the Control encoder to select the desired Input Quantization mode from the three modes available (see their description above).

### 8.6.2 Duplicating Sounds, Groups, Patterns, Scenes, and Plug-ins via Drag-and-Drop

You can now duplicate Sounds, Groups, Patterns, Scenes, and Plug-ins in the software by dragging them with the mouse while holding [Ctrl] ([Alt] on Mac OS X) on your computer keyboard.

While [Ctrl] ([Alt] on Mac OS X) is held and you drag the item, the mouse cursor turns to a duplication cursor.

![Duplicating a Group (Windows depicted).](image)

You can press and hold [Ctrl] ([Alt] on Mac OS X) before or after you start dragging the item. If you release [Ctrl] ([Alt] on Mac OS X) while dragging the item, the cursor turns back to the default move cursor and the item will be moved instead of duplicated. Duplication will occur only if [Ctrl] ([Alt] on Mac OS X) is held when you release the mouse button — this allows you to decide whether to duplicate or move the item until the very last moment!
For Groups, Patterns, Scenes, and Plug-ins, you can add the duplicate to the existing items or replace one of the existing items with the duplicate. As you are dragging the item, MASCHINE will indicate the potential locations in which the duplicate can be inserted:

- If you drag the item between two existing items in the list, a white insertion line appears and the duplicate will be inserted between the existing items.
- If you drag the item over another item, this item gets slightly highlighted and the duplicate will replace that item.

When duplicating a Sound, you cannot insert the duplicate between two existing Sound slots — the duplicate will always be placed into an existing Sound slot, replacing its content (if any).

**Duplicating Sounds via Drag-and-Drop**

- [Ctrl]-drag a Sound ([Alt]-drag it on Mac OS X) onto the desired location in the Sound List to duplicate it there.

As you are dragging the Sound, the potential Sound slot in which the duplicate can be inserted is highlighted: If you release the mouse button the duplicate will be inserted in that Sound slot, replacing any existing Sound in that slot.

You can also drag the Sound over another Group in the Group List: the focus switches to the other Group and you can duplicate the Sound to the Sound List of that Group!

Please note: In MASCHINE 2.1, when you copy/paste a Sound in the Sound List of the software, its events in any existing Patterns are duplicated as well (this was not the case in MASCHINE 2.0). See section 8.3.1, New Copy/Paste Procedure for Sounds and Groups in the Software for more on this.

You can also **duplicate multiple Sounds at once**:

- To duplicate multiple Sounds, select them and [Ctrl]-drag them ([Alt]-drag them on Mac OS X) onto the desired location.

For general information on managing Sounds, please refer to section 4.2 “Managing Sounds” in the MASCHINE 2.0 Manual.
Duplicating Groups via Drag-and-Drop

► [Ctrl]-drag a Group ([Alt]-drag it on Mac OS X) onto the desired location in the Group List to duplicate it there.

→ The Group is duplicated with its Clip content in the Arranger.

Please note: In MASCHINE 2.1, when you copy/paste a Group in the Group List of the software, its Clip content is duplicated as well (this was not the case in MASCHINE 2.0). See section 8.3.1, New Copy/Paste Procedure for Sounds and Groups in the Software for more on this.

You can also duplicate multiple Groups at once:

► To duplicate multiple Groups, select them and [Ctrl]-drag them ([Alt]-drag them on Mac OS X) onto the desired location.

For general information on managing Groups, please refer to section 4.3 “Managing Groups” in the MASCHINE 2.0 Manual.

Duplicating Patterns via Drag-and-Drop

You can duplicate Patterns via drag-and-drop in the Pattern Manager. You can use the list of Patterns (on the left) or the pad grid (on the right) — you can even drag a Pattern between both.

For more information on the Pattern Manager, please refer to section 7.7.1 “The Pattern Manager and Pattern Mode” in the MASCHINE 2.0 Manual.

► [Ctrl]-drag a Pattern ([Alt]-drag it on Mac OS X) onto the desired location in the Pattern Manager to duplicate it there.

Duplicating Scenes via Drag-and-Drop

You can duplicate Scenes via drag-and-drop in the Scene Manager or using the Scene names at the top of the Arranger. When using the Scene Manager, you can use the list of Scenes (on the left) or the pad grid (on the right) — you can even drag a Scene between both.

For more information on the Scene Manager, please refer to section 13.2.1 “Scene Management Overview” in the MASCHINE 2.0 Manual.
[Ctrl]-drag a Scene ([Alt]-drag it on Mac OS X) onto the desired location in the Scene Manager or in the top row of the Arranger to duplicate it there.

**Duplicating Plug-ins via Drag-and-Drop**

You can duplicate Plug-ins via drag-and-drop in the Plug-in List of the Control area (software in Arrange view) or of the Mixer (software in Mix view).

For general information on Plug-ins, please refer to section 6.1 “Plug-in Overview” in the MASCHINE 2.0 Manual.

[Ctrl]-drag a Plug-in ([Alt]-drag it on Mac OS X) onto the desired location in the Plug-in List to duplicate it there.

### 8.6.3 Auto-Enabling the Metronome when Recording Patterns

The metronome provides a new Auto-Enable option allowing the metronome turn on automatically when you start recording a Pattern:

- **If Auto-Enable is off** (default setting): The metronome is not automatically enabled (MASCHINE 2.0 behavior).

- **If Auto-Enable is on**: When you start recording a Pattern (typically by pressing REC on your controller), the metronome is automatically enabled. When you exit recording (e.g., by pressing the lit REC button) the metronome returns to its state before the recording (this can be on or off).

The Auto-Enable option can be activated/deactivated both in the software and from your controller.

For more information on the metronome, please refer to section 7.2.3 “Using the Metronome” in the MASCHINE 2.0 Manual.

The Auto-Enable option does not affect the Count-in: Even if Auto-Enable is disabled, the metronome turns on when you press SHIFT + REC to start the Count-in. For more information on the Count-in, please refer to section 7.2.4 “Recording with Count-in” in the MASCHINE 2.0 Manual.
8.6.3.1 Activating/Deactivating the Auto-Enable Option in the Software

The Auto-Enable option of the metronome is available in the General page of the Preferences panel:

The new Auto-Enable when Recording setting in the General page’s Metronome section of the Preferences panel.

► Click the Auto-Enable when Recording check box to switch the metronome’s Auto-Enable option on or off.
8.6.3.2 Activating/Deactivating the Auto-Enable Option from Your Controller

On MASCHINE, MASCHINE MK2 and MASCHINE STUDIO

On your controller the Auto-Enable option of the metronome is available from the recording settings:

1. Press **SHIFT + GRID** to show the recording settings.

   ![Recording Settings](image)

   - **Metronome**
     - **Level**: -2.0 dB
     - **Time**: 1/4
     - **Auto-On**: Off
     - **Count-In**: Length 2 Bars
   - **Quantize**
     - **Mode**: None

2. Turn Knob 3 (**AUTO-ON**) to activate or deactivate the Auto-Enable option of the metronome: When **AUTO-ON** is set to **OFF** the Auto-Enable option is inactive; when **AUTO-ON** is set to **REC** the Auto-Enable is active.

   ![Count-in and Quantize Options](image)

   - **Count-in and Quantize options** have been shifted to the right in order to make room for the new Auto-Enable option: Now the Count-in and Quantize options are controlled via Knob 4 and Knob 5, respectively (it previously was Knob 3 and Knob 4 in MASCHINE 2.0).

On MASCHINE MIKRO and MASCHINE MIKRO MK2

On your controller the Auto-Enable option of the metronome is available from the recording settings:

1. Press **SHIFT + GRID** to show the recording settings.
2. Press the Left/Right Arrow buttons to display the **AUTO-ON** parameter.

3. Turn the Control encoder to activate or deactivate the Auto-Enable option of the metronome: When **AUTO-ON** is set to **OFF** the Auto-Enable option is inactive; when **AUTO-ON** is set to **REC** the Auto-Enable is active.

### 8.6.4 Deleting Events for the Entire Group at Playback Position

On your controller you can now erase events for all Sounds in the Group at the playback position.

In MASCHINE 2.0 you could only erase events for a particular Sound at the playback position — see section 7.4.5 “Deleting Events/Notes” in the MASCHINE 2.0 Manual for more information. The new MASCHINE 2.1 feature extends it to all Sounds in the Group when playback is on.

**On MASCHINE, MASCHINE MK2 and MASCHINE STUDIO**

- While the Pattern is playing, hold **ERASE** + the desired Group button A–H to progressively delete events for all Sounds in that Group as they are reached by the playhead.

**On MASCHINE MIKRO and MASCHINE MIKRO MK2**

- While the Pattern is playing, hold **ERASE + GROUP** + the desired pad 9–16 to progressively delete events for all Sounds in that Group as they are reached by the playhead.

### 8.6.5 Recording Samples from Your Controller: Switching the Pads Between the Sounds and the Recording History

When your controller is in Sampling mode with the **RECORD** page displayed, you can now choose from two behaviors for the pads:
• By default the pads trigger the various Sounds of the Group (MASCHINE 1.8 behavior). This allows you to directly check your new recording(s) together with the other Sounds of the Group.

• Alternatively the pads can trigger the various recordings stored in the Recording History for the focused Sound (MASCHINE 2.0 behavior). This allows you to quickly switch between different takes, compare them, and select the one(s) you prefer.

For more information on recording Samples and using the Recording History, please refer to section 14.2 “Recording a Sample” and 14.2.4 “Checking Your Recordings” in the MASCHINE 2.0 Manual, respectively.

On MASCHINE, MASCHINE MK2 and MASCHINE STUDIO

To switch your pads between triggering Sounds and triggering the various recordings stored in the Recording History, do the following:

► When your controller is in Sampling mode with the RECORD page displayed, press SHIFT + Button 5 (REC HIST) to switch your pads between the Sounds and the Recording History.

→ When REC HIST is highlighted your pads control the Recording History, otherwise they control the various Sounds in the focused Group.

When REC HIST is enabled your pads give you access to 16 recordings from the Recording History. If you have recorded more than 16 takes, press SHIFT + Button 7/8 to switch the pads to the previous/next 16 recordings from the Recording History!

On MASCHINE MIKRO and MASCHINE MIKRO MK2

To switch your pads between triggering Sounds and triggering the various recordings stored in the Recording History, do the following:

► When your controller is in Sampling mode with the RECORD page displayed, press SHIFT + F3 (REC HST) to switch your pads between the Sounds and the Recording History.

→ When REC HST is highlighted your pads control the Recording History, otherwise they control the various Sounds in the focused Group.
Erratum

This chapter provides corrections to errors found in the original MASCHINE 2.0 documentation.

9.1 Editing Events with the Mouse in Paint Mode

In section 7.4.1 “Editing Events with the Mouse: an Overview” of the MASCHINE 2.0 Manual, paragraph “Mouse in Paint Mode” states that clicking in the background of the Event area and dragging the mouse with the button pressed will set notes wherever you move the cursor. This is only true for horizontal movements of your mouse.

9.2 Hardware Control Reference: [1]–[8] Key Shortcuts

Section 3.3 “Editing” of the MASCHINE 2.0 Hardware Control Reference states that keys [1]–[8] on your computer keyboard allow you to adjust the Pattern Grid resolution. This is wrong: These keys adjust the Step Grid resolution (i.e. the step size) instead.

💡 The key [0] switches the Step Grid on/off.