

MASCHINE JAM



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1 Welcome to MASCHINE JAM

Thank you for buying MASCHINE JAM!

MASCHINE is essentially the synergy of the MASCHINE JAM controller hardware and the MASCHINE software combining the advantages of both worlds for making music, live as well as in the studio. The intuitive, hands-on qualities of a dedicated instrument, the MASCHINE JAM controller, with the advanced editing features and the versatility of the MASCHINE software turn it into the creative center of your musical productions.

Using the MASCHINE JAM Project view, with its 8x8 click-pad matrix, you can intuitively control your project with unprecedented overview of your Scenes and Patterns, allowing you to create, and arrange new ideas on the fly. Create tight rhythms, harmonies and melodies — the highly enjoyable instrument combines a pattern-based sequencer, professional sampler, multiple studio and performance effects, and VST/AU plug-in host. Once you touch the tactile Smart Strips and interact with the 8x8 click-pad matrix the fun and intuitive workflow takes over, allowing you to stay focused on your music.

Since you can integrate it in any DAW that supports VST, Audio Units or the AAX format with multiple instances, you can profit from its abilities in almost any software setup or use it as a stand-alone application. You can sample your own material, slice loops and rearrange them easily turning your ideas into full productions.

However, MASCHINE is a lot more than an ordinary drum machine or sampler: It comes with an 8-gigabyte Library programmed and created by well-known artists and a sophisticated, yet easy to use tag-based Browser to give you instant access to the sounds you are looking for. But it doesn't stop there! You can create your own sounds and samples or use MASCHINE EXPANSION packs, available for purchase from the Native Instruments website to further enhance your library of sounds.

You can also control your external MIDI Hardware and Software with the MASCHINE JAM controller and customize the functions of the click-pads to your needs, utilizing the Controller Editor Application.

We hope you enjoy the MASCHINE playground as much as we do. Now let's get going!

1.1 Document Conventions

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



The speech bubble icon indicates a useful tip that may often help you to solve a task more efficiently.



The exclamation mark icon highlights important information that is essential for the given context.



The red cross icon warns you of serious issues and potential risks that require your full attention.

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 labels of the hardware is printed in **orange**. Whenever you see this formatting applied, you will find the same text on the hardware.
 - 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 JAM controller as the 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.
3. Release **SHIFT**.

1.2 Where to Start?

There are many sources of information available for the MASCHINE software and MASCHINE JAM hardware. The main documents should be read in the following sequence:

1. **MASCHINE Software Manual** and online **video tutorials**.
2. **MASCHINE JAM Manual** (this document)

1.3 About This Document

What you are reading now is the MASCHINE JAM Manual. This document provides detailed information about MASCHINE JAM.



Please refer to the MASCHINE Software Manual for information about MASCHINE software. This document is available from the Native Instruments website at <https://www.native-instruments.com/maschinedownloads>.

1.4 Connecting MASCHINE JAM

This chapter contains a quick walk-through of the basic hardware setups.

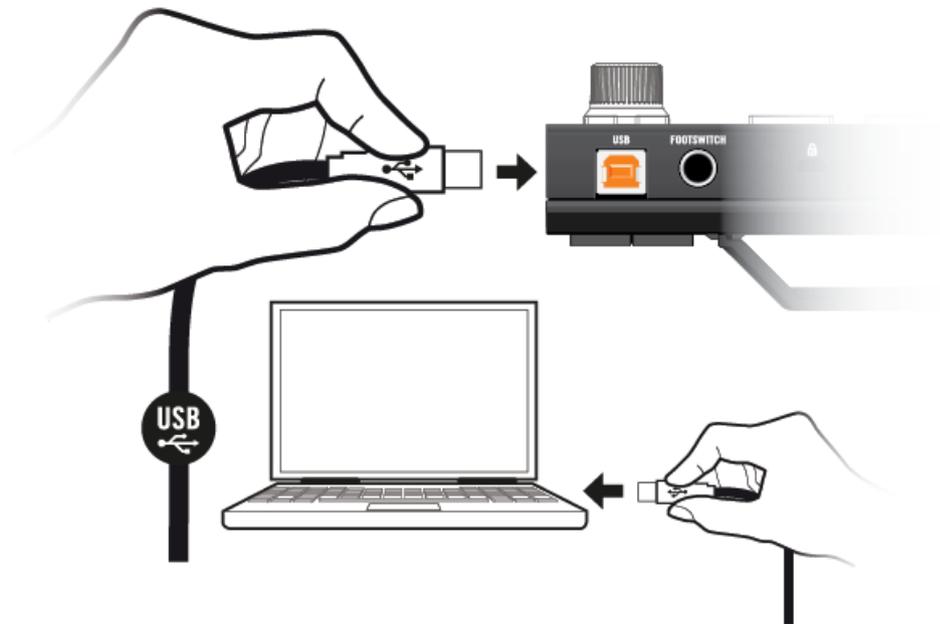


Make sure that you have installed the latest version of the MASCHINE software, including the MASCHINE JAM hardware driver, before you connect the controller to your computer!

1.4.1 Connecting MASCHINE JAM to Your Computer

To connect the MASCHINE JAM to your computer:

1. Attach the 'device end' of the included USB cable to the USB socket on the rear panel of the MASCHINE JAM.
2. Attach the 'computer end' of the USB cable to an available USB 2.0 (or later) port on your computer.



Connecting MASCHINE JAM to a computer.



MASCHINE JAM will not work when it is connected to a USB 1.1 port. A USB 2.0 (or later) port is required!

Windows users: In case you have installed the software including the hardware drivers, but the controller is not detected by your computer, connect the USB cable to another USB port before taking further measures.

1.4.2 Using MASCHINE JAM as a MIDI Device

In addition to using your MASCHINE controller together with its dedicated MASCHINE software, you can also use it as a powerful and highly versatile MIDI controller to pilot any other MIDI-capable software application running on the computer it is connected to via USB. This is made possible by the Controller Editor software, an application that allows you to precisely define all MIDI assignments for your MASCHINE controller. The Controller Editor is installed dur-

ing the MASCHINE software installation procedure. For more information on this, please refer to the Controller Editor Manual available as a PDF file in the Documentation subfolder of the Controller Editor installation folder on your hard disk.

2 MASCHINE Project Overview

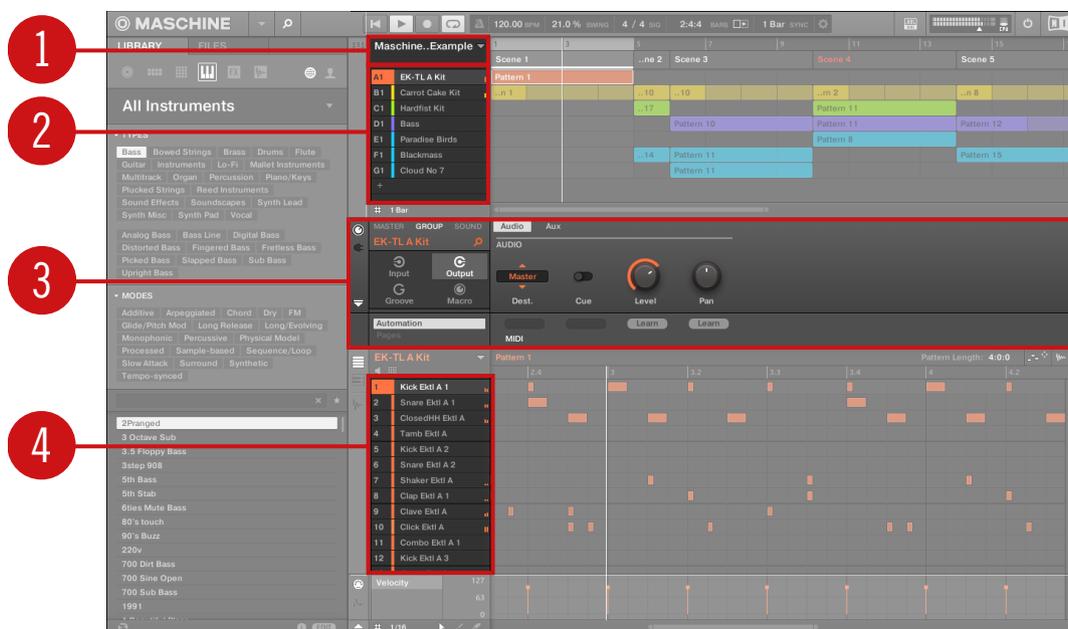
A MASCHINE Project contains all the information stored with a MASCHINE-produced piece of music.

- The Project references all the **sound content**: the instruments, sounds and samples, and all the effects you apply to them.
- The Project also contains the **arrangement** of your song: how Patterns are built from events which trigger Sounds, and how they are arranged into a song structure using Scenes and Patterns.

The following section will explain these two aspects in detail.

2.1 Sound Content

The sound content aspect of a MASCHINE Project includes all the instruments and effects contained in your Project file, and how these are structured.

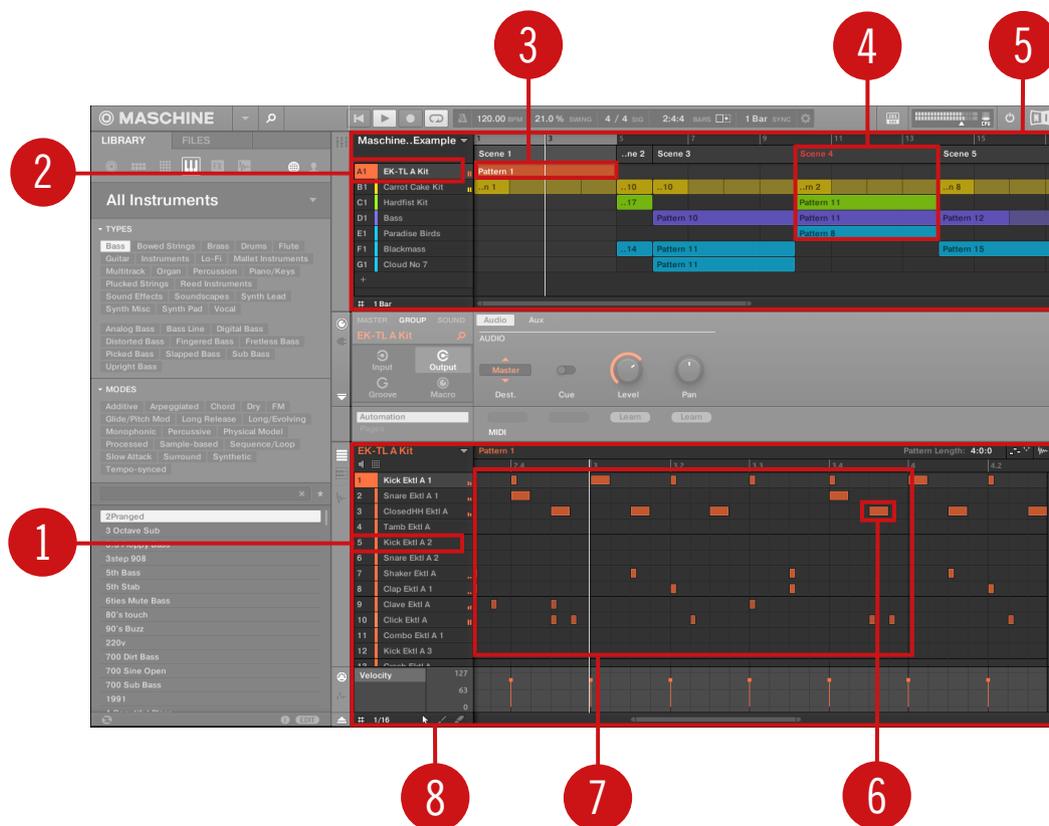


The sound content aspect of a MASCHINE Project.

- A MASCHINE Project file (1) Groups (2) are available in Banks. Each Bank contains eight Groups (A-H) and each Group contains sixteen Sound slots (1–16) (4). Each Sound slot can be filled with samples or plug-ins.
- You can influence the sound on these three channels: the Project (or Master) channel, the Group channel, and the Sound channel. The relevant controls are situated in the Control area (3), which can be used for accessing Plug-in parameters or Channel properties.
- The Control area has three tabbed sections corresponding to each channel: **MASTER**, **GROUP**, and **SOUND**.
 - The controls in the **SOUND** section affect the sound of the selected Sound (1–16).
 - The controls in the **GROUP** section affect the sound of the selected Group (A–H), i.e. the sound of all its Sound slots.
 - The controls in the **MASTER** section affect the sound at the main outputs of MASCHINE, i.e. the sound of all Groups and all Sounds.

2.2 Arrangement

The arrangement aspect of a MASCHINE Project is about building patterns, and putting those patterns into a loop or a song structure.



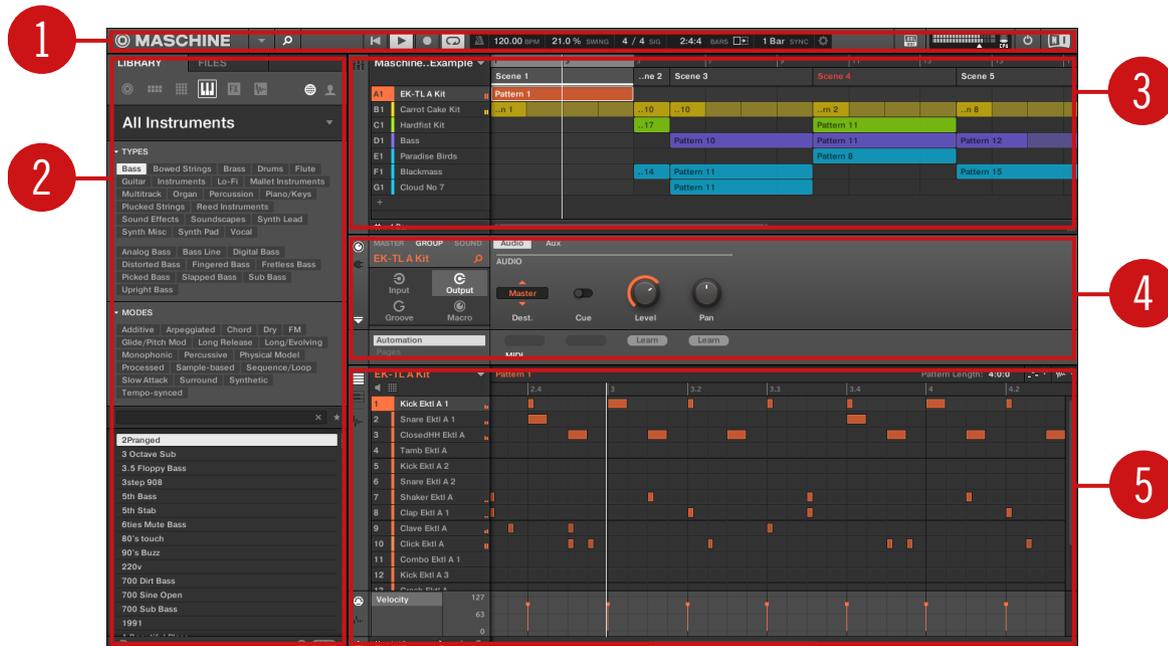
The arrangement aspect of a MASCHINE Project.

The basic workflow in building a song in MASCHINE is as follows:

- You load samples or plug-ins into the Sound slots (1) of the selected Group (2).

- You record instances of your Sounds by playing the pads (1-16). A recorded instance of a Sound is called an event (6).
- Together, the events add up to a Pattern (7) for this Group.
- All of this takes place in the Pattern Editor (8), where you can create several Patterns for each of your Groups.
- In the upper half of the software's user interface, the Arranger (5) lets you organize together the Patterns of your various Groups.
- Here you combine your Patterns (3) — into Scenes (4).
- Several Scenes add up to a song (...or a track, or an arrangement, or whatever you want to call it).

2.3 MASCHINE Software Overview



The MASCHINE software.

(1) **Header:** The Header contains the main controls for the MASCHINE software including the Display area, the Transport controls and the Master Volume slider. You can also use this area to toggle the Browser, connect to your hardware controller and monitor the CPU usage of your computer.

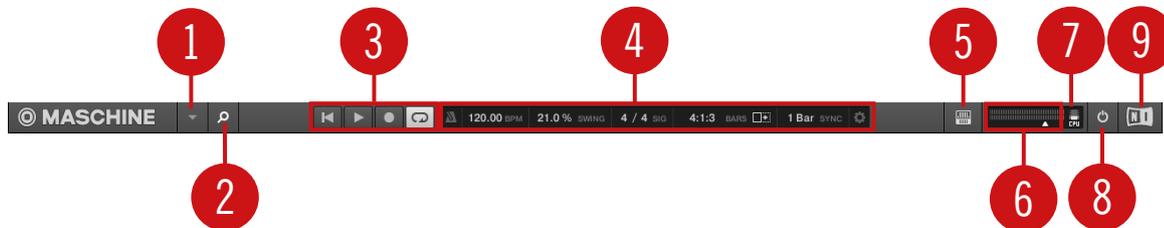
(2) **Browser:** The Browser is your tool for managing, finding, tagging and categorizing Projects, Groups, Sounds, Instruments, Effects and Samples. Using the search facility you can quickly find things and prehear Samples.

(3) **Arranger:** Use the Arranger to combine your Patterns into Scenes in order to build your track and make arrangements.

(4) **Control area:** The Control area allows you to control parameters and settings for each of the Plug-in slots at each Project level (Sound, Group and Master). This area can hold settings for Groups, Sounds, Plug-ins (internal or VST/AU plug-ins), MIDI, routing.

(5) **Pattern Editor:** The Pattern Editor features both step programming and real-time recording and is the basis for each Scene. Patterns for each Group can be created here and then arranged into Scenes in the Arranger. The Pattern Editor also lets you edit modulation for the Sound, Group, and Plug-in (Internal or External) parameters.

2.3.1 Header



The Header.

(1) **MASCHINE menu:** Click the MASCHINE menu to access the software menus. This menu is particularly useful in Full screen mode and when MASCHINE is used as a plug-in in a host application.

(2) **Browser button:** Use the Browser button to toggle the Browser. The Browser is your tool for managing, finding, tagging and categorizing Projects, Groups, Sounds, Instruments, Effects and Samples. From the Browser you can directly search your computer or an external drive to add new files. You may also prehear (audition) Samples directly from the Browser and apply new tags.

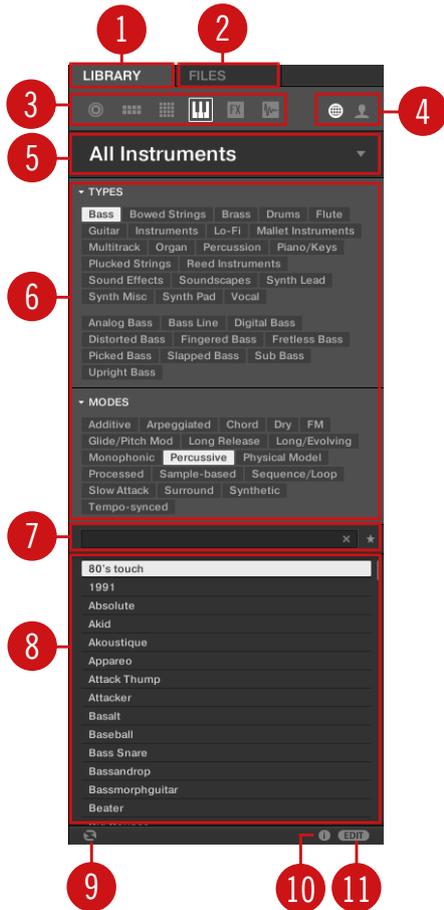
(3) **Transport controls:** The Transport controls contain buttons such as Play, Restart, Record and Loop.

(4) **Display area:** The Display area provides control regarding tempo, global swing, time signature, Follow and Sync (Perform Grid and Retrigger in the Cog wheel icon.)

(5) **Connect button:** Use the Connect button to connect an instance of the MASCHINE software to the hardware controller.

- (6) **Master Volume slider:** Shows and adjusts the level of the MASCHINE audio output.
- (7) **CPU meter:** The CPU meter represents the current load on your computer's processor and is constantly measured; it should not go above 70 % to avoid clicks and interruptions. You can save CPU power by sampling the audio output of MASCHINE if necessary using export (for more information, please refer to the Manual).
- (8) **Audio Engine button:** Click the Audio Engine button to disable the entire sound processing of MASCHINE.
- (9) **NI logo:** The NI logo and MASCHINE logo open the About screen which displays the version number and edition of your MASCHINE software.

2.3.2 Browser



The Browser.

- (1) **LIBRARY tab:** Use the **LIBRARY** tab to access your computer's hard drives via MASCHINE's selectors and filters.
- (2) **FILES tab:** Use the **FILES** tab to access your computer's hard drives.

(3) **File Type selector:** This contains six icons representing the different file types of MASCHINE. From left to right the file types are: **Projects, Groups, Sounds, Instruments, Effects,** and **Samples**. Clicking one of them causes only the files of the selected type to be displayed.

(4) **Content selector:** The Content selector allows you to select between Factory content and User content.

(5) **Product selector:** The Product selector allows you to browse and select any content of the same File Type as is selected in the File Type selector above.

(6) **Tag Filter:** The Tag Filter allows you to search based on tags. You can quickly find files based on the **TYPES** and **MODES** categories by clicking the tags.

(7) **Search field:** Use the Search field to quickly find files based on their name or tagged attribute. Select the type of file you are looking for from the File Type selector and enter the name or category of a file into the Search field to perform a search. Results are displayed in the Results list below.

(8) **Results list:** The Results list displays all files that match your query.

(9) **Audition controls:** The Autoload button allows you to load and listen to the item selected in the Results list in context with the rest of your Project while it is playing.

If you are browsing **Samples**, the Prehear button allows you to quickly hear each Sample you select in the Results list, at the volume set by the slider nearby.



Audition control volume slider.

If you are browsing **Groups**, the Pattern icon appears. Use the Pattern icon to load any patterns that have been saved with the selected Group.

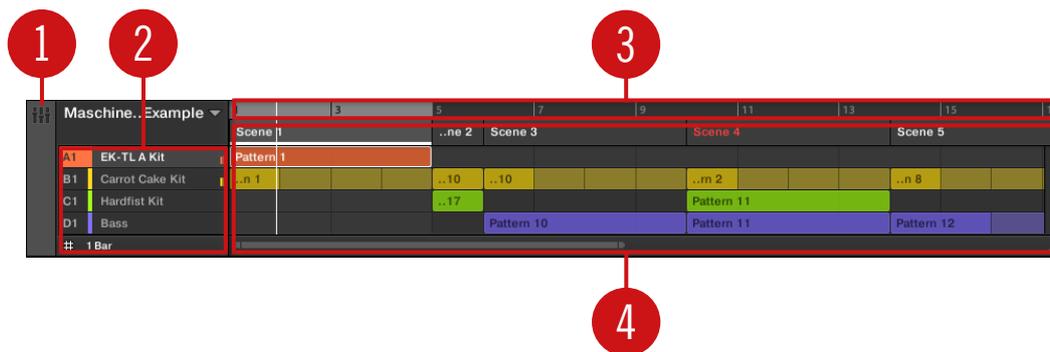


Load Pattern with Group icon.

(10) **Information:** Click the Information icon to view details of the selected file type.

(11) **Tag Editor:** The Tag Editor allows you to edit Tags applied to files and add Tags to new files from the Bank, Types, and Modes and view Properties. Only Types and Modes Properties can be edited in the User content. The NI (Native Instruments) content is read only. You can show/hide it by clicking the **EDIT** button at the bottom right.

2.3.3 Arranger



The Arranger.

(1) **Mix view button:** Click the Mix view button to access the Mix view. The Mix view gives you quick access to the level and routing settings of all your Sounds, Groups, and the Master. In addition, it provides you with an intuitive interface for adjusting the parameters of all your Plug-ins.

(2) **Groups:** The Group slots can hold one Group each. Select the desired slot to load a Group into it and display the Group's content (Sounds, Patterns...) in the Pattern Editor (see [↑2.3.5, Pattern Editor](#)) and the Group's Channel properties and Plug-in parameters in the Control area (see [↑2.3.4, Control Area](#)).

(3) **Arranger timeline:** This area displays the current position within the track and allows you to set the loop range.

(4) **Pattern area:** Each Pattern from a given Group is represented here. A combination of several Patterns stacked vertically is called a Scene. A Scene can be moved freely by clicking the name of the Scene and dragging and dropping it into place. You can also right-click on the name of a Scene to Insert, Duplicate and Delete Scenes using the context menu.

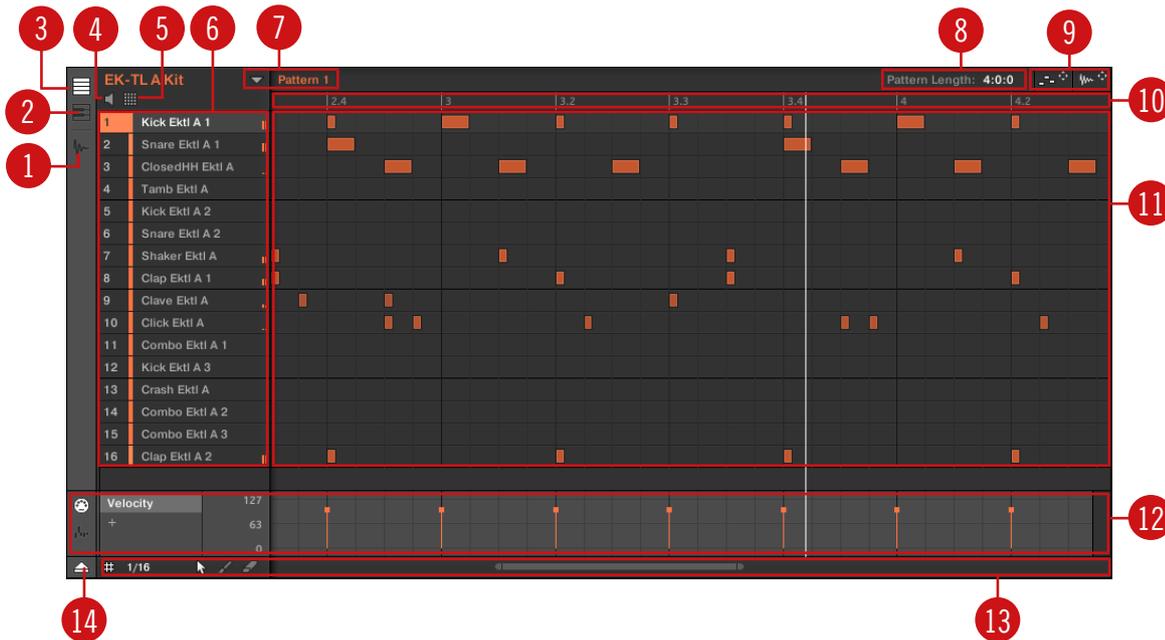
2.3.4 Control Area



The Control area.

- (1) **Plug-in icon:** Click the Plug-in icon to access Plug-ins and their parameters.
- (2) **Channel icon:** Click the Channel icon to access Channel properties where you can display and adjust various properties for the selected Sound/Group or Master channel in the Parameter area.
- (3) **MASTER tab:** Click the **MASTER** tab to control sound at the main outputs of MASCHINE (including all Groups and Sounds).
- (4) **GROUP tab:** Click the **GROUP** tab to gain access to Plug-ins and Channel properties of the Group loaded in the selected Group slot (A–H).
- (5) **SOUND tab:** Click the **SOUND** tab to gain access to Plug-ins and Channel properties of the Sound in the selected Sound slot (1-16).
- (6) **Parameter area:** Displays the parameters for the selected Plug-in or Channel properties. Depending on the number of parameters to display, these can be split into several pages. In this case, click the name of the parameter page to display it.
- (7) **Quick Browse Icon:** Use the Quick Browse icon to recall the search query you performed to find the currently loaded file/preset.
- (8) **Plug-in List:** There are Plug-in slots on each channel level (Sound, Group and Master). Each of them can hold one effect Plug-in. The first Plug-in slot of the Sound level can also hold a plug-in instrument. Select the desired Plug-in to display its parameters in the Parameter area (6).

2.3.5 Pattern Editor



The Pattern Editor.

- (1) **Sample Editor button:** Click this button to open/close the Sample Editor.
- (2) **Keyboard view button:** Click this button to display the Keyboard view.
- (3) **Group view button:** Click this button to display the Group view.
- (4) **Audition button:** Click this button to audition a Sound when it is selected from the Sound slots (6).
- (5) **Sound properties icon:** Click this icon to quickly access the Key, Choke, and Link settings for the selected Sound.

(6) **Sound slots:** Sounds slots 1–16 of the selected Group are listed here. Click a Sound slot to bring it into focus and display its Plug-ins and Channel properties in the Control area (see [↑2.3.4, Control Area](#)). In Keyboard view (2), click a Sound slot to display its events in the Step Grid (11).

(7) **Pattern slots:** Each Group has an unlimited number of Patterns available. Each Pattern slot can hold one Pattern. A Pattern contains the events that make up a groove or a musical phrase for the selected Group. Click the drop-down arrow to open the Pattern Manager and select a Pattern slot to display and edit its Pattern. Upon slot selection this Pattern is also referenced for that Group in the selected Scene in the Arranger (see [↑2.3.3, Arranger](#)). Select various Patterns from each Group to form an arrangement.

(8) **Pattern Length controls:** The Pattern Length controls allow you to choose the unit by which the length of the Pattern can be adjusted and to adjust the length of the displayed Pattern according to that unit.

(9) **Dragger icons:** The Dragger icons allow you to conveniently drag and drop audio or MIDI from your Patterns to your desktop or host software.

(10) **Pattern timeline:** The timeline at the top of the Step Grid (11) displays musical time units, including bars and beats. Click the timeline to resize the currently selected Pattern.

(11) **Step Grid:** Displays the content of the selected Pattern slot (7). Here you can see your recorded events as rectangular blocks. In Group view (3) these represent the Sounds of your Group. In Keyboard view (2) they represent musical notes of the selected Sound. The events can be edited using your mouse; they can be dragged to a new position, elongated, shortened or deleted.

(12) **Control Lane:** The Control Lane provides a visual overview and editing tools for the automation of each parameter and modulation of each MIDI control change.

(13) **Edit controls:** Use the Step menu to change the step size in which events can be moved/resized and click the Arrow or Paint icons to toggle the Paint mode on/off.

(14) **Control Lane button:** The Control Lane button allows you to show/hide the Control Lane (12).



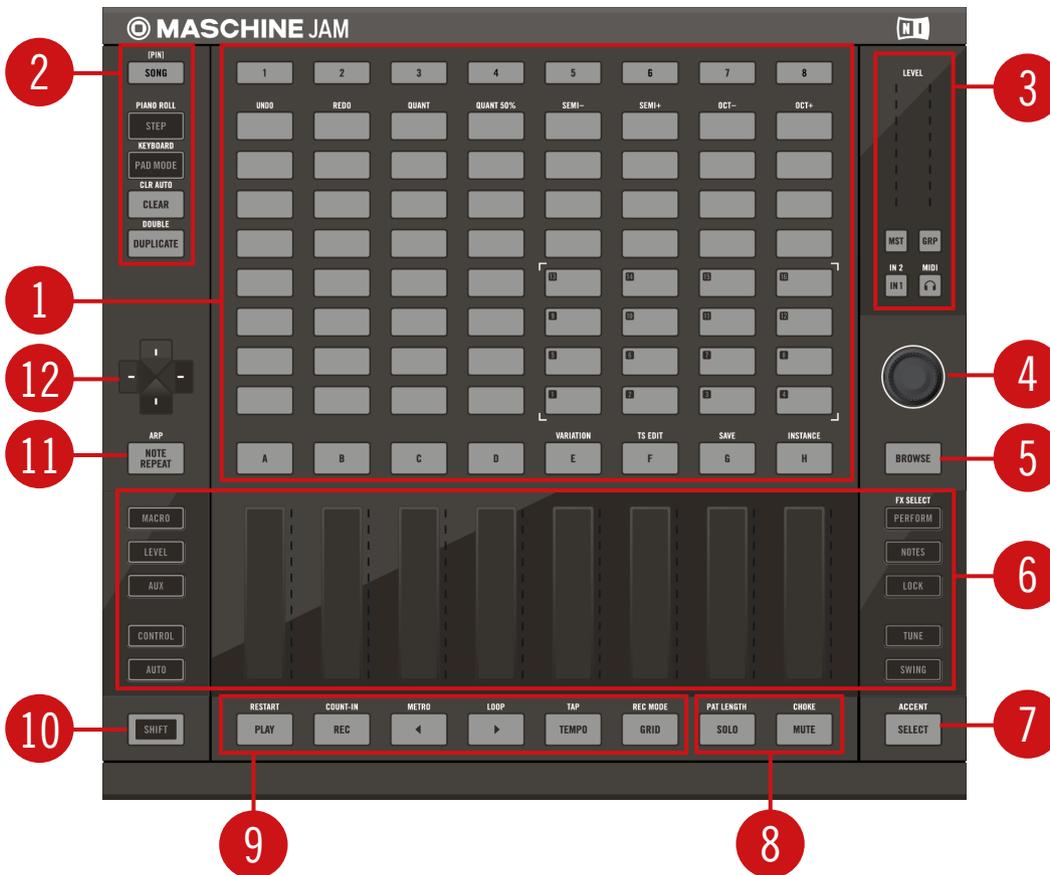
For a detailed explanation of each section please refer to the MASCHINE Software Manual.

3 MASCHINE JAM Overview

This chapter describes the areas and control elements on your MASCHINE JAM controller.

3.1 MASCHINE JAM Top View

This section describes the top view of your MASCHINE JAM controller.



Top view of the MASCHINE JAM hardware controller.

(1) **Project view** section: By default the 8x8 click-pad matrix displays your Scenes and Patterns for the corresponding Group. Here you can access Groups (A-H), arrange patterns and build your Scenes (1-8). You can also access the Sounds pertaining to each Group by pressing the click-pads labeled 1-16. The Project view can also be transform into a step sequencer, or allow you to play sounds like a keyboard depending which of the modes from Note Inputs section (2) is selected. In addition, the Lock feature allows you to use the click-pads to store snapshots of parameters including Solo and Mute assignments, and them morph between them. For more information on the Project view section read subchapter [↑3.1.1, Project View Section](#).

(2) **Note Input** section: This section provides access to all note input features that are displayed on the 8x8 click-pad matrix of the Project view (1), these include; **Pad mode**, **Keyboard mode**, **Step mode**, and **Piano Roll mode**. You can also find **CLEAR** and **DUPLICATE** buttons here which help you manage your Scenes, Patterns, Groups and Sounds. For more information on the Note Input section, read subchapter [↑3.1.2, Note Input Section](#).

(3) **Level Meters**: The Level Meter section allows you to monitor all incoming and outgoing signals into MASCHINE. Use the meters to monitor volume levels and the buttons below the meters to switch between Master, Group, Input and Bus levels. For more information on the Level Meter section, read subchapter [↑3.1.3, Level Meter Section](#).

(4) **Encoder**: Use the Encoder combined with the D-pad (12) for navigating and adjusting parameters within the On-screen Overlay, and browsing the MASCHINE Library content.

(5) **BROWSE** button: The **BROWSE** button opens the On-screen Overlay which provides access to the MASCHINE Library. Use the Encoder (4) to scroll through the content, and the D-pad (12) to navigate different sections.

(6) **Smart Strip** section: Use the multifunctional Smart Strips to control your mix, work with plug-ins, record modulation, interact with the Perform FX, and input notes using **NOTES** mode. The buttons at either side of the Smart Strips can be used to change their function.

(7) **SELECT** button: The **SELECT** button allows you to change the focused Sound (1-16) without triggering it.

(8) **SOLO / MUTE** buttons: Use **SOLO** to isolate a Sound or Group in the mix. Use **MUTE** to remove a Sound or Group from the mix. For more information on **SOLO / MUTE** buttons, read subchapter [↑3.1.5, Solo and Mute Section](#).

(9) **Transport** section: Start, stop and activate record. Use **SHIFT** to access the secondary functions such as Restart, Count-In, Metronome, Loop, Tap Tempo, and Record mode. For more information on the Transport section, read subchapter [↑3.1.6, Transport Section](#).

(10) **SHIFT**: While the most important features are accessible through dedicated buttons, many shortcuts are available by holding the **SHIFT** button and other buttons (where labeled). You can also use the **SHIFT** button to change parameters in finer increments when entering values with the Encoder or the Smart Strips.

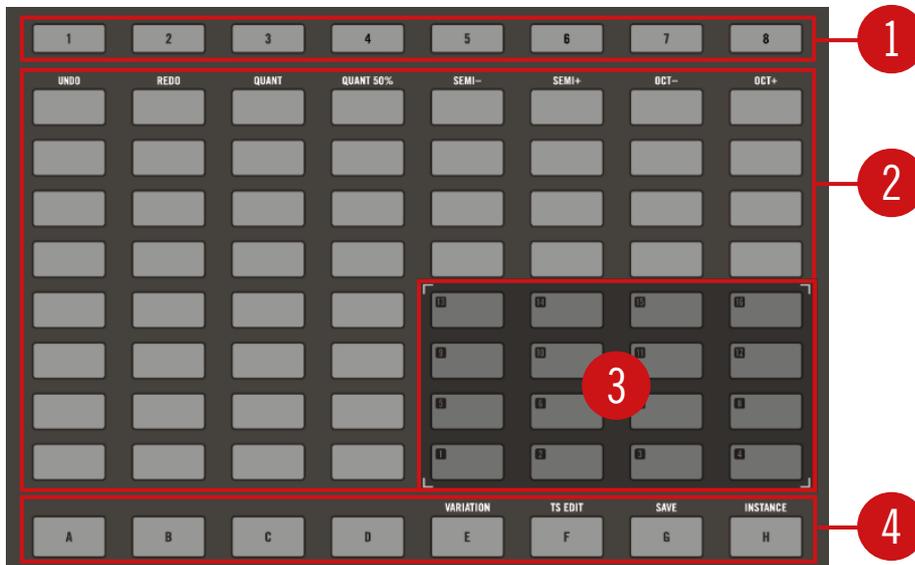
(11) **NOTE REPEAT / ARP** button: Note Repeat is a really handy way to play and record beats — it plays the selected Sound automatically at a given rate. While holding the **NOTE REPEAT** button, and the click-pad you want to play: notes will be repeatedly triggered at the selected rate. For more information on Note Repeat, see [↑6.2.2.1, Using Note Repeat](#).

Pressing **SHIFT + NOTE REPEAT (ARP)** switches the arpeggiator on or off. The controller will automatically switch to Keyboard mode and allow you to play arpeggios by pressing the click-pads. For more information on the arpeggiator, see [↑6.3.5, Creating Arpeggios](#).

(12) **D-pad**: The D-pad is comprised of four buttons (referred to as Left, Right, Up, and Down buttons) that can be used to direct the entry point on the On-screen Overlay. Use in combination with Encoder (4) to confirm a selection. The D-pad can also be used to access Group banks, Pattern banks within the Project View, as well as the upper and lower parts of a scale when in Keyboard or Piano Roll mode.

3.1.1 Project View Section

This subchapter provides an overview of the Project view section.

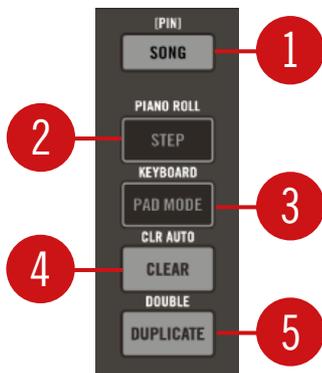


Overview of the Project view section.

- (1) **SCENE** buttons: Scenes allow you to store and select different variations (patterns) of a musical idea in real time. Use the Scene buttons to select a Scene.
- (2) **Click-pad Matrix**: By default the 8x8 click-pad matrix shows your Patterns for each corresponding Group (A-H).
- (3) **Click-pad 1-16**: Click-pads labelled 1-16 can be used to play and select your Sounds, the click-pads also have other functions depending on the Note Input mode that is currently active.
- (4) **Group** buttons: Press one of the eight dedicated Group buttons A–H to select the Group of Sounds you want to work with. These buttons not only provide access to the Sounds within the Group but also allow you to access Group channel functions such as Level, Perform FX, Solo, and Mute, etc.

3.1.2 Note Input Section

This subchapter provides an overview of the Note Input section.



Overview of the Note Input Section

- (1) **SONG**: Press the **SONG** button to return to the Project view. The Project view provides an overview of your Scenes, Patterns, Groups and Sounds.

(2) **STEP:** Step mode doubles as a full-featured step sequencer. In this mode, each pad represents one step of the selected Step Grid resolution. During playback, a running light (Playhead) shows the current position of the step sequencer. Press the click-pads to create notes on the corresponding steps (causing them to illuminate) or press the illuminated steps to remove the notes.

(3) **PAD MODE** button: Enters Pad Mode. In this mode you can play the Sounds of Group or access Keyboard mode and use the whole 8x8 click-pad matrix to play melodies or even chords.

- In the standard layout mapping, each click-pads (1-16) represent one Sound of a Group.
- In **Keyboard** mode, the click-pads represent the steps of the selected Scale, ascending from the selected root note, this way you can play the selected Sound like a melodic instrument. Press **SHIFT** + **PAD MODE (KEYBOARD)** to quickly activate Keyboard mode.

(4) **CLEAR** button: Press the **CLEAR** button to delete note events Sounds, Group, Pattern, or Scene.

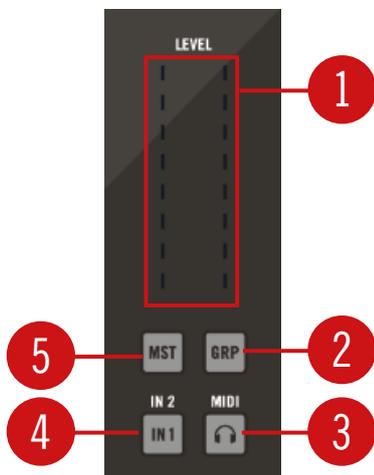
Pressing **SHIFT** + **CLEAR (CLR AUTO)** will delete all modulations for the selected Sound.

(5) **DUPLICATE:** button: Enters Duplicate mode. Use the Duplicate button to swiftly create another instance of any Sound, Pattern, Group or Scene. This can be useful for creating variations or trying out something new while preserving the current state of your work.

Pressing **SHIFT** + **DUPLICATE (DOUBLE)** will double the length of a pattern.

3.1.3 Level Meter Section

This subchapter provides an overview of the Level Meter section.



Overview of the Level Meter Section

(1) **Level meter** The **LEVEL** meter displays the volume level of the selected input/output. Select an input (4) or output (2, 3, and 5) to display it in the Level meter.

(2) **GRP button** (Group button). Press the **GRP** button to display the volume level of the selected Group in the Level meter (1) and use the Encoder to adjust its volume level.

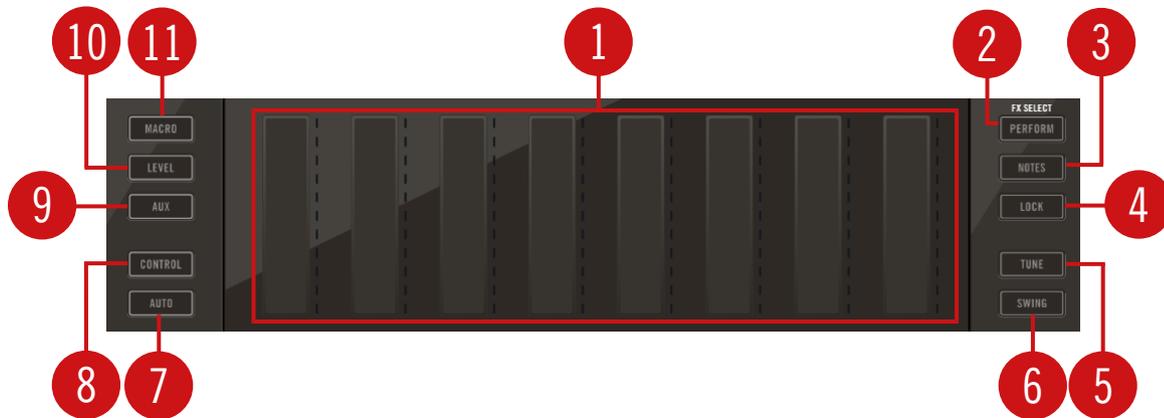
(3) **CUE button** Press the **Cue** button to display the Cue level in the Level meter (1) and use the Encoder to adjust its volume level.

(4) **IN1 button**: Press the **IN1** or **SHIFT + IN2** buttons to meter one of the two external audio inputs. You can meter an input level using the Level meter (1) and adjust an input level using the Encoder.

(5) **MST button** (Master button) Press the **MST** button to display the Master volume level (main volume output level) in the Level meter (1) and use the Encoder to adjust its volume level.

3.1.4 Smart Strip Section

This subchapter provides an overview of the Smart Strip section.



Overview of the Smart Strip section.

(1) **Smart Strips:** The Smart Strips provide quick access to the level and settings of all your Sounds, Groups, and the Master channel. In addition, you can adjust the parameters of all your Plug-ins, record modulation, play with the Perform effects, or use the Smart Strips for note input when in Notes mode.

(2) **PERFORM:** Press **PERFORM** to access the Performance effects. The performance effects were specifically designed for MASCHINE JAM and you can interact with them using the Smart Strips. Using the Smart Strips you can add the effect applied to the selected Group and change the effect parameters, for example, the Cutoff in the Filter.

Use the **SHIFT** button to access the FX Select function. Press **SHIFT + PERFORM** and turn the Encoder to select a Performance effect for a Group (**A-H**). The available effects are: Filter, Flanger, Burst Echo, Reso Echo, Ring, Stutter, Tremolo, and Scratcher.

(3) **NOTES:** In Notes mode each of the eight strips can be used to play a chord. This allows for perfect progressions in the selected scale, and interesting musical gestures.

(4) **LOCK:** Press Allows you to create up to sixty-four snapshots, with each snapshot containing every modulatable, parameter in your project, including your Solo and Mute assignments. You can switch between these instantly, or morph between them synchronized to the tempo. This is a nice tool for extensive modulations, but also very useful to compare mixes, or to switch up snapshots during a live performance.

(5) **TUNE:** Press **TUNE** to adjust the tune of a particular Group or Sound. To adjust the tuning of a Group, press the Group button (**A–H**) until it flashes, then turn the Encoder or slide your finger on the corresponding Smart Strip. To adjust the tune of an individual Sound, press the Group button (**A–H**) until it flashes, then press the Pad **1-16** to select the Sound you want to change, then turn the Encoder or slide your finger on the corresponding Smart Strip to adjust the tuning amount.

(6) **SWING:** Press **SWING** to adjust the amount of Swing. Swing shifts some of the played notes or events, adding some “groove” to your Pattern to the whole project, a Group or individual Sounds. Use the Smart Strips or on-screen overlay to adjust Swing values.

(7) **AUTO:** Press **AUTO** to record pattern modulation. Writing modulation means MASCHINE can record any changes you make to a selected parameter(s) and then play back those changes each time with the track. Modulation of almost any parameter on the Sound and Group channel is achieved with one-touch simplicity. Press and hold the **AUTO** button while sliding your finger across the Smart Strips to record modulation for the corresponding parameter(s) when playback is active.

(8) **CONTROL:** Press **CONTROL** to access all Sound, Group and Master parameters via the eight Smart Strips.

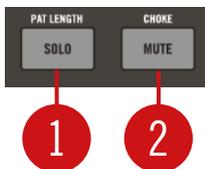
(9) **AUX:** Press **AUX** to access AUX1 for Groups and Sounds. Press **SHIFT + AUX** to access AUX2.

(10) **LEVEL:** Press **LEVEL** to access Group and Sound volume levels. Press **SHIFT + LEVEL** to access Group and Sound Pan settings.

(11) **MACRO:** Press **MACRO** to access Master, Group and Sound level macro. Macro Controls enable you to control in one same location a selection of parameters from different sources. Available in every channel (Sounds, Groups, and Master), Macro Controls are very useful for playing live since you can choose a set of parameters from various sources to manipulate on one screen without having to switch screens.

3.1.5 Solo and Mute Section

This subchapter provides an overview of the Solo and Mute section.



An overview of the Solo and Mute section.

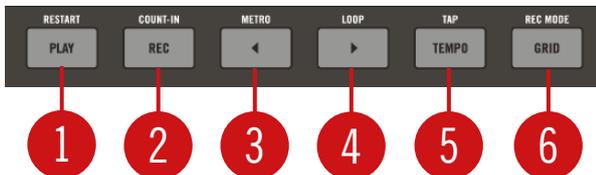
(1) **SOLO:** Press **SOLO** to enter Solo mode. In this mode, you can instantly solo any Sound or Group (equals muting all other Sounds/Groups) by pressing its pad or Group button — useful to tweak the Sound or for performing live. The pad of the soloed Sound or Group is fully lit, while all other pads (representing the muted Sounds/Groups) are dimmed.

(2) **MUTE:** Press **MUTE** to enter Mute mode. In this mode, you can instantly mute Sounds and/or Groups by pressing the corresponding pads and/or Group buttons — good for getting on top of your production when you have many sounds playing and especially useful for performing live.

Muted Sounds/Groups are represented by half-lit pads, while unmuted (i.e. audible) Sounds/Groups are represented by fully lit pads.

3.1.6 Transport Section

This subchapter provides an overview of the Transport section.



Overview of the Transport section.

(1) **PLAY:** Use the **PLAY** button to activate playback. Use **PLAY** a second time to stop playback. Use **SHIFT + PLAY** to restart playback at any time to restart from the beginning of the current loop range.

(2) **REC:** During playback use **REC** to begin recording. Or use **SHIFT + REC** to begin recording with a Count-in. Use **REC** a second time to stop recording.

(3) **Page Left:** Use the Page Left button to navigate left through the pages of a plug-in Control mode, or to switch between Sounds 1-8 or 9-16 in Level mode. Use **SHIFT** + Page Left button (**METRO**) to activate the Metronome.

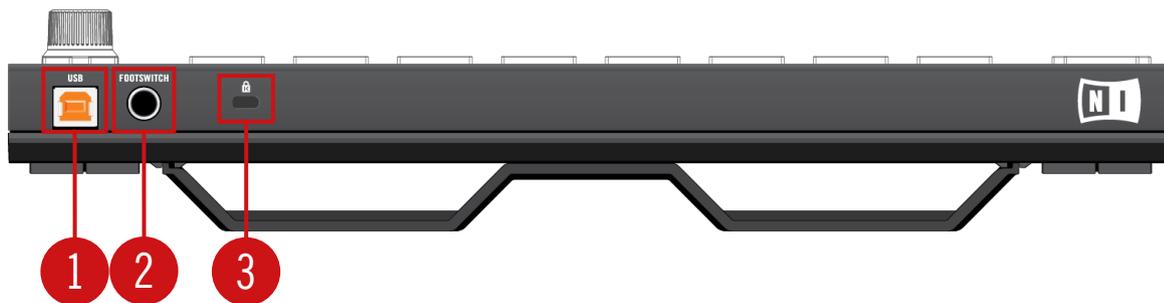
(4) **Page Right:** Use the Page Right button to navigate right through the pages of a plug-in Control mode, or to switch between Sounds 1-8 or 9-16 in Level mode. Use **SHIFT** + Page Right button (**LOOP**) to activate the Loop.

(5) **TEMPO:** Use **TEMPO** and the Encoder to change the tempo of the track in beats per minute (BPM).

(6) **GRID:** Use **GRID** to enter Grid mode and use the on-screen overlay to set resolutions for the Step (used for quantization), Nudge, Arrange, and Perform grid settings. Use **SHIFT** + **GRID** to access **RED MODE**. This allows you adjust Metronome parameters (Level, Time signature and Auto-on) Count-In Length, automatic Quantize mode, and set Pattern Follow via the on-screen overlay.

3.2 MASCHINE JAM Rear View

Here is a description of the MASCHINE JAM rear view.



MASCHINE JAM controller rear view.

(1) **USB socket:** Connect your MASCHINE JAM controller to your computer using the supplied USB cable.

(2) **FOOTSWITCH:** Your MASCHINE JAM controller provides a footswitch inputs in the form of a 1/4" socket on its rear panel. If you have a footswitch with two buttons:

- Button 1: Starts/stop the playback in MASCHINE. This is equivalent to the **PLAY** button on your controller and the Play button in the MASCHINE software Header.
- Button 2: Engage/disengage recording in MASCHINE. This is equivalent to the **REC** button on your controller and the Record button in the software's Header.

(3) Kensington Lock: Use the Kensington Lock slot to lock your MASCHINE JAM controller to something immobile and thus save it from being stolen.

4 Working with MASCHINE JAM

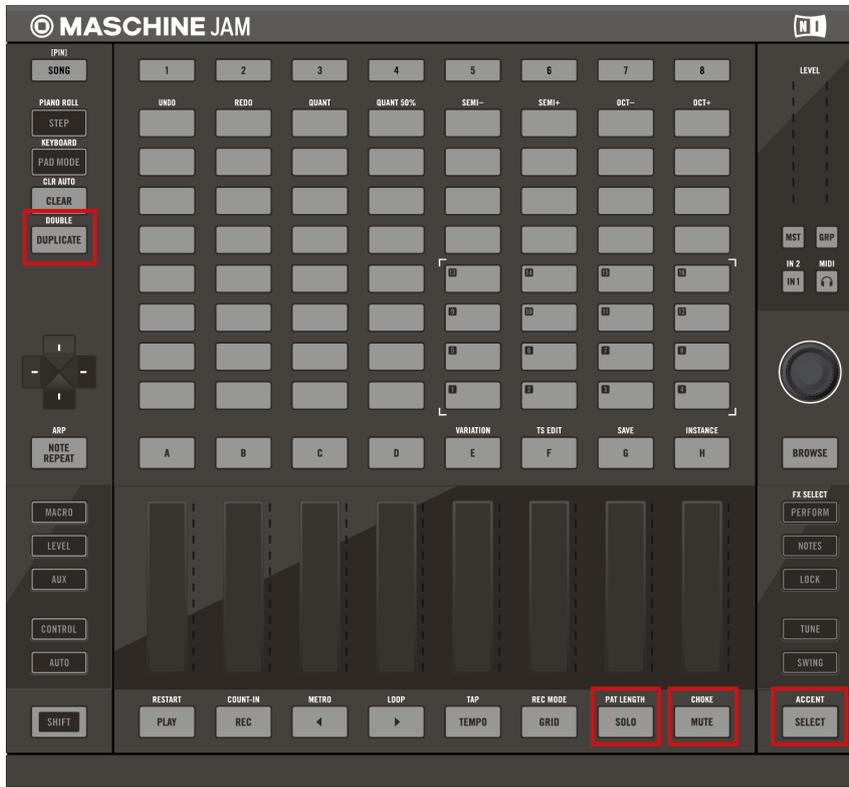
This section holds useful information for your every-day work with the MASCHINE JAM controller.

4.1 Controller Modes and Mode Pinning

Your controller has various other modes of operation, which you can enter by pressing their dedicated buttons. Depending on their purpose and workflow, these controller modes are of two types:

- **Temporary** modes only stay active as long as you hold down their button on the controller. When you release the button, your controller returns to the previous mode. This is for example the case with the **MUTE** button.
- **Permanent** modes stay active even if you release their button. To deactivate them, you must press their button a second time. This is for example the case with the **BROWSE** button.

The following buttons are temporary; **SELECT**, **SOLO**, **MUTE**, **DUPLICATE** and **CLEAR**.



Pinning Buttons on MASCHINE JAM Controller

Each of these buttons needs to be held pressed in order to use the corresponding mode.

Pinning the Controller Modes

You can also pin (i.e. lock) controller modes, so the controller doesn't switch back when releasing a mode button, for example:

1. Press and hold a controller mode button, e.g., **MUTE**.
2. Press the **SONG** ([PIN]) button.

→ You can release the **MUTE** button: The controller will remain in Mute mode until you press **MUTE** again.



Once a mode has been pinned your controller will automatically pin the mode next time it is pressed.

You can unpin any mode by pressing its button together with **SONG ([PIN])** button again.

4.2 Selecting Channels in MASCHINE

MASCHINE JAM allows you to access the different channels of the MASCHINE software such as the Master, Groups and Sounds directly while using one of the mode buttons (Macro, Level, Aux, Control, Tune, and Swing) either side of the Smart Strips.

Sound Channel

Sounds are the building blocks of all audio content in MASCHINE. A Sound is made up of any number of plug-ins. Each Sound within the selected Group is mapped to one of the click-pads (1-16) on the hardware controller, so you can play the Sounds by pressing the click-pads.

To access a Sound within any mode:

Press and hold a mode button.

1. Press the Group button (A–H).
2. Press a click-pad 1-16 to select a Sound.

→ The Smart Strips can be used to adjust the parameters of the selected mode.

Group Channel

A Group contains sixteen Sounds. In addition to the effect plug-ins applied to each individual Sound, a Group can have its own insert effect. These affect all the Sounds in the Group. A Group can also contain any number of Patterns.

To access a Group within any mode:

1. Press and hold a mode button.
2. Press the Group button (A–H)
3. Press the D-pad Left and Right buttons to access other Group banks.

→ The Smart Strips can be used to adjust the parameters of the selected mode.

Master Channel

This is where all audio signals from each of the Groups and Sounds come together and get mixed. The Master channel can also host any number of insert effects of its own, these effects are applied to all Groups and the Sounds within them.

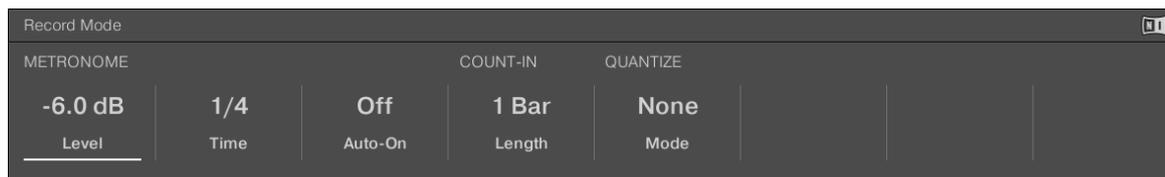
To access the Master within any mode:

▶ Press the **MST** button.

→ The Encoder can be used to adjust the parameter of the selected mode.

4.3 On-Screen Overlay

When used with the MASCHINE software, the MASCHINE JAM hardware initiates an on-screen overlay, which in addition to the regular MASCHINE software provides a specific focus on the feature in use. The on-screen overlay in conjunction with the Encoder and D-pad allows you to quickly scroll and navigate through functions, change parameters, and also access the vast MASCHINE Library.



An example of the on-screen overlay.

MASCHINE JAM and all its other features remain fully functional even when the on-screen overlay is in use—never stop jamming!



The on-screen overlay can only be used with the Encoder and D-pad. It does not accept any interaction using the mouse.

4.4 Undoing and Redoing Actions

Undoing and re-doing your last actions can be useful to cancel operations you have performed or to compare two versions before and after a change. You can undo most of the actions you performed after loading or creating your Project.

Step Undo/Redo is the classic undo/redo. It cancels or re-executes each single action you have performed.

- ▶ On your controller, perform the Step Undo operation by pressing **SHIFT + UNDO**. To perform the Step Redo operation, press **SHIFT + REDO**.

4.5 Using MASCHINE JAM in Plug-in Mode

You can run the MASCHINE software as a stand-alone application or integrate it into your favorite Digital Audio Workstation (or DAW, in short) by loading it as a plug-in. The MASCHINE software is available in the VST, Audio Unit, and AAX plug-in formats. For further information on plug-in compatibility and for a detailed description of how to use plug-ins in your host, please refer to the documentation included with your host software. If you did not install the plug-ins when installing the MASCHINE software, please refer to the Setup Guide available from the documentation folder in the MASCHINE software installation folder.

4.5.1 Differences between Stand-Alone and Plug-in Mode

Transport Functions

The most noticeable difference between the stand-alone and plug-in mode of MASCHINE relates to the interaction with MASCHINE's sequencer. Indeed, when MASCHINE is used as a plug-in within a host sequencer software (e.g., Cubase or Pro Tools), MASCHINE's sequencer is exclusively controlled by the host application: you cannot, e.g., manually start, stop or restart the playback in MASCHINE, nor modify the tempo or the time signature of your Project within the MASCHINE plug-in itself — these are synchronized to your host's own transport functions and tempo settings. As a direct consequence, when MASCHINE is used as a plug-in

the Restart and Play buttons as well as the Tempo and Time Signature fields are grayed out and inactive in the MASCHINE Header. Obviously you cannot control MASCHINE's playback and tempo settings from your MASCHINE controller either.

However from your controller you can directly control the transport functions of your host application instead. For more information see [↑4.5.2, Controlling your Host's Transport Functions in Plug-in Mode](#).

Audio and MIDI Handling

When MASCHINE is used in stand-alone mode, it directly communicates with your audio and MIDI interface. You can select which physical audio/MIDI ports have to be used on your interface, and configure crucial audio settings like the sample rate. All this is done via the Audio and MIDI Settings panel (for more information on this, please refer to the MASCHINE Software Manual).

On the contrary, when MASCHINE is used as a plug-in within a host application, the communication with your audio and MIDI interfaces is managed by the host — the MASCHINE plugin only communicates with the host. Native Instruments' Online Knowledge Base provides how-to articles that will help you route the MASCHINE plug-in to multiple tracks/outputs in the major hosts:

- How to Route MASCHINE 2 Sounds to Separate Audio Tracks in Ableton Live:

<https://support.native-instruments.com/hc/articles/210278025>

- How to Route MASCHINE 2 Sounds to Separate Audio Tracks in Cubase:

<https://support.native-instruments.com/hc/articles/209556049>

- How to Route MASCHINE 2 Sounds to Separate Audio Tracks in Pro Tools:

<https://support.native-instruments.com/hc/articles/209556069>

- How to Route MASCHINE 2 Sounds to Separate Audio Tracks in Logic Pro X:

<https://support.native-instruments.com/hc/articles/209556089>

For all details on the audio and MIDI configuration of your host application, please refer to its documentation.

Multiple Plug-in Instances

When you are using MASCHINE as a plug-in within a host application, you can open multiple MASCHINE instances. Actually, you can load as many instances of MASCHINE as your computer and your host application can handle CPU-wise. In contrast to the stand-alone application, they are always synced to the host. In plug-in mode you can also send MIDI Program Change messages from your host to switch between MASCHINE's Scenes or between patches of other plug-ins loaded into MASCHINE, or record automation for MASCHINE parameters.

4.5.2 Controlling your Host's Transport Functions in Plug-in Mode

When you are using MASCHINE as a plug-in within a host application, the Host Transport Control feature allows you to split the control elements of your controller into two groups:

- All buttons in the Transport section except **REC**, **SHIFT**, and **GRID** control your host application via MIDI.
- All other elements control the MASCHINE plug-in instance.

This allows you to simultaneously control the transport functions of your host and the various elements of your MASCHINE Project!

The Host Transport Control can be activated in the MIDI Template loaded in the Controller Editor.

When MASCHINE is loaded as a plug-in in your host application, do the following:

1. Start the Controller Editor.
 2. In the Device menu in the top left corner of the Controller Editor window, select the entry corresponding to your controller in order to edit its MIDI assignments of your MASCHINE JAM controller.
 3. In the Templates page on the right, click the desired MIDI Template to load it.
 4. Click the Host Transport Control option under the Template List to enable/disable it.
- From now on the buttons in the Transport section (except **REC**, **SHIFT**, and **GRID**) will send MIDI data as specified in the Template loaded in the Controller Editor, while all other elements will control the MASCHINE plug-in instance.



For more information on the MIDI mode, please refer to the Controller Editor Manual.

4.5.3 Using Two or More MASCHINE Controllers

You can use two or more MASCHINE controllers of different types (MASCHINE JAM, MASCHINE STUDIO, MASCHINE MK2, MASCHINE MIKRO MK2, MASCHINE, and MASCHINE MIKRO) simultaneously with different instances of the MASCHINE software (possibly with one instance in stand-alone mode). In doing so, the following applies:

- MASCHINE JAM will work alongside your existing MASCHINE hardware and share the focus of the MASCHINE software.
- Only one MASCHINE controller of any type can be connected to an instance at a time.
- You can choose which instance you want to control from each controller as described in Switching Instances.
- When you start a new instance of the MASCHINE software, it connects to one of your other MASCHINE controllers according to following precedence rules:
 - Rule 1: The MASCHINE STUDIO controller focus have priority over the MK2 controllers (MASCHINE MK2 and MASCHINE MIKRO MK2), which themselves take priority over legacy controllers (MASCHINE and MASCHINE MIKRO).
 - Rule 2: The MASCHINE controllers (legacy and MK2) have priority focus over MASCHINE MIKRO controllers (legacy and MK2).
 - Rule 1 has priority over rule 2.



If you have more than one instance of the MASCHINE software running on your computer, you can control each instance with a different controller. See the MASCHINE Software Manual for more information.



A controller not connected to any MASCHINE software instance can be used in MIDI mode (i.e. as a MIDI controller) at the same time as the other controller(s). See the Controller Editor Manual for more information on MIDI mode.

On the controller you want to use with the MASCHINE software, do the following:

- MASCHINE JAM controller: Press **SHIFT + H (INSTANCE)** and turn the Encoder to select an instance, and press the Encoder to load it.



- MASCHINE STUDIO controller: Press **SHIFT + PLUG-IN**, turn the jog wheel to select the desired instance, and press the jog wheel or Button 8 to load it.
- MASCHINE (MK2) controller: Press **SHIFT + STEP**, turn Knob 5 (or press Button 5/6) to select the desired instance, and press Button 8 to load it.
- MASCHINE MIKRO (MK2) controller: Press **SHIFT + F2**, turn the Encoder to select the desired instance, and press the Encoder to load it.

5 Using the Browser

The Browser provides access to all MASCHINE files: Projects, Groups, Sounds, presets for Instrument and Effect Plug-ins, and Samples. Each of these can be stored, tagged, and categorized in a way that allows you easy access to all of them. MASCHINE's factory library is already completely tagged, as well as factory libraries of all Native Instruments products installed on your computer.

Once both the MASCHINE software and MASCHINE JAM are up and running, your first stop is the Browser. You can access the vast library using the Browse button and navigate it using the on-screen overlay in combination with the Encoder and the D-pad.

The sections within this chapter cover the generic use of the MASCHINE Browser when using the MASCHINE Jam controller. For detailed information on the MASCHINE Browser, please read the MASCHINE Software Manual.



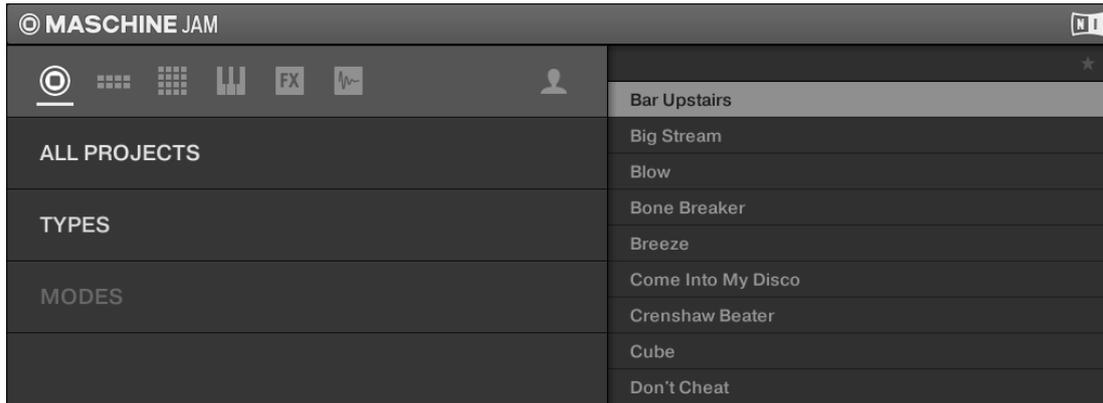
The Browser in the on-screen overlay will respect settings made in the MASCHINE Software such as; Prehear (audition), Preload, and the loading of Patterns with Groups. Please refer to the Browser in the MASCHINE Software to make changes to these settings.

5.1 Loading Files from the Browser

To load a file using the MASCHINE JAM controller:

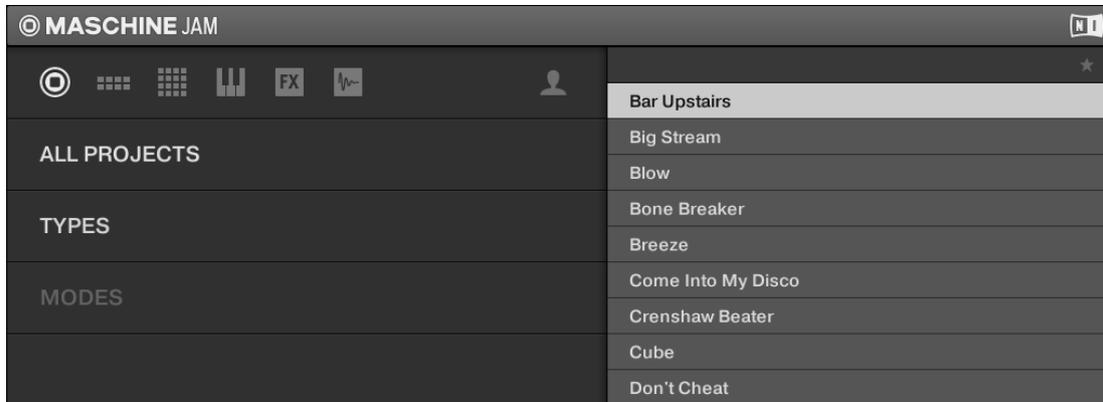
1. Press **BROWSE** to display the Browser.
2. Press **SHIFT** + D-pad Left button to reset the Browser.

3. Turn the Encoder to select a file type, from left to right: **Projects**, **Groups**, **Sounds**, **Instrument** and **Effect Plug-ins** presets, and **Samples**, then press the Encoder to confirm your selection.



4. Press the D-pad Right button to access the list of available items in the results list.

⇒ In this example you can see a list of Projects.



5. Press the Encoder to load the selected file.

→ The selected file is loaded.

With the Browser still open, you can continue to load the next or previous file.

To load the next or previous file:

▶ Press **SHIFT** + D-pad Up or Down button to load next or previous file.

→ The next/previous file is loaded.



Press **SHIFT** and turn the Encoder to quickly scroll through the results list by ten items at a time.

5.2 Filtering Files in the Browser

As browsing through your entire MASCHINE Library can be time consuming—especially in a live performance situation—the Browser comes equipped with some handy features to enhance your browsing experience, such as the **TYPES** and **MODES** filters. In this section you will learn how to:

- Filter the library using the **TYPES** and **MODES** filters.
- Select and load an instrument preset from the result list.

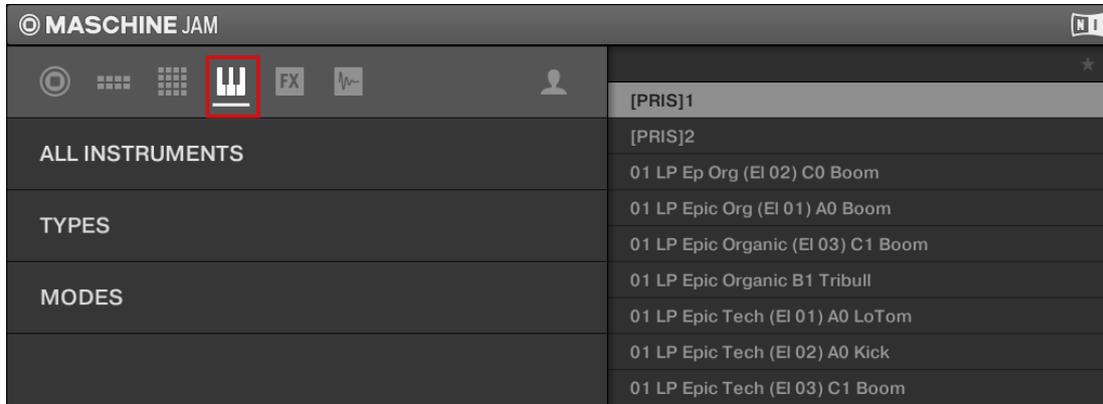
To load a file type from the Browser using Filters:

▶ To open the Browser, press the **BROWSE** button.

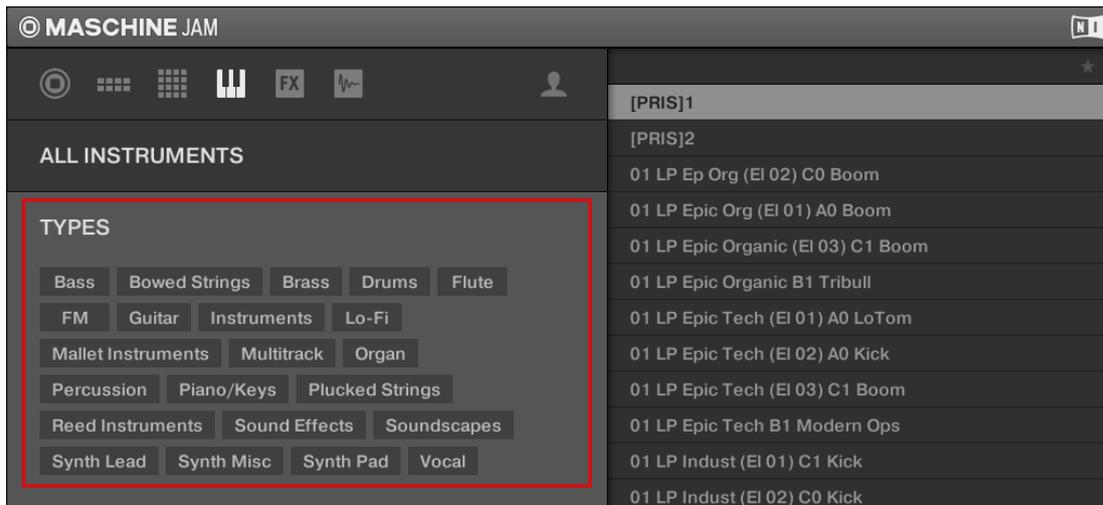
By default the factory content is selected. For information about accessing user content, see section [↑5.4, Accessing User Content](#).

1. Press **SHIFT** + D-pad Left button to reset the Browser.

2. To select a category, for example, turn the Encoder to select the instruments icon.

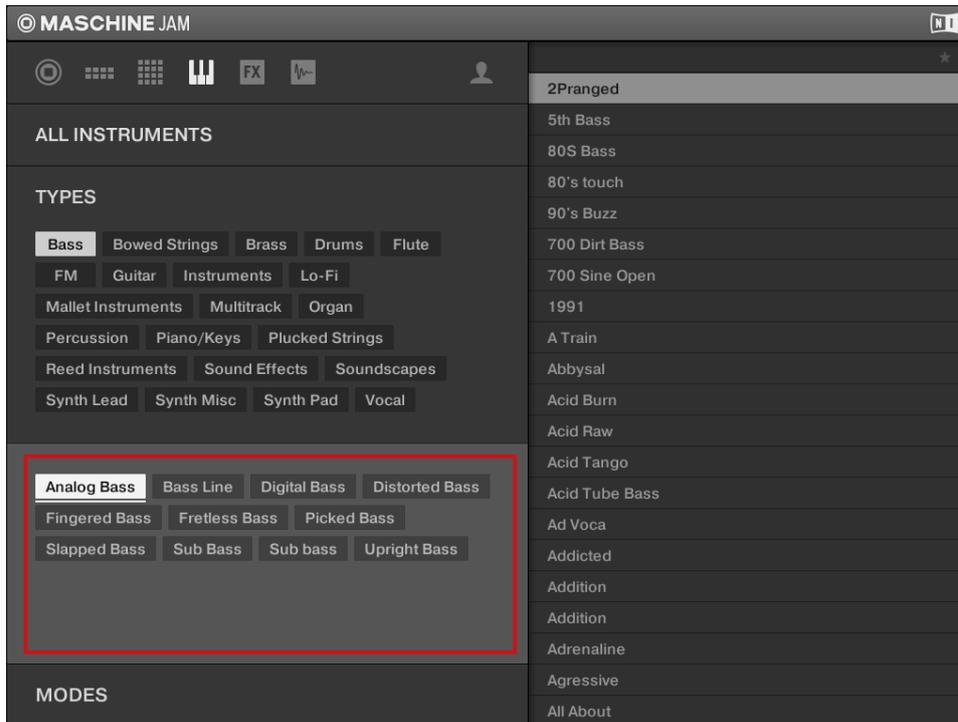


3. To set focus to the **TYPES** filter, press the D-pad Down button until **TYPES** is selected.

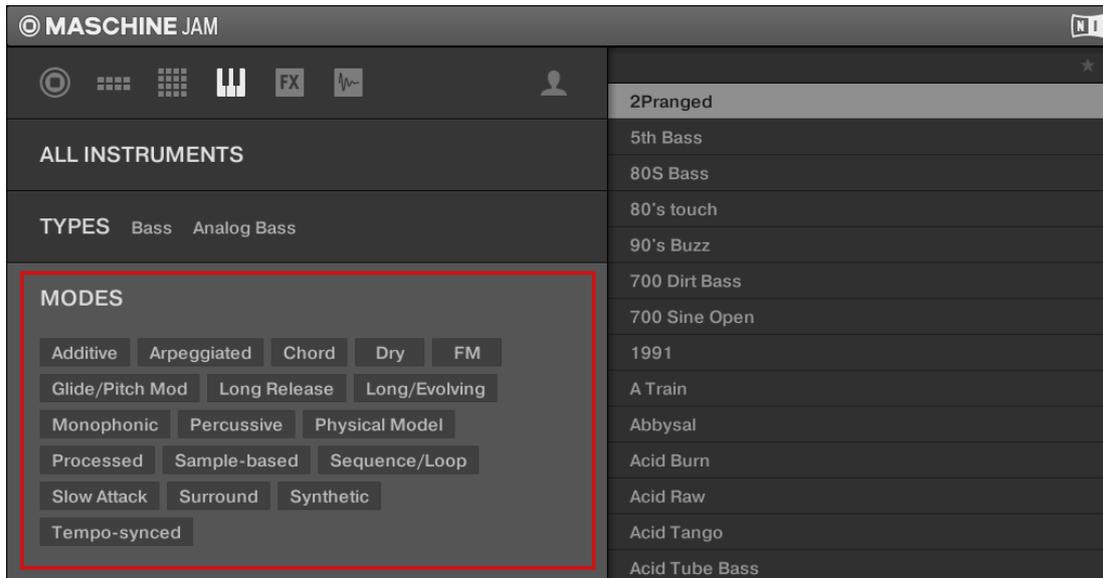


4. Turn the Encoder to scroll to the Type you want to use, then press the Encoder to select it.

⇒ The result list on the right side is filtered accordingly and the Subtypes appear beneath the Types. You can select a Subtype to further filter the result list.

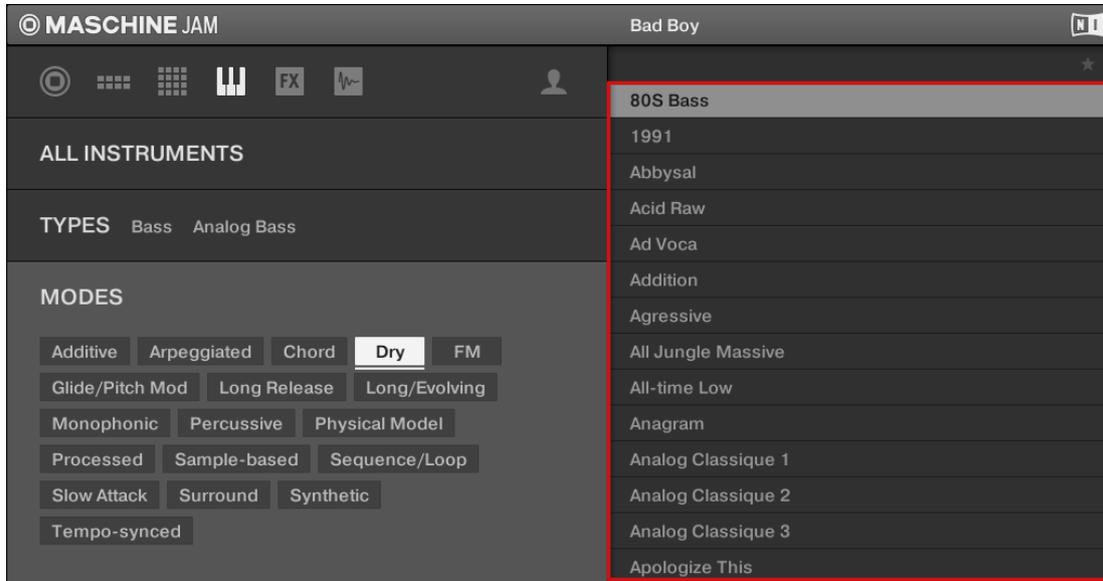


- To set focus to the **MODES** filter, press the D-pad Down button until the **MODES** filter is selected.

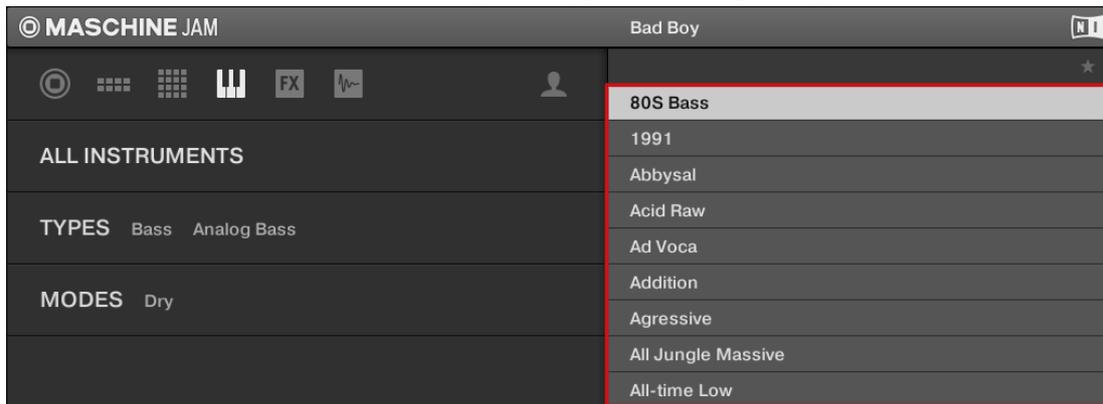


- To scroll to a mode you want to use, turn the Encoder and then press it to select the mode.

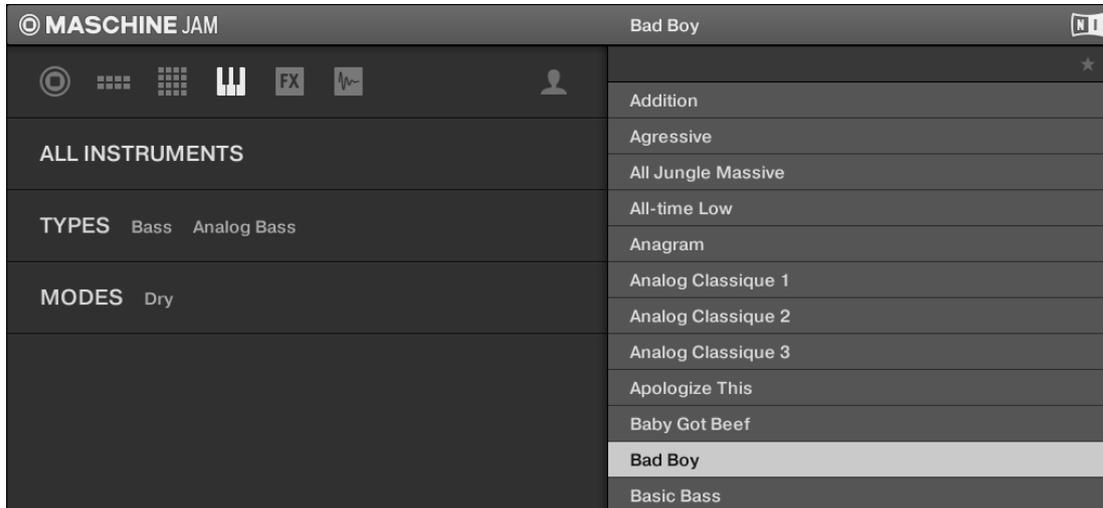
⇒ The result list on the right side is filtered accordingly.



7. To set focus to the result list on the right side, press the D-pad Right button.

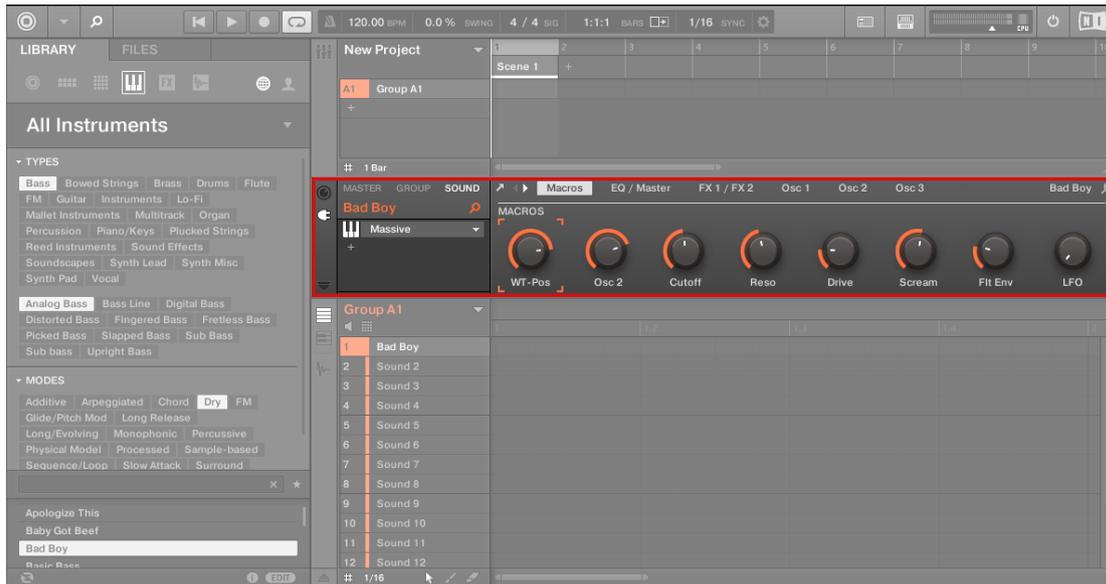


8. To scroll to an instrument preset you want to load, turn the Encoder.



9. To load the instrument preset, press the Encoder.
10. Press **SHIFT** + D-pad Up or Down button to load next or previous preset.

- In this example, the instrument with the selected preset is loaded into the MASCHINE software and its parameters are automatically mapped to the Smart Strips on your MASCHINE JAM controller, giving you direct hands-on access to the controls on the instrument panel via the **CONTROL** button.



Resetting a Filter

At any point you can reset a filter within the Browser. This removes all filter previously selected and is a good starting point for a new search.

To reset the Browser:

- ▶ Press **SHIFT** + D-pad Left button.

→ The Browser will reset so you can create a new filter.

Restoring a Filter

To restore a previous filter:

- ▶ Press **SHIFT** + D-pad Right button.

→ The Browser will return to the location where the previous filter was created.

5.3 Using 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. Any of these items can be assigned as a Favorite.

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 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.

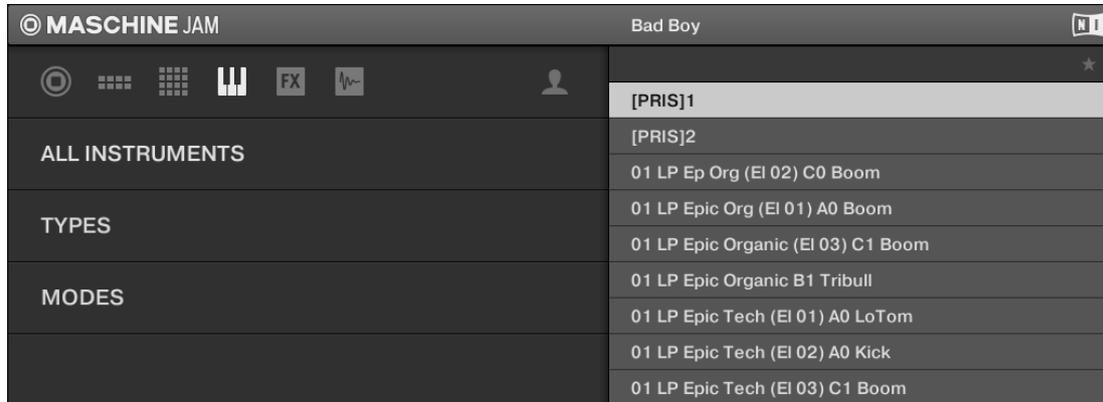
For more information on the use of Favorites, please refer to the MASCHINE Software Manual.

5.3.1 Activating and Deactivating the Favorites Filter

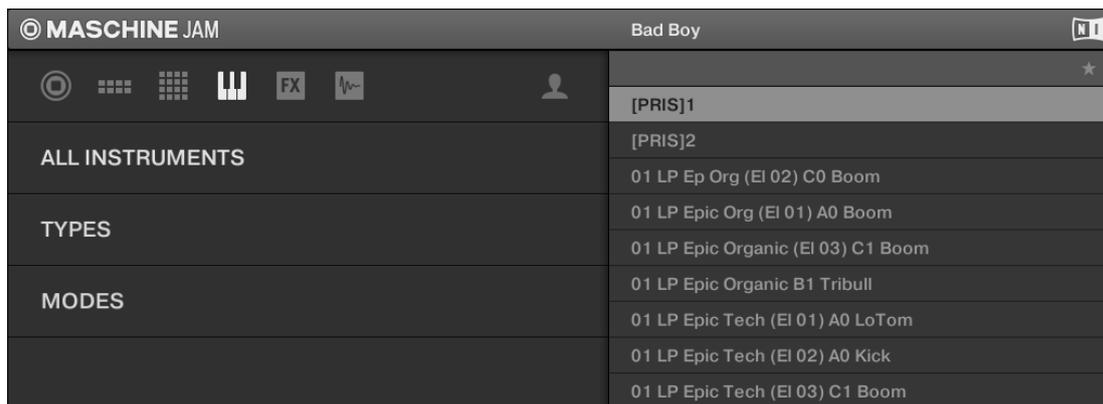
To activate the Favorites filter:

1. Press the **BROWSE** button to access the Browser.

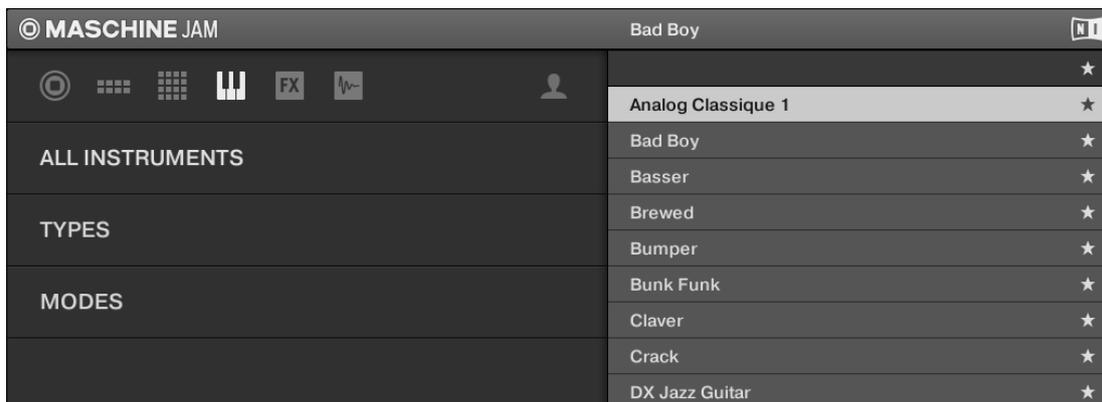
2. Press the D-pad Right button to access the Results list.



3. Press the D-pad Up button to access the Favorite icon and press the Encoder to toggle Favorites on or off.



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

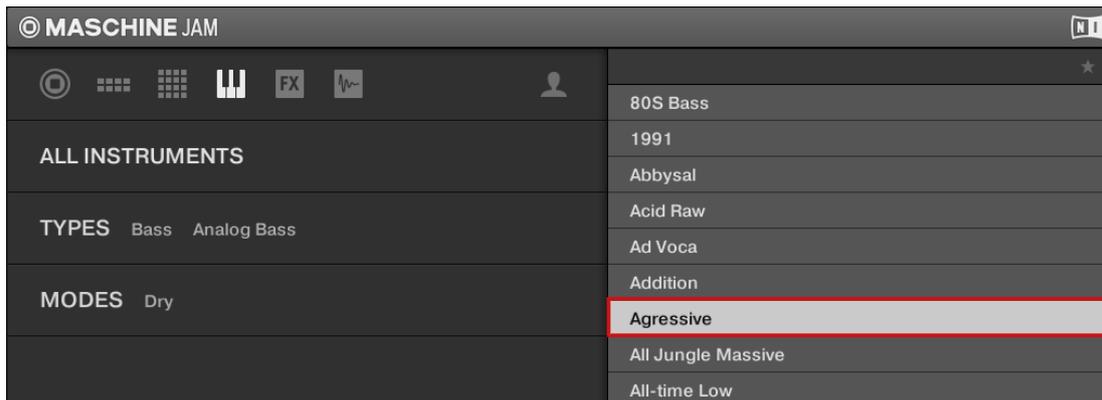


5.3.2 Adding an Item to the Favorites List

Items can be added to the Favorites list from the Browser search results.

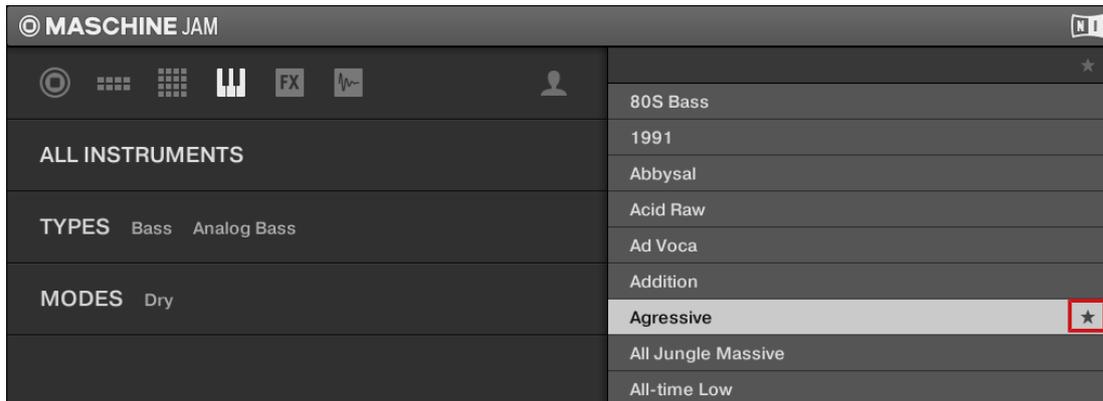
To add an item to the Favorites list:

1. Select an entry in the search results list.



2. Press **SHIFT** and press the Encoder to add the corresponding item to the Favorites list.

→ The item is added to the Favorites list as indicated by the highlighted icon next to its name.



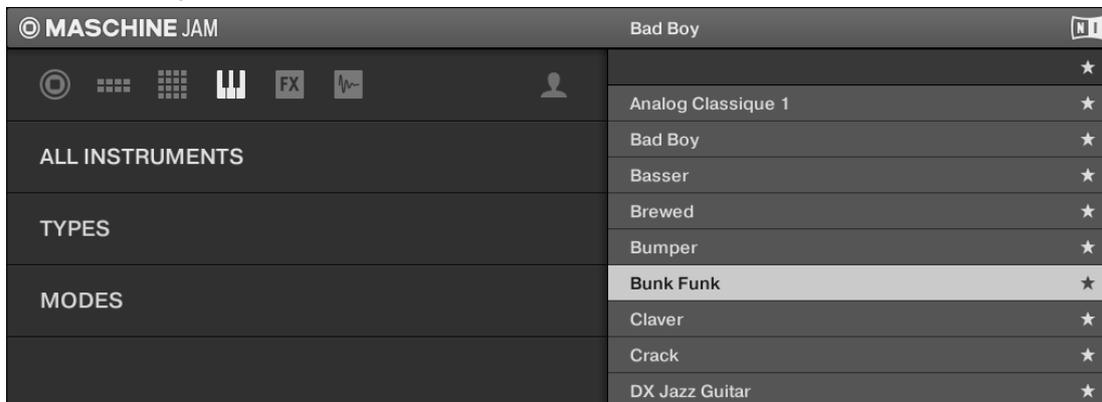
To view all your Favorite items, activate the Favorites Filter. For more information please read: [↑5.3.1, Activating and Deactivating the Favorites Filter.](#)

5.3.3 Removing an Item from the Favorites List

Items can be removed from the Browser search results or from the Favorites list.

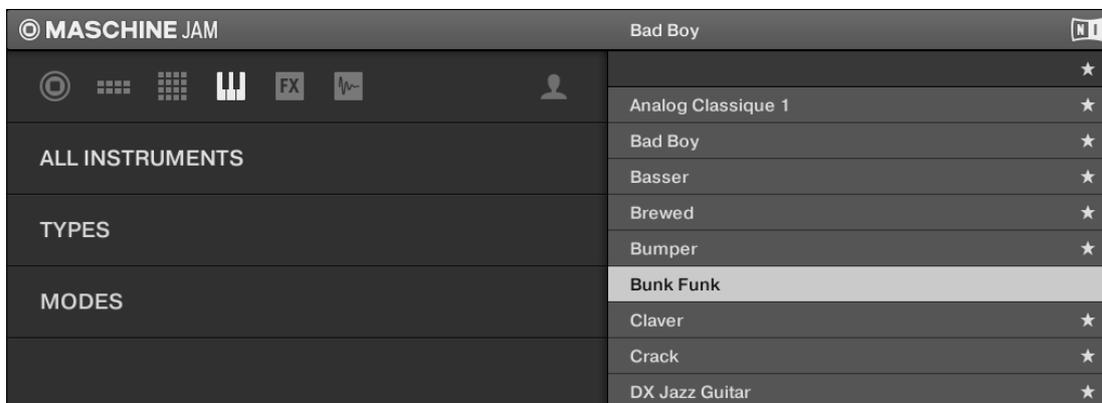
To remove an item to the Favorites list:

1. Select an entry in the results list.



Press **SHIFT** and press the Encoder to remove the corresponding item from the Favorites list.

- The item is removed from the Favorites list, and the Favorites icon next to its name is deactivated:



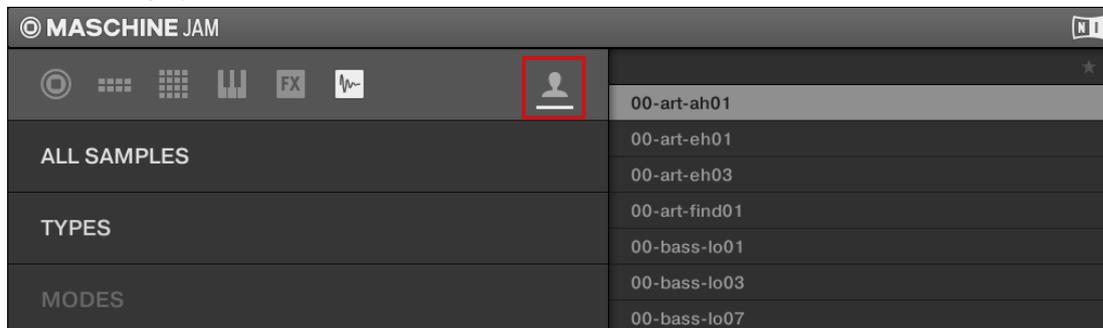
To view all your Favorite items activate the Favorites Filter. For more information please read: [↑5.3.1, Activating and Deactivating the Favorites Filter.](#)

5.4 Accessing User Content

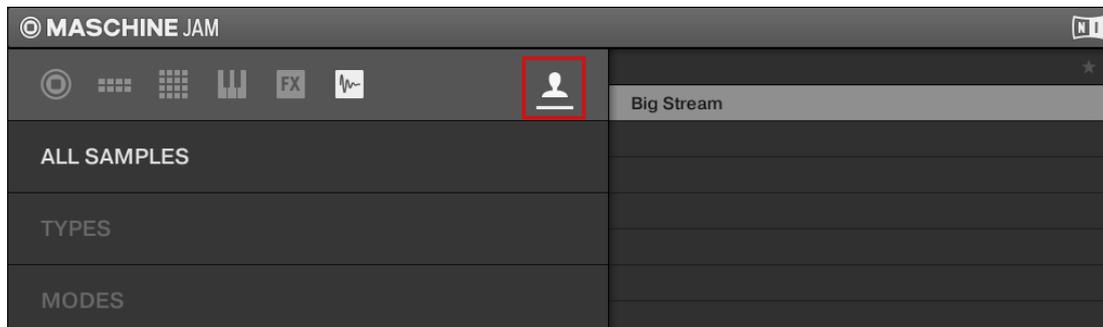
The Browser contains an icon on the top right-hand side which represents either the MASCHINE Factory library content or User created content. By default factory content is displayed.

To access the User content:

1. Press **SHIFT** + D-pad Left button to reset the Browser.
2. In the Category header of the Browser turn the Encoder to select the User icon.



3. Press the Encoder to select User content.



→ The User library is selected as indicated by the highlighted icon. Press the Encoder again to return to the Factory library.

You can filter User content using the same workflow as described for the Factory library content. For more information please see [↑5.2, Filtering Files in the Browser](#).

After filtering the User content, the results will appear on the right-hand side of the Browser.

- ▶ Use the D-pad Right button to access the User content results list.
- You can now use the Encoder to scroll through the results list.
- ▶ Push the Encoder to load the selected file.
- The selected file type is loaded and ready to use.

6 Recording and Editing Patterns

This chapter provides an overview of the necessary steps required to record and edit a pattern. It explains the generic process of creating both a beat and melodic content. It also describes the various ways this can be accomplished with MASCHINE JAM through real-time input or using the sequencer.

However, it is important to first familiarize yourself with the MASCHINE Software Manual or refer to the MASCHINE Project Overview chapter before you begin, as this will help cement your knowledge of how the MASCHINE software and hardware complement each other. The MASCHINE Project Overview can be found here; [↑2, MASCHINE Project Overview](#).

Now it's time to learn how to create some patterns!

6.1 Setting Recording Options

Before you begin recording there are several options you may want to configure to help you get the most from your controller. You can of course start recording straight away using the default MASCHINE settings, but if you are an experienced MASCHINE user and have a preferred recording setup you can use the MASCHINE JAM controller to configure this. However, regardless of your experience with MASCHINE you can revisit these features at any time to optimize your setup.

The recording options include:

- **Tempo.** The tempo of your track can be changed at any time, but setting it upfront can often give your track a certain feel that helps create the “vibe” or foundation of your track as you are recording. Additionally, you may even want to use **Tap Tempo** to sync up with other musicians when recording or playing live. For more information see [↑6.1.1, Setting the Tempo](#).
- **Pattern Length.** Set the length of the pattern you want to record in Bars. To change the default setting of one Bar, see [↑6.1.3, Setting the Pattern Length](#).
- **Step Grid.** Step Grid affects both the size and number of steps and the quantization resolution in your pattern. This is useful when recording and also when editing your pattern. For more information see [↑6.1.2, Setting the Step Grid](#).

- **Record Mode.** The Record Mode options allows you to adjust Metronome parameters (Level, Time signature and Auto-on), Count-In Length, and automatic Quantize mode via the on-screen overlay, Input velocity and Pattern Follow. The Metronome is a precise musical reference that can help you keep time when recording live input. The Quantize mode options allow you set various options related to when and how quantization is applied to the input of your recording. Pattern Follow will set the controller to move with the Playhead through the various parts of your Pattern when step sequencing if the Pattern does not fit in the 8x8 matrix at once. For more information see [↑6.1.4, Setting the Record Mode](#).

6.1.1 Setting the Tempo

The Tempo button is located along the bottom of the controller and allows you to change the tempo of the track in beats per minute (BPM).

To change the tempo of the track:

1. Press the **TEMPO** button.



- ⇒ The on-screen overlay appears.



2. Turn the encoder clockwise to increase the tempo, or turn it counterclockwise to decrease the tempo.

→ The tempo of the track will change, and the on-screen overlay will display the current tempo as it is adjusted.

Tapping the Tempo

You can use Tap Tempo to set the tempo at any time. This is an intuitive way to match another beat or sync with other musicians. As you tap the tempo once every beat, MASCHINE will follow you're the tempo of your tapping.

To use Tap Tempo:

- ▶ Press and hold **SHIFT** + tap the **TEMPO (TAP)** button to the desired beat.



→ The tempo is adjusted to your tapping.

6.1.2 Setting the Step Grid

Steps are elementary time blocks. They are notably used to apply quantization or to compose Patterns from your controller in Step mode. All steps together make up the Step Grid. In the software's Pattern Editor, steps are visualized by vertical lines. You can adjust the step size, e.g., to apply different quantization to different events or to divide the Step Grid into finer blocks to edit your Pattern more precisely.

The Step Grid resolution — in other terms the step size — directly affects the precision of all Pattern editing actions, including quantization and its default value is 1/16th. However you may use another Step Grid resolution or disable the Step Grid completely.

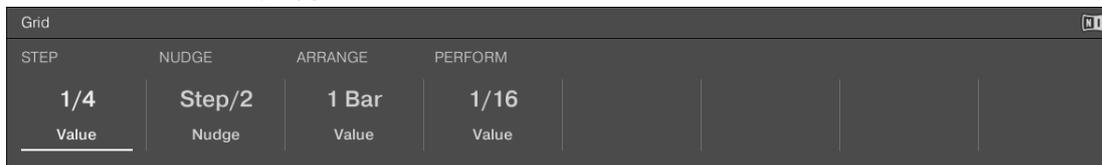
Although we introduce the Step Grid in the context of the Step mode, please note that the Step Grid affects both the Step mode (size and number of steps) and the Song mode (quantization resolution)!

As an example, you might want to reduce the step size from 1/16th note to 1/32nd note. This will allow you to place notes more precisely in the Pattern.

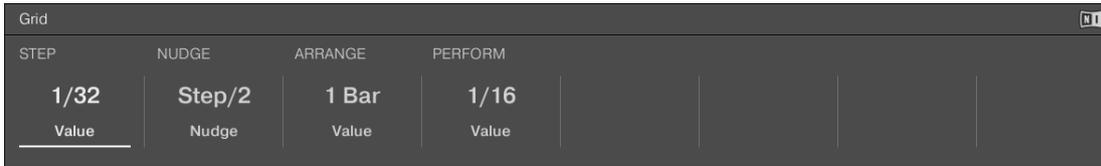
To adjust the Step Grid:

1. Press and hold the **GRID** button.

⇒ The on-screen overlay appears.



- Press a button from 1-4 (1/4, 1/8, 1/16 and 1/32) respectively to select one of the more commonly used a Grid resolutions.



→ The selected resolution is indicated by the on-screen overlay.

Changing the Grid Using the On-Screen Overlay

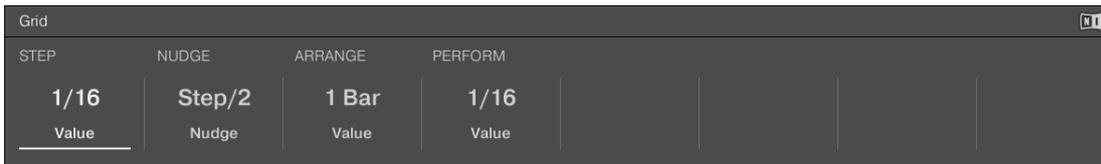
The on-screen overlay provides access to all available Step Grid resolutions.

To change the Step Grid's settings using the on-screen-overlay:

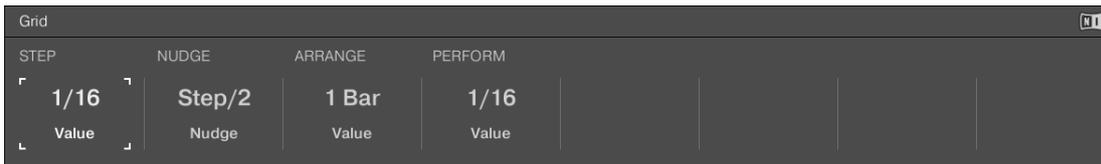
- Press the GRID button.



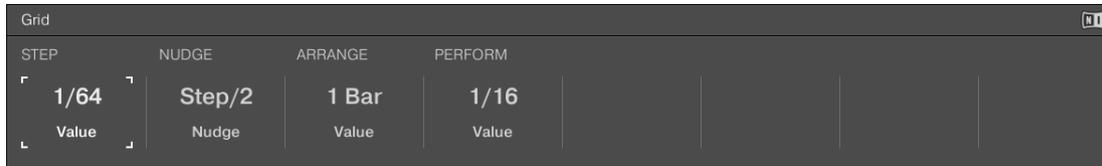
- Turn the Encoder to select STEP.



- Press the Encoder.



- Turn the Encoder to select a new value.



→ A new Step Grid value is selected.

6.1.3 Setting the Pattern Length

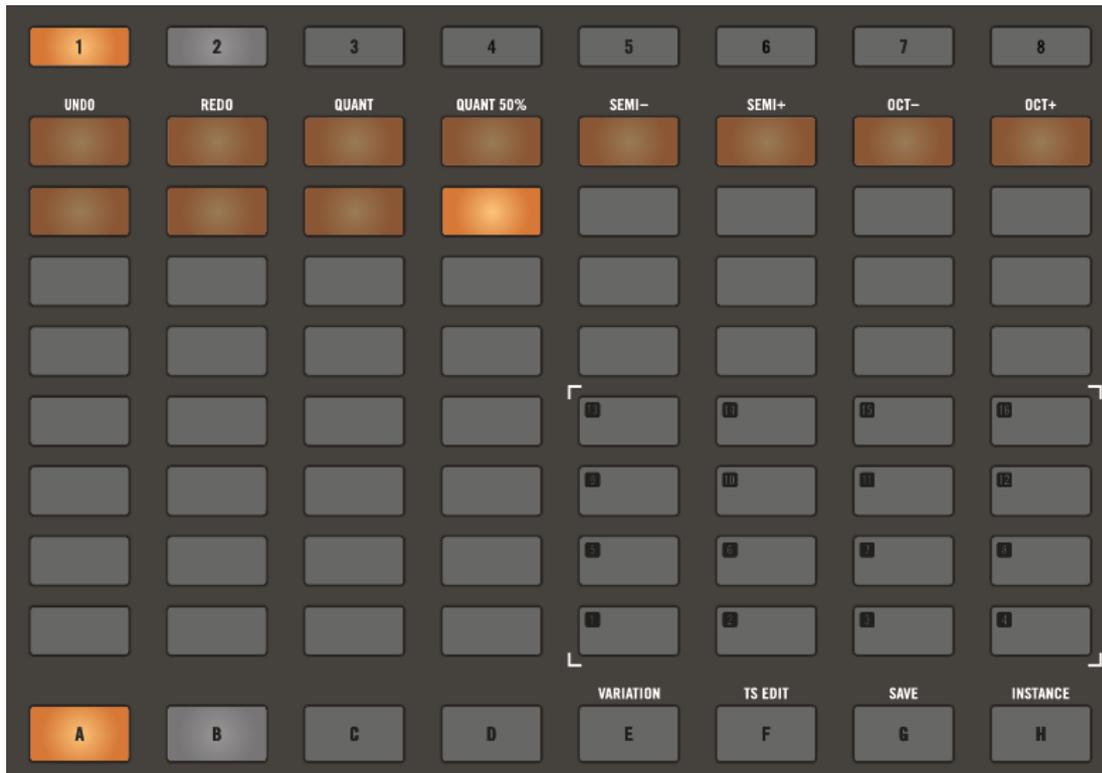
The Pattern Length is measured in bars and beats, and patterns can be up to 256 bars long. When you create a new empty pattern it has the default length as defined in the Default page of the Preferences panel of the MASCHINE software.

To set a new Pattern Length:

- Press the **SONG** button.
- Select a pattern by pressing a half-lit click-pad on the 8x8 matrix, or create a new pattern by pressing an unlit click-pad in the same column as the Group you want to work with.
- Press **SHIFT + SOLO (PAT LENGTH)** to enter the Pattern Length mode.



4. Press the click-pads in the 8x8 matrix to select the amount of bars you want. One click-pad equals one bar.



5. Press the **SONG** button to exit Pattern Length mode.

→ The pattern length is adjusted, and can be readjusted at any time by repeating the same procedure.

6.1.4 Setting the Record Mode

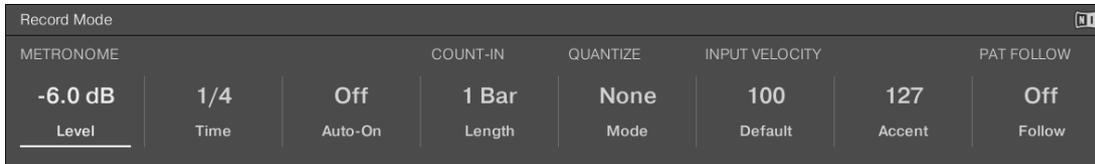
The Record mode options allow you to adjust Metronome parameters (Level, Time signature and Auto-on), Count-In Length, and automatic Quantize mode via the on-screen overlay.

On your controller do the following to access the Record mode options:

- ▶ Press the **SHIFT + GRID (REC MODE)** button to enter Record mode.



- This Record mode on-screen overlay will appear. Use the Encoder and D-pad to navigate the on-screen overlay and make your settings.



The following table describes each of the parameters in the Record mode on-screen overlay.

Element	Description
METRONOME	
Level	The metronome marks time at a selected rate by giving a regular audible tick. This is useful to have in the background in order to keep time when recording. The metronome Level parameter adjusts the volume of the metronome. The level range is from $-\infty$ (infinity) to 10.0 dB.
Time	Set the musical time divisions on which the metronome is heard. Values range from 1/4, 1/8, 1/16, 1/4T, 1/8T, 1/16T divisions.
Auto-On	The metronome provides a new Auto-Enable option allowing the metronome to turn on automatically when you start recording a Pattern: If it is set to Rec then the metronome is always heard when record is enabled. If set to Off then enabling / disabling Record mode has no effect on the metronome on / off state.
COUNT-IN	
Length	Adjusts the duration of the Count-in, i.e. how long the metronome will sound before the recording actually starts. The count-in length can be set to; 1 Bar, 2 Bars, and 4 Bars.
QUANTIZE	

Element	Description
Mode	<p>You can choose to have notes automatically quantized as you play and record them on the click-pads, or just when they are record. This is called Input Quantization.</p> <p>If set to None all quantization must be applied manually</p> <p>If set to Record then all notes are immediately quantized to the step grid when they are recorded</p> <p>If set to Play/Rec then all notes are quantized on record and are also quantized in real time as played</p> <p>Note that real time quantizing only moves events forward, and does not change notes that would be moved backwards in time during an offline quantize operation.</p> <p>With Quantization enabled, as you are recording the click-pads (1-16) your notes will be quantized according to the step size (i.e. Step Grid resolution) selected. If you turn the Step Grid off, no quantization will be applied. See section ↑6.1.2, Setting the Step Grid for more information on Step Grid and the step size.</p>
INPUT VELOCITY	
Default	Set the default input velocity level of notes added when using the 8x8 click-pad matrix in Step mode or Piano Roll mode.
Accent	Set the default input velocity level of accented notes (SHIFT + SELECT) added when using the 8x8 click-pad matrix in Step mode or Piano Roll mode.
PAT FOLLOW	
Follow	<p>Set the timeline to follow through the various parts of the Pattern in the Project view when step sequencing in Step mode.</p> <p>The shortcut of SHIFT + A can also be used to set Follow to On or Off.</p>

6.2 Playing and Programming Beats

This chapter explains the process and features that can be used to create a beat based pattern using MASCHINE JAM. For information on creating melodic content see [↑6.3, Creating Melodies and Harmonies](#).

Your controller offers two modes that are ideal for creating beat based patterns:

- **Pad mode** – In Pad mode you can assign one Sound from a Group to each of the click-pads labelled 1-16. The click-pads can be used to record in real-time as you finger drum or simply trigger each Sound individually. You can have many Groups, each containing up to sixteen Sounds each. Switch between your Groups and record several Patterns in order to create a set of Scenes, and ultimately a Song.
- **Step mode** – In Step mode, your controller can be used as a traditional step sequencer, where each of the sixty-four click-pads in the 8x8 matrix represent a step in the Step Grid. Just as on classical drum machines, a light representing the sequence runs across the 8x8 matrix, highlighting each step during playback. Select a Sound and put events at chosen steps in the sequence by pressing the corresponding click-pads. By repeating the process sound by sound you can build up a whole Pattern.

However, before you begin to create a beat you must first load a drum kit using the Browser.

6.2.1 Loading a Drum Kit

Since we are creating a beat you must first load a kit from the MASCHINE factory library.

To load a drum kit:

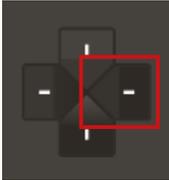
1. Press the Group button (A-H) to select a Group.



2. Press **BROWSE** to access the MASCHINE library.
3. Press **SHIFT** + D-pad Left button to reset the Browser.
4. Turn the Encoder to select **ALL GROUPS** from the on-screen overlay.

⇒ A list of available kits appear in the results list on the right-hand side of the browser.

5. Press the D-pad Right button to access the results list.



6. Turn the Encoder to select one of the kits.

7. Press the Encoder to confirm your selection.

→ The kit is loaded and you can begin to play each Sound using click-pads 1-16.

6.2.2 Recording Beats in Real-time

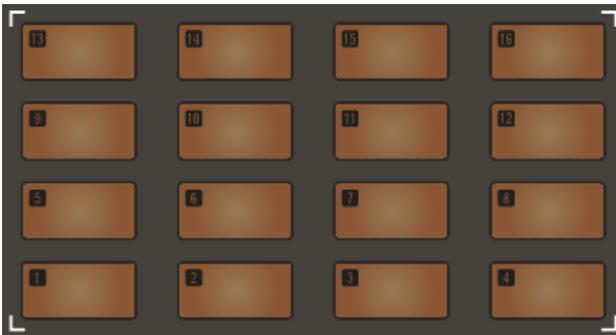
In Pad mode the sixteen click-pads representing the Sounds of a Group can be used to jam or record beats in real-time as the Sounds are triggered.

The kit you loaded using the Browser is now assigned to the click-pad 1-16 of the Group you selected.

To enter Pad mode:

1. Press the **PAD MODE** button.

⇒ The Group buttons and click-pads numbered 1-16 illuminate.



2. Select a Group containing the Sounds you want to play.

3. Press any of the sixteen click-pads to hear their Sound.
 - ⇒ Once you are satisfied with your Sounds and your idea for a pattern, it's time to record!
4. Press REC + PLAY at any time to record a pattern.
 - ⇒ As you trigger the click-pads your pattern is recorded.
 - ▶ Press REC + PLAY again to stop recording.



If you want to swap any of the Sounds in your kit you can use the Browser to load different samples into each slot. Select the Sound you want to swap by selecting the click-pad (1-16) and load a new drum sample. For more information on loading files (including Samples) from the Browser see [↑5.1, Loading Files from the Browser](#).

For information on changing Pattern Length or Step Grid settings see [↑6.1, Setting Recording Options](#).

6.2.2.1 Using Note Repeat

Note Repeat is a really handy way to play and program beats: it plays the selected Sound or note repeatedly at a given rate. You just need to hold a click-pad and its Sound/note will be steadily repeated until you release it.

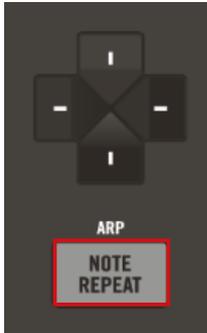
- Note Repeat is a way to play percussion and drums live creating build-ups and breaks.
- Note Repeat can also come in handy to quickly record a regular beat when creating Patterns.

General Notes on the Note Repeat

- Note Repeat accepts live input from the click-pads (1-16) of your controller only.
- The output of the Note Repeat is recorded into the Pattern Editor.
- The Note Repeat cannot be modulated nor automated in MASCHINE.
- You can use Note Repeat even if the transport is not running: In this case the Note Repeat engine will use its own central clock. This clock will be reset as soon as you start the playback.

To use Note Repeat:

1. Press the **NOTE REPEAT** button.



→ MASCHINE JAM will automatically switch to Pad Mode and the Sounds within the selected Group illuminate.

1. Select the Group (**A-H**) containing the Sound you want to repeat.
2. Press the Sound click-pads (**1-16**).

→ The sound will repeat according to the setting in the Note Repeat on-screen overlay.

Element	Description
RHYTHM	
Rate	The first RHYTHM parameter, Rate, is available in both Arp and Note Repeat mode. It sets the beat of the Note Repeat engine in relation to global tempo in musical values, ranging from 1/1 to 1/128. All note values (except 1/1 and 1/128) are available as basic notes, dotted notes, and triplets. Dotted notes are 1.5 times longer than the corresponding basic notes. Triplets are 2/3 the duration of their corresponding basic notes, so that e.g. three 1/4 notes are equal in duration to two basic 1/4 notes.

Element	Description
Unit	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).
OTHER	
Gate	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 in the RHYTHM section). Available values range from 1.0% 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).
Lock	Keeps the Note repeat feature enabled even when you leave Note Repeat mode. For example, this can be useful to adjust the settings, switch to another Pattern, adjust Plug-in parameters, etc., while keeping Note Repeat running.
Hold	The Hold function allows you to latch the notes played by the Note Repeat. When set to On , the Note Repeat will continuously play a sequence. To stop Note Repeat, set the Hold parameter to Off .

6.2.3 Sequencing Beats with Step Mode

Step mode turns your controller into a fully featured step sequencer. If you are familiar with classic drum machines, you should quickly feel at home.

When we record patterns “live”: We hit the various click-pads at the desired moments while the sequencer is playing and the sequencer directly records our hits. This is the recording workflow when the controller is in Pad mode. On the contrary, in **Step mode** you progressively build a Pattern by programming a sequence for each individual Sound of the selected Group. Notably, the sequencer does not need to be playing.

By default the step-sequencer is set to allow one individual sound to be programmed using the 8x8 click-pad matrix but it can also be used to sequence four, or eight sounds simultaneously. The click-pad matrix in the Project view will work like this for each mode:

- When one sound is selected for sequencing it is displayed on the first two or four parallel lanes of the click-pads, (depending on the Pattern length see [↑6.1.3, Setting the Pattern Length](#)) and each click-pad represents one step of the sequence.
- When four sounds are selected for sequencing, each sound is displayed on two parallel lanes at a time and each click-pad represents one step of the sequence.
- When eight sounds are selected for sequencing, they are displayed on a single lane and each click-pad represents one step of the sequence.

Preparing Step Mode

To prepare Step mode before you begin sequencing:

1. Press the Group button (A-H) containing the Sounds you want to sequence (preferably a drum kit for this example).



2. Select a click-pad on the 8x8 matrix to create a pattern.

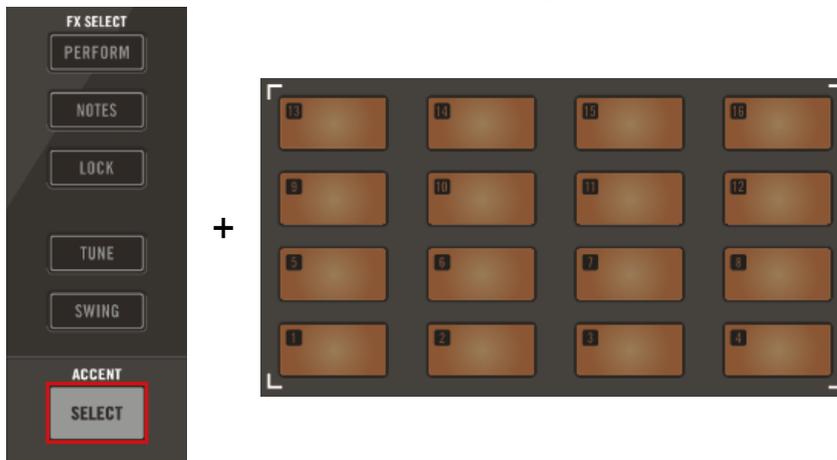
- Press and hold the **STEP** button at the top left of your controller and press button **1**, **4** or **8** to sequence one, four, or eight sounds.



Creating a Sequence

To create a sequence in Step mode:

- Press **SELECT** + click-pad (**1-16**) containing the Sound you want to sequence.



- Activate each step by pressing a click-pad once.
 - ⇒ The click-pads illuminate to represent each entered step. If you press an illuminated click-pad the step is removed. This way it's quick and easy to create a drum pattern.

3. Press **SHIFT** + **SELECT (ACCENT)** to add an accent to the step.



- ⇒ New steps are now be audibly more pronounced and the click-pads will be brighter to visually signify the step is accented. The controller will remain in Accent mode until you press **SHIFT** + **SELECT (ACCENT)** again.
- 4. Press **PLAY** to start the sequencer.
- You can now hear the sequence and see a light chasing through the 8x8 matrix from left to right. You may continue to activate or deactivate click-pads to build your sequence during playback.

Accessing the Pattern

If your Pattern is larger than the 8x8 click-pad matrix you may want to access the other parts that don't fit into the Project view. To do this:

1. Press the numbered buttons (**1-8**) across the top of the Project view to access the various parts of your pattern.
- ⇒ The Project view will update to show each part of the pattern.
2. Press **SHIFT** + **A** button to allow the controller to automatically follow the pattern.
- ⇒ The Project view now automatically updates to show each part of the pattern during playback.
3. To switch to another Sound, press **SELECT** and the click-pad with the Sound you want to sequence.
- Progressively, you build up a new Pattern.

At any time, you can leave Step mode:

- ▶ Press the **STEP** button to exit Step mode.

6.2.4 Adding Swing

Swing controls the rhythmic relationship between events in the selected channel (Sound, Group or Master). By shifting some of the events, you can e.g. give a shuffling, ternary touch to your Patterns.

The groove created by swing can be adjusted for each channel individually via the on-screen overlay or using the Smart Strips.

A groove configured for a channel affects all its contained channels:

- On the Master channel, the Groove properties affect all Sounds of all Groups. The Master's swing is added to the groove set for each individual Group and Sound via their own Groove properties.
- On the Group channel, the Swing settings of a Group affect all Sounds of the Group. The Group's swing is added to the Swing set for each individual Sound.
- On the Sound channel, the Swing settings of a Sound affect that single Sound.

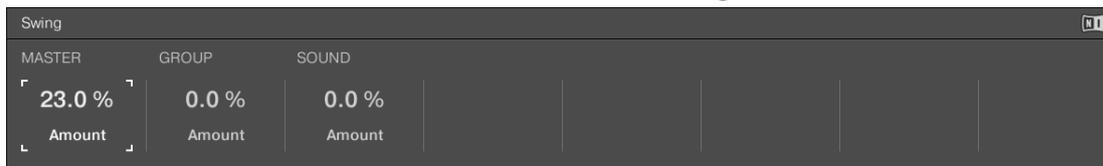
Adding Swing to the Master

To add Swing to the Master channel:

1. Press and hold the **SWING** button.
2. Touch the Encoder to show the on-screen overlay.
3. Turn the Encoder to select **MASTER**.



4. Push the Encoder and then turn it to select a Master swing value.



5. Press the Encoder to confirm the new value.

Adding Swing to a Group

To add Swing to a Group channel:

1. Press and hold the **SWING** button.
2. To change the Swing of a Group, select a Group button **A-H**. If your Project contains more than eight Groups, use the D-pad Left and Right buttons to access other Group banks.
3. Turn the Encoder to select **GROUP**.
4. Push the Encoder and then turn it to select the Group Swing value. Hold **SHIFT** while you turn the Encoder to adjust the value in finer increments.
5. Press the Encoder to confirm the new value.

→ The Swing value is updated. Alternatively, you can use the Smart Strips to adjust Swing for each Group.

Adding Swing to a Sound

To add Swing to a Sound channel:

1. Press and hold the **SWING** button, then select a Sound **1-16**.
2. Turn the Encoder to select **SOUND**.
3. Push the Encoder and then turn it to select the Sound swing value.
4. Press and turn the Encoder to adjust the value. Hold **SHIFT** while you turn the Encoder to adjust the value in finer increments.
5. Press the Encoder to confirm the new value.

→ The Swing value is updated. Alternatively, you can use the Smart Strips to adjust Swing for each Sound.

6.2.5 Applying Choke

The Choke All Notes feature allows you to kill any note or event currently playing in your Project. This affects the audio coming from all Plug-ins.

Choke All Notes is only available on your controller:

- ▶ Press **SHIFT** + **MUTE (CHOKE)** to choke all playing notes.



Choke All Notes can be useful in various situations:

- As a creative tool in a live performance, e.g. to create stutter beats.
- As a workflow aid, to stop long one-shot Samples that still continue playing after you have stopped the sequencer.
- As a first panic button, if you are not sure where in your Project a particular sound is coming from, and you want to get rid of it.



Contrary to the Mute function, Choke All Notes is not turning any Group/Sound into another state. Instead, all audio voices currently playing are instantaneously killed. The killed voices cannot be reactivated and are freed up for subsequent notes according to the polyphony setting. Voices triggered by subsequent notes will play normally.

6.3 Creating Melodies and Harmonies

This chapter explains how to create melodic content using MASCHINE JAM. For information on creating a beat see [↑6.2, Playing and Programming Beats](#).

Your controller offers several ways to do this:

- **Keyboard mode** – In Keyboard mode the 8x8 click-pad allows you to play notes of the focused Sound at different pitches.
- **Piano Roll** – Piano Roll mode turns your controller into a step sequencer for melodies and chords. In Piano Roll mode the horizontal axis of the 8x8 click-pad matrix represents time, while the vertical axis represents pitch: allowing you to progressively build a Pattern by programming a sequence for each individual note.

The following subsections will now explain how to create melodic content using these two modes.

6.3.1 Loading an Instrument

Before you begin to record a melody you must first load an instrument. You can load a MASCHINE Sound from the MASCHINE factory library or a plug-in from KOMPLETE SELECT bundle that came free with MASCHINE JAM.

For the purposes of this example it assumed that KOMPLETE SELECT has been installed on your computer.

To load an Instrument:

1. Press the Group button (A-H) to select a Group.

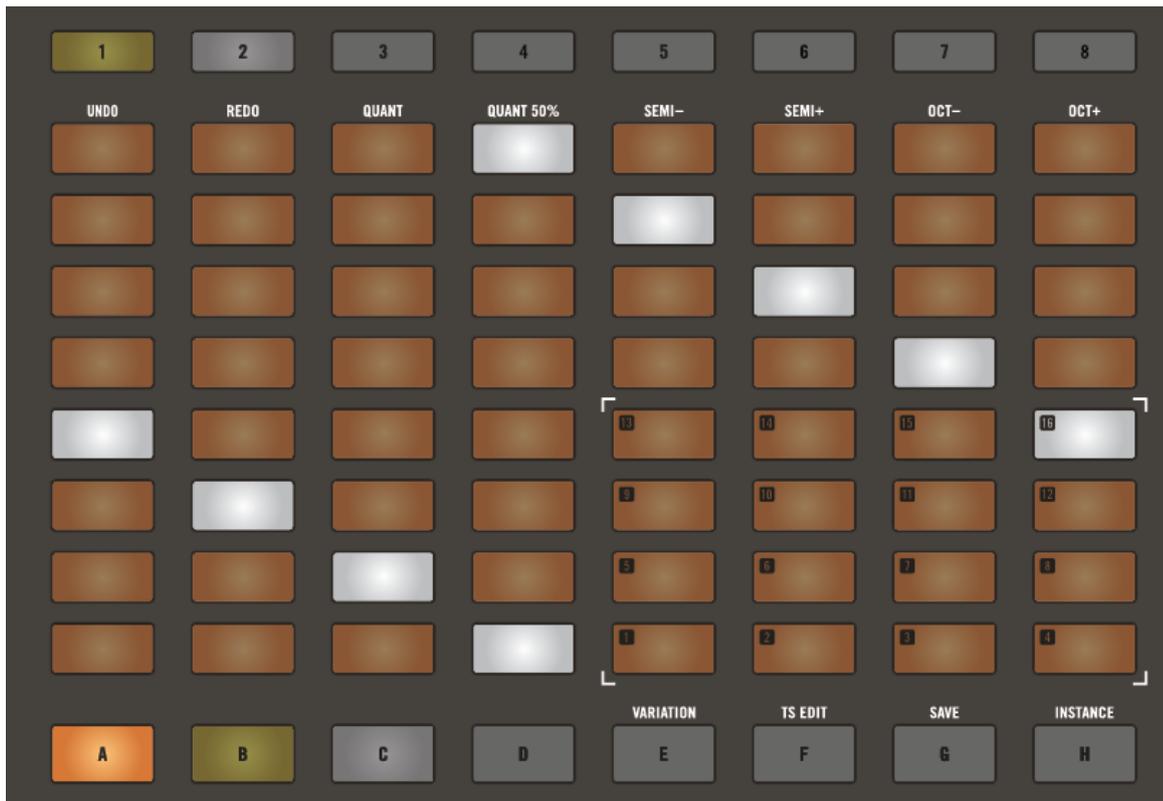


2. Press **BROWSE** to access the MASCHINE library.
3. Press **SHIFT** + D-pad Left button to reset the Browser.
4. Turn the Encoder to select **ALL INSTRUMENTS** from the on-screen overlay.
⇒ A list of available instruments presets appear in the results list on the right-hand side of the browser.
5. Press the Encoder to access the list of available Instruments and turn the Encoder to select a plug-in.
6. Press the D-pad Down button to filter the available sounds by **TYPES**.
7. Use the Encoder to select **Synth Lead** for example, and press the Encoder to confirm your selection.
8. Press the D-pad Right button to access the results list.
9. Turn the Encoder to select one of the preset sounds.
10. Press the Encoder to confirm your selection.
→ An instrument preset is now loaded.

6.3.2 Recording Melodies and Harmonies in Real-time

In Keyboard mode the 8x8 click-pad matrix in the Project view allows you to play notes of the focused Sound at different pitches. This is well suited for playing melodic instruments.

The 8x8 click-pad matrix indicates the pitches played by each button (all are shown in the color of the focused Sound). If you press the click-pads you will hear that they all play the same Sound, but each with a different pitch.



Keyboard mode on MASCHINE JAM

To access Keyboard mode:

1. Press **SHIFT + PAD MODE (KEYBOARD)**.

→ The controller will enter Keyboard mode and is set to the default chromatic scale of C.

From bottom left to top right of the 8x8 click-pad matrix the selected Sound can be played chromatically from C1 to C6, and the white click-pads represent the root note of the scale at each octave.

- ▶ Press D-pad Up/Down buttons to access higher or lower notes in the scale.
- The notes will shift accordingly and you can play notes in the higher or lower regions of the scale.
- ▶ Press **REC** + **PLAY** at any time to record a pattern.
- ▶ Press **REC** + **PLAY** again to stop recording.

For more information on setting recording options and changing the length of your Pattern see [↑6.1, Setting Recording Options](#).

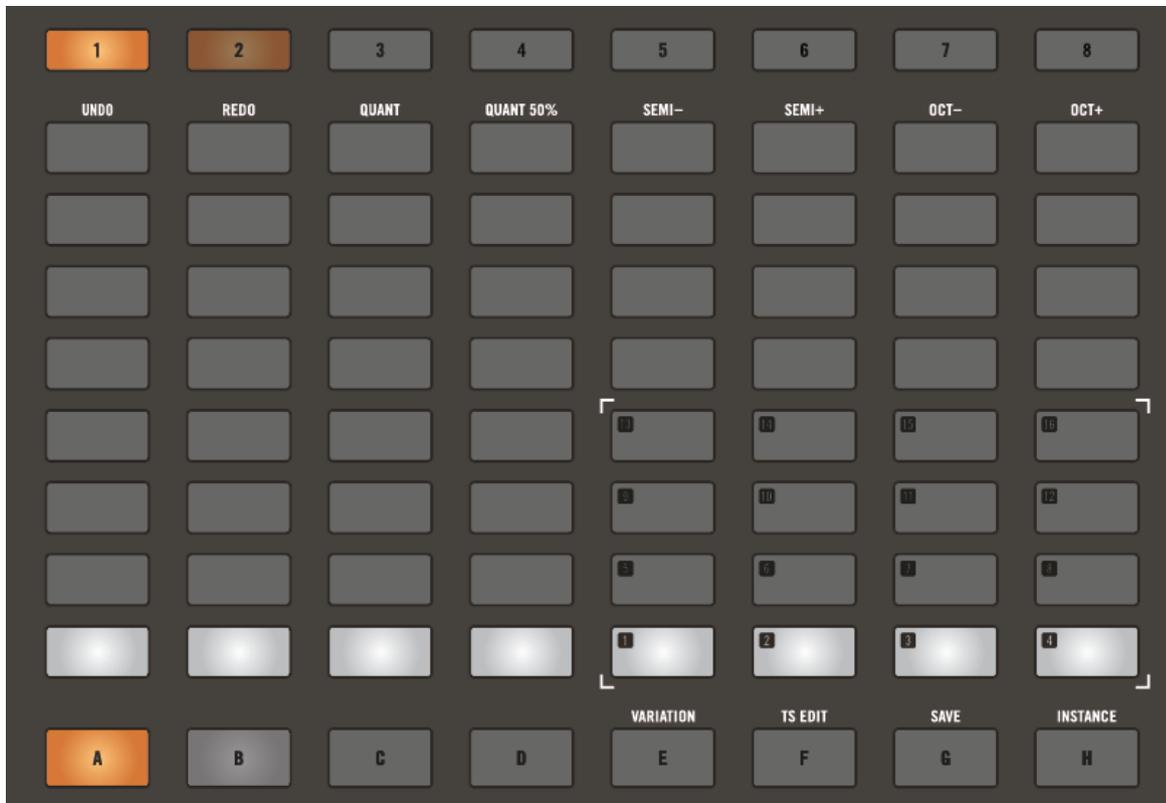
For information on editing your Pattern see [↑6.4, Editing a Pattern](#).

6.3.3 Step Sequencing Melodies and Harmonies

Piano Roll mode turns your controller into a step sequencer for melodies and chords.

In Piano Roll mode the horizontal axis of the 8x8 click-pad matrix represents time, while the vertical axis represents pitch: allowing you to progressively build a Pattern by programming a sequence for each individual note.

Piano Roll mode is set to allow one individual sound to be programmed using the 8x8 click-pad matrix. Select a Sound and a Scale and you're ready to go!



Piano Roll mode on MASCHINE JAM.

Preparing Piano Roll Mode

To prepare Piano Roll mode before you begin sequencing:

1. Press **SONG** to enter Project view.
2. Press the Group button (**A-H**) containing the sound you want to sequence.
3. Select a click-pad on the 8x8 matrix in the Project view to create a pattern.
4. Press **SHIFT** + **STEP (PIANO ROLL)** top-left of your controller to enter Piano Roll mode.

Setting a Scale

Piano Roll works best when used with a scale as this constrains the available notes and allows you to work more precisely and in key.

- ▶ Touch the Encoder to display the Scale on-screen overlay, and use the D-pad and Encoder to navigate and select the scale you would like to work with.

For information on selecting a scale with MASCHINE JAM see [↑6.3.4, Selecting a Scale and Chords](#).

Creating a Sequence

To create a sequence in Piano Roll mode:

1. Press **SELECT** + click-pad (1-16) containing the Sound you want to sequence.
2. Activate each step by pressing a click-pad once.
 - ⇒ The click-pads will illuminate to represent each selected step. If you press the click-pad again, the step is removed. This way it's quick and easy to create a melodic pattern.
3. Press **SHIFT** + **SELECT (ACCENT)** to add an accent to the step.
 - ⇒ With Accent new steps will now be audibly more pronounced and the click-pads will be brighter to visually signify a step is accented. The controller will remain in Accent mode until you press **SHIFT** + **SELECT (ACCENT)** again.
4. Press **PLAY** to start the sequencer.
 - Now you will hear the sequence and see a light chasing through the matrix, from left to right. You may continue to activate or deactivate click-pads to build your sequence during playback.

Accessing Each Part of Your Pattern

Depending on the length of your Pattern, it may not all fit on to the 8x8 click-pad matrix at once.

To access the various parts of your Pattern:

1. Press the numbered buttons (1-8) across the top of the Project view to access each part of your pattern.

⇒ The Project view will update to show the selected part of the Pattern.

More conveniently, you can set your controller to automatically follow the playback position of your Pattern.

To set Follow:

1. Press **SHIFT + A** to allow the controller to automatically follow the Pattern.

→ The Project view automatically updates to show each part of the Pattern during playback, as the light (Playhead) chases through the sequence.

▶ To switch to another Sound, press **SELECT** plus the click-pad with the Sound you want to sequence.

→ Progressively, you can build up a new Pattern.

At any time, you can leave Piano Roll mode:

▶ Press the **STEP** button to exit Piano Roll mode.

6.3.4 Selecting a Scale and Chords

MASCHINE 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 in a certain scale without hitting a wrong note on your controller, or to play chords that always fit by just hitting a single click-pad.

When you select a scale from the on-screen overlay, the scale gets mapped onto the 8x8 click-pad matrix. This means that regardless of which click-pads you actually press—or what MIDI notes you send from your host application—the notes that are being played back are always mapped onto the closest notes contained in the scale that you selected.

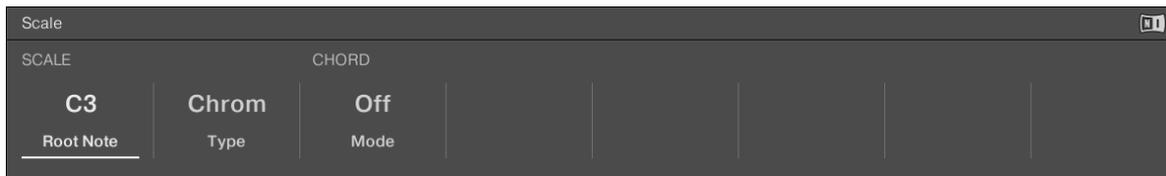
By default MASCHINE JAM is set to the chromatic scale of C and the 8x8 click-pad matrix represent each semitone. By simply touching the Encoder you can display the Scale on-screen overlay. This will provide an overview of the current settings and allow you to set a new root note for the scale, a scale type, and select a chord mode; including harmonic, or one of the predefined chord sets that can be triggered using a single click-pad from the 8x8 matrix.

Selecting a Scale

To select items from the Scale on-screen overlay:

1. Switch the focus to a Sound slot containing a polyphonic instrument, or load one into the desired Sound slot.
 2. Enter Keyboard mode **SHIFT + PAD MODE (KEYBOARD)**.
 3. Touch the Encoder.
- ⇒ The on-screen overlay will display the Scale on-screen overlay.
4. Turn the Encoder to select a parameter and press it to confirm a selection.
 5. Turn the Encoder to adjust a value and press it again to confirm your changes.

Scale On-screen Overlay



The Scale on-screen overlay

Element	Description
SCALE	
Root Note	Select the root note of the scale.
Type	Select the required scale type.
CHORD	
Mode	Choose between Off (no Chord) or Harm (Harmony).
Type	Choose the required Chord type.

The following sections explain the Scale options in more detail.

6.3.4.1 Setting the Root Note of a Scale

Use the **SCALE** parameter **Root Note** to set the root note of a scale. This means deciding what key the scale will begin with. The following notes of the scale depend on which scale pattern you select with the **SCALE Type** parameter. You can transpose any scale pattern up or down by selecting a different **Root Note**.



The 8x8 click-pad matrix indicates the selected Root Note via white LEDs, while other active keys are half-lit.

6.3.4.2 Setting the Scale Type

Use the **SCALE** parameter **Type** to set the scale pattern according to which the notes will be mapped onto the 8x8 click-pad matrix.

For example, using the default **Root Note** value *C* combined with the default **SCALE Type** value *Major*, you get the scale C major, which spans over one octave and contains the notes C, D, E, F, G, A, and B (followed by C again). If instead you select *G* as your **Root Note**, the G major scale contains the notes G, A, B, C, D, E, and F# (followed by G again). You will notice that the distance between each note follows the same pattern of “whole step–whole step–half step–whole step–whole step–whole step–half step,” which is the pattern of the Major scale.

If you are triggering an instrument via an incoming MIDI pattern from your host software, the notes of the MIDI pattern will be mapped onto the closest keys belonging to the selected **SCALE Type**. This means that, for example (with **Root Note** set to *C*) a MIDI pattern consisting of the notes C-D-D# will be played back as such if **SCALE Type** is set to *Chromatic* (named *Chrom* in the on-screen overlay), but instead as C-D-E if **SCALE Type** is set to *Major*.

6.3.4.3 Chord Mode

Use the **CHORD** parameter **Mode** to generate chords from single notes, either from your MASCHINE JAM or from incoming MIDI notes from your host software.



The 8x8 click-pad matrix indicates the keys of a chord being played via white illuminated LEDs, while inactive click-pads are not fully illuminated.

CHORD mode has one inactive (*Off*) and two active states, which are described in detail below:

Chord Mode	Description
Off	CHORD Mode is inactive.
Harm	If CHORD Mode is set to Harm, the CHORD Type menu allows you to specify the interval of notes in the selected SCALE Type that will constitute the chord: E.g. a triad in the form of the root note, the third note, and the fifth note (CHORD Type value 1-3-5).
Chd Set	If CHORD Mode is set to Chd Set, the CHORD Type menu allows you to choose from a selection of predefined major and minor chords depending on the current Root Note. Chords can be triggered using the twelve illuminated click-pads in the 8x8 matrix.

6.3.4.4 Chord Type

Use the CHORD parameter Type to define a chord that will be generated from a single note used as input.



The 8x8 click-pad matrix indicates the keys of a chord being played via white illuminated LEDs, while inactive click-pads are not fully illuminated.

The available CHORD Type values depend on whether CHORD Mode is set to Harm or Chd Set, as described in detail below.

Chord Type, Chord Mode Set to Harmonizer

If CHORD Mode is set to Harm, then CHORD Type will offer you a selection of individual notes present in the selected SCALE Type. This means that for all scales except the 12-tone Chrom scale, you can select the interval of notes that will make up your chord.

The note interval is added onto the key of an incoming MIDI note, either from the click-pad matrix or from your host software. For example, you can select to play a C minor triad by setting **Root Note** to **C**, **SCALE Type** to **Minor**, **CHORD Mode** to **Harm**, and **CHORD Type** to **1-3-5**. If all of this seems complex, try setting a random value and use the click-pad matrix to see what notes are active, inactive, and played back.

When **CHORD Mode** is set to **Harm**, the **CHORD Type** setting includes the following values:

Chord Type	Interval Added to Played Note
Octave	Octave
1-3	3rd
1-5	5th
1-3-5	3rd and 5th
1-4-5	4th and 5th
1-3-5-7	3rd, 5th and 7th
1-4-7	4th and 7th

Chord Type, Chord Mode Set to Chord Set

If **CHORD Mode** is set to **Chd Set** and, for example, the **Root Note** is set to **C**, then the **CHORD Type** menu presents you with a list of selectable chords. Values are, e.g., **Maj 4** and **Min 7**, which would generate a major and minor chord, respectively—both using C as the chord's root note.

When **CHORD Mode** is set to **Chd Set**, the **CHORD Type** setting includes the following values:

- Maj 1-8
- Min 1-8

Chord Type and the Chromatic Scale

The **Chrom** scale consists of every semitone in an octave. That means that when you play every white key and every black key of an octave up or down, you are playing the 12-step **Chrom** scale. Since all semitones of an octave are present in the scale, you can use all keys to form chords. In turn, selecting **Chrom** as **SCALE Type** means that you can select virtually any **CHORD Type**. The following chords are available and can be generated:

Chord Type	Semitones Added above Played Note
Octave	12
Perf 4 (Perfect 4)	5
Perf 5 (Perfect 5)	7
Major	4 and 7
Minor	3 and 7
Sus 4 (Suspended 4)	5 and 7
Maj 7 (Major 7)	4, 7 and 11
Min 7 (Minor 7)	3, 7 and 10
Dom 7 (Dominant 7)	4, 7 and 10
Dom 9 (Dominant 9)	4, 7, 10 and 14
Min 7b5 (Minor 7 b5)	3, 6 and 10
Dim 7 (Diminished 7)	3, 6 and 9
Aug (Augumented)	4 and 8
Quartal	5, 10 and 15
Trichd (Trichord)	5 and 11

6.3.5 Creating Arpeggios

MASCHINE JAM features a flexible and versatile arpeggiator that lets you play your instruments in note sequences according to the keys you press on the on the 8x8 click pad matrix. You can also use the arpeggiator in combination with the scales and chords created with the Scale engine (see section [↑6.3.4, Selecting a Scale and Chords](#)). To play an arpeggiated note sequence you only need to press a click-pad on the 8x8 matrix.

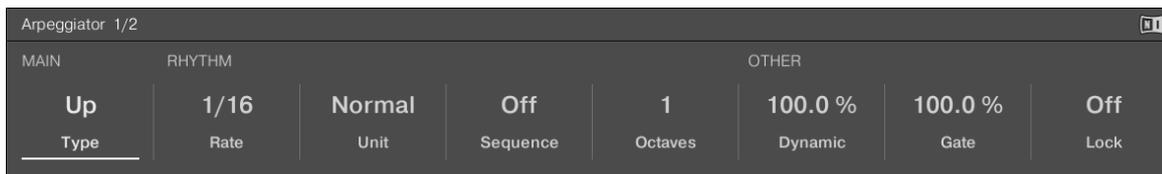
The arpeggiator has lots of parameters that provide you with many possibilities to shape your own note sequences.

To access the arpeggiator:

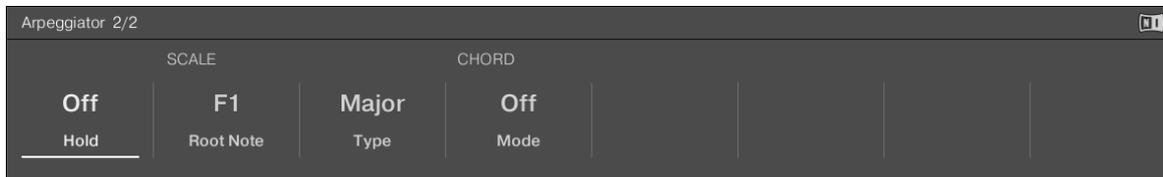
1. Press the **SHIFT + NOTE REPEAT (ARP)** button.
 - ⇒ The controller automatically switches to Keyboard mode and the 8x8 click-pad matrix illuminates. The white click-pads represent the root-note of the scale.
 - ▶ Press the D-pad Up or Down button to show higher or lower notes within the scale.
 - The 8x8 click-pad matrix will update to display the available notes.

Setting the Arpeggiator

1. To edit the Arp parameters in the on-screen overlay, touch the Encoder.
 - ⇒ The on-screen overlay appears and you can edit the options.
2. Turn the Encoder to select a parameter and press it to confirm a selection.
3. Turn the Encoder to adjust a parameter value and press it again to confirm your changes.



Page 1 of the Arpeggiator on-screen overlay



Page 2 of the Arpeggiator on-screen overlay

- To create interesting rhythms for the Arp sequence, use the **RHYTHM** parameters Rate, Sequence, and Swing. For more information, see section Rhythm.
- To change the range of available notes for the Arp sequence, as well as their velocity and length, use the **OTHER** parameters Octaves, **Dynamic**, and Gate. For more information, see the parameter description in the table below.
- To latch the playback of the Arp sequence, use the **HOLD** parameter. For more information, see section Hold.

The following table describes each of the parameters in the Arpeggiator on-screen overlay.

Element	Description
MAIN	
Type	<p>Sets the sequential order of the arpeggiated notes. You can choose from following settings:</p> <p>Up starts from the root note and plays the notes up through the chord.</p> <p>Down plays the notes the other way around.</p> <p>Up & Down plays the notes in both directions alternatively.</p> <p>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 button you pressed, then all notes of the chord triggered by the second button you pressed, etc.</p> <p>Chord plays all notes of the chord together repeatedly.</p>
RHYTHM	

Element	Description
Rate	Rate sets the beat (musical division) of the Arp engine in relation to global tempo in musical values, ranging from 1/1 to 1/128. All note values (except 1/1 and 1/128) are available as basic notes, dotted notes, and triplets. Dotted notes are 1.5 times longer than the corresponding basic notes. Triplets are 2/3 the duration of their corresponding basic notes, so that e.g. three 1/4 notes are equal in duration to two basic 1/4 notes.
Unit	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).
Sequence	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	Adjusts the spread of the arpeggiated sequence. You can choose to play back your sequence within the octave of the click-pads you pressed on your controller only, or you can select up to eight octaves and let the notes of your chord (or a single note) be played back in as many octaves.
OTHER	
Dynamic	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.

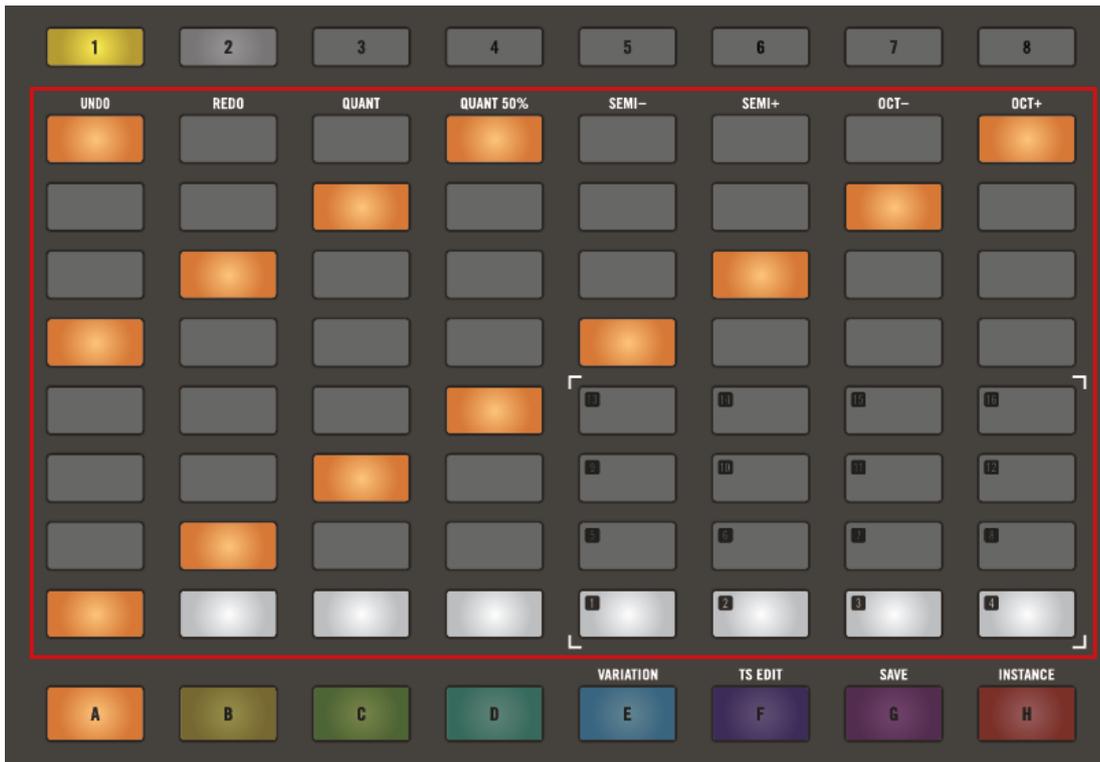
Element	Description
Gate	Adjusts the ratio between the duration of the notes and the duration of the silences between them, measured as a percentage of the note value set by Rate (see above in the RHYTHM section). Available values range from 0% to 200%: At low values the notes are very short. At 50% 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).
Lock	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.
Hold	The Hold function allows you to latch the notes played by the arpeggiator. When set to On , the arpeggiator will continuously play a sequence according to the last notes that were pressed. To stop the arpeggiator playback, set the Hold parameter to Off .
SCALE	
Root Note	The first SCALE parameter is Root Note . Setting the root note of a scale means deciding what key the scale will begin with. The following notes of the scale depend on which scale pattern you select with the Scale Type parameter. You can transpose any scale pattern up or down by selecting a different Root Note.

Element	Description
Type	<p>The second SCALE parameter is Type. Use this to set the scale pattern according to which the notes will be mapped onto the 8x8 click-pad matrix.</p> <p>For example, using the default Root Note value <i>C</i> combined with the default SCALE Type value <i>Major</i>, you get the scale C major, which spans over one octave and contains the notes C, D, E, F, G, A, and B (followed by C again). If instead you select <i>G</i> as your Root Note, the G major scale contains the notes G, A, B, C, D, E, and F# (followed by G again). You will notice that the distance between each note follows the same pattern of “whole step–whole step–half step– whole step–whole step–whole step–half step,” which is the pattern of the Major scale.</p> <p>If you are triggering an instrument via an incoming MIDI pattern from your host software, the notes of the MIDI pattern will be mapped onto the closest keys belonging to the selected SCALE Type. This means that, for example (with Root Note set to <i>C</i>) a MIDI pattern consisting of the notes C-D-D# will be played back as such if SCALE Type is set to <i>Chromatic</i> (named Chrom in the on-screen overlay), but instead as C-D-E if SCALE Type is set to <i>Major</i>.</p>
CHORD	
Mode	<p>The first CHORD parameter is Mode. Use it to generate chords from single notes, either from MASCHINE JAM or from incoming MIDI notes from your host software.</p>

6.3.6 Playing Notes with Smart Strips

Notes mode lets you play sounds using the Smart Strips, for an inspiring playing experience. Using the Smart Strips you can finger-strum chords in key with different scales to uncover new melodic ideas. Playing notes on the Smart Strips feels like strumming a guitar and is very useful with traditional sounds or even more stunning with more advanced synthetic sounds.

In Notes mode each of the eight strips represents a chord. This allows for perfect progressions in the selected scale, and interesting musical gestures. It is possible to customize the predefined chord sets or completely create your own using the controller's click-pad matrix.



Notes mode on the MASCHINE JAM controller.

Notes mode has three different types of input:

- **Guitar:** This allows you to use the Smart Strips to strum a set number of notes based on the selected scale. The notes are based on Guitar barre chords, and each note that makes up the chord is illuminated on the click-pad matrix. You can press the click-pads to modify the predefined chord by adding or removing notes to each column. Use in conjunction with the Chord settings to play whole chords instead of single notes.

- **Chords:** This allows you to use the Smart Strips to strum a predefined chord based on the selected scale. The notes are based on keyboard triad chords, and each note that makes up the chord is illuminated on the click-pad matrix. You can press the click-pads to modify the predefined chord by adding or removing notes to each column. Use in conjunction with the Chord settings to play whole chords instead of single note of a chord.
- **User:** This allows you to use the Smart Strips to strum a set number of notes based on the notes you select. Press the click-pads to add or remove notes to each column. Notes will be constrained by the selected scale, if a scale has been selected. Use in conjunction with the Chord settings to play whole chords instead of single notes.



Notes mode produces more useful results when a Scale Type is selected. For detailed information on selecting a scale, see [↑6.3.4, Selecting a Scale and Chords](#).

Using Notes Mode

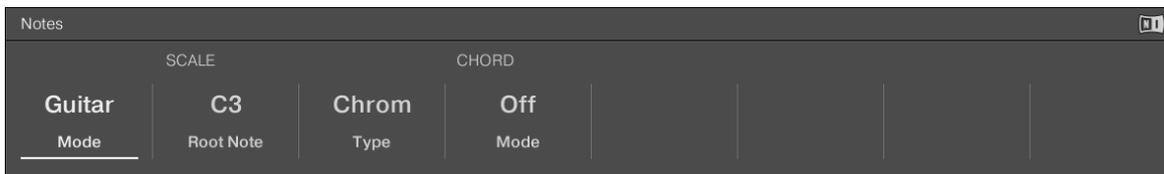
To use Notes mode:

1. Press and hold **NOTES** + **1**, **2**, or **3** to select a Notes mode (**Guitar**, **Chords**, **User**) respectively. Alternatively, turn the Encoder and navigate to **Mode**, then turn the Encoder to select a mode and push it to confirm your selection.
 - ⇒ The Notes mode on-screen overlay is displayed and you can use the Encoder to navigate and confirm each selection.
2. Press and slide your fingers up and down the Smart Strips to play chords, or press them at different locations on the Smart Strips to create variety.

The white click-pads represent the root-note of the scale.

- ▶ Press the D-pad Up or Down button to show higher or lower notes within the scale.

Notes Mode On-Screen Overlay



Notes mode on-screen overlay

Element	Description
Mode	Use the Encoder to select from Guitar , Chords or User mode. Alternatively, hold the NOTES button and press button 1 , 2 , or 3 to select a mode.
SCALE	
Root Note	Select the root note of the scale.
Type	Select the required scale type.
CHORD	
Mode	Choose between Off (no Chord) or Harm (Harmony).
Type	Choose the required Chord type.

For detailed information on selecting Scales in MASCHINE, please refer to [↑6.3.4, Selecting a Scale and Chords](#).

6.4 Editing a Pattern

This section explains some of the features available from the MASCHINE JAM hardware that can be used to edit your Patterns.

These features include:

- Quantizing to force note events to stick to the selected Grid. For more information see [↑6.4.1, Quantizing Your Pattern](#).
- Doubling a Pattern in length. For more information see [↑6.4.2, Doubling a Pattern](#).
- Nudging events in the Pattern Editor. For more information see [↑6.4.4, Nudging Events in a Pattern](#).
- Transposing a Pattern. For more information see [↑6.4.3, Transposing a Pattern](#).

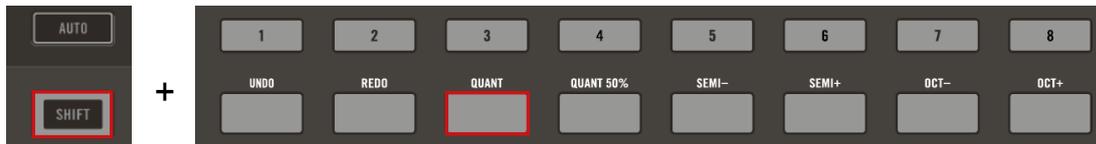
You can also find detailed information on these features in the MASCHINE Software Manual, available from the [Help](#) menu.

6.4.1 Quantizing Your Pattern

The process of quantization (sometimes called “note snap”) consists of forcing events to stick to the beats or to their subdivisions. This ensures that the rhythm is perfectly tight.

To quantize a Pattern:

- ▶ Press **SHIFT** + **QUANT**.

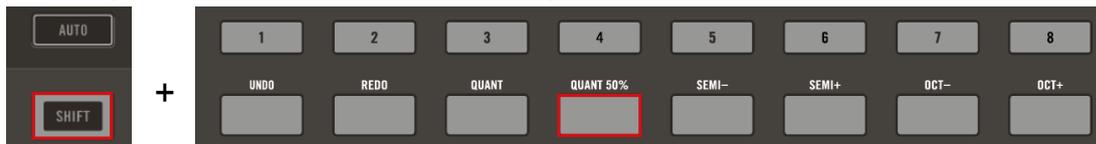


→ Your Pattern now plays perfectly tight. In the Pattern Editor, you can hear that all events now are exactly on the beats or their subdivisions.

Adding Half Quantization

Sometimes, having beats perfectly tight might sound too “mechanical” and dull. Indeed, the groove often comes from all these little imperfections in the rhythm. Hence, to avoid losing the Pattern’s groove, MASCHINE JAM allows you to half-quantize your events: Events are moved half way toward the closest beat/subdivision. Therefore, you get a tighter rhythm while keeping its human touch and groove.

- ▶ To half-quantize the events of your Pattern, press **SHIFT** + **QUANT 50%**.



→ You can apply half-quantization several times in a row: Each time, events will move half of the remaining way to the beats/subdivisions.

6.4.2 Doubling a Pattern

Your controller provides a useful shortcut to double the length and content of the current Pattern. In the software, you can do this for example by copying all events, putting the Playhead indicator at the end of the Pattern, and pasting the events (the Pattern Length is automatically doubled).

To double the length and content of a Pattern:

1. Press the **SONG** button to enter Project view.
2. Select the desired Pattern by pressing it on the 8x8 click-pad matrix.
3. Press **SHIFT** + **DUPLICATE (DOUBLE)**.

→ The Pattern is doubled.



Keep in mind that doubling a Pattern twice results in a Pattern that is four times as long.

6.4.3 Transposing a Pattern

You can transpose selected events or whole patterns by semitones or octaves.

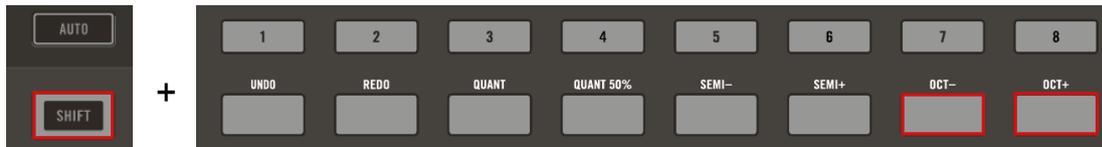
To transpose the selected events or Pattern in semitones or octaves:

1. Press the **SONG** button to return to the Project view.
2. Select a Pattern.
3. To transpose the selected events down in semitones press **SHIFT** + **SEM-**. To transpose the selected events up press **SHIFT** + **SEM+**.



⇒ The notes are transposed by a semitone. If nothing is selected, all event/notes in the Pattern will be affected.

4. To transpose the selected events down in octaves press **SHIFT + OCT-**. To transpose the selected events up press **SHIFT + OCT+**.



→ The notes are transposed by an octave. If nothing is selected, all event/notes in the Pattern will be affected.

6.4.4 Nudging Events in a Pattern

In addition to the Step Grid, a secondary grid specifically controls the timings at which existing events/notes can be nudged in the Pattern: the Nudge Grid.

Nudging events means shifting them a small amount ahead or behind their current position.

The Nudge Grid is based on the Step Grid:

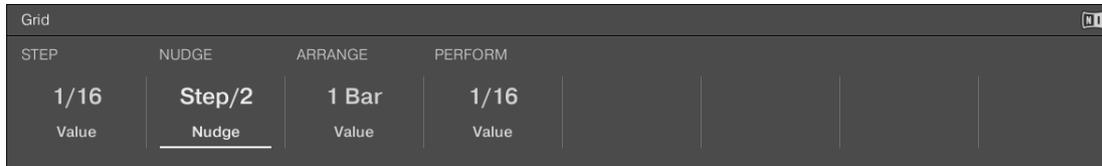
- The Nudge Grid is active only when the Step Grid is active. If the Step Grid is disabled, nudging events will shift them at the maximum resolution of the sequencer.
- By default, the Nudge Grid resolution is half a step, meaning that events will be nudged by half a step at a time.
- If you set the Nudge Grid resolution to a full step, the Nudge Grid will mirror the Step Grid and you can nudge events with the same resolution as when creating or quantizing events.
- You can also set the Nudge Grid resolution to a smaller fraction of the Step Grid resolution. This allows you to nudge events with even finer increments.

To change the Nudge Grid's settings:

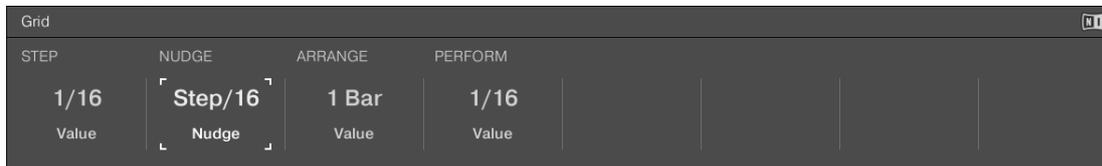
1. Press the **GRID** button.



- Turn the Encoder to select **NUDGE**.



- Press the Encoder to select the **NUDGE** parameter.
 - Turn the Encoder to select a new value.
- A new Nudge value is selected.



6.4.5 Adding Variation to Patterns

Variation provides an abundance of inspiration and even “happy accidents” when applied to your workflow. The variation engine contains two modes:

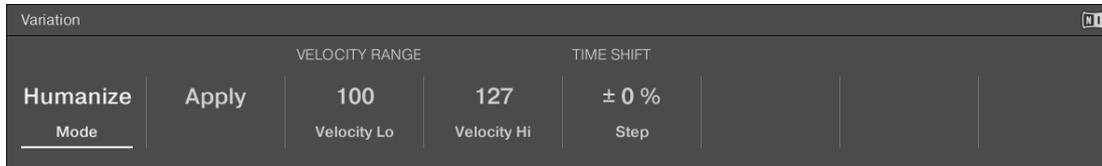
- **Random:** This mode provides randomly generated patterns or variations of your beats and melodies based on customizable values.
- **Humanizer:** This mode adds natural rhythmic fluctuations to programmed sequences.

Variation is available in both Pad mode and Keyboard mode and can be applied to a Sound. In Keyboard mode the Variation Random mode contains extra parameters that allow you to add variety to melodic content.

To access Variation mode:

- Select the Group (**A-H**) containing the Sound to which you want to apply the variation.
- Press **SELECT** + Sound (**1-16**).

3. Press **SHIFT + E (VARIATION)** to open the on-screen overlay.



4. Turn the Encoder to navigate the various parameters and press it to enter a value.

The onscreen overlay contains the following parameters:

Element	Description
Mode	Select from Random or Humanize mode. Randomize creates generated versions of your beats and melodies based on the values of the parameters of this mode. Humanize provides natural rhythmic fluctuations to your programmed sequences based on the values of the parameters of this mode.
Apply	Applies the current settings to the selected Sound.

Random Mode Parameters

Element	Description
PROBABILITY (Keyboard mode))	
Probability	Set the probability of how often a note is created. At 50% a note may or may not be created at each step. At 100% a note will be created at every step of pattern. Probability can be changed from 10-100% in 10% increments. Press SHIFT to change in finer increments of 1%.
NOTE RANGE (Keyboard mode)	
Note Lo	Create notes no lower than the set value.

Element	Description
Note Hi	Create notes no higher than the set value.
VELOCITY RANGE)	
Velocity Lo	Create notes with a velocity no lower than the set value.
Velocity Hi	Create notes with a velocity no higher than the set value.
CHORDS (Keyboard mode))	
Note Count	Set the amount of notes that are available to make up a chord per step. This is also calculated in relation to Note Count set in the DISTRIBUTIONS section. The Note Count range is from 1 to 6.
NOTE LENGTH)	
Steps	Set the length of a note in steps. The value ranges from 1 to 6 steps per note. Press SHIFT to change in finer increments.
TIME SHIFT)	
Step	Set the amount of time shift per step. The value is applied to all notes and will move them randomly in both plus and minus values according to the overall percentage set here. Step can be changed from +/- 0-50% in 5% increments. Press SHIFT to change in finer increments of 1%.
DISTRIBUTIONS)	

Element	Description
Note Count (Keyboard mode)	<p>Fixed: The note count is fixed. The value set in the Note Count of the Chord section will take precedent here.</p> <p>Equal: The note count will be evenly distributed across the Note Range.</p> <p>Gauss: The note count is likely to be distributed to the middle section of the Note Range.</p> <p>½ Gauss: The note count more is likely to be distributed to the middle and lower section of the Note Range.</p>
Notes (Keyboard mode)	<p>Equal: Notes will be evenly distributed across the Pattern in accordance with the Step grid.</p> <p>Gauss: Notes are more is likely to be distributed to the middle part of the note range.</p> <p>½ Gauss: Notes are more likely to be distributed to the middle and lower part of the Pattern in accordance with the Step range.</p>
Note Length	<p>Fixed: Note lengths will the same length across the Pattern.</p> <p>Equal: Note lengths will be evenly distributed across the Pattern.</p> <p>Gauss: Note lengths in the middle part of the pattern are more likely to be shorter.</p> <p>½ Gauss: Note lengths in the middle to lower part of the pattern are more likely to be shorter.</p>

Humanizer Mode Parameters

Element	Description
Apply	Applies the current settings to the selected Sound.
VELOCITY RANGE	
Velocity Lo	Adjust notes with a velocity no lower than the set value.
Velocity Hi	Adjust notes with a velocity no higher than the set value.

Element	Description
TIME SHIFT)	
Step	<p>Set the amount of time shift per step. The value is applied to all notes and will move them randomly in both plus and minus values according to the overall percentage set here.</p> <p>Step can be changed from +/- 0-50% in 5% increments. Press SHIFT to change in finer increments of 1%.</p>

6.4.6 Clearing Groups and Sounds

You can clear Groups and Sounds from your Project using MASCHINE JAM.

Clearing Groups

When a Group is cleared its Patterns are also removed from the Project.

On your controller, do the following to clear a Group:

1. Press and hold **CLEAR**.
2. Press the Group (**A-H**) button you want to clear. If your Project contains more than eight Groups, use the D-pad Left or Right buttons to access other Group banks.



→ The Group, all its Sounds, and Patterns are removed.

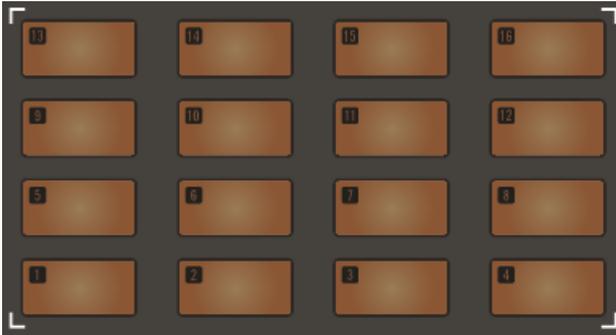
Clearing Sounds

You can clear Sounds from Sound slots (and thereby across click-pads) and Groups in your Project using MASCHINE JAM.

When a Sound is cleared it is removed from the Sound slot and its events are removed from the Pattern.

On your controller in Pad Mode, do the following to clear a Sound:

1. Press the **PAD MODE** button to enter Pad Mode.
- ⇒ An overview of all your Groups and Sounds is provided.
2. Press the Group button containing the target Sound slot (this can also be in another Group (**A-H**), in this case first press the desired Group button).
3. Press and hold **CLEAR**.
4. Press the button (**1-16**) of the Sound you want to clear.



→ The click-pad of the Sound you cleared illuminates. The Sound, and its events in the Pattern are removed.

6.4.7 Duplicating Groups and Sounds

You can copy and paste Groups and Sounds in your Project using MASCHINE JAM.

Duplicating Groups

When a Group is duplicated its Pattern content is also included.

On your controller in any mode, do the following to copy a Group from one to another:

1. Press and hold **DUPLICATE**.
2. Press the Group button (**A-H**) of the Group you want to copy.



- ⇒ The Group button starts blinking.
- 3. Press the button of the target Group slot.
- All Sound and Pattern content is copied. The copied Group will replace any Group previously loaded in the target slot.

You will notice that once you have pasted the Group, the target slot starts to blink, indicating that it is ready to be pasted again to additional Group slots: Therefore, to duplicate a Group more than once, once you have pressed the source button you only have to press all the desired target slots in a row.

Duplicating Sounds

You can copy and paste Sounds across Sound slots (and thereby across click-pads (1-16) within the same Group of your Project using MASCHINE JAM. When a Sound is duplicated its Pattern content is also included.

On your controller in Pad Mode, do the following to copy a Sound from one slot to another:

1. Press the **PAD MODE** button to enter Pad Mode.
- ⇒ An overview of all your Groups and Sounds is provided.
2. Press and hold **DUPLICATE**.
3. Press the button (1-16) of the Sound you want to copy.
- ⇒ The click-pad of the Sound starts blinking.
4. Press the button of the target Sound slot.
- All parameters of the Sound will be copied (including the Pattern content for that Sound). The copied Sound will replace any Sound previously loaded in the target slot.

You will notice that once you have pasted the Sound, the target button starts to blink, indicating that it is ready to be pasted again to additional Sound slots: Therefore, to duplicate a Sound more than once, once you have pressed the source button you only have to press all the desired target buttons in a row.



If your Project contains more than eight Groups, use the D-pad Left or Right buttons to access other Group banks.



Instead of holding **DUPLICATE**, you can also pin Duplicate mode by pressing **DUPLICATE + SONG [PIN]**. You can then release **DUPLICATE**: Your controller will stay in Duplicate mode until you press **DUPLICATE** again. See section [4.1, Controller Modes and Mode Pinning](#) for more information.

6.4.8 Clearing Patterns

You can clear a Pattern from your Project using MASCHINE JAM. When a Pattern is cleared it is removed from the Scene.

On your controller, do the following to clear a Pattern:

1. Press the **SONG** button to return to the Project view.
 - ⇒ An overview of your Scenes and Patterns is provided.
2. Press and hold **CLEAR**.
3. Press the click-pad on the 8x8 click-pad matrix containing the Pattern you want to clear.
 - The Pattern is removed from the Scene and deleted.



If you have more than eight Patterns for a Group, use the up/down arrow of the D-pad to gain access to all your Patterns.

6.4.9 Duplicating Patterns

You can copy and paste Patterns in your Project within the same Group using MASCHINE JAM.

On your controller in the Project view, do the following to copy a Pattern from slot to another:

1. Press the **SONG** button to enter Song mode.
 - ⇒ An overview of all your Scenes and Patterns is provided.
2. Press and hold **DUPLICATE**.
3. Press the Pattern button you want to copy.
 - ⇒ The click-pad containing the Pattern starts blinking.
4. Press the click-pad of the target Pattern slot.

→ All an exact duplicate of the Pattern will be copied. The copied Pattern will replace any Pattern previously loaded in the target slot.

You will notice that once you have pasted the Pattern, the target slot starts to blink, indicating that it is ready to be pasted again to additional Pattern slots: Therefore, to duplicate a Pattern more than once, once you have pressed the source button you only have to press all the desired target click-pads in a row.



If your Project contains more than eight Groups, use the D-pad Left or Right buttons to access other Group banks.



Instead of holding DUPLICATE, you can also pin Duplicate mode by pressing **DUPLICATE + SONG [PIN]**. You can then release **DUPLICATE**: Your controller will stay in Duplicate mode until you press **DUPLICATE** again. See section [↑4.1, Controller Modes and Mode Pinning](#) for more information.

6.5 Saving Your Project

You can save your Project at any time by initiating the Save command directly from MASCHINE JAM.

To save your Project using MASCHINE JAM:

1. Press **SHIFT + G (SAVE)**.



- ⇒ A message will appear on MASCHINE software. Since our current Project was not saved yet, MASCHINE asks you to name it before saving. A Save Project As... dialog opened and is waiting for your input.
2. On your computer keyboard, type a name (e.g., “My Project”) in the field and press [Enter] to confirm.
- Your Project is now saved on your hard disk. Should you close MASCHINE or open another Project, you will still be able to open this Project later.

7 Arranging your Project

In MASCHINE, a song is made of a variety of Scenes. Each Scene provides access to a number of different patterns that make up the song, e.g., intro, verse, chorus, break, second verse, etc. One of the strengths of MASCHINE JAM lies in its ability to provide quick and easy access to Scenes and Patterns, which is a very flexible way to arrange your song and maintain an overview of your project.

The basic building blocks of a Scene is a Pattern. A Pattern is a sequence that plays Sounds from a Group, and is therefore usually linked to a Group. However, you can also save it independently from the Group, which is useful if you want to try out different drum kits with the same Pattern or different Sounds with a given melody.

Pressing the Scene buttons along the top of MASCHINE JAM will trigger a Scene and in turn trigger the Pattern. Scene buttons are not only good for creating an arrangement in a studio environment but they are also fantastic for improvisation during a performance.

7.1 Creating Scenes

Now that we have created a few Patterns for both our drum kit Group and our melodic Group, we can start to arrange them together in order to build up a structured song!

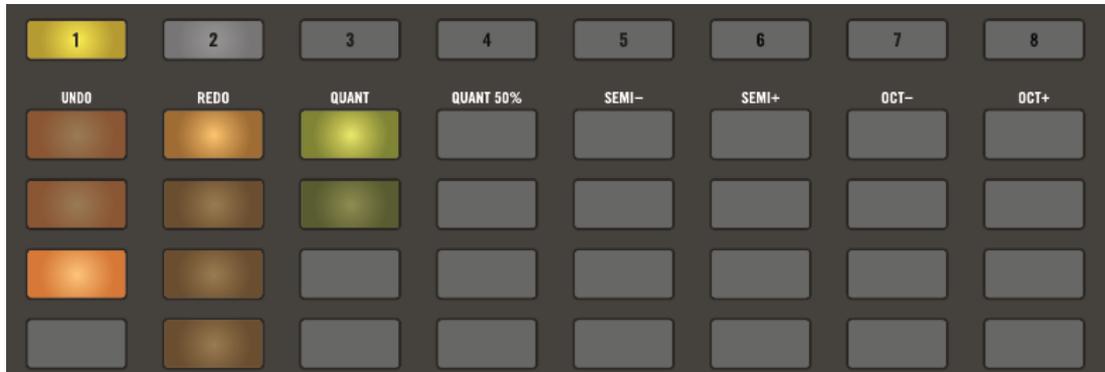
In MASCHINE, a song is made of a variable number of Scenes, which represent the different parts of the song — e.g., intro, verse, chorus, break, another verse... Scenes provide a very flexible way to arrange your song.

Creating the First Scene

To create a new Scene:

1. Select the Scene button (1).
2. Press a click-pad from each column to select the desired Patterns for the Scene.

→ Press **PLAY** and the Scene plays all the selected Patterns.



Creating a Second Scene

1. Select the Scene (2) which is highlighted in white.

⇒ This creates a new Scene.

2. Press the click-pads in each Group column to select or deselect Patterns for this Scene.

→ Press **PLAY** and the Scene plays all the selected Patterns at once. Slowly you can begin to build-up a song Scene by Scene. Add more Groups with Instruments to create more Patterns and Scenes.



7.2 Triggering Scenes and Patterns

Using the Pattern you created in while following the previous chapters, namely a drum kit Group, a bass Group, lead Group, and we can use Scenes to improvise a structured song. Begin by triggering each Scene button to try out different combinations.

Triggering Scenes

To trigger a Scene:

- ▶ Press the Scene buttons labelled 1-8 situated at the top of MASCHINE JAM. If your Project contains more than eight Scenes, press **SHIFT** + Scene button (1-8) to access a Scene bank.



- As each Scene button is pressed, all the selected patterns for Scene will playback in a loop.

Switching between Patterns

The 8x8 click-pad matrix of MASCHINE JAM provides a clear overview regarding the status of your Scenes and Patterns.

The Project view represents the following:

- Each column from the top down contains one Scene (1-8), up to eight Patterns, and one Group (A-H).
- The numbered buttons across the top represent each Scene. A Scene contains a number of selected Patterns, and one from each Group can be selected to play when the Scene is triggered.
 - The brightly colored click-pads represent the selected Pattern for the Scene.
 - Half-lit click-pads represent inactive Patterns.
 - Unlit click-pads represent empty Patterns.



Project view displaying the status of the available Scenes, Patterns and Groups.

Selecting Patterns for a Scene

To select a different Pattern for a Scene:

1. Press the Scene button containing the Patterns you want to change.
 2. Press the click-pads in each Group column to select the desired Patterns for this Scene.
- Press **PLAY** and the Scene plays all the selected Patterns.

7.3 Looping Scenes

Loop allows you to repeat any number of Scenes (a section of your track). This can be useful for listening to a section of a track on repeat while composing, or used as a performance tool.

To set a Loop range:

1. Press **SHIFT** + Page Right button (**LOOP**) to enter Loop mode.



- ⇒ The Scene buttons will illuminate.
2. Press a Scene button (1-8) e.g. **3** to select the start point for the loop.
 3. Press a Scene button (1-8) e.g. **6** to select the end point for the loop.
- ⇒ All Scene buttons between **3** and **6** illuminate according to the set Loop range.



4. Press **PLAY** to hear the Scenes.
- ⇒ The Song will play and then repeat in the loop range.
5. Press **SHIFT** + Page Right button (**LOOP**) to stop the loop.
- The loop will continue until it is stopped. The loop range can be altered at any time by repeating the procedure and adding new start and end points.



Press and hold a Scene button then turn the Encoder to set a loop range.

7.4 Setting the Performance Grid

The Grid on-screen overlay is used to set quantize values for the following features:

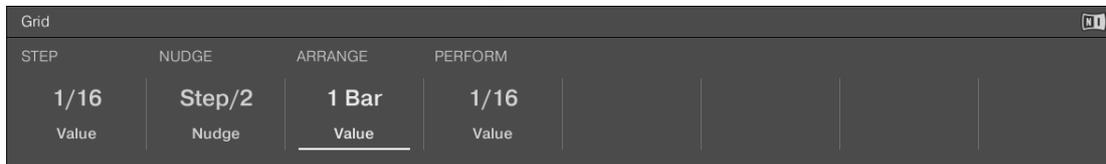
- **Step Grid:** The resolution of the Steps in the Pattern.
- **Nudge Grid:** In addition to the Step Grid, a secondary grid specifically controls the timings at which existing events/notes can be nudged in the Pattern.
- **Arrange Grid:** The Arrange Grid is used to quantize all modifications related 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
- **Perform Grid:** The Perform Grid lets you quantize the Scene transitions: You can choose the point at which the playback will leave the current Scene. For example, you might not want a newly selected loop to fire off immediately — you might want it to wait until the next bar line. The available quantization values are: one bar, one half note, one quarter note, one eighth note, one sixteenth note, the whole Scene, and Off. If you choose Off, the Scene change will be performed immediately after you select the next loop.

To change the settings of a Grid:

1. Press the **GRID** button.



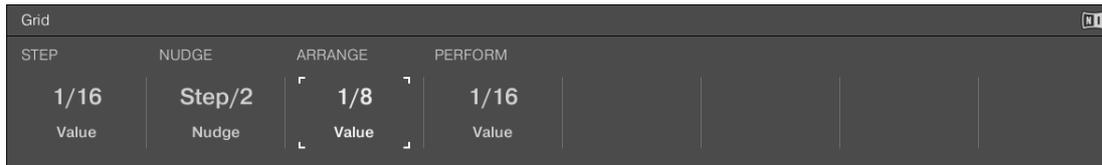
2. Turn the Encoder to select a Grid setting.



3. Press the Encoder.
4. Turn the Encoder to select a new value.

5. Press the Encoder to confirm your selection.

→ A new Grid value is selected.



7.5 Duplicating Scenes

You can copy and paste Scenes in your Project using MASCHINE JAM.

On your controller in the Project view, do the following to copy a Scene and all its contents from slot to another:

1. Press the **SONG** button to enter Song Mode.
- ⇒ This will provide an overview of all your Scenes and Patterns.
2. Press and hold **DUPLICATE**.
3. Press the Scene button (1-8) you want to copy. If your Project contains more than eight Scenes, press **SHIFT** + Scene button (1-8) to access a Scene bank.



⇒ The button containing the Scene starts blinking.

4. Press the button of the target Scene slot.

→ An exact duplicate of the Scene is copied. The copied Scene will replace any Scene previously loaded in the target slot.

You will notice that once you have pasted the Scene, the target slot starts blinking itself, indicating that it is ready to be pasted again to additional Scene slots: Therefore, to duplicate a Scene more than once, after you have pressed the source button you only need to press all the desired target buttons in a row.



Instead of holding **DUPLICATE**, you can also pin the Duplicate mode by pressing **DUPLICATE + SONG [PIN]**. You can then release **DUPLICATE**: Your controller will stay in Duplicate mode until you press **DUPLICATE** again. See section [↑4.1, Controller Modes and Mode Pinning](#) for more information.

7.6 Clearing Scenes

You can clear a Scene from your Project using MASCHINE JAM. When a Scene is cleared it is removed (deleted) from the Project, however, the Patterns still remain available.

On your controller, do the following to clear a Scene:

1. Press the **SONG** to return to the Project view.
⇒ An overview of your Scenes and Patterns is provided.
2. Press and hold **CLEAR**.
3. Press the Scene button (**1-8**) you want to delete.



- The Scene is removed from the Project. If your Project contains more than eight Scenes, press **SHIFT + Scene button (1-8)** to access the Scene bank.

8 Mixing your Project

MASCHINE JAM provides quick access to the level and routing settings of all your Sounds, Groups, and the Master channels. In addition, you can adjust the parameters of all your Plugins, record modulation, and play with the Perform FX.

8.1 Basic Functions

The section describe the basic mixing functions, and how to access them using MASCHINE JAM. This includes:

- Setting volume levels
- Adjusting Pan
- Using Solo and Mute
- Tuning Groups and Sounds

8.1.1 Setting Volume Levels

Use the Smart Strips to change the volume for up to eight Groups, or Sounds at a time.

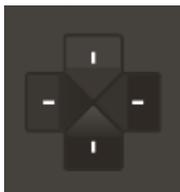
8.1.1.1 Setting a Sound Level

Level mode turns each Smart Strip into a volume fader for up to eight Sounds at a time. Simply select a Group, and then select a Sound. Sounds 1-8 or 9-16 are represented by the faders at any one time, and the Page buttons can be used to switch between them. Once a Sound has been selected you can slide your finger across a Smart Strip to adjust a Sound volume. The LEDs indicate the volume level.

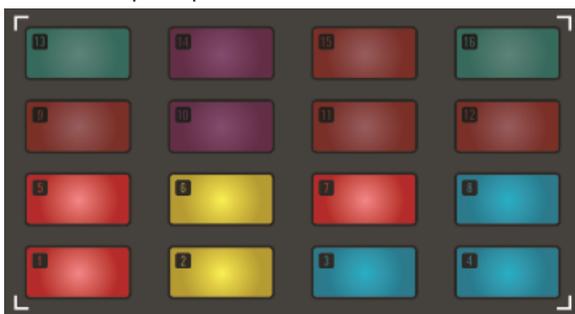
Adjusting the Volume of a Sound

To adjust the volume of a Sound in Level mode:

1. Press the Group button (A-H) to select the Group that contains the Sound you want to adjust. If necessary, use the D-pad Left or Right buttons to access each bank of eight Groups.



2. Press and hold the LEVEL button, then press the Pad (1-16) to select the Sound you want to adjust.
 - ⇒ If you select Pads numbered 1-8 the Smart Strip LEDs will reflect the volume level of the first eight Sounds of the selected Group. If you select any click-pad numbered 9-16 the Smart Strips represent the volume level of the second set of eight click-pads.



3. Slide your finger across a Smart Strip to adjust the level of a Sound.
 - The volume level of the selected Sound is adjusted.

Resetting the Sound Level

To quickly reset a Sound to the default level:

1. Hold the LEVEL button.
 - ⇒ The Group buttons and Sound click-pads illuminate. The selected Group will blink and the on-screen overlay will appear.
2. Select the Group button containing the Sound you want to reset.

3. Press the click-pad (1-16) containing the Sound you want to reset.
 - ⇒ The Smart Strips will now represent Sounds 1-8 or 9-16 depending on which Sound you selected.
4. Double tap on the Smart Strip of the Sound you want to reset.
 - The Sound will reset to the default level.

8.1.1.2 Setting a Group Level

Level mode turns each Smart Strip into a volume ‘fader’ for up to eight Groups at a time. Simply slide your finger across a Smart Strip to adjust a Group volume, and the LEDs indicate the volume level. Use the D-pad to access each bank of Groups.

Adjusting the Volume of a Group in Level Mode

To adjust the volume of a Group in Level mode:

1. Press and hold the LEVEL button.
 - ⇒ The Smart Strips act like faders and the LED’s indicate the level of each Group.
2. Press the Group button (A-H) to select the Group you want to adjust.

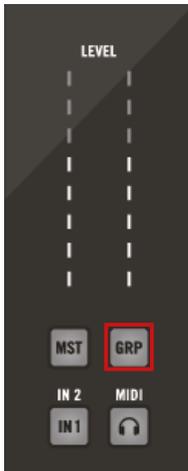


3. Slide your finger across a Smart Strip to adjust the level of a Group.
 - The volume level of the selected Group is adjusted.

Adjusting the Volume of a Group using the Input/Metering Section

Alternatively, you can still adjust the level of a group without entering Level mode, meaning you can continue to perform a task in another mode and still adjust the volume of a group. To achieve this, use the Input/Metering section on the right to adjust the volume level of a Group.

1. Press the **GRP** button in the Input/Metering section.



2. Press the Group button (**A-H**) to select the Group you want to adjust. If necessary, use the D-pad Left or Right buttons to access each bank of eight Groups.



3. Turn the Encoder to adjust the volume of the Group you selected.

Resetting the Volume Level of a Group

To quickly reset the volume level of a Group:

1. Hold the **LEVEL** button.
 - ⇒ The Group buttons and Sound click-pads illuminate. The selected Group will blink and the on-screen overlay will appear.
 - ⇒ The Smart Strips now represent Group **A-H**.
2. Double tap on the Smart Strip of the Group you want to reset.

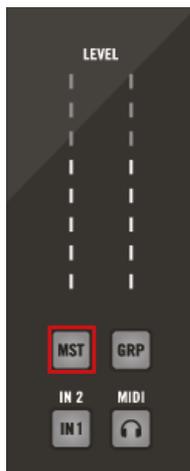
→ The Group volume level will reset. You can reset the volume level of other Groups by switching between banks using the left and right buttons of the D-pad and double-tapping on each of the Smart Strips.

8.1.1.3 Setting the Master Level

Using the Encoder you can adjust the Master output (the overall level) of MASCHINE. The meter shows the current peak level of the output signal. Control the output volume by pressing the **MST** button and turning the Encoder. This will adjust the output volume in 0.5dB increments from -30dB to +10dB. Below -30dB, the volume control is exponentially scaled and quickly lowers the output signal to complete silence.

To adjust the Volume of the Master:

1. Press the **MST** button in the Input/Metering section on the right.



2. Turn the Encoder to adjust the level of the main volume. Hold **SHIFT** and turn the Encoder to adjust the value in finer increments.

8.1.1.4 Setting the Cue Level

MASCHINE provides a dedicated Cue bus. This Cue bus allows you to route any channel (Sound or Group) to a separate output while leaving the main MASCHINE output untouched. For example, you can use it to prepare any Sound or Group in your headphones during a live session: first send the empty channel to the Cue bus, then load the desired Sound or Group

from the Browser (or create one from scratch), add any Plug-ins, adjust any parameters in that channel, record Patterns for that Group as you see fit, and when you are ready, insert it back into your performance!

The Cue bus is also used for following features:

- Pre-listening to Samples in the Browser.
- Metronome.
- Pre-listening functions in the Sample Editor when recording or slicing Samples.

Sending Sound and Group Channels to the Cue Bus

- ▶ In any channel strip, click the little headphones button to send this channel to the Cue button.



- The headphones button lights up. The channel is no longer sent to its defined destination but instead to the Cue bus.

Adjusting the Volume of the Cue Bus:

1. Press the **Cue** button in the Input/Metering section on the right.



2. Turn the Encoder to adjust the level of the Cue volume.
3. Hold **SHIFT** and turn the Encoder to adjust the value in finer increments.

For more information on setting the Cue Bus, read the MASCHINE Software Manual available from the [Help](#) menu.

8.1.1.5 Mixing External Signals

MASCHINE allows you to route not only other internal signals to your Sounds, but also audio coming from the external sources.

MASCHINE JAM allows you to select between two external input sources. You can meter an input level using the Level meter and adjust an input level using the Encoder.

To adjust the level of external source one:

1. Press the **IN1** button to select input source one.
2. Turn the encoder to set the volume level.

To adjust the level of an external source two:

- ▶ Press the **SHIFT + IN1 (IN2)** button to select input source two.
- ▶ Turn the encoder to set the volume level.

For more information on setting up input sources, refer to the MASCHINE Software Manual available from the [Help](#) menu

8.1.2 Adjusting Pan

Use the Smart Strips to set the left and right pan for up to eight Sounds at a time.

To adjust a Pan setting:

1. Press **SHIFT + LEVEL** to switch the Smart Strips into Pan mode.
2. Press the Group (**A-H**) containing the Sound you want to adjust. If necessary, use the D-pad Left or Right buttons to access different Group banks.
3. Press and hold **SELECT** and press the Sound button **1-16**.
 - ⇒ Use the Page buttons to switch between Sound **1-8** or **9-16**. The eight Smart Strips will update accordingly to allow the panning of each Sound to be adjusted.
4. Slide your finger up the Smart Strip to pan the Sound right, and down to pan left. Press **SHIFT** to adjust the Pan amount in finer increments.
 - The Pan is adjusted accordingly.

8.1.3 Using Solo

Solo mode allows you to listen to a single Group or a Sound in isolation. This is useful for isolating a Group or Sound in a mix to test different sequences. It can also be used to great effect as a performance technique, for example, to create a breakdown.

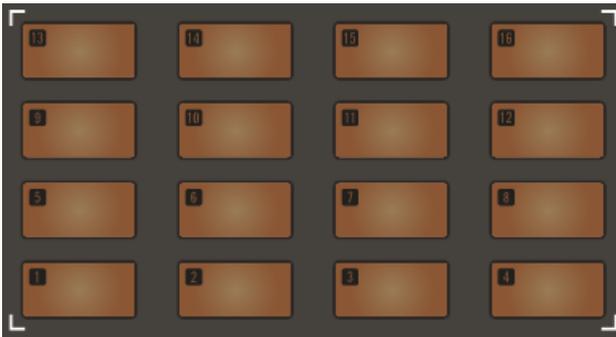
Soloing a Group

1. Press and hold **SOLO** to momentarily enter Solo mode.
2. Press a Group button (**A-H**) to solo it. Press the Group again to turn Solo off.

→ When Solo is activated the Group button is highlighted and the Sound is isolated in the mix. All the other Groups are dimmed and can no longer be heard.

Soloing a Sound

1. Press the Group button (A-H) containing the Sound you want to solo.
2. Press and hold **SOLO** to momentarily enter Solo mode.
3. Press the Sound (1-16) you want to solo. Press the Sound again to turn Solo off.



→ When Solo is on, the click-pad is highlighted and its audio is isolated. All the other click-pads are dimmed and no other Sounds from the Group can be heard.



Pinning allows a mode to remain selected without the need to hold the mode button, for example, press **SOLO** + **SONG** to pin Solo mode. You can now use both hands to manipulate the controls of MASCHINE JAM. Click **SOLO** again to exit the pinned Solo mode.

8.1.4 Using Mute

Mute allows you to silence any number of Sounds or Groups. Mute can be used to great effect when you quickly want to remove Sounds or Groups from the mix and then bring them back. This can be very effective when checking a mix or as an effect during a live performance.

Muting a Group

To mute a Group:

1. Press and hold **MUTE** to momentarily enter Mute mode.



2. Press any number of Group buttons (**A-H**) to mute them. Press the Group button again to turn Mute off.



→ Selected Groups can be removed or added to the mix.

Muting a Sound

To mute a Sound:

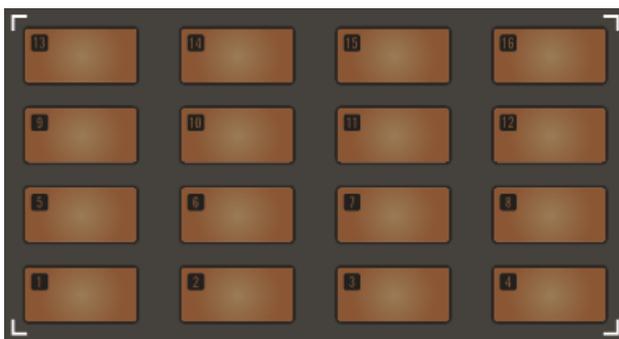
1. Press the Group button (**A-H**) containing the Sound you want to mute.



2. Press and hold **MUTE** to momentarily enter Mute mode.



- Press any number of click-pads (1-16) to mute Sounds. Press the click-pads again to turn mute off.



→ Selected Sounds are muted or returned to the mix.



Pinning allows a mode to remain selected without the need to hold the mode button, for example, press **MUTE** + **SONG** to pin Mute mode. You can now use both hands to manipulate the controls of MASCHINE JAM. Click **MUTE** again to exit the pinned Mute mode.

8.1.5 Adjusting AUX Send

Each Sound or Group of your Project provides two auxiliary outputs that you can route to additional targets. For example, you can send a definable amount of the channel's audio output to other channels for further processing. This is notably used in send effects. The auxiliary outputs of a Sound/Group are configured on the Aux page of the Output properties.

MASCHINE JAM allows you to control the Aux levels for each Group and Sound.

Adjusting the Aux Level of a Group

To adjust the Aux level of a Group:

- Press and hold the **AUX** button.
 - ⇒ The Smart Strips act like faders and the LED's indicate the level of each Group. If necessary, use the D-pad Left or Right buttons to access other Group banks.

- Press the Group button (A-H) to select the Group you want to adjust.



- Slide your finger across a Smart Strip to adjust the Aux level of a Group.
→ The Aux level of the selected Group is adjusted.

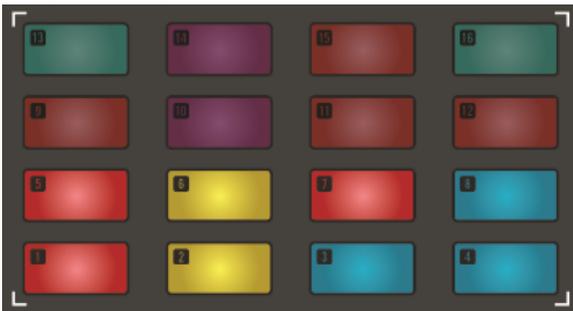
Adjusting the Aux Level of a Sound

To adjust the Aux level of a Sound:

- Press the Group button (A-H) to select the Group that contains the Sound you want to adjust. If necessary, use the D-pad Left or Right buttons to access each bank of eight Groups.



- Press and hold the **AUX** button, then press the click-pad (1-16) to select the Sound you want to adjust.
- If you select any Pads numbered 1-8 the Smart Strip LEDs will reflect the aux level of the first eight sounds of the selected group. If you select any Pad numbered 9-16 the Smart Strips will represent the aux level of the second set of eight pads.



- Slide your finger across a Smart Strip to adjust the Aux level of a Sound.
- The Aux level of the selected Sound is adjusted.

8.1.6 Tuning Sounds and Groups

Use the Smart Strips to change the tuning of up to eight Groups, or Sounds at a time.

Tuning a Sound or Group is also great as an effect, for example, to create build-ups during a live set. You can also use Tune mode with Lock mode to create different snapshots of your tune settings, and then switch between them to add interest and movement to your recording or performance. For more information see [↑8.6, Creating Parameter Snapshots using Lock](#).

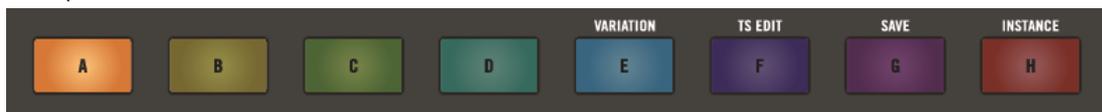
8.1.6.1 Tuning a Sound

Using the Tune mode you can tune a Sound using the Smart Strips. Sounds 1-8 or 9-16 are represented by the faders at any one time. Once a Sound has been selected you can slide your finger across a Smart Strip to adjust the tuning. The LEDs indicate the tuning.

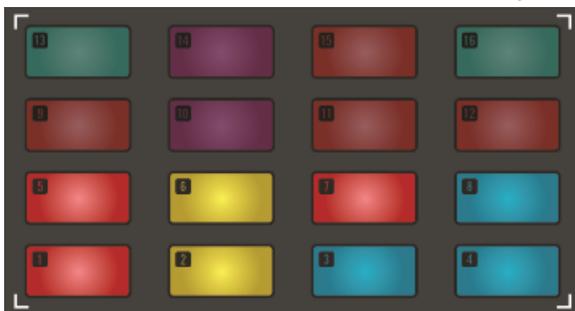
Tuning a Sound Using the Smart Strips

To adjust the tuning of a Sound using the Smart Strips:

- Press and hold the **TUNE** button.
- Press the Group button (**A-H**) to select the Group containing the Sound you want to adjust. If necessary, use the D-pad Left or Right buttons to access each bank of eight Groups.



3. Press the Pad (1-16) to select the Sound you want to tune.



4. The Smart Strips display the selected bank of Sounds, either 1-8 or 9-16. If required, use the Page buttons to switch between them, or select them directly by pressing a click-pad.
 5. Slide your finger across a Smart Strip to adjust the tuning of a Sound. Hold **SHIFT** to adjust the value in finer increments.
- The tuning of the selected Sound is adjusted.

Resetting the Tuning of Sound

To quickly reset the tuning of a Sound:

1. Press and hold the **TUNE** button.
 - ⇒ The Group buttons and Sound click-pads become illuminated. The selected Group button blinks and the on-screen overlay is displayed.
2. Select the Group button containing the Sound you want to reset, then press the click-pad (1-16) containing the Sound you want to reset.
 - ⇒ The Smart Strips now represent Sounds 1-8 or 9-16 depending on which Sound you selected.
3. Double tap on the Smart Strip of the Sound you want to reset.
 - The Sound tuning is reset. You can reset other Sounds 1-8 or 9-16 by switching between the banks using the Page buttons and double-tapping on each Smart Strips.

8.1.6.2 Tuning a Group

Tune mode allows you to tune a whole Group. Simply select a Group, and then slide your finger across a Smart Strip to adjust the tuning. The LEDs indicate the tuning.

To adjust the tuning of a Group:

1. Press and hold the **TUNE** button.
2. Press the Group button (**A-H**) to select the Group that containing the Sound you want to adjust. If necessary, use the D-pad Left or Right buttons to access each bank of eight Groups.



3. Slide your finger across a Smart Strip to adjust the tuning of a Group. Hold **SHIFT** to adjust the value in finer increments.

→ The tuning of the selected Group is adjusted.

Resetting the Tuning of Group

To quickly reset the tuning of a Group:

1. Hold the **TUNE** button.
 - ⇒ The Group buttons and Sound click-pads become illuminated. The selected Group button blinks and the on-screen overlay is displayed.
 - ⇒ The Smart Strips now represent Groups **A-H**.
2. Double tap on the Smart Strip of the Group you want to reset.
 - The Group tuning is reset. You can reset other Groups by switching between banks using the left and right buttons of the D-pad and double-tapping on each Smart Strips.

8.2 Using Performance Effects

MASCHINE provides a healthy selection of studio effects (FX) that can be loaded in the form of Plug-ins. Each Sound, Group and Master channel can have an unlimited number of insert effects loaded in their Plug-ins slots.

In addition, MASCHINE also has a set of Performance effects that are ideal for use in a live performance situation with MASCHINE JAM. They are designed specifically for their ease of use with the Smart Strips and can be applied to Group channels for maximum sonic impact.

8.2.1 Selecting a Performance Effect

One Performance FX can be added to each Group channel. The following Performance effects are available:

- **Filter:** An analog-modeled High, Low, and Band-pass filter capable of yielding raw, natural-sounding results using saturation and resonance. Roll off the highs for a thick, murky veil, or use the resonance to create sounds that float into self-oscillation infinity.
- **Flanger:** A comb filter effect with more than a few tricks up its sleeve. Get performance-ready flanger or phaser effects, or expose its wild side – setting higher decay and frequency values unleashes ping-pong delay-like flutter effects.
- **Burst Echo:** A warm, versatile echo with plenty of character, designed for spontaneous splashes of echo. Strong, responsive attacks that taper off into hazy trails are perfect for dub and can also be tweaked for more extreme sound design.
- **Reso Echo:** A complex resonant echo with advanced feedback and saturation that verge on psychedelic tendencies. Echoes range from a tight, punchy resonant hum to ambiguous howling sounds from another dimension.
- **Ring:** Built on a carefully selected bank of ring modulators, Ring adds a bell-like quality to melodic sound sources. Using the additional plate reverb, tweak a knob or Smart Strip to hand-pick individual notes and keep them ringing into the stratosphere.
- **Stutter:** Turn the intensity up, and down again with Stutter. This beat-mangling effect adds creative dynamics like glitches, fills, and expressive pitch-bending crescendos to drum patterns and more.

- **Tremolo:** A no-frills tremolo and vibrato effect that’s perfect for creating motion and wobble on the fly. Instantly add expression with multiple modes, Rate, and Depth ranges, and use the Stereo knob to create auto-pan motion effects.
- **Scratcher:** Scratcher warps your sounds with turntable motion effects that can get other-worldly. Apply a ‘brake’ to a sound, then scratch with it – just like on vinyl. Or use the pitch shifter delay to thicken the sound and create alien-sounding sweeps.



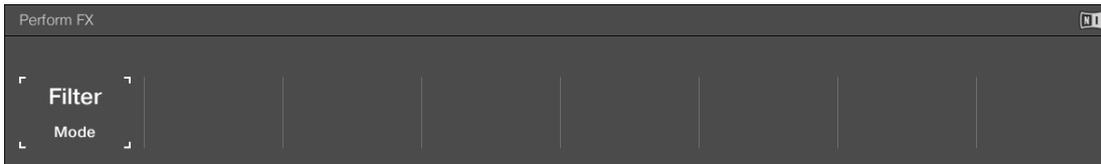
For a full description of each Performance FX and its parameters, please refer to the MASCHINE Software Manual.

To select a Performance FX:

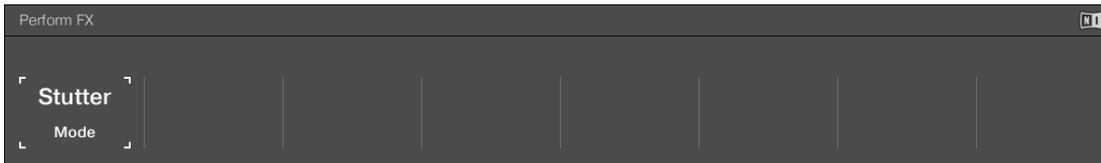
1. Press button (A-H) to select a Group.



2. Press **SHIFT + PERFORM** to see Performance FX on-screen overlay.
⇒ The Performance FX on-screen overlay will appear.



3. Turn the Encoder to scroll through the list of available effects.



4. Press the Encoder to confirm your selection.
→ The Performance FX will be loaded to the selected Group.

8.2.2 Using a Performance Effect

After selecting a Performance FX you can start to interact with it. This is where the fun really begins!

To adjust a Performance FX:

1. Press **PLAY** to start playback of your Song.
2. Press the Group button (**A-H**) to select the Group where you applied the Performance FX.
3. Put your finger on the Smart Strip and slide it upwards to increase the effect, or slide it downwards to decrease the effect.

→ The effect can be heard as you slide your finger up and down the Smart Strip. Take your finger off the Smart Strip to release the effect.

Adjusting the Performance FX Parameters

Each Performance FX has a set of dedicated parameters that can be adjusted using the Smart Strips. These parameters can also be viewed in the Control Area of the MASCHINE software.

To adjust the individual parameters of the selected Performance FX:

- ▶ Press the **CONTROL** button.

→ The Smart Strips can now be used to adjust the parameters of the Performance FX. Use the page buttons to switch between parameter pages.

For a full description of Performance FX parameters, see the MASCHINE Software Manual, available from the [Help](#) menu.

8.2.3 Automating a Performance Effect

After selecting a Performance FX and applying it to a Group, if you find something you like while playing with it, you can automate it! Automation will replicate any movement you make with your finger on the Smart Strip, leaving your hands free to perform other tasks.

To automate a Performance FX:

1. Press **PLAY** to start playback of your song.

2. Press the Group button (**A-H**) to select a Group containing the performance effect you want to automate.
 3. Press and hold the **AUTO** button.
 4. Put your finger on the Smart Strip and slide it upwards to increase the effect, or slide it downwards to decrease the effect.
 5. Release the **AUTO** button once you are satisfied with the sound.
- When you release the **AUTO** button, the changes you made to the effect using the Smart Strip are automatically replicated during playback.



To delete automation press **SHIFT + CLEAR**.

8.3 Controlling Plug-in Parameters

The Control button enables you to control the plug-in parameters visible in the MASCHINE software Control area. Available on every channel (Sound, Group, and Master), the Control button provides access to sets of parameters that are very useful for quickly adjusting parameters while playing live or recording.

Adjusting Plug-in Parameter Values

To adjust parameters of a plug-in using your controller:

1. Press and hold the **CONTROL** button.
 2. To adjust the parameters of a plug-in on the Master channel press the **MST** button, for a Group channel press the Group button (**A-H**), and for the Sound channel press a Sound button (**1-16**).
- ⇒ The LED meters on the Smart Strips adjust to display the current value of the selected page of parameters. The Smart Strips can be used to adjust the parameter values.
3. Press the Page buttons to select another page of parameters, as displayed in the Control area of the software.

→ The LED meters on the Smart Strips update to display the next page of parameters, and the Smart Strips can be used to adjust the parameters.



Try automating plug-in parameter values by holding the **AUTO** button and sliding your finger on a Smart Strip. For more information, see [↑8.5, Using Automation](#)

Switching between Plug-ins

If there are several plug-ins loaded in the plug-in list, you can use the controller to switch between plug-ins.

To switch between plug-ins:

1. Press and hold the **CONTROL** button.
2. Use the D-pad to step through the loaded plug-ins in the list.

→ The LED meters on the Smart Strips update to display the parameters levels of the selected plug-in, and the Smart Strips can be used to adjust the parameters of the newly selected plug-in.

Resetting Plug-in Parameters Values

To reset a plug-in parameter to its default value:

1. Press and hold the **CONTROL** button.
2. To reset a plug-in parameter on the Master channel press the **MST** button, for a Group channel press the Group button (**A-H**), and for the Sound channel press a Sound button (**1-16**).
3. Double tap on the Smart Strip of a parameter to reset it.

→ The plug-in parameter is reset.

Selecting a Free Slot to Load a Plug-in

To load another plug-in, such as an effect into a free plug-in slot:

1. Press and hold the **CONTROL** button.
2. Use the D-pad to select the **+** symbol.

3. Press the **BROWSE** button to load a plug-in.

→ Plug-ins can be loaded using the Browser. For information on loading files, refer to [↑5.1, Loading Files from the Browser](#).

8.4 Controlling 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 playing live since you can choose a set of parameters from various sources to manipulate directly from your controller without the need to switch between Control pages.



A set of Macros can be defined using the MASCHINE software. For more information on Macros, refer to the MASCHINE Software Manual available from the [Help](#) menu.

Adjusting Macros

To adjust predefined Macros using your controller:

1. Press the **MACRO** button.
2. To adjust a set of Macros on the Master channel press the **MST** button, for a Group channel press the Group button (**A-H**), and for the Sound channel press a Sound button (**1-16**).

→ The LED meters on the Smart Strips adjust to display the current value of the Macros.



Try automating a Macro's parameters by holding the **AUTO** button and sliding your finger on a Smart Strip. For more information see [↑8.5, Using Automation](#).

Resetting Macros

To reset a Macro to its default value:

1. Press and hold the **MACRO** button.
2. To reset a Macros on the Master channel press the **MST** button, for a Group channel press the Group button (**A-H**), and for the Sound channel press a Sound button (**1-16**).

3. Double tap on the Smart Strip of a Macro to reset it.

→ The Macro parameter is reset.

8.5 Using Automation

Automation can be used automatically replicate any movement you make with your finger on the Smart Strips when controlling parameters, leaving your hands free to perform other tasks. Many of the parameters in MASCHINE can be automated using your controller, however, in order to be automated, the parameter must be one that is controlled by a knob or a button in the MASCHINE software.

All the parameters that can be automated are found in Plug-ins or Channel properties (e.g., you cannot automate the Pattern Length or the color of a Scene). This means that within the MASCHINE software all the parameters that can be automated with your controller can be seen in the Parameter pages of the Control area.

Here is a list of modes containing parameters you can automate on a Master, Group or Sound channel using your controller:

- **Level** mode to automate volume levels.
- **Control** mode to automate plug-in parameters.
- **Macro** mode to automate defined macro parameters.
- **Perform** mode to automate Performance FX parameters.
- **Swing** mode to automate the Groove amount.
- **Tune** mode to automate tuning.

To automate a parameter:

- ▶ Automate a parameter on the Master channel press the **MST** button, for a Group channel press the Group button (**A-H**), and for the Sound channel press a Sound button (**1-16**).
- ▶ Press the required mode button **LEVEL**, **CONTROL**, **MACRO**, **PERFORM**, **SWING**, or **TUNE**.

After you have a selected a parameter to automate:

1. Press **PLAY** to start playback of your project.
 2. Press and hold the **AUTO** button.
 3. Put your finger on the Smart Strip and slide it upwards to increase the parameter, or slide it downwards to decrease the parameter.
 4. Release the **AUTO** button once you are satisfied with the sound.
- When you release the **AUTO** button, the changes you made to the parameter are automatically replicated during playback.

Deleting Automation

Automation can be deleted at any time.

To delete your automation:

1. Select the channel (Master, Group or Sound) containing the automation.
2. Press **SHIFT + CLEAR**.

→ The automation is deleted and the pattern will play normally.

For detailed information on automation, refer to the MASCHINE Software Manual available from the [Help](#) menu.

8.6 Creating Parameter Snapshots using Lock

The MASCHINE JAM Lock feature allows you to create up to sixty-four snapshots, each containing every modulatable parameter in your project, including your Solo and Mute assignments. Once created, you can switch between these instantly, or morph between them synchronized to the tempo of your project. This is a powerful tool for extensive modulations, but also very useful to compare mixes, or to switch up snapshots during a live performance.

You can also use Lock view, where each of your snapshots is represented by up to sixty-four illuminated click-pads on the 8x8 matrix. In Lock view snapshots can be recalled at any time, and managed; allowing you to update them, clear unwanted snapshots, and organize them exactly the way you want.

See also

- 📄 Saving Your Project [→ 114]

8.6.1 Creating a Snapshot

To create a Lock snapshot:

- ▶ Press the **LOCK** button.
- A single snapshot is taken of all parameters including the Solo and Mute functions in their current state. If you find better settings you can quickly press the **LOCK** button again to update the snapshot.



You must save your Project to permanently store and recall your snapshots.

- ▶ Press **SHIFT** + Group button **G** (**SAVE**) to save your Project. For more information see [↑6.5, Saving Your Project](#).

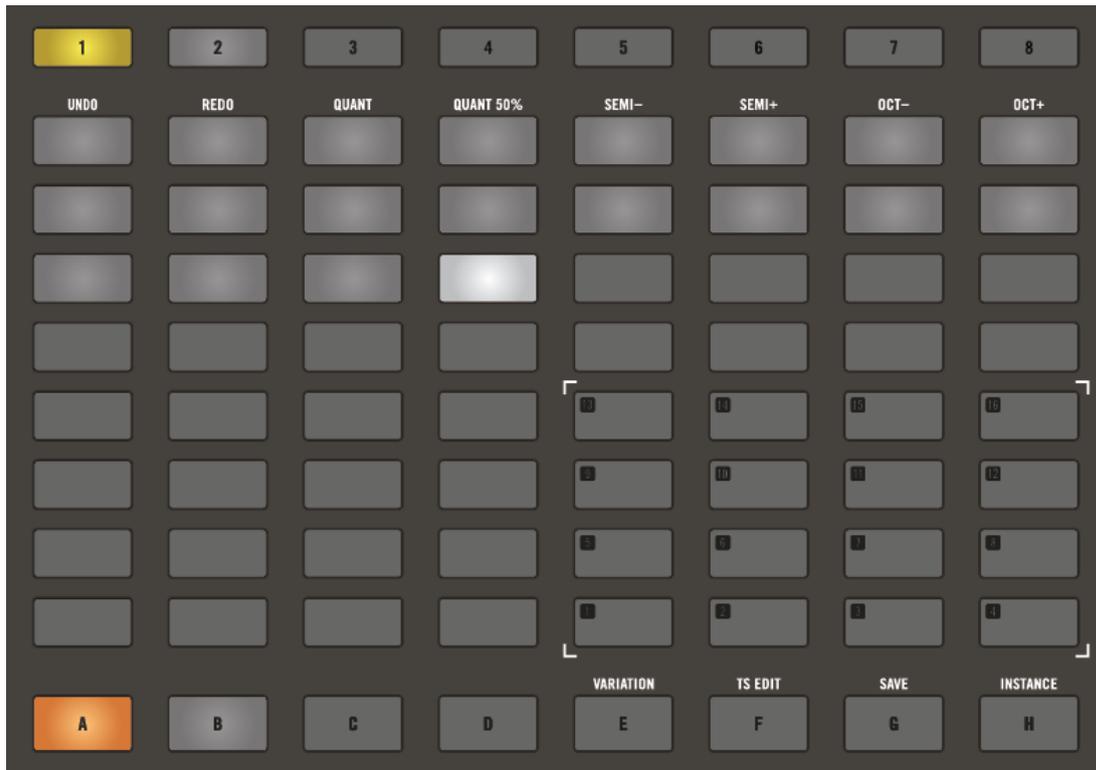
8.6.2 Using Lock View

Lock view presents an overview of all your snapshots. Here you can recall, update, or clear your snapshots. Using the on-screen overlay you can also set options for morphing between two snapshots.

To enter Lock view:

- ▶ Press **SHIFT** + **LOCK**.

→ The Project view changes to provide an overview of all your snapshots. The dimly-lit click-pads represent your stored snapshots.



8.6.3 Updating a Snapshot in Lock View

To update an existing Lock snapshot:

1. Press the **SHIFT** + **LOCK** button to enter Lock view.
 2. Select the snapshot you want to update from the 8x8 matrix.
- ⇒ The snapshot will illuminate to indicate it is in focus.
3. Adjust the settings on your controller until you are ready to update the snapshot.
 4. Press and hold the **LOCK** button to update your snapshot.

- ⇒ The selected click-pad of the stored snapshot blinks.
- 5. Press the click-pad to confirm you want to store the settings.
- An updated snapshot of parameters is created.

8.6.4 Recalling a Snapshot in Lock View

To recall a Lock snapshot:

1. Press the **SHIFT + LOCK** button to enter Lock view.
 2. Press the illuminated click-pad on the 8x8 matrix of the snapshot you want to recall.
- The snapshot is recalled and parameters return to their stored setting. You can also morph between settings using the settings in the on-screen overlay.

8.6.5 Morphing Between Snapshots

When recalling snapshots it possible to morph between them to add movement and interest to song. Use the on-screen overlay to set your Morphing preferences.

To morph between snapshots:

1. Press the **SHIFT + LOCK** button to enter Lock view.
 2. Create your Lock snapshots.
 3. Touch the Encoder to open the Lock onscreen-overlay.
- ⇒ The on-screen overlay is displayed.
4. Turn the morph setting on, and adjust the transition time accordingly.
- As you switch between your snapshots a controlled transition from one to another at the selected time rate can be heard.



The Lock on-screen overlay.

Element	Description
MORPHING	
Morph	Select to switch morphing On or Off mode.
Mode	Travel will morph the selected snapshots without syncing to the grid. The morph will begin instantly instead of waiting until the next bar begins. The duration of the morph is set using the Time parameter. Target will morph in sync to the downbeat when set to Bar, or to the selected Grid value.
Time/Grid	In Travel mode the duration of the morph will last for the amount of Bars set here. In Target mode the duration of the morph is set according to the Grid value set here.

8.6.6 Clearing a Snapshot in Lock View

To clear a Lock snapshot:

1. Press the **SHIFT** + **LOCK** button to enter Lock view.
2. Press and hold the **CLEAR** button.
3. Press the click-pad on the 8x8 matrix containing the snapshot you want to clear.

→ The snapshot is cleared.

8.6.7 Triggering Lock Snapshots via MIDI

If MASCHINE is running as a plug-in in a host environment, you can trigger and change Lock snapshots using MIDI Note or MIDI Program Change messages sent from your host to the MASCHINE plug-in.

When this feature is enabled, MIDI notes messages, or Program Change messages are linked to MASCHINE's Lock snapshots, whether they contain a snapshot or not:

Matrix Click-Pad/Snapshot	MIDI Note Number	Program Change Number
1	0 (C-2)	1
2	1 (C#-2)	2
3	2 (D-2)	3
...
64	63 (D#3)	64

The primary use case for triggering Lock snapshots via MIDI is when using MASCHINE in plug-in mode. However, it is also possible using an external MIDI device such as a keyboard to trigger a snapshot.



MIDI Note numbers: Host applications use various conventions to name MIDI notes. For example, in MASCHINE, MIDI note number 0 is referred to as C-2 and MIDI note number 60 (middle C) as C3. Please refer to the documentation of your host to know which convention is used.



Program Change numbers: Some host applications send Program Change numbers in the range [0–127] instead of [1–128]. In that case, the PC number 0 will trigger snapshot slot 1, PC 1 will trigger snapshot slot 2, etc. Please refer to the documentation of your host to know in which range it sends Program Change numbers.

Enabling the MIDI Lock Change

To enable or disable the MIDI Lock Change feature, do the following:

1. In the MASCHINE Header, click the cog wheel icon.

⇒ This opens the following menu:



- ⇒ Click [MIDI Lock Change](#) from the menu.
2. In the submenu that opens, select [MIDI Note](#) to trigger your Lock snapshots via MIDI notes, [Program Change](#) to trigger your Lock snapshots via MIDI Program Change messages, or [None](#) (default setting) to disable MIDI Lock Change completely.
 3. If necessary, reopen the same submenu and select the MIDI channel the Lock Changes should receive MIDI messages from (channel 1 by default).



MIDI Scene change has priority over Lock change. Only Scenes will be triggered by the corresponding events coming from the MIDI source. Corresponding Lock snapshots will not be recalled.

For more information on triggering Lock snapshots using your DAW (Digital Audio Workstation), please check the Knowledge Base on the Native Instruments website.

9 Troubleshooting – Getting Help

This chapter assists you in solving common issues with MASCHINE and provides you with the necessary information for getting further assistance.



Before getting help please make sure you have downloaded the latest MASCHINE software and documentation from the Native Instruments website.

9.1 Troubleshooting

A few common issues and possible solutions when working with MASCHINE are listed in this section.

9.1.1 The MASCHINE Software Won't Start

- Check the system requirements for MASCHINE. The minimum requirements are the very least you can get by with and are often not enough for advanced use (e.g., many effects, complex routing...). Increasing your RAM may save you a lot of trouble.
- Make sure you have the most recent version of the MASCHINE software installed. You can find the latest available version following this link: <http://www.native-instruments.com/updates>.
- Make sure that you have not clicked an outdated application alias/shortcut.
- Try to restart your computer. Disconnect any other audio interfaces and computer peripherals like printers, scanners, and the like.

9.1.2 Latency Issues

- Please check if your computer is suited for handling real-time audio processing without dropouts. In general, it is not recommended to use laptops with shared-memory graphic cards. You will need all the memory and processing power available for your audio software.

- It is not recommended to run the laptop on battery, as built-in power management systems might slow the clock rate of the CPU in an effort to extend battery life.
- Disconnect all unused hardware (e.g., printer, scanner). This will increase the amount of processing power available for your music software.
- Laptops often are equipped with built-in devices that disturb audio processing, most commonly Bluetooth transceivers, an Ethernet network adapter, or a wireless LAN card. You might need to disable these devices while working with MASCHINE.

9.1.3 The MASCHINE Software Crashes

In case of a crash during runtime, please contact the Native Instruments technical support team as described in section [↑9.2.2, Technical Support](#) and send them your crashlog. You will find the crashlog in the following folders:

- Windows: *My Documents\Native Instruments\Maschine\Crashlogs*
- Mac OS X: *Users/~/.Library/Logs/CrashReporter*

9.1.4 Updates

Whenever you encounter problems, it is recommended that you first download and install any available software updates. Updates are released regularly to fix known problems, maintain compatibility with operating system updates, and to continuously improve the software. The version number of your software is displayed in the About dialog for any Native Instruments application. This dialog can be opened by clicking on the NI logo in the upper right corner of the user interface. Updates are available on the [Update](#) page of our website under: <http://www.native-instruments.com/updates>.

9.2 Getting Help

If you are experiencing problems related to your Native Instruments product that the supplied documentation does not cover, there are several ways of getting help!

The links in the following sections are also accessible from the Service Center application:

- ▶ Open the Service Center application and click on the Support button in the upper-right corner.

9.2.1 Knowledge Base

The Online Knowledge Base gathers useful information about your Native Instruments product which helps solve issues you may have. You will find the Knowledge Base at:

<http://www.native-instruments.com/knowledge>

9.2.2 Technical Support

If no Knowledge Base entry matches your problem, or if the matching entry does not solve the problem, you can use the Online Support Form to contact the Technical Support team of Native Instruments. The Online Support Form will ask you to enter information about your hardware and software setup. This information is essential for our Support team to be able to provide you with quality assistance. You can reach the Online Support via:

<http://www.native-instruments.com/suppform>

When communicating with the Native Instruments support team, keep in mind that the more details you can provide about your hardware, your operating system, the version of the software you are running, and the problem you are experiencing, the better they will be able to help you. In your description, you should mention:

- How to reproduce the problem
- What you have already tried to fix the problem
- A description of your setup, including all hardware
- The brand and specifications of your computer
- The software version number



The version number of your software is displayed in the MASCHINE splash screen you see when the application launches. After startup, the same splash screen can be opened by clicking the MASCHINE logo in the upper right corner of the software.

When installing new software or software updates, a Readme file is included that contains last minute information that was not yet included in the documentation. Please open and read this Readme file before contacting Technical Support.

9.2.3 Registration Support

If problems occur during the product activation procedure, please contact our Registration Support team:

<http://www.native-instruments.com/suppform>

9.2.4 User Forum

In the Native Instruments User Forum, you can discuss product features directly with other users and with experts moderating the forum. Please be aware that the Technical Support team does not participate in the forum. If you're encountering an issue that can't be solved by other users, contact Native Instruments' Technical Support team via the online support form as described above. Find the User Forum at:

<http://www.native-instruments.com/forum>

10 Glossary

In this glossary you will find short definitions for numerous terms used in the MASCHINE context. If you have any doubts about the meaning of a word, this is the place to check!

Arranger

The Arranger is the big area located in the upper part of the MASCHINE window, right under the Header. On its left you can select Groups. The Arranger allows you to combine Clips (references to Patterns) into Scenes, and arrange these Scenes into a song. You can adjust the Scene Sync resolution in order to adjust transitions between Scenes.

Autoload

When Autoload is enabled, any Group, Sound, Pattern, Plug-in preset (instrument or effect), or Sample that you select in the Browser is instantly loaded into the selected Group slot, Sound slot, Pattern slot or Plug-in slot. This way, you can listen to this object in the current context of your song.

Browser

The Browser is the front end for accessing all MASCHINE objects: Projects, Groups, Sounds, Patterns, presets for instrument and effect Plug-ins, and Samples. Each of these can be stored, “tagged,” and categorized in a way that allows you easy access to all of them. MASCHINE’s factory library is already completely tagged, and you can also import your own files to the Library and tag them as well.

Bussing Point

A bussing point is a point in the signal flow that can accept signals coming from various locations in the audio routing system. In MASCHINE for example, the first Plug-in slot of a Sound usually contains a sound source (which you will hear by pressing the corresponding pad on your controller). If you load an effect plug-in in this first Plug-in slot, though, the Sound won’t generate audio itself but instead it becomes available for other Sounds and Groups to process their audio. You then only have to set up the desired Sound(s) and Group(s) of your Project to send some of their audio to this bussing point. This basically is the way to set up send effects in MASCHINE!

Channel Properties

Channel properties are sets of parameters available at each Project level (i.e. for each Sound, each Group, and for the Master) that are independent of the Plug-ins loaded in that Sound/Group/Master. Like the Plug-in parameters, in the software the Channel properties are displayed in the Control area. For example, the volume, pan or swing controls are properties of their respective Sound/Group/Master channel.

Clip

Clips are found in the Arranger in form of colored blocks. Clips are the building blocks for Scenes. A Clip is a reference to a particular Pattern. In one Scene you can create one Clip for each Group — in other terms, in each Scene you can play one Pattern of each Group. You can create more than one Clip referencing the same Pattern in different Scenes. When you modify your Pattern in the Pattern Editor, all Clips referencing this Pattern in the Arranger will get updated accordingly.

Control Area

The Control area is located in the middle of the MASCHINE window, between the Arranger (above) and the Pattern Editor (below). This area allows you to adjust all Plug-in parameters and Channel properties for the selected Sound/Group or the Master level: routing, effects, Macro Controls, etc.

Control Lane

Located at the bottom of the Pattern Editor in the MASCHINE window, the Control Lane shows and lets you edit the recorded automation in form of automation points for each automated parameter. You can add, remove, or manipulate existing automation points as well as add new parameters to automate.

Control Mode

Control mode also allows you to easily adjust any parameter of your channels (Master, Group and Sound) and any plug-ins contained in them via the Control section of your controller.

Effect (FX)

An effect modifies the audio material it receives. MASCHINE already includes many different effects. You may also use VST/AU plug-in effects. Effects can be loaded as Plug-ins in any Plug-in slot of the Sound, Group, and Master levels. MASCHINE's flexible routing allows you not only to apply insert effects but also to create send effects and multi-effects.

Event

Events are the individual drum hits or notes that make up a Pattern. In the Pattern Editor, events are visually represented by rectangles in the Step Grid. Depending on the current view in the Pattern Editor, you can see events for all Sounds slots (Group view) or for the selected Sound slots only (Keyboard view).

Groove Properties

The Groove properties control the rhythmic relationship between events for the selected Group/Sound or the Master level. By shifting some of the events, you can e.g. give a shuffling, ternary touch to your Patterns. The main parameter of the Groove properties is the Swing control.

Group

A Group contains 16 Sound slots, each of which can hold one Sound. In addition to the effects applied to individual Sounds, a Group can have insert effects loaded in its Plug-in slots. These affect all the Sounds in the Group. A Group can also contain an unlimited amount of Patterns organized into Pattern Banks.

Group View

Group view is the view of the Pattern Editor in which events for all 16 Sound slots of the selected Group are visible and editable. In Group view, each row of the Step Grid represents a different Sound slot. This mode is well suited for rhythmic instruments (e.g., a drum kit).

Insert Effect

An insert effect is an effect directly inserted in the signal path of the audio to be processed.

Header

The Header is the topmost row of controls in the MASCHINE software window. It contains global settings, such as the Master Volume slider, the Transport controls, controls for global swing, tempo, time signature, etc.

Keyboard View

Keyboard view is the view of the Pattern Editor in which only events of the selected Sound are visible and editable. The Keyboard view provides a vertical on-screen keyboard that indicates the pitch of each event (one row per semi-tone). This mode is well suited for melodic instruments (e.g., synthesizer). The Keyboard view of the Pattern Editor and the Keyboard Mode on your controller are bound together: If you enable Keyboard view in the Pattern Editor, your controller automatically switches to Keyboard mode, and inversely.

Macro Control

Each Sound/Group/Master channel provides a page of eight Macro Controls to which you can assign almost any parameter from that level or the underlying one. This way you can define for, e.g., each Group or Sound a set of eight parameters that are quickly accessible. Furthermore, Macro Controls can be assigned to MIDI CCs to be controlled by an external MIDI controller or application. Last but not least, if you use MASCHINE as a plug-in in a host, Macro Controls are available for modulation in your host too.

Master

The Master is where all audio signals from each of the Groups and Sounds come together and get mixed. The Master bus can also have insert effects loaded in its Plug-in slots. These effects are applied to all Groups and the Sounds within them.

Modulation

Modulation allows you to record changes of parameter values so that you don't need to actuate these parameters in real-time. Any modulated parameter is displayed both in the Control Lane (at the bottom of the Pattern Editor) and as a movement of the chosen parameter itself in the Control area.

Mute and Solo

Muting allows you to bypass a Sound or a Group, whereas Soloing is pretty much the opposite: It mutes all other Sounds or Groups so that only the soloed Sound or Group is played. The combination of muting and soloing is a useful means both to play live and to test different sequences together.

Pad Mode

Your controller offers various Pad modes that allow you to play your Sounds from the pads in different ways: Depending on the selected Pad Mode, you can either assign one Sound to each of the click-pads labelled 1-16 or in Keyboard mode trigger each Sound with full 8x8 click-pad matrix. The Keyboard mode on your controller and the Keyboard view in the software's Pattern Editor are bound together: If you enter Keyboard mode on the controller, Keyboard view gets automatically enabled in the software, and inversely.

Parameter Pages

The Parameter pages constitute the biggest part of the Control area in the MASCHINE window. They contain the adjustable Plug-in parameters and Channel properties of the selected Sound/Group or those of the Master.

Pattern

A Pattern is a sequence that plays Sounds from the current Group. A Pattern is therefore usually linked to a Group since it is a part of the Group; however you can also save it independently from the Group. This is useful if you want to try out different drum kits with the same Pattern or different Sounds with a given melody. Using the Patterns you created in your different Groups, you can compose Scenes in the Arranger.

Pattern Editor

Located at the bottom of the MASCHINE window, the Pattern Editor allows you to select Sound slots (on the left), display and edit your Patterns, change the Step Grid settings and create/edit automation.

Piano Roll Mode

Piano Roll mode provides a more convenient method way of working with melodic content by turning the 8x8 click-pad matrix in a step sequencer that allows you to enter events with pitch and time as well as constraining notes to a selected scale.

Plug-in

A Plug-in is an instrument or effect unit, either Internal or External (by Native Instruments or a third-party manufacturer), that can be loaded into a Plug-in slot to produce or alter sound. When a Plug-in is loaded into a Plug-in slot, the Plug-in appears in the Plug-in List in the left part of the Control area.

Prehear

The Prehear feature allows you to listen to Samples directly from the Browser without loading them into Sound slots first. This way, you can quietly choose a Sample before modifying anything in your Project.

Project

A Project contains all data needed for a song: all Groups, Patterns, Sounds, Samples, Scenes and all settings, automation, effects, routings, etc. It's like a snapshot of the entire state of MASCHINE.

Quantization

To quantize a Pattern is to make its events snap to a set of equally distributed locations known as steps. This ensures that these events are on beat. You can also let MASCHINE automatically quantize events that you play and/or record live. Quantization makes it easier to get a rhythm going, but too much use can make the Pattern seem stiff or lifeless.

Sample

A Sample is any piece of audio that can be used e.g. to build a drum kit or a melodic instrument, or as a distinct loop in your song. You can load one or more Samples into each Sound slot.

Sample Editor

The Sample Editor can be displayed in place of the Pattern Editor. The Sample Editor is the all-in-one editor for Samples. It notably allows you to record Samples, edit them, split them into slices and map them across notes and velocities on your keyboard.

Scene

A Scene is a combination of Clips for your different Groups. Each Clip references a specific Pattern of a Group. In a Scene you can create one Clip for each Group. Scenes are located in the Arranger. They can be used to build up a finished arrangement or to trigger different parts of a song during a live performance.

Send Effect

A send effect is an effect available for audio signals located on other Sounds and/or Groups. These audio signals can be routed to a variable extent to the send effect for the effect to process them. Send effects notably allow you to reuse the same effect on different Sounds and/or Groups, thereby limiting the overall CPU load.

Sequencer

Generally speaking, a sequencer is a hardware unit or software tool that arranges musical sequences, e.g. drum patterns or chord progressions. Hardware sequencers typically function as a set of steps, where every step can be filled with musical content. The steps are then played back as a musical sequence. MASCHINE has its own sequencing abilities: you can record and play single Patterns as well as arrange Patterns into Scenes and Scenes into full songs.

Solo

See Mute and Solo.

Song Mode

Song Mode is the default mode of your controller. In this mode, you can gain an overview of all your Scenes, Groups and Patterns. Song mode also allows you to easily adjust any parameter of your Groups and Sounds via the Smart Strip section of your controller.

Sound

Sounds are the building blocks of all sound content in MASCHINE. They are organized into Groups that can hold up to 16 Sounds each. Sounds can be played directly from the pads on your controller. A Sound can be loaded with Plug-ins of various types (sound source or effect, Internal or External, etc.).

Step

Steps are elementary time blocks. They are notably used to apply quantization or to compose Patterns from your controller in Step mode. All steps together make up the Step Grid. In the software's Pattern Editor, steps are visualized by vertical lines. You can adjust the step size, e.g., to apply different quantization to different events or to divide the Step Grid into finer blocks to edit your Pattern more precisely.

Step Grid

The Step Grid is a set of parallel lines that divide the Pattern into steps. By changing the resolution of the Step Grid (i.e. the step size), you can adjust the note values at which you can quantize your Pattern and the number of steps available in Step mode on your controller.

Step Mode

In Step mode, your controller can be used as a traditional step sequencer, where each of the click-pads represent a step in the Step Grid. Just as on classical drum machines, a light representing the sequence runs from left to right, highlighting each step during playback. Select a Sound and put events at chosen steps in the sequence by pressing the corresponding pads. By repeating the process Sound by Sound you build up the whole Pattern.

The secondary function of Step mode; Piano Roll mode provides a more convenient method way of working with melodic content by turning the 8x8 click-pad matrix in a step sequencer that allows you to enter events with pitch and time as well as constraining notes to a selected scale.

Swing

The Swing parameter allows you to shift some of the events in your Pattern to create a shuffling effect.

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