MASCHINE

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THE FUTURE OF SOUND

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1 Welcome to MASCHINE

Thank you for buying MASCHINE!
MASCHINE is essentially the synergy of the MASCHINE 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 controller, with the advanced editing features and the versatility of the MASCHINE software turn it into the creative center of your musical productions.

You can create tight rhythms, harmonies and melodies — the highly enjoyable instrument combines a pattern-based sequencer, professional sampler, multiple studio and creative effects, and VST/AU plug-in host. Everything is intuitively controllable via the fully integrated hardware — once you touch the tactile controller 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 controller and customize the functions of the pads, knobs and buttons 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 Documentation Overview

Native Instruments provide many information sources regarding MASCHINE. The main documents should be read in the following sequence:

1. **MASCHINE Getting Started** (this document): The MASCHINE Getting Started guide provides a practical approach to MASCHINE via a set of tutorials covering simple tasks in order to help you familiarize yourself with MASCHINE.
2. **MASCHINE Manual**: The MASCHINE Manual provides you with a comprehensive description of all MASCHINE software and hardware features.

Additional documentation sources provide you with details on more specific topics:

- **Controller Editor Manual:** Besides using your MASCHINE hardware 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 application or device. 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 was installed during the MASCHINE installation procedure. For more information on this, please refer to the Controller Editor Manual available as a PDF file via the Help menu of Controller Editor.
- **Online Support Videos:** You can find a number of support videos on The Official Native Instruments Support Channel under the following URL: https://www.youtube.com/NIsupport-EN. We recommend that you follow along with these instructions while the respective application is running on your computer.

Other Online Resources: 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:

- Knowledge Base
- User Forum
- Technical Support
- Registration Support

You will find more information on these subjects in the chapter ↑12, Troubleshooting.

MASCHINE documents are available in PDF. You can also access these documents from the application's Help menu or the following location:
www.native-instruments.com.

Please check the Native Instruments website regularly for up-to-date and localized versions of these documents.

1.1.1 In This Document

What you are reading now is the MASCHINE Getting Started. This document consists of a set of tutorials that will guide you through common workflows in MASCHINE. Please follow these tutorials in the described order. You will learn a little something in each of them which will be essential later on. On the way, you will get to know the main objects and concepts of MASCHINE. After reading this, you should have the basic know-how allowing you to make music with MASCHINE!

Even if you're already familiar with MASCHINE, all tutorials are worth a read as every chapter may have little workflow hints of which you weren't aware. Should you wish to revise a specific task covered in a later tutorial, be sure to check the prerequisites listed at the beginning of each chapter!

This document is structured as follows:

- The first part is this introduction.
- The second part holds the tutorials:
  - Chapter ↑2, First Steps: Load a drum kit from the factory library via the Browser, play this kit with the pads and use it to record a simple rhythmic pattern — all this using your MASCHINE controller only.
  - Chapter ↑3, Building Your Own Drum Kit: Customize your drum kit by quickly exchanging some of its sounds via the Browser and by adjusting some of the sounds' basic settings.
  - Chapter ↑4, Creating Beats: Record a second pattern and discover how to fine-tune your patterns.

- Chapter ↑5, Adding a Bass Line: Add a bass line to your song using a VST/AU instrument plug-in in MASCHINE.
- Chapter ↑6, Applying Effects: Add effects to the various instruments in your song and quickly automate the effect parameters.
- Chapter ↑7, Creating Beats with the Step Sequencer: Create a Pattern, this time with the step sequencer, which is another great way of creating grooves from your controller.
- Chapter ↑8, Creating Scenes: Arrange your Patterns into Scenes and play them live.
- Chapter ↑9, Creating an Arrangement: Assign your Scenes to Sections and Arrange your song.

- The third and last part consists of useful global information on MASCHINE to be used at any time:
  - Chapter ↑11, Quick Reference provides you with a quick reference of the MASCHINE hardware controller and the MASCHINE software. It gives you a good overview of the main concepts and features of MASCHINE, along with lists of hardware shortcuts for various tasks. You can use it as a quick reminder before you dive into the MASCHINE Manual.
  - Chapter ↑12, Troubleshooting gathers useful information for troubleshooting and getting help.
  - Chapter ↑13, Glossary holds definitions of all the important terms and concepts used in MASCHINE.

1.1.2 Document Conventions

This section introduces you to the signage and text highlighting used in this document. This document uses particular formatting to point out special facts and to warn you of potential issues. The icons introducing these notes let you see what kind of information is to be expected:

Whenever this exclamation mark icon appears, you should read the corresponding note carefully and follow the instructions and hints given there if applicable.

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

Furthermore, the following formatting is used:

- Text appearing in (drop-down) menus (such as *Open...*, *Save as...* etc.) and paths to locations on your hard drive or other storage devices is printed in *italics*.
- Text appearing elsewhere in the software (labels of buttons, controls, text next to checkboxes etc.) 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 MASCHINE controller is printed in orange. Whenever you see this formatting applied, you will find the same text on the controller.
- Text appearing on the display(s) of your controller is printed in gray. Whenever you see this formatting applied, you will find the same text on the controller's display(s).
- Important names and concepts are printed in **bold**.
- References to keys on your computer's keyboard are in square brackets (e.g., "Press [Shift] + [Return]").

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

→ Results of actions are introduced by this smaller arrow.

Naming Convention

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

The term "**effect**" is 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 the 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.

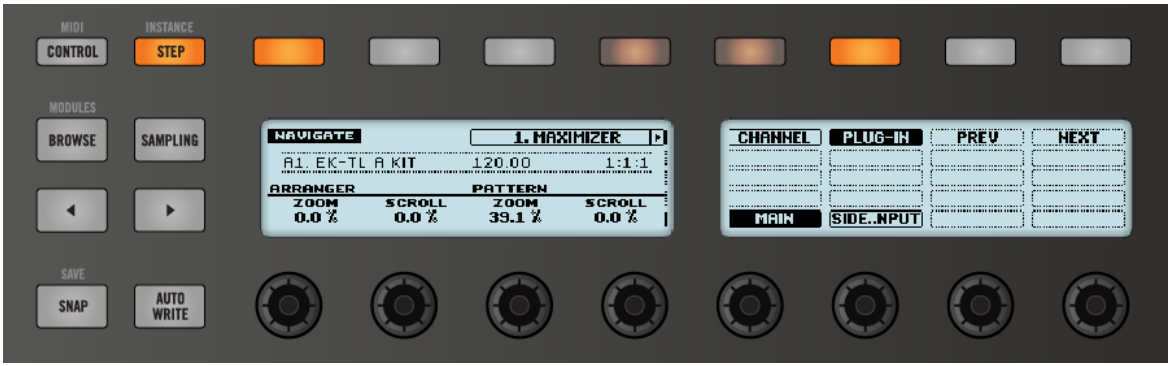
Displayed Products

Some images displayed in this document include products from the KOMPLETE and KOMPLETE ULTIMATE series. These products are not included with MASCHINE.

For more information on KOMPLETE and KOMPLETE ULTIMATE please visit the Native Instruments website.

Unlabeled Buttons and Knobs on the Controller

The buttons and knobs above and below the displays on your MASCHINE controller do not have labels (all other elements on the controller do).



The unlabeled buttons and knobs on the MASCHINE controller.

For better reference, we applied a special formatting here: throughout the document, the elements are capitalized and numbered, so the buttons are written Button (1–8), while the knobs are written Knob (1–8). For example, whenever you see an instruction such as "Press Button 2 to open the EDIT page," you'll know it's the second button from the left above the displays.

1.2 Labeling on your MASCHINE Controller

Since its initial release the labels of the MASCHINE MK1 controller have been revised. The instructions in this document will only refer to the 2nd generation controller labels. If you have a first generation MASCHINE MK1 controller, please use the table below to reference the equivalent labels of the first and second generation controllers.

MASCHINE MK1 Controller 1st Generation	MASCHINE MK1 Controller 2nd Generation
F1 button	SNAP button
F2 button	AUTO WRITE button
LOOP button	RESTART button
KEYBOARD button	PAD MODE button

Labels in brackets refer to the secondary function, available by pressing and holding SHIFT when pressing the button or pad.

If you have a MASCHINE MK2 controller please download the relevant documentation for that controller from the Native Instruments website.

2 First Steps

In this first tutorial, you will load a drum kit from the factory library, play it with the pads and record a simple rhythmic pattern.

For a complete overview of MASCHINE and its controls, please see section ↑11, Quick Reference.

Prerequisites

Please carefully follow the instructions of the Setup Guide which can be downloaded in PDF format from the Native Instruments website. Once you have followed the Setup Guide, MASCHINE should be installed on your computer, its basic audio settings correctly configured, and the hardware controller connected to your computer. If this is not the case, please return to the Setup Guide for more information before going any further.

► Please start MASCHINE via one of the usual ways on your operating system — for example, by double-clicking the alias placed on your desktop during the installation procedure.

A Project in MASCHINE

In MASCHINE, your whole song (or track) is called **Project**. A Project consists of all sounds, instruments, effects, settings, along with all arrangement information you will create — in other words, a Project holds everything defining your song.

► If you already started testing MASCHINE, please start again with a blank, new Project by clicking the File menu and choosing *New* or by using the shortcut [Ctrl] + [N] ([command] + [N] on macOS).

First you will learn how to load a drum kit using the MASCHINE software and then use your hardware controller to carry out the same procedure.

For a complete overview of a MASCHINE Project, please see section ↑11.2, MASCHINE Project Overview.

2.1 Loading a Drum Kit from the Factory Library

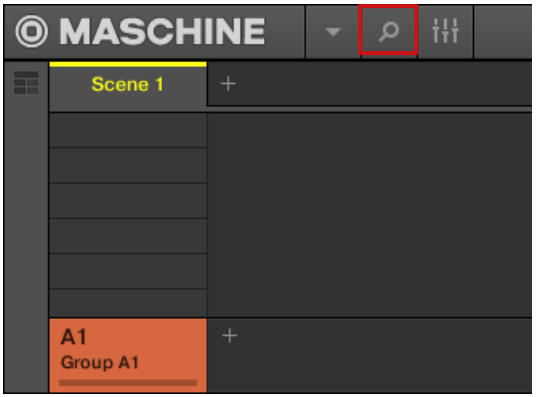
First you will choose a complete drum kit from the huge factory library included with MASCHINE, and load it using the MASCHINE Browser. The Browser is your tool for finding, tagging and categorizing all types of objects used in MASCHINE.

A drum kit basically consists of several instruments — called **Sounds** in MASCHINE terminology. Those Sounds are put together into a **Group**, which represents the complete kit. In addition, A MASCHINE Project can have any number of Groups which are organized into **Banks**. The first Group bank is labeled A1 to H1 in the MASCHINE software and the second is labeled A2 to H2, the third A3 to H3, and so on. So let's look for a nice kit and load it into Bank 1 Group A which is selected by default when you start a new Project.

2.1.1 Loading a Drum Kit from the Factory Library in the MASCHINE Software

In the MASCHINE software, the Browser is found in the left part of the window.

If you cannot see the Browser in the MASCHINE software, click the magnifying glass icon in the Header at the top of the MASCHINE window in order to show the Browser:

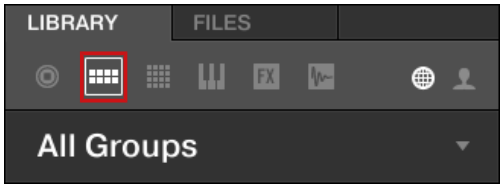


Enable the magnifying glass to display the Browser.

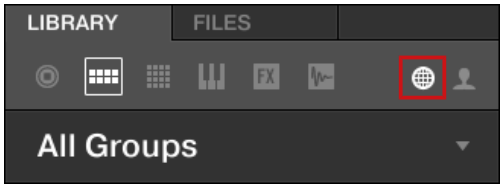
To load a drum kit, do the following:

1. Click the LIBRARY tab to open the LIBRARY pane.

2. Click the Group icon to get a list of all available drum kits in the Library:

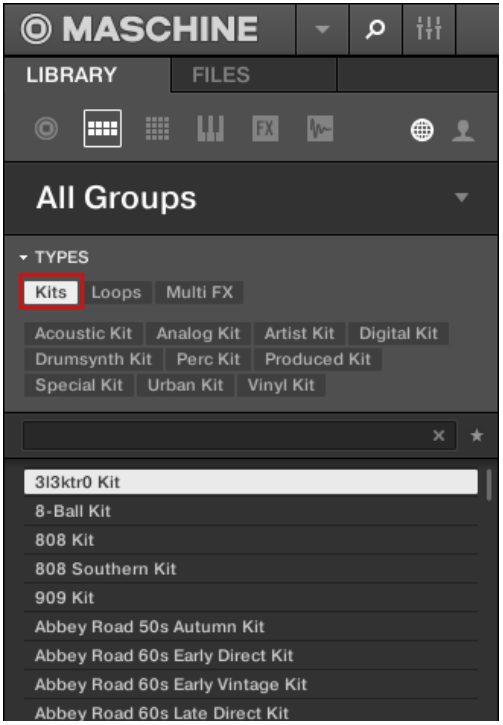


3. In the Content selector to the right, click the world icon to select only Native Instruments factory content:



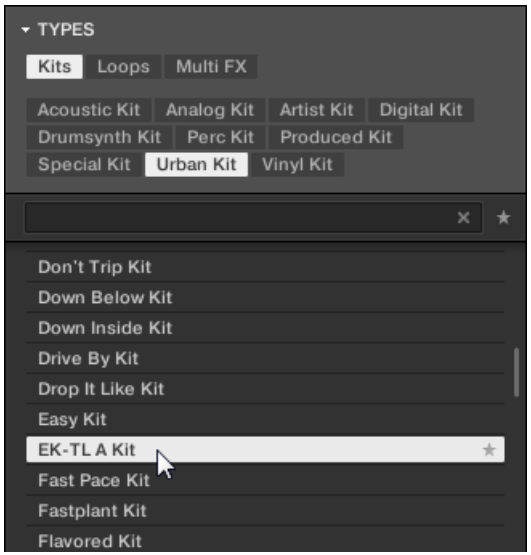
4. In the TYPES filter, select the Kits.

⇨ The Browser will then display only kits in the Result list:



5. Select the Urban Kit sub-type tag below to further refine your search.

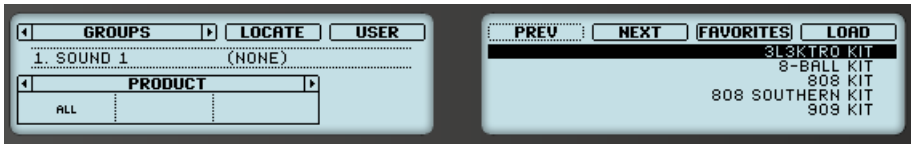
6. Scroll down the Result list and double-click EK-TL A Kit to load this drum kit into Group A:



2.1.2 Loading a Drum Kit from the Factory Library Using the Controller

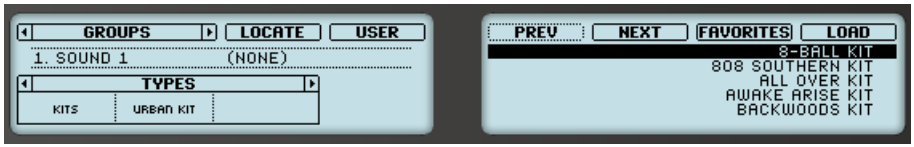
On your controller, do the following:

1. Press button A on the left of your controller to select the first Group slot. This is where you are going to load our drum kit. Button A should be lit in blue to indicate that it is selected.
2. Press the BROWSE button at the top left of your controller.
   The BROWSE button lights up. In the left display, you now are presented with a selection of choices.
3. Press Button 1 or 2 above the displays to select GROUPS.

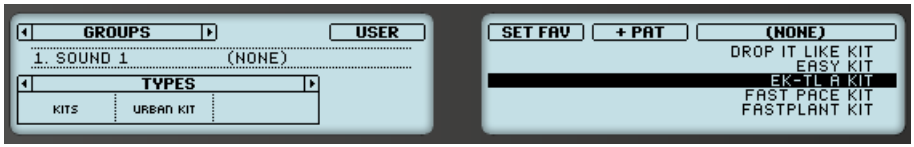


Now you can browse Groups only on the right display.

4. Press the right Page button to change the filter from PRODUCT to TYPES.
5. Turn Knob 1 until KITS is selected. This will reduce the results list on the right to display only kits.
6. Turn Knob 2 until URBAN KIT is selected. This will further reduce the results list on the right display to the kits of that type.



7. Under the right display, turn Knob 8 to scroll down the list until EK-TL A KIT is selected.
8. Now press SHIFT + Button 4 above the displays so that +PAT is *deselected* (the Button must be off — this will be explained in more detail later).



9. Press Button 8 to select the LOAD command.

→ The drum kit is loaded into the first Group slot.

As the last step, let's leave the Browser and return to the default Control mode of your controller:

► Press the lit BROWSE button to leave the Browser (the button is unlit).

That's it! You just loaded a drum kit into a Group slot of MASCHINE. It is now ready to be played from the pads, as you will see in the next section.

The process of loading from the Browser is the same for all kinds of objects: In the Browser, after choosing the desired object (Project, Group, Sound, etc.), select the desired content, type, and subtype, then scroll through the result list and select an object for loading.

2.2 Playing with the Pads

As soon as a Group is loaded (here the EK-TL A Kit) and the corresponding Group slot selected (here Group slot A), this Group can be played from the pads on your controller. Each pad triggers one of the Sounds included in the Group.

► Play the pads to get the feel of your controller: reactivity, sensitivity to the force you apply while playing (called velocity), etc.

If you don't hear any sound when playing on your pads, check that none of the buttons in the column to the left of the pads is accidentally lit (if any button is lit, press it to disable it).

While playing, take a look at your pads. You will note the following:

- When you press a pad, it flashes and then stays fully lit.
- At any time, only one pad is fully lit. This is the pad you pressed last.
- All other pads are half lit to indicate that they are loaded with a Sound ready to be played.
- An unlit pad would indicate that it has no Sound loaded — hence, pressing it would not have any effect.

While playing on the pads, focus on the eight Group buttons on the left of your controller. You will note the following:

- All Group buttons except button A and B are off, indicating that they are not loaded with anything.
- Button A is fully lit, indicating that Group slot A is selected. This means that the pads currently trigger the Sounds of this Group.
- Button B is half lit to indicate the next Group can be created here.

As you can see, MASCHINE communicates in both directions: The commands you give via the pads and buttons control the software, but the software also communicates information back to you via the display and the LEDs.

► Select Group A again by pressing button A and continue playing on the pads to get familiar with them.

When you feel ready, move on to the next section, where you can record a little rhythmic pattern using this drum kit!

2.3 Recording Your First Pattern

Now that you feel comfortable with the pads, let's use them to live record some rhythm into a **Pattern**. A Pattern is a recorded sequence of notes played on the Sounds of the current Group. In each Group you can have an unlimited number of Patterns which are grouped into Pattern banks containing up to 16 Patterns each.

In addition to recording your own Patterns, you can also add audio loops to your Project. For more information on how to add audio loops to your Project, and to learn about the MASCHINE Audio plug-in, refer to the MASHINE Manual.

You can now use the transport controls, which are located at the bottom left of your controller:

The TRANSPORT section on your controller.

1. Press PLAY to start the sequencer.
2. Press SHIFT + PLAY to activate the metronome so you get a rhythmical reference.
3. Play along to the metronome to get a feel for the tempo.
4. If you'd like to increase or decrease the tempo to make your playing feel more comfortable, turn the TEMPO knob at the left of the controller.

→ The tempo value is indicated in the left display:

You can also adjust the volume of the metronome by pressing SHIFT + GRID and turning Knob 1.

It is recommended that you to start with a simple sequence using a few Sounds only (e.g., the kick and the snare on pads 1 and 2). You will have the possibility to enrich your Pattern later.

To start recording:

1. With the sequencer playing, press REC to enter recording mode.
   REC lights up.
2. Play the desired rhythm on the pads. By default, the recorded Pattern is one bar long.
   Your playing is recorded and directly played in a loop. As long as you don't press PLAY again, the new Pattern keeps playing.
3. Press REC again to stop recording.

→ You just created your first Pattern!

You can now deactivate the metronome by pressing SHIFT + PLAY again and listen to your newly created rhythm.

► To stop the sequencer, press PLAY again.

Quick Edits on Your Pattern

At any time, you can **undo** your last recording by pressing SHIFT + pad 1, whether you are currently recording or not. You can **redo** it by pressing SHIFT + pad 2.

The undo and redo commands are global in MASCHINE: Almost any action in MASCHINE can be undone/redone.

At any time, you can enrich your Pattern by activating PLAY and REC again, and playing the pads. This way, you can progressively build up a complex Pattern step by step.

2.4 Playing with Your Pattern

Now that you have a nice Pattern, let's introduce a few powerful tools for playing your Pattern live.

2.4.1 Using Solo and Mute

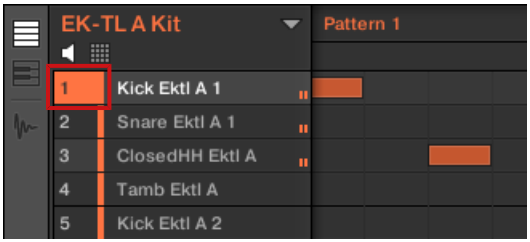
Mute can be used to bypass a Sound or Group, whereas Solo is the opposite: Solo will mute all other Sounds in the Group, or all other Groups in the Project, so a selected Sound, or Group can be heard alone. The combination of both is a useful means to play live and to test different sequences together.

When used on Sounds, the Solo only applies to the current Group: The Sounds in other Groups will not be affected.

2.4.1.1 Using Solo and Mute in the MASCHINE Software

Soloing a Sound

► To solo a Sound, right-click the number on the left side of the Sound slot in the Pattern Editor.



Soloing the first kick Sound.

► To unsolo a Sound, right-click the number again.

Muting a Sound

► To mute a Sound, click the number on the left side of the Sound slot in the Pattern Editor.

Muting a Sound.

► To unmute the Sound, click the number again.

By default, the Mute on Sounds is an event mute: events for muted Sounds are not triggered, but the audio coming from previous events might still be audible (reverb tail, etc.). You can also activate audio mute for Sounds to mute both events and audio. See the MASCHINE Manual for more information.

2.4.1.2 Solo and Mute Sounds on Your Controller

1. Press PLAY to start the sequencer.
2. Hold the MUTE button at the bottom of your controller.
3. While holding MUTE, press pad 1.
4. While holding MUTE, press a few other pads to mute their Sound to your liking.
5. While holding MUTE, press pad 1 again.
6. While holding MUTE, press the muted pads to bring their Sounds back.
7. Release MUTE.
8. Now hold the SOLO button (just above MUTE).
9. While holding SOLO, press pad 1.
10. Now release SOLO and hold MUTE again.
11. Press the half-lit pads one by one, progressively bringing each drum back in the mix.

→ The combination of muting and soloing Sounds allows you to create effective breaks on the fly.

You can also solo and mute whole Groups by holding SOLO or MUTE and pressing the desired Group button A–H; since you only have one Group loaded, it would not make much sense yet.

2.4.2 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 pad and its Sound/note will be steadily repeated until you release the pad.

- When using Note Repeat all pads will be both velocity and pressure sensitive, allowing for expressive drum rolls or dynamic basslines.
- Note Repeat is a great way to play percussion and drums live to create build-ups and breaks.
- Note Repeat can also come in handy to quickly record a regular beat when creating Patterns.
- Note Repeat is also interesting to use with tonal Sounds and you can access it from Keyboard mode to create synthesizer-like arpeggios.

Note Repeat can only be enabled using the controller.

1. Check that your Pattern is playing — if not, press PLAY to start the sequencer.
2. Hold the NOTE REPEAT button.
3. While holding NOTE REPEAT, hold any pad.
   The Sound of the pad is repeatedly triggered at the rate shown at the bottom of the controller's display.
4. While holding NOTE REPEAT, press Button 5, 6, 7 or 8 above the right display to select another repetition rate.

→ This is a handy way to add live ornaments to your Pattern!

Of course you can also use Note Repeat to program your Pattern (e.g., recording a continuous hi-hat).

2.5 Saving Your Project

A drum groove is an ideal starting point for the creation of a song. All the instruments you record afterwards will be based on the feeling of that rhythm. Before you get to adding new elements and editing your Pattern, you should save your work right away.

Saving your Work for the First Time in the MASCHINE Software

1. Click File.
2. Click *Save*.

⇨ The Save Project As dialog opens.

3. On your computer keyboard, type a name (e.g., "My First Project") in the field and press [Enter] to confirm.

→ Your Project with its new Pattern is now saved on your hard disk. If you close MASCHINE or open another Project, you will still be able to open this Project later.

Saving your Work for the First Time on the Controller

1. To save your modifications to the Project, press SHIFT + SNAP.

⇨ A message will appear on your controller that asks you to look at the MASCHINE software. Since our current Project was not saved yet, MASCHINE asks you to name it before saving. For this, you need to get back to your computer. A Save Project As dialog opened and is waiting for your input.

2. On your computer keyboard, type a name (e.g., "My First Project") in the field and press [Enter] to confirm.

→ Your Project with its new Pattern is now saved on your hard disk. If you close MASCHINE or open another Project, you will still be able to open this Project later.

2.6 To Sum Up...

In this first tutorial, you have learned to:

- Load a Group using the Browser.
- Use the pads to play the Sounds of that Group.
- Record a simple Pattern with that Group.
- Use the Mute, Solo and Note Repeat features to create variations on the fly.
- Save the current Project for a later use.

Once you feel comfortable with these tasks, please proceed to the next tutorial, where you will customize your drum kit, and have a closer look at the MASCHINE software user interface.

3 Building Your Own Drum Kit

In this tutorial, you will exchange some of the Sounds of your drum kit, and adjust a few settings for your Project and your Group. On the way, you will discover some features of the MASCHINE software user interface.

Prerequisites

It is assumed here that you have followed the previous tutorial. In particular, you already know how to:

- Load a Group using the Browser.
- Use the pads to play the Sounds of that Group.
- Record a simple Pattern with that Group.
- Save the current Project for a later use.

If you have any doubts about these tasks, please refer to chapter ↑2, First Steps before proceeding!

3.1 Opening Your Project

If for any reason your tutorial Project is not currently open in MASCHINE (e.g., you opened another Project in the meantime), you first need to open it again. You can do this with the controller or in the software, for example using the MASCHINE Browser.

If you closed MASCHINE and started it again, your last Project should automatically load by default. If you changed this setting, follow these instructions to load the tutorial Project again!

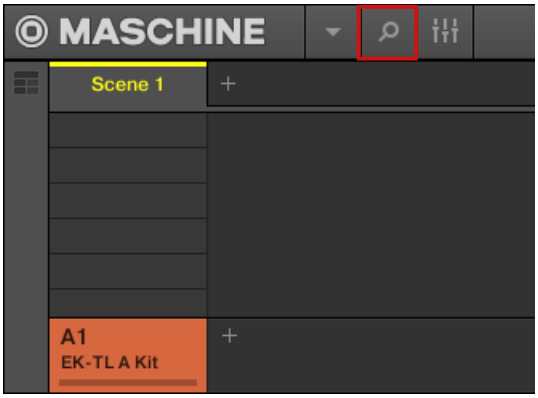
If the tutorial Project is already open in MASCHINE, you can skip to section ↑3.2, Customizing Your Drum Kit.

Available both on your controller and in the software, the Browser will be the preferred way to open a project when working on your controller. Here you will use a nice feature of MASCHINE: Each file you created and saved in MASCHINE is automatically put in "User" content. Hence, you will select the User icon in the Content selector to quickly find your tutorial Project again.

Opening a Project in the Software

In the MASCHINE software, the Browser is found in the left part of the window.

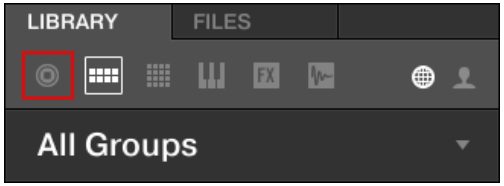
If you cannot see the Browser in the MASCHINE software, click the little magnifying glass in the Header at the top of the MASCHINE window in order to show the Browser:



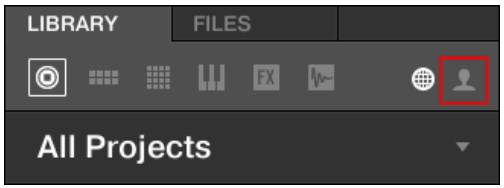
Enable the magnifying glass to display the Browser.

To open the tutorial Project, do the following:

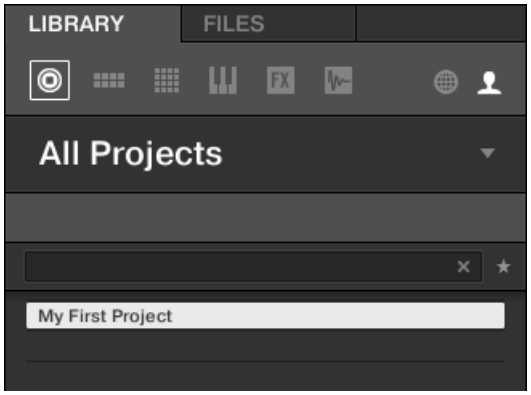
1. At the top left, click the button showing the Project icon to get a list of all available Projects in the Library:



2. In the Content selector to the right, click the User icon to select only the user-created Projects:



In the result list below, you now have one unique Project left — your "My First Project":



3. Double-click this unique entry to load the Project in MASCHINE.

If you have already created other Projects in MASCHINE, they will also appear in the result list along with your tutorial Project.

Opening a Project Using the Controller

Now try operating MASCHINE via the controller wherever possible. To open a Project via the controller, you will follow the same process as above, filtering MASCHINE objects to narrow your search until you find your tutorial Project. This is similar to what you did when loading a drum kit in the previous tutorial. Do the following:

1. Press BROWSER to show the Browser.
2. Press Button 1 above the displays repeatedly until PROJECTS is selected.
3. Press Button 4 above the displays to enable it.

4. If you have already created more than one Project, turn the 4-D encoder or Knob 8 until My First Project is selected on the right display.
5. Press the 4-D encoder or Button 8 to load the Project.
6. Press BROWSER to leave the Browser.
   The BROWSER button turns off.

→ You can continue to work on your tutorial Project.

You will note that every action you did on the controller is directly mirrored in the Browser of the MASCHINE software. This is true in both directions.

Opening a Recent Project Using the Controller

Your MASCHINE controller also provides a handy way to open Projects on which you worked recently:

1. Press FILE to open the File mode.
   The right display shows a list of your recent Projects.
2. Turn the 4-D encoder or Knob 8 to select the desired Project from the list.
3. Press the 4-D encoder or Button 8 to load the selected Project.
4. Press FILE to leave the File mode.

→ You can continue to work on your Project.

The File mode provides additional options for managing your Project files directly from your controller: start a new Project, save a copy of the current Project, or save the Project under a new name. For more information, please refer to the Manual.

Opening a Project Using the Controller

Now try operating MASCHINE via the controller wherever possible. To open a Project via the controller, you will follow the same process as above, filtering MASCHINE objects to narrow your search until you find your tutorial Project. This is similar to what you did when loading a drum kit in the previous tutorial. Do the following:

1. Press BROWSE to show the Browser.

2. Press Button 1 or Button 2 above the displays to select PROJECT.
3. Press Button 4 to select USER content.
4. If you have already created more than one Project, turn Knob 8 until MY FIRST PROJECT is selected on the right display.
5. Press Button 8 to load the Project.
6. Press BROWSE to leave the Browser.
   The BROWSE button turns off.

→ You can continue to work on your tutorial Project.

You will note that every action you did on the controller is directly mirrored in the Browser of the MASCHINE software. This is true in both directions.

3.2 Customizing Your Drum Kit

You might want to replace one or more drums from the Group "EK-TL A Kit" with ones that sound better with your Pattern. To do this, you must make use of the Browser again.

3.2.1 Selecting Another Snare Sample

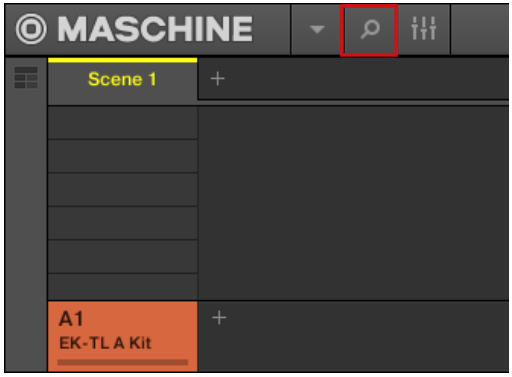
For the sake of providing an example, replace the Sample "Snare Ektl A 2" used in the Sound on pad 6 to something less intrusive.

Selecting another Snare Sample in the Software

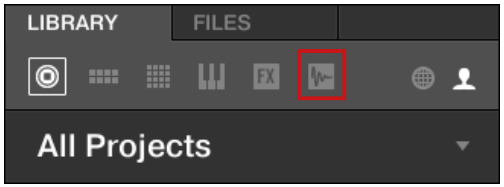
You have already used the Browser to open various objects (e.g., your tutorial Project). Now you will learn another of its facilities: This time, you will not select Types, but instead use the **text search**. This powerful feature allows you to instantly find items by name.

1. Click the Sound slot containing the "Snare Ektl A 2" that you want to replace:

2. Click the Browser button in the top row to show the Browser within the MASCHINE window (the button becomes highlighted):

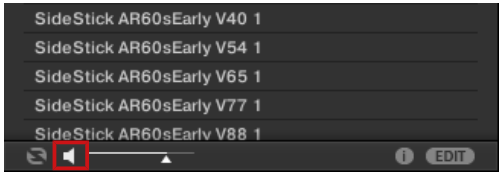


3. In the top row of the Browser, click the Sample icon on the far right to get a list of all the available samples in the Library:



4. Since you want to find a side stick, type “side stick” into the empty field above the list of Samples.

5. Now activate **Prehear** by clicking the Prehear button (the loudspeaker symbol) at the bottom of the Browser:



6. When you have found a suitable side stick Sample, double-click it to load it in the Sound slot. You can also drag and drop it on the Sound slot.

You can also mix both search methods: You can simultaneously select specific Banks (and Types, Subtypes…) and type the desired search query in the Search field.

You can activate the **Autoload** feature to listen how the selected Sample work with the other percussions in your Pattern. To do this:

1. Click the Autoload button at the bottom left corner of the Browser to activate it (you can deactivate the Prehear button next to it):

2. Click any Sample in the result list.

⇨ The Sample will automatically load in the selected Sound slot, replacing the previously loaded Sample. If the Pattern is playing, you can directly hear the new Sample in context.

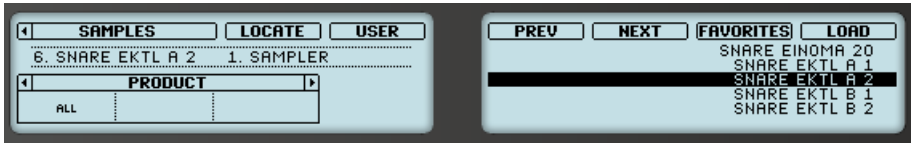
Try to exchange a few Samples to familiarize yourself with the procedure described above, both on your controller and in the software. This should allow you to build a custom drum kit that fits your needs.

Note that you can also start from a blank Group and entirely fill it up with the Sounds of your choice.

Selecting another Snare Sample on the Controller

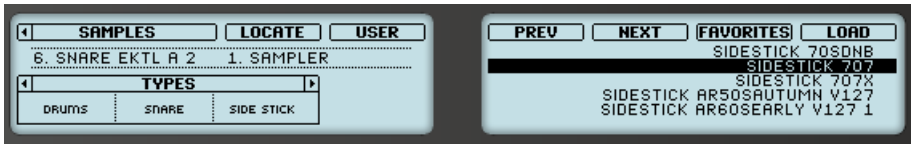
On your controller, do the following:

1. Press Button 3 to select SOUND.
2. Press BROWSE to open the Browser.
3. Press pad 6 to select its Sound.
4. Press Button 1 or Button 2 above the displays to select SAMPLES.

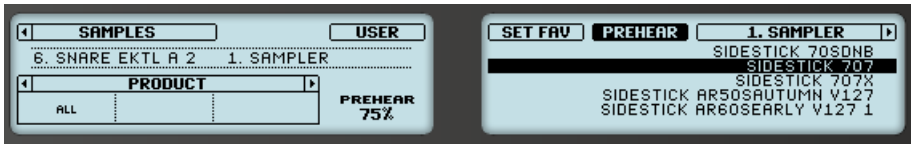


By selecting this a list of Samples will become visible on the right display.

5. Check that Button 4 above the displays is not fully lit and that the USER label underneath is not highlighted; if necessary, press Button 4 to disable it.
   This will select only Native Instruments factory content.
6. Press the right Page button to change the filter from PRODUCT to TYPES.
7. Turn Knob 1 until the first TYPES field is set to DRUMS.
8. Turn Knob 2 until the second TYPES field is set to SNARE.
   The Browser will now show the snare drum samples only… but the factory library still holds many hundreds of them, so you need to narrow your search a bit more.
9. Turn Knob 3 until third TYPES field is set to (for example) SIDE STICK.
   On the right display, you now see that the side stick samples are ready to be browsed.



10. Press and hold SHIFT + Button 6 to activate the PREHEAR feature.



11. Turn Knob 8 to scroll through all side stick samples. You can hear each sample that you select thanks to the enabled Prehear feature.
12. Once you have found a suitable side stick sample, press Button 8 to load it into the Sound slot currently selected (the one triggered by pad 6).

To help you decide which sample would fit best, MASCHINE offers you an additional, convenient help: **Autoload**. This allows you to replace the selected Sound on the fly with the Sound currently selected in the Browser's result list while your Pattern is playing. Meaning, you can listen to each sample in the context of your Pattern. To do this:

1. Press PLAY to start the sequencer.

⇨ The Pattern you created starts playing.

2. Press SHIFT + Button 6 to *deactivate* the Prehear feature. In the display, PREHEAR should not be enabled anymore.
3. Now, instead of using Knob 8 for scrolling through the Samples, use Buttons 5 and 6 above the right display.

→ The selected Sample will automatically load into the Sound slot triggered by the pad 6. Since your Pattern is playing, you will hear the selected Sample in place of the former "Snare Ektl A 2" Sample in the context of your recorded Pattern.

When you have found a suitable Sample you don't need to explicitly load it, with Auoload it is already loaded in the Sound slot. Use button 5 PREV and button 6 NEXT to audition other Sounds in the MASCHINE library.

► Don't forget to press BROWSE again to leave the Browser once you have found the ideal Sample.

3.2.2 Loading a Drumsynth

In this section you will learn you how to load Drumsynths in MASCHINE using the Plug-in List.

The Plug-in List

Before you load a Drumsynth, have a quick look at the Control area in the software:

1. Select the Group "EK-TL A Kit" (Group A1).
2. Select the Sound "Kick Ektl A 2."

Now have a look at the Control area:

The Control area showing some Sampler Plug-in parameters for your kick drum Sound.

In the left part of the Control area, you can load any number of Plug-ins into the Plug-in List. The processing order is from top to bottom (from the first Plug-in to the last).

For example, in each Sound of the Group "EK-TL A Kit," the first slot in the Plug-in List hosts a Sampler Plug-in (that is, the MASCHINE internal sampler). The Sampler is the sound source of each of these Sounds.

Plug-in slots are available in every channel of your Project:

- **Sound channels**: In Sounds, the first Plug-in slot is the only slot that can contain both an instrument or an effect. The other slots can only contain effects.
- **Group channels**: Each Group also offers slots for effects that will process all Sounds of that Group together.
- **Master channel**: The Master channel provides additional slots for effects that will process the overall audio of your Project before it is sent to the master output.

By loading an effect Plug-in into the first slot of a Sound, you make this Sound available as a bussing point for other signals in MASCHINE and for signals from the outside world. You will learn how to set this up in Using Other Sound Sources.

Loading a Drumsynth into a Plug-in List

To further customize your drum kit, you could replace one of the kick drums with another one, for example coming from an internal instrument included with MASCHINE: Drumsynth.

You can load Plug-ins into the Plug-in List via two methods:

- **Using the Browser**: You have already used the Browser to load Projects, Groups, Samples, and Plug-ins. Similarly, you can use it to search for plug-in effects.
- **Using the Plug-in menu**: You can also choose the desired Plug-in directly from the Plug-in slot itself via the Plug-in menu.

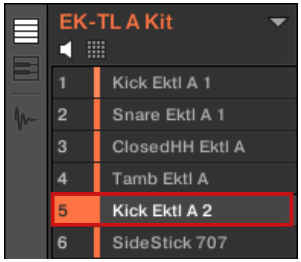
Note that these methods work in any channel: Sounds, Groups, or Master. However, since Drumsynth is an instrument, you can load it only into the first Plug-in slot of Sounds.

The difference between the two loading methods is that the Browser allows you to load Plug-in *presets* (from the factory content or user-created), while the Plug-in menu allows you to load Plug-ins in their *default state*.

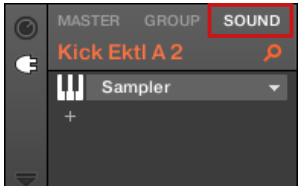
Since you should already be familiar with the Browser (if not, check for example section ↑2.1, Loading a Drum Kit from the Factory Library or ↑3.2.1, Selecting Another Snare Sample), this time you will learn the method using the Plug-in menu.

3.2.2.1 Loading a Drumsynth into a Plug-in List in the Software

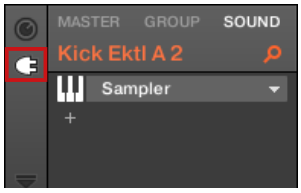
1. At the left of the Pattern Editor, click the Sound slot's name (Kick Ektl A 2) to select that Sound slot.



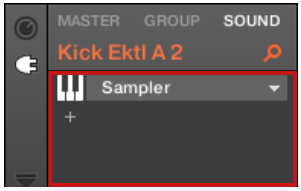
2. In the Control area above, click the SOUND tab to select the Sound level, since this is the only level at which Drumsynths can be loaded.



3. At the far left of the Control area, click the small Plug-in icon to display the Plug-ins.

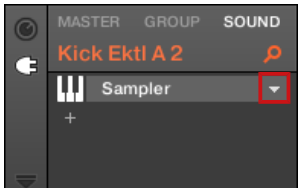


This displays the Plug-in List on the left of the Control area:



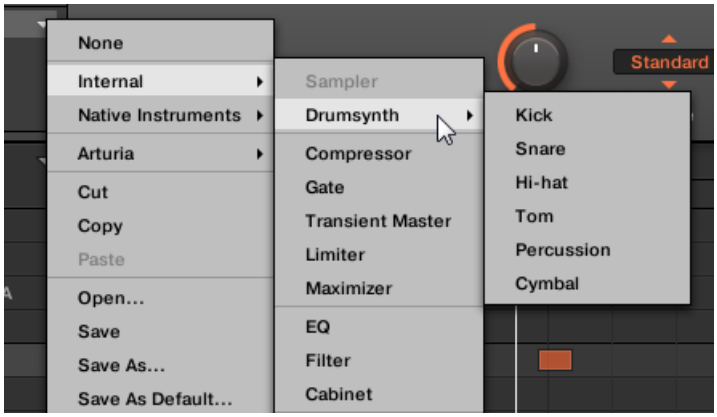
The Plug-in List in this instance contains Sampler.

4. Click the down-pointing arrow at the right to open the Plug-in menu.

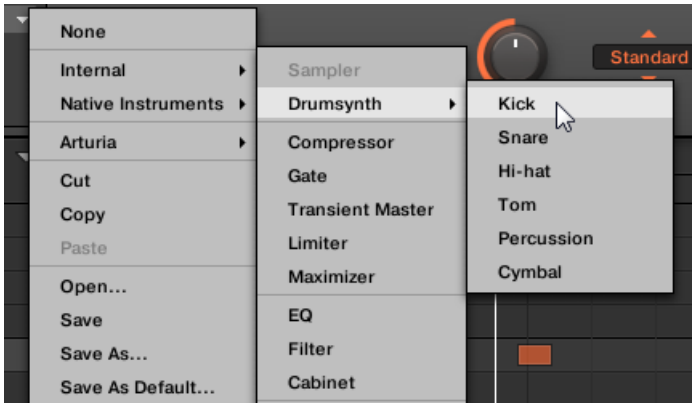


The **Plug-in menu** opens and displays a list of all available effects.

5. In this menu, click the *Drumsynth* submenu to display the Drumsynths.



6. Click the *Kick* entry to load it into the Plug-in List.



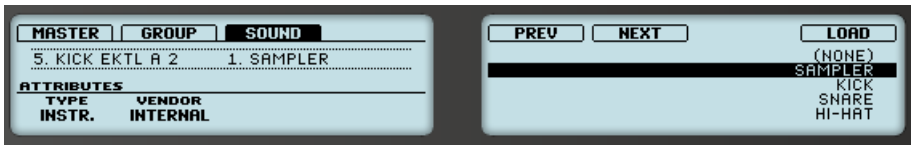
→ The Kick Plug-in is now loaded and is ready to be tweaked.

3.2.2.2 Loading a Drumsynth into a Plug-in List on the Controller

1. Check that the CONTROL button is lit at the top left corner of your controller — if not, press it to enter Control mode.
2. Press SELECT + pad 5 to select the Sound Kick Ektl A 2.
3. Press Button 3 to select the SOUND tab.
4. Press Button 6 to select PLUG-IN.

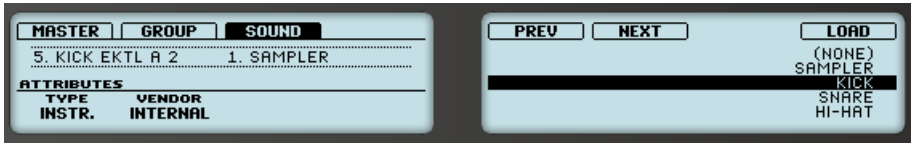
5. Press SHIFT + BROWSE to select a Plug-in.
   If you would have pressed BROWSE alone here, you would have accessed the Browser. By additionally holding SHIFT, you access the Plug-in menu instead!
6. Turn Knob 1 until the TYPE field is set to INSTR. and then turn Knob 2 until the VENDOR field is set to INTERNAL.

⇨ The right display shows you the available MASCHINE instruments:



If you have NI VST/AU plug-ins installed you may browse them by selecting NI. If you have external plug-ins installed you can browse them by selecting EXTERNAL.

7. Turn Knob 5 to select KICK, and press Button 8 to load it.



8. Press SHIFT + BROWSE again to leave the Plug-in menu.

→ The Kick Plug-in is now loaded and is ready to be tweaked.

3.2.3 Adjusting Volume, Swing and Tempo

After selecting the right Samples for your drum kit, you might need to adjust their levels. MASCHINE holds a powerful sampler that allows you to fine-tune many settings for each generated sound. Without entering into too many details yet, look at a quick way to adjust the volume level and swing for each Sound in your Group.

3.2.3.1 Adjusting Volume, Swing and Tempo in the MASCHINE Software

Adjusting Volume

To adjust the various volume levels in the software, the following controls are at your disposal:

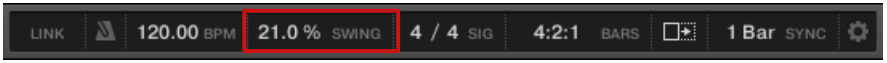
► To adjust the overall output level, click and drag the Master Volume slider located on the right part of the Header, at the top of the window.

Use the Master Volume slider in the Header to adjust the overall volume of MASCHINE.

You can also use Mix view to adjust your Sound and Group levels. 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. More on this in section The Mix View.

Adjusting Swing

To adjust the overall Swing of your song, you can use the display in the Header, at the top of the MASCHINE window:



The SWING control in the Header.

► To adjust the Swing value of your Project, click the SWING value, hold the mouse button and drag vertically.

Adjusting Tempo

To adjust the overall Tempo of your song, you can use the display in the Header, at the top of the MASCHINE window:

The BPM control in the Header.

► To adjust the Tempo (Beats Per Minute) value of your Project, click the BPM value, hold the mouse button and drag vertically.

3.2.3.2 Adjusting Volume, Swing, Tempo and Tune on Your Controller

Adjusting Volume

1. To adjust the overall volume, turn the VOLUME knob. Hold SHIFT and turn the VOLUME knob to adjust the value in finer increments.
2. To adjust the volume of a particular Group, press and hold its Group button (A–H) and turn the VOLUME knob. Hold SHIFT additionally to adjust the value in finer increments.
3. To adjust the volume of an individual Sound, press and hold its pad and turn the VOLUME knob. Hold SHIFT additionally to adjust the value in finer increments.

As you adjust the volume, the left display indicates the volume's current value.

It is recommended you try this while your Pattern is playing, you will immediately hear the effect of your changes.

Adjusting Tempo/Tune

1. Turn the TEMPO knob to adjust the overall Tempo for your Project.
2. To adjust the **tune** of a particular Group, press and hold its Group button (A–H) and turn the TEMPO knob. Hold SHIFT additionally to adjust the value in finer increments.
3. To adjust the **tune** of an individual Sound, press and hold its pad and turn the TEMPO knob. Hold SHIFT additionally to adjust the value in finer increments.

Adjusting Swing

Now adjust the overall **swing** of your Project, too. The Swing feature shifts some of the played notes, hereby adding some "groove" to your Pattern. The procedure is similar to the one described above for the volume:

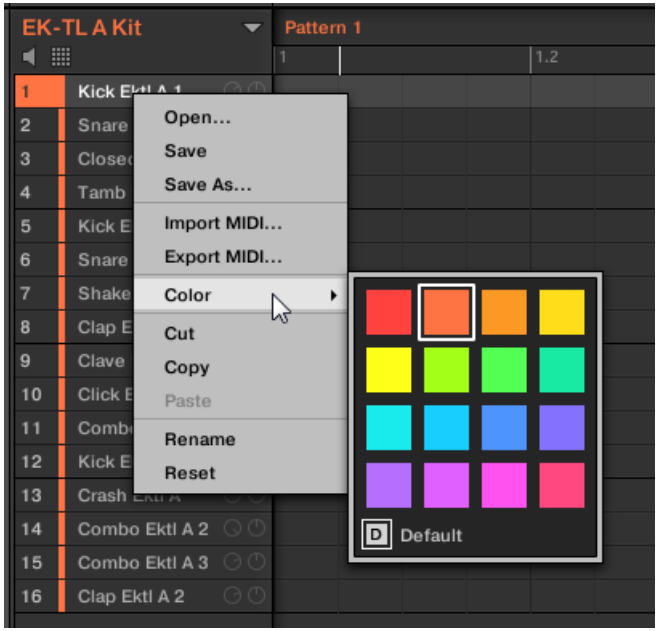
1. Turn the SWING knob to adjust the overall Swing for your Project.
2. To adjust the swing of an individual Sound, press and hold its pad and turn the SWING knob. Hold SHIFT additionally to adjust the value in finer increments.

3.2.4 Changing the Color of Your Sounds

MASCHINE allows you to change the color of each Group or Sound. It can be very useful to see at a glance to identify certain Groups or Sounds.

Now assign different colors to the different types of percussions in your drum kit:

- Right-click on the desired Sound slots, select *Color* in the context menu, and select the desired color according to the type of percussion in that Sound slot.



Here is an example of how you could color Sounds:

Your drum kit full of colors.

This helps you see much quicker where the kicks, the snares, etc., are.

You can assign colors to your Sounds, Groups, Patterns, Scenes, and Sections. It's up to you to decide which colors to use. You can use colors to distinguish different sound types, purposes, or anything else that best fits your needs and workflow.

Changing the color of items can be done in the MASCHINE software only.

3.2.5 Moving your Sounds and Groups

You can exchange the position of your Sounds and Groups at any time. This can be done in the MASCHINE software only. It can be helpful to organize your Sounds or Groups more conveniently. Notably, this allows you to move your Sounds to other pads, and create a Group that is easier to play from the pads.

Now exchange the positions of the "Kick Ektl A 2" and the "Snare Ektl A 1" in order to have both kicks on pads 1 and 2, and both snares on pads 5 and 6:

1. Click and hold the Sound slot 5 containing the "Kick Ektl A 2."

2. While holding the mouse button, drag your mouse up.
   As the mouse cursor moves up, an insertion line appears at the places where you can drop your Sound.

3. When the insertion line appears under the other kick, release the mouse button.

→ Your second kick takes place under the first kick in the Sound slot 2. It will now be triggered by the pad 2 on your controller.

In a similar manner, you will now move the "Snare Ektl A 1" to pad 5:

1. Click and hold the Sound slot 3, which now contains the "Snare Ektl A 1."
2. While holding the mouse button, drag your mouse down. When the insertion line appears above the other snare, release the mouse button.

→ Your first snare takes place above the second snare in the Sound slot 5. It will now be triggered by pad 5 on your controller.

Keep in mind that any change in the Sound slot positions also affects the pads triggering the corresponding Sounds! Hence, it is recommended you practice with your new mapping to avoid confusion.

3.3 Saving Your Project

Again, it is recommended to regularly save your work. You can then open another Project or close MASCHINE and take a break. Your tutorial Project will be recalled as it was the next time you open it.

To save your Project in the software:

► Press [Ctrl] + [S] ([command] + [S] on macOS) to save your Project.

To save your Project on the controller:

► Press SHIFT + SNAP to save your Project.

3.4 To Sum Up...

In this tutorial, you have learned to:

- Open a Project using the Browser (both on your controller and in the software).
- Replace one of the Sounds from the original Group with another Sample taken from the factory library using the Browser.
- Replace one of the Sounds from the original Group with a Drumsynth.
- Adjust the overall volume of MASCHINE along with the individual volume levels of your Groups and Sounds using your controller.
- Adjust the overall Swing of your song, both on your controller and in the software.
- Change the colors of your Sounds, and possibly of your Groups, Patterns and Scenes (more on Scenes later).
- Move your Sounds across your Group to assign them to other pads on your controller.

Once you feel comfortable with these few tasks, proceed to the next tutorial, where you will learn more on Patterns!

4 Creating Beats

In this tutorial, you will further enhance your tutorial Project and do the following:

- Double your Pattern and fine-tune it.
- Add a second Pattern for breaks.

Even though you have only dealt with drum kits until now, MASCHINE is much more than a rhythm box. Indeed, it also does a great job with melodic instruments! For those who can't wait: Please be patient, you will add a bass line in the next tutorial.

Prerequisites

It is assumed here that you followed the previous tutorials in chapter ↑2, First Steps and ↑3, Building Your Own Drum Kit. In particular, you already know how to:

- Open a Project (↑3.1, Opening Your Project).
- Use the pads to play the Sounds of the loaded Group (↑2.2, Playing with the Pads).
- Record a simple Pattern with that Group (↑2.3, Recording Your First Pattern).
- Save the current Project for a later use (↑2.5, Saving Your Project).

If you have any doubts about these tasks, please refer to the previous tutorials before proceeding!

In case your tutorial Project "My First Project" is not open, please open it now:

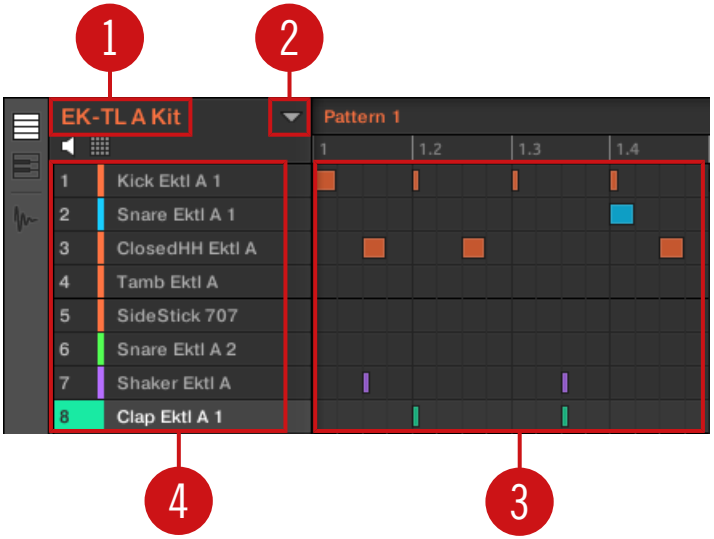
► Open the tutorial Project "My First Project."

4.1 Fine-tuning your First Pattern

You will start by improving your first Pattern using some of the powerful editing features of MASCHINE.

4.1.1 Your Pattern in the Software

First of all, have a quick look at the Pattern Editor in the software:



Your first Pattern displayed in the Pattern Editor.

In the Pattern Editor, you will note the following:

- At the top left (**1**), EK-TL A Kit is the name of the selected Group; in this instance, it is your customized drum kit.
- Under the Group name, you see a vertical list of all Sounds included in the Group (**4**). If the list does not fit into the screen, a vertical scroll bar at the right end of the Pattern Editor allows you to display the missing Sounds. At any time, the selected Sound slot is highlighted (in the picture above, the Clap Ektl A 1, triggered by the pad 1).

At the right of the Group name, you find a drop-down menu which reveals the Pattern Manager. This comprises the Pattern List view and Pattern Pad view (**2**). These represent the **Pattern slots** for that Group. At any time, the selected Pattern slot is highlighted both in the List view and in the Pad view (in the picture above, the Pattern slot 1). A Pattern contains the **events** (the notes) that plays Sounds from the current Group. More typically this is known as a sequence.

- The biggest area of the Pattern Editor (**3**), in the lower right part, displays the **events** (the notes) of the selected Pattern. In other terms, you see here what you recorded in ↑2.3, Recording Your First Pattern. Events mirror the colors of their respective Sounds. Vertical lines indicate the beats and their subdivisions. The thin white line at the top of the pattern indicates the current play position and the thin white line with a triangle is the pattern end marker. At the bottom, a horizontal scroll bar allows you to display other parts of the Pattern, in case it is too long to fit on your screen.

Now that you have a better overview of your Pattern, you can start fine-tuning it.

4.1.2 Doubling the Pattern and Adding a Variation

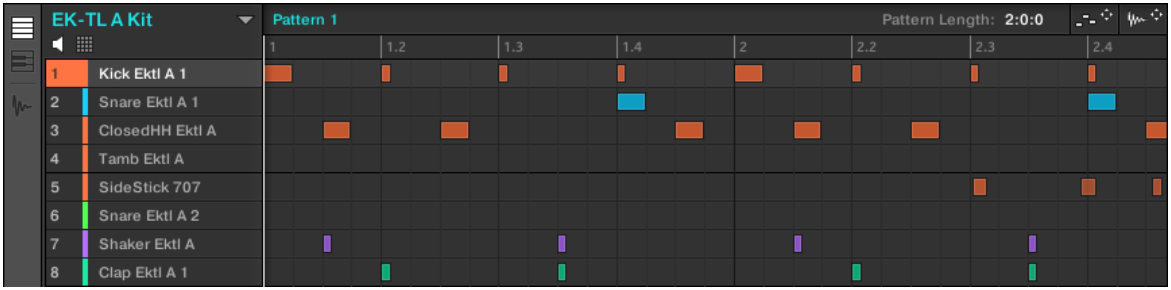
Your Pattern is currently one bar long. When played in a loop, it might get a bit monotonous. To solve this, you will exclusively use the controller to double the pattern length and add some variation.

Double is only available on your controller.

Do the following:

1. Press PATTERN and hold it.
2. While holding PATTERN, press Button 3 above the displays to select DOUBLE.
3. Release the PATTERN button.
4. Press PLAY to listen to your Pattern.
5. Check that the CONTROL button at the top left corner of your controller is lit — if not, press it to enter Control mode.
6. Press REC to start recording (the button lights up), and add a few notes with the pads when the second half of the Pattern is playing.
7. At any time, don't hesitate to undo/redo your last action(s) by pressing SHIFT + pad 1 and SHIFT + pad 2, respectively.
8. Once you are pretty much satisfied with the ending of your extended Pattern, disable REC to stop recording.

→ The Pattern has increased to two bars and now contains some added variation.



A doubled Pattern with some added side-sticks in bar 2 for variation.

When recording, you don't necessarily need to be super-accurate in your playing: The next section will show you how the Quantize functions can correct the timing of your playing to a set of discrete values.

4.1.3 Quantizing the Rhythm

It takes a little practice to be very precise when playing the pads. Sometimes (especially if you're new to MASCHINE) your timing may be slightly off and this will be evident when you record your Pattern. MASCHINE has a solution for this! It's called quantization.

A Few Notes on Quantization

Here are a few points worth noting on quantization:

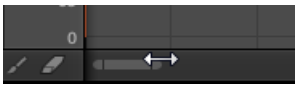
- The use of quantization notably depends on the music style of your song: In some cases, the rhythm must be perfectly tight, while in other cases, half-quantization (or even no quantization at all) would fit best.
- For now, you haven't selected any event yet, and quantization (or half-quantization) was applied to all events — in other terms, to the whole Pattern. If by chance you selected some events in your Pattern, quantization would be applied to these events only! This can be very useful if you want to build a tight rhythmic basis (e.g., kick and snare) while keeping specific events or Sounds "out of rhythm" (e.g., ornaments, slightly shifted hi-hat…). This can help create a powerful groove. For more information on selecting particular events in a Pattern, please refer to the Manual.

- You can change the resolution of the subdivisions to which events will be quantized.
- You can also quantize events directly when playing on the pads and/or recording! By default, this option is disabled. You can enable it in *Preferences > Defaults > Input > Quantize*. Please refer to the Manual for more information.

4.1.3.1 Quantizing the Rhythm in the MASCHINE Software

Zooming In Your Pattern

To check this, zoom on specific parts of your Pattern in the software. Go to the bottom of the Pattern Editor in the software where you find the horizontal scroll bar which can also be used as a Zoom tool:



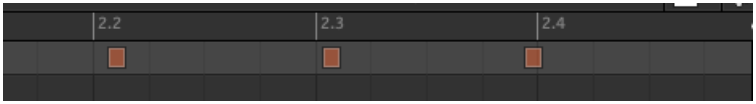
The Zoom Tool in the Pattern Editor.

► Click either end of the horizontal scroll bar, hold the mouse button, and then drag your mouse left or right to zoom in/out.

Alternatively, you can click anywhere on the scroll bar and drag upwards or downwards to zoom in and out of your pattern.

At any time, you can click the middle of the horizontal and vertical scroll bars to display another part of the Pattern.

If you zoom in, you can see that some of your hits might not be accurate:



A detailed view of your live recorded Pattern: The first two kicks are late, the third one is in advance.

MASCHINE provides you with a powerful quantization feature that allows you to correct this to the desired extent.

4.1.3.2 Quantizing the Rhythm using the Controller

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. On your controller, do the following:

► To quantize the events of your Pattern, press SHIFT + pad 5.

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

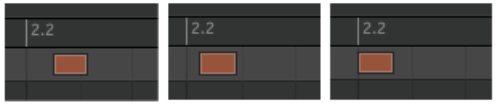
Quantizing Your Pattern, but Not Too Much

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 lets you half-quantize your events: Events are moved half way toward the closest beat/subdivision. Thus, you get a tighter rhythm while keeping its human touch and groove.

► To half-quantize the events of your Pattern, press SHIFT + pad 6.

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

Here is the effect of half-quantization and quantization on an event:



Original event, half-quantized event, and quantized event.

At any time, don't hesitate to undo/redo your last action(s) by pressing SHIFT + pad 1 and SHIFT + pad 2, respectively.

4.2 Adding a Second Pattern

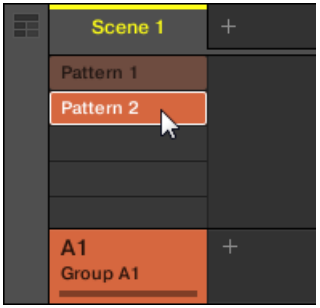
Now you can create another Pattern that you can use as a break in your song. This will introduce a few more tasks and features of MASCHINE, namely the selection of Patterns, the Pattern Length, and the Count-in.

4.2.1 Selecting a Pattern Slot

Until now, you only used the first of the 64 Pattern slots available in your Group. You will now select another Pattern slot, in which you will later record your second Pattern.

4.2.1.1 Selecting a Pattern Slot in the MASCHINE Software

► In the Ideas view of the Arranger at the top of the MASCHINE window, double-click the empty slot below Pattern 1 to create a new Pattern.



Double-click the slot below slot 1 to create a new empty Pattern.

- Pattern slot 2 is now selected. Selecting an empty Pattern slot automatically creates a blank Pattern in it.

Note that the slots' lighting behavior in the software mirrors the pads' lighting behavior on the controller:

- Pattern slot 1 is half lit: There is a Pattern inside but the slot is not selected.
- Pattern slot 2 is fully lit: There is a (blank) Pattern inside and the slot is selected.
- All other Pattern slots are dark: They contain no Pattern.

4.2.1.2 Selecting a Pattern Slot on the Controller

1. Press PATTERN and hold it.
   All pads light off except pad 1, which is fully lit. This indicates that all Pattern slots are empty except the first Pattern slot, which is additionally selected.
2. While holding PATTERN, press pad 2.

→ Pattern slot 2 is now selected. Selecting an empty Pattern slot automatically creates a blank Pattern in it.

Have a look at the pads:

- Pad 1 is half lit: There is a Pattern inside but the slot is not selected.
- Pad 2 is fully lit: There is a blank Pattern inside and the slot is selected.
- All other pads are unlit: They contain no Pattern.

4.2.2 Adjusting the Pattern Length

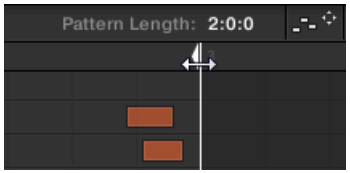
You have already learned how to change the Pattern Length by doubling the Pattern: the Pattern's length was doubled and its content reproduced in the second half (see ↑4.1.2, Doubling the Pattern and Adding a Variation). Here you will learn how to adjust the Pattern Length without affecting its events, if any.

You can adjust the Pattern Length at any time, even if you already put events in the Pattern. If you reduce the Pattern Length so that some events are not included in the Pattern anymore, these events have not been deleted: They stay at their location — if you extend your Pattern again, you can include them again.

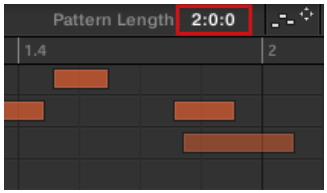
4.2.2.1 Adjusting the Pattern Length in the MASCHINE Software

In the software, you can change the Pattern Length in two ways:

1. In the timeline of the Pattern Editor, click the right limit of the Pattern (indicated by a little triangle pointing to the left) and drag your mouse horizontally in the timeline to change the Pattern Length.

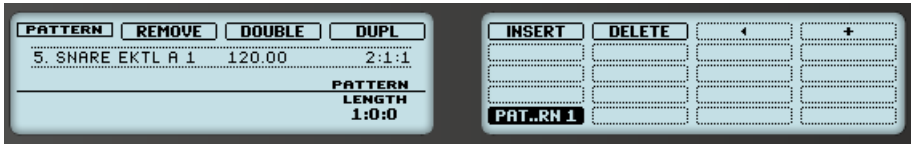


2. At the top right of the Pattern Editor, click the value and drag your mouse vertically to change the Pattern Length.



4.2.2.2 Adjusting the Pattern Length on the Controller

1. Press PATTERN and hold it.
   At the bottom of the left display, you see that the LENGTH parameter is currently set to 1:0:0, which means one bar.



2. While holding PATTERN, turn Knob 4 to set a new value for the Pattern Length.

→ The empty Pattern in the Pattern slot 2 now has a new length, as you can see in the software's Pattern Editor.

To change the resolution at which the Patten Length can be resized, refer to the Manual for information on Arranger Grid.

4.2.3 Recording a New Pattern Using the Count-in

Once your empty Pattern in Pattern slot 2 has the desired length, you are ready for recording. You have already learned how to record a Pattern by starting the sequencer then enabling the record mode, also using the metronome (see ↑2.3, Recording Your First Pattern). Here you will learn another useful aid for recording: the Count-in.

The Count-in cannot be enabled from the software. Please use your controller as described below.

1. Check that the CONTROL button at the top left corner of your controller is lit — if not, press it to enter Control mode.
2. Press SHIFT + PLAY to activate the Metronome.
3. Press SHIFT + REC to start recording using the Count-in.
4. Play on the pads.
5. To stop the metronome, press SHIFT + PLAY. To stop the recording, press REC to disable it. To stop the sequencer, press PLAY to disable it.

The Count-in allows you to prepare yourself and e.g. get the downbeat on time.

You can change the Count-in length (i.e. how long you hear the metronome alone before the sequencer and the recording start) directly from your controller by pressing SHIFT + GRID and turning Knob 4 (COUNT-IN LENGTH).

Pressing SHIFT + GRID opens the Recording Settings mode, which allows you to adjust various metronome and quantization settings. For all details, please refer to the Manual.

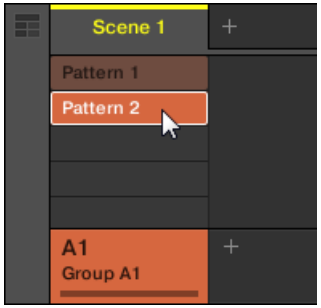
4.2.4 Switching Patterns

Once you have recorded something in the second Pattern slot, you can check that both Patterns fit well together by instantly switching between both:

4.2.4.1 Switching Patterns in the MASCHINE Software

1. Click the Play button in the Header at the very top of the MASCHINE window to start the sequencer (the Play button must be lit).

2. Click Pattern slot 1 and 2 alternatively and listen how both Patterns fit together.



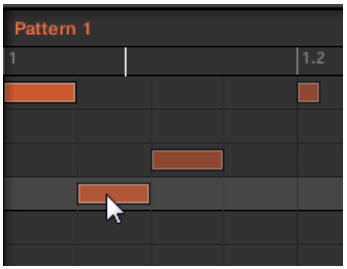
4.2.4.2 Switching Patterns on the Controller

1. Press PLAY to start the sequencer.
2. Press and hold PATTERN.
3. Press pad 1 and pad 2 alternatively and listen how both Patterns fit together.

4.3 Editing Patterns in the Software

In the MASCHINE software, the Pattern Editor allows you to precisely tailor new or existing Patterns. Only the main mouse actions are mentioned here.

1. To create a new event, double-click into the grid at the desired location.



Double-click into the Grid to create an event. Right-click it to delete it.

2. To clear an event, right-click it.
3. To move an event, drag it (i.e. click it, hold the mouse button, drag your mouse to the desired location, and release the mouse button). Dragging horizontally will shift the event in time for the same Sound, while dragging it vertically will move it to another Sound while preserving its timing.
4. To stretch an event, drag its right border (this makes more sense for melodic, sustained instruments than for percussive sounds).

When you create, drag or stretch an event, your action is automatically quantized according to the current quantization resolution.

You have the Pencil tool at your disposal for editing events in the Pattern Editor. For more information, please refer to the Manual.

4.4 Saving Your Project

Again, it is recommended to regularly save your work. You can then open another Project or close MASCHINE and take a break. Your tutorial Project will be recalled as it was the next time you open it.

To save your Project in the software:

► Press [Ctrl] + [S] ([command] + [S] on macOS) to save your Project.

To save your Project on the controller:

► Press SHIFT + SNAP to save your Project.

4.5 To Sum Up...

In this tutorial, you have learned to:

- Double a Pattern.
- Quantize or half-quantize a Pattern.
- Select different Pattern slots.
- Adjust the Pattern Length.
- Use the Count-in for recording.
- Edit Patterns in the software.

Once you feel comfortable with these few tasks, proceed with the next tutorial, where you will add a bass line to your song!

5 Adding a Bass Line

MASCHINE is not only about rhythm. It is also a full-featured sequencing environment and, as such, lets you create melodic parts as well. As an example, you will add a bass line to your song. More precisely:

- You will create a new Group with a nice bass Sound using a VST/AU plug-in synthesizer.
- You will record a few bass lines.
- You will adjust the Plug-in parameters to fine-tune the bass sound.

In addition to recording your own instruments, you can also add audio loops to your Project. For more information on how to add audio loops to your Project, and to learn about the MASCHINE Audio plug-in, refer to the MASHINE Manual.

Prerequisites

It is assumed here that you have followed the previous tutorials. In particular, you already know how to:

- Open a Project (↑3.1, Opening Your Project).
- Use the pads to play the loaded Sounds (↑2.2, Playing with the Pads).
- Select Pattern slots (↑4.2.1, Selecting a Pattern Slot).
- Record a Pattern (↑2.3, Recording Your First Pattern), possibly using the Count-in (↑4.2.3, Recording a New Pattern Using the Count-in).
- Quantize a Pattern (↑4.1.3, Quantizing the Rhythm), and edit it in the software (↑4.3, Editing Patterns in the Software).
- Save the current Project for a later use (↑2.5, Saving Your Project).

If you have any doubts about these tasks, please refer to the previous tutorials before proceeding!

In case your tutorial Project “My First Project” is not open, please open it now:

► Open the tutorial Project “My First Project.”

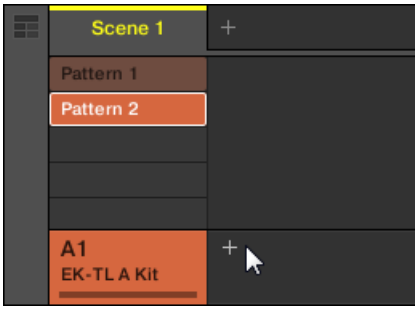
5.1 Selecting Another Group

Until now, you have only used the first Group available in your Project. You will now select another Group and load a bass sound. Loading the bass into a different Group slot will later allow us to handle it separately, and easily combine it with the existing drum kit Group and its Patterns.

In MASCHINE it is possible to have more than one Group bank. In this tutorial you will only be working with Group bank 1, which contains the first eight Group slots. Each Group bank can contain another eight Groups. The Groups in each bank will be labeled sequentially: The Groups in Group bank 1 will be labeled A1 to H1 and Group bank 2 A2 to H2. For more information on creating and selecting additional Group banks, please refer to the MASCHINE Manual, available from the *Help* menu.

5.1.1 Selecting Another Group in the Software

1. In the top part of the MASCHINE window, click the + sign to add another Group.



2. Click the name of the desired Group B1 to select it.

Click the Group slot's name to select that slot.

Upon selection, the Pattern Editor below switches to display the content of the newly selected Group slot. For now, this is still empty (no Sounds, no Patterns).

5.1.2 Selecting Another Group on the Controller

The eight buttons labeled A to H on the left of your controller represent the eight available Groups of each Bank. All are off except button A, which is fully lit and button B which is half lit indicating that a new Group can be created here. All other Groups are empty except the first Group (A), which is selected.

► Press button B to select the second Group (B1).

→ Group B1 now is selected.

Have a look at the Group buttons:

- Button A is half lit: There is a Group but it is not selected.
- Button B is fully lit: This Group is selected.
- All other Group buttons are unlit because their slots are empty.

5.2 Renaming and Coloring the Group

As you loaded the drum kit into the Group A1 (see ↑2.1, Loading a Drum Kit from the Factory Library), the slot automatically took the name of the loaded Group ("EK-TL A Kit"). Here you will manually rename the Group B1 to help keep your Project well organized.

This feature is only available from the MASCHINE software.

To rename a Group:

1. Double-click the Group name.

   The Group name becomes highlighted.

2. Type a new name (e.g., “Bass”), then press [Enter] on your computer keyboard to confirm.

→ The new name replaces the default name.

A new name for the Group B1.

Now quickly give your Groups different colors:

► Right-click each Group, select *Color* in the context menu, and select the desired color in the palette.

New color for the Bass Group.

5.3 Using an Instrument Plug-in for the Bass

In addition to using the internal sounds of MASCHINE, you may also use 32-bit and 64-bit VST/AU plug-ins from Native Instruments and third-party manufacturers. This notably allows you to make use of your favorite synthesizer and effect plug-ins!

MASCHINE already includes KOMPLETE 11 SELECT, a premium instrument and effect package for all styles of music. This Native Instruments bundle notably includes MASSIVE (the legendary synthesizer), REAKTOR PRISM (a modal synthesizer), SCARBEE MARK 1 (an iconic electric piano) and SOLID BUS COMP (a superior compressor), just to mention a few. Among other things, MASSIVE is ideal for fat bass sounds — exactly what you need here.

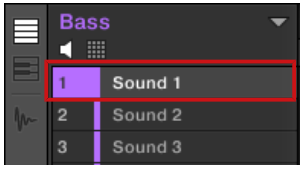
5.3.1 Browsing the MASSIVE Presets

Not only is MASSIVE included with MASCHINE, but its factory library is fully integrated into the MASCHINE workflow and its preset sounds are directly available from the MASCHINE Browser. Hence, you can choose a bass sound with the common workflow you already used for loading a Group (see ↑2.1, Loading a Drum Kit from the Factory Library) or a Sample (see ↑3.2.1, Selecting Another Snare Sample): By filtering your choices, you progressively narrow your search by selecting the MASCHINE object, Product, Type, and Subtype.

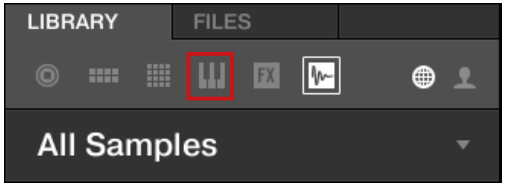
5.3.1.1 Browsing Instrument Presets in the Software

In the software, do the following:

1. Make sure that your Bass Group is selected — if not, select it again (see ↑5.1, Selecting Another Group).
2. Click the name of the first Sound slot to select that slot.

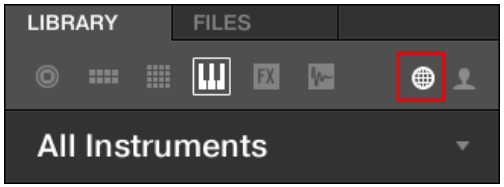


3. Show the Browser if it is currently hidden (reminder: click the magnifying glass in the MASCHINE Header).
4. At the very top of the Browser, select the keyboard icon from the File Type selector:



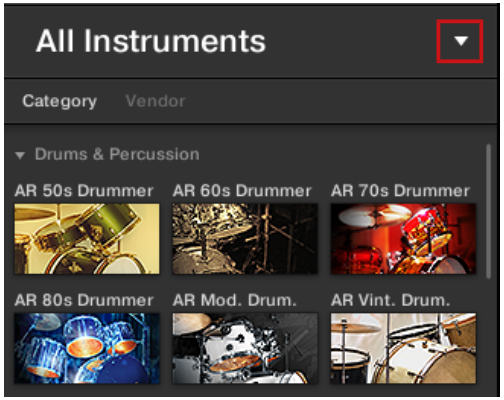
The Browser now shows the Instrument presets.

5. Select the sphere icon from the Content selector:

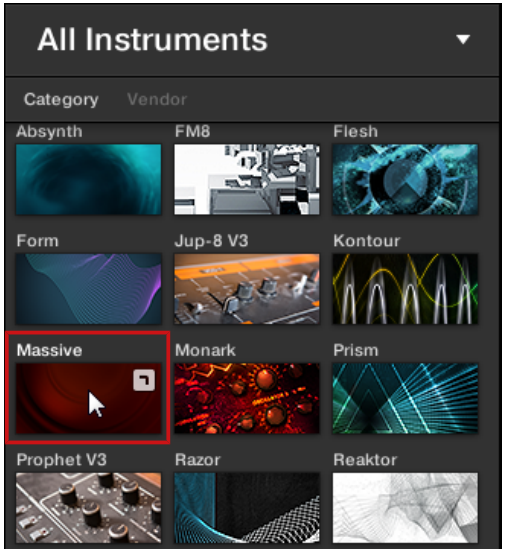


This selects the factory content for displaying.

6. In the Product selector click the drop-down arrow…

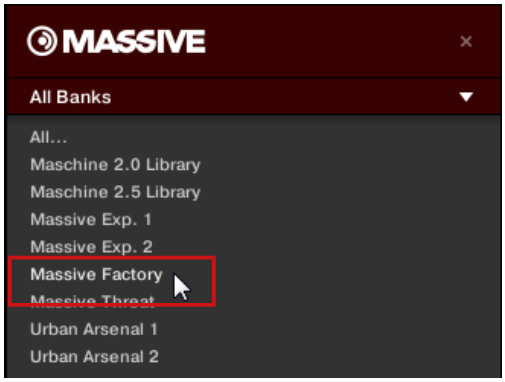


7. …and select Massive:

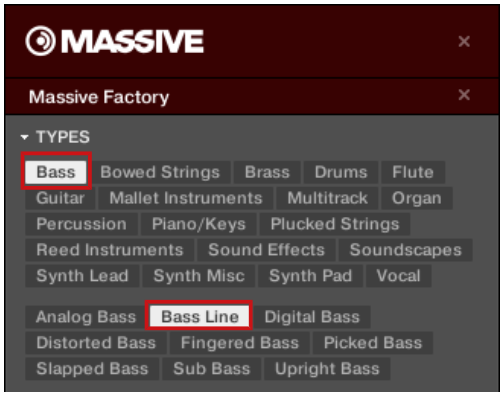


This will limit the list of presets displayed to the MASSIVE presets.

8. Click All Banks to reveal a list of all MASSIVE banks installed on your computer:



9. From this list, click Massive Factory.
   This will update the results list with only presets from this bank.
10. In the Tag Filter below, click Bass in the TYPES section.
11. Click Bass Line in the Sub-Type section to further narrow your search.



→ You can now load a bass preset by double-clicking its entry in the result list below.

5.3.1.2 Browsing Instrument Presets on the Controller

On your controller, do the following:

1. Press button B to select the Group slot B1.

2. Press the pad 1 to select the Sound slot 1. Pad 1 should be fully lit.
3. Press BROWSE to show the Browser. The BROWSE button should be lit.
4. Button 4 should not be illuminated. If it is illuminated, press Button 4 to deselect USER.
5. Press Button 1 or 2 to select INSTRUMENTS.
6. Press the Page buttons until PRODUCT is selected.
7. Turn Knob 1 under the displays until the Product field on the left display turns to MASSIVE.
   The Browser will now show MASSIVE plug-in presets only.
8. Turn Knob 2 until the Bank field is set to MASSI..E FACT ("Massive Factory").
   The Browser will now show MASSIVE presets from the MASSIVE FACTORY library only.
9. Press the Page buttons until TYPES / MODES is selected.
10. Turn Knob 1 until the Type field is set to BASS.
11. Turn Knob 2 until the Sub-Type field is set to BASS LINE.
    On the right display, you now see the list of MASSIVE's bass presets.

→ You can now select bass presets by turning Knob 8, and load the selected preset into the selected Sound slot (Sound slot 1 in this example) by pressing Button 8. But don't leave Browse mode yet: You will learn about some useful features for choosing a bass in the next two sections.

5.3.2 Switching to Keyboard Mode

In order to choose a suitable bass preset, you can make use of the Autoload feature (see ↑3.2.1, Selecting Another Snare Sample for more information): This will directly load a Preset into your Project as you select them in the Browser, allowing you to play them on the pads together with the drum kit Patterns you have already recorded.

As a reminder (in the software):

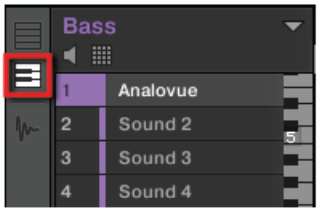
► In the software, click the Autoload button at the bottom of the Browser to activate it:

→ Each preset is now automatically loaded into the Sound slot 1 when selected in the Browser's result list.

For now, you can hear the presets only by pressing the pad 1, which triggers a single note (by default C3). This is not ideal for choosing a preset — not to mention for recording a bass line. Hence, for melodic instruments like your bass, MASCHINE provides another mode for the pads called **Keyboard mode**, in which the pads play **different notes of the same Sound**.

5.3.2.1 Switching to Keyboard View in the Software

► At the left of the Pattern Editor, click the Keyboard View button (with a keyboard icon) to activate the Keyboard view.



The Keyboard View button.

The Pattern Editor shows a vertical keyboard at the right of the Sound slots. The rows in the grid now represent each note for the selected Sound slot, instead of representing each Sound slot.

The Keyboard mode on your controller and the Keyboard view in the software are strictly equivalent: By switching to Keyboard view in the software, you also switch your controller to Keyboard mode; by disabling the Keyboard mode on your controller, you also disable the Keyboard view in the software.

5.3.2.2 Switching to Keyboard Mode on the Controller

► Press SHIFT + PAD MODE (at the left of the pads).

→ From now on, your 16 pads will not trigger the 16 Sound slots of your Group, but instead 16 notes of the selected Sound. This will make both choosing a bass preset and recording a bass line much easier!

To disable this Keyboard mode, press SHIFT + PAD MODE again.

As long as the Keyboard mode is active, the PAD MODE button is half lit to remind you it is switched on.

Other pad modes are also available. For a detailed description of all pad modes, please refer to the Manual.

5.3.3 Adjusting the Root Note for the Pads

While trying out various bass presets on the pads, you will note that they are playing quite high notes. This is because your 16 pads play by default the notes from C3 to D#4 — not the most appropriate notes for playing bass. Hence, you need to lower the notes played by the pads.

1. Press and hold PAD MODE.
   You will note that, in Keyboard mode, the right display shows you which note will be played by each pad.

2. Press Button 5 OCT- until the base key field is set to C1.
3. Release PAD MODE.

→ Your pads now play two octaves lower.

This setting is only relevant for your controller: Indeed, in the software the vertical keyboard already displays all notes (use the vertical scroll bar on the right to display them all).

You now can choose a bass sound:

1. If you left Browse mode in the meanwhile, press BROWSE to enter it again.
2. Load various bass presets into Sound slot 1 and play them on the pads to choose the bass sound you would like to use.
3. Now choose the Sound “Analovue,” because it both has a nice bass content and some high-frequency ornaments. Moreover, it holds interesting rhythmic content synchronized to the Project tempo!
4. Once you have found a bass to your liking, deactivate BROWSE to leave the Browser.

In this example you don’t need to specifically load the selected Sound, since it is already loaded via the Autoload function.

5.4 Recording a Bass Line

You are now ready to record a bass Pattern. This will allow us to repeat many of the tasks you have learned until now.

5.4.1 Recording a Bass Pattern

On your controller, do the following:

1. Check that the CONTROL button at the top left corner of your controller is lit — if not, press it to enter Control mode.
2. Press PLAY.
   You hear your drum Pattern playing.
3. Practice with the bass to get familiar with your instrument.
4. When you feel ready, press REC (the button lights up) and start recording a bass line.
5. When you are done, deactivate REC.

Don't forget to reuse all you have learned in the previous tutorials for recording Patterns: using the metronome, using the Count-in, adjusting the Pattern Length, editing the recorded Pattern, etc. If you have any doubt about these tasks, please refer to the previous tutorials (notably in section ↑4, Creating Beats and chapter ↑2.3, Recording Your First Pattern).

5.4.2 Recording Another Bass Pattern

A single bass line is obviously not enough for your whole song. Now record a second one that you could use as variation.

1. Switch to the second Pattern slot. As a reminder, you can do this on your controller by pressing PATTERN + pad 2, and in the software by double-clicking the Pattern slot 2 in the Ideas view.
2. Record a second Pattern. Again, don't hesitate to reuse the various Pattern recording/editing tasks that you have already learned.

Check that both Patterns fit well together by switching repeatedly between both Pattern slots.

5.4.3 Loading an Additional Bass Sound

To enhance your song further, you will load another bass Sound next to "Analovue." This second bass could for example play rhythmic lines with somewhat higher frequencies.

Selecting the Sound Slot 2

Before you load another Sound, you first need to select another Sound slot — e.g., Sound slot 2.

In the software, you can select the Sound slot 2 as usual by clicking its name in the Pattern Editor.

On your controller, you will notice that pressing pad 2 only is not working for selecting Sound slot 2: Indeed, since your pads are in Keyboard mode, they don't play/select each Sound slot but play each note of the same Sound slot 1. To circumvent this, do the following on your controller:

1. Press and hold SELECT.
2. While still holding SELECT, press pad 2 to select Sound slot 2.

→ Sound slot 2 is now selected.

Holding SELECT while pressing the pad selects the Sound slot regardless of which pad mode is active; on the contrary, pressing the pad only does not select the Sound slot if the Keyboard mode is active. Moreover, when holding the SELECT button, you don't hear the Sound when you press the pad. This can be very useful when your song is playing and you don't want the audience to hear your selection!

Loading and Recording Another Bass

► Once Sound slot 2 is selected, repeat the steps described above in this tutorial to load another bass Sound and to record bass lines with that Sound in the same Patterns 1 and 2 as you did for the first bass. For example, try with the Sound "Ad Voca" as a second bass!

Choosing Colors for Your Bass Sounds

Now choose different colors for the two bass Sounds as you did for the Sounds of the Group "EK-TL A Kit":

- ► Right-click each Sound slot, select *Color* in the context menu, and select the desired color.

5.5 Accessing the Plug-in Parameters

Once installed, MASSIVE is fully integrated into MASCHINE. Not only does this mean that its factory presets are available in the MASCHINE Browser, but also that the MASSIVE parameters themselves are available from within MASCHINE. Here, you will discover another area of the MASCHINE software's user interface: the **Control area**.

The Control area is located in the middle of the MASCHINE software window.

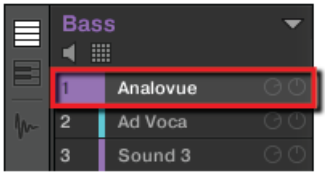
The Control area showing the MASSIVE plug-in parameters for your bass Sound "Analovue."

The Control area allows you, among many other things, to adjust the parameters of your Plug-ins.

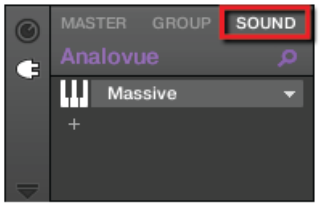
Here, you want to display the Plug-in parameters for your first bass Sound "Analovue."

5.5.1 Accessing the Plug-in Parameters in the Software

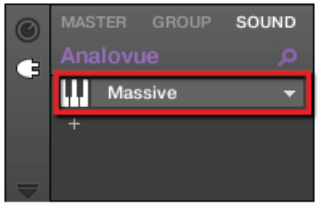
1. At the left of the Pattern Editor, click the Sound slot's name (Analovue) to select that Sound slot.



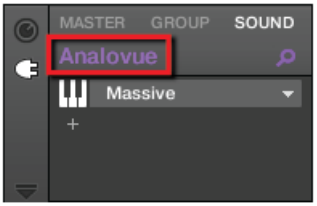
2. In the top left part of the Control area, click the SOUND tab to select it (it should be highlighted).



3. In the Plug-in List below, click Massive to select it.



→ The Control area now displays the parameters of your bass Sound "Analovue." You can check this by looking in the left part of the Control area:



The Control area indicating which parameters are displayed.

The large part of the Control area to the right is called the **Parameter area**. This gives you access to the desired parameters:

The parameters for the Sound “Analovue.”

These parameters are organized into pages that you can select for displaying by clicking the little labels at the top of the Control:

The pages allow you to display further parameters for your plug-in.

On each page, you can click and drag the knobs to adjust the corresponding parameters.

Example

As an example, adjust the amplification level of the second oscillator in your “Analovue” preset. Do the following:

1. Click the Osc2 label at the top of the Control area to select the Osc2 parameter page. The Control area now displays the parameters of that page.
2. Click the fourth knob (Osc2Amp) and drag your mouse vertically to adjust the value.

You can fine-adjust the parameter value by holding down [Shift] on your computer keyboard while you drag the mouse.

5.5.2 Accessing the Plug-in Parameters on the Controller

1. Press Button 3 to select SOUND.
   This displays parameters for the selected Sound slot.
2. If the Sound slot 1 containing the "Analovue" Sound is not currently selected, select it by pressing SELECT + pad 1.
3. Press Button 6 to select PLUG-IN
   The displays should now look like this:

→ You now have access to the parameters of your bass Sound "Analovue."

To adjust any parameter from your controller, do the following:

1. Turn any Knob 1–8 to adjust the value of the parameter indicated right above in the displays.
2. Press the Page buttons (showing two arrows) at the left of the displays to switch to another page of parameters.

Example

As an example, adjust the amplification level of the second oscillator in the "Analovue" preset. Do the following:

1. Press the Page buttons repeatedly until you see OSC2 at the left of the left display. The right display shows 6/16 at its right (indicating that this is the sixth page of parameters from a total of 16 pages).
2. Turn Knob 4 to adjust the value of the OSC2AMP parameter.

You can fine-adjust the parameter value by holding SHIFT while turning Knob 4!

5.6 Saving Your Project

Again, it is recommended to regularly save your work. You can then open another Project or close MASCHINE and take a break. Your tutorial Project will be recalled as it was the next time you open it.

To save your Project in the software:

► Press [Ctrl] + [S] ([command] + [S] on macOS) to save your Project.

To save your Project on the controller:

► Press SHIFT + SNAP to save your Project.

5.7 To Sum Up…

In this tutorial, you have learned to:

- Select different Groups and rename them.
- Load a VST/AU plug-in instrument into a Sound slot.
- Use the Keyboard mode on your controller (and the Keyboard view in the software) to play and record melodic instruments.
- Adjust the Root Note when using Keyboard mode.
- Adjust the Plug-in parameters both from your controller and in the software (using the Control area).

Once you feel comfortable with these few tasks, proceed with the next tutorial, where you will add effects to your Sounds and Groups.

6 Applying Effects

Now that you have created a few Patterns, you can spice them up with some effects.

MASCHINE provides a healthy selection of effects (FX) that can be loaded in the form of Plug-ins. Each channel (Sounds, Groups and Master) can have an unlimited number of insert effects loaded in their Plug-ins slots. In each Plug-in slot you can load an internal, Native Instruments or external effect Plug-in.

Effects can also be applied to external audio or set up as send effects. These tasks will be covered in the Manual.

In this tutorial, you will:

- Apply effects to various Sounds and Groups of your tutorial Project.
- Tweak the loaded effects.
- Modulate the effect parameters.

Prerequisites

It is assumed here that you followed the previous tutorials. In particular, you already know how to:

- Select Groups (Selecting Another Group).
- Select Sounds.
- Access the parameters of a Plug-in (Accessing the Plug-in Parameters).

If you have any doubts about these tasks, please refer to the previous tutorials before proceeding!

In case your tutorial Project “My First Project” is not open, please open it now:

► Open the tutorial Project “My First Project.”

6.1 Loading Effects

In this section you will learn how to load effects in MASCHINE.

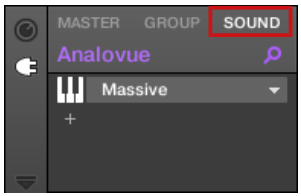
In MASCHINE, effects are just a particular type of Plug-ins; the other type are the instrument Plug-ins, which you already met in the previous tutorials. Both effect and instrument Plug-ins are handled in the same way, with the notable difference that instrument Plug-ins can be loaded only in the first Plug-in slot of Sounds, whereas effect Plug-ins can be loaded in any Plug-in slot of any channel (Sounds, Groups or Master). For the rest, you can apply to effect Plug-ins what you have learned about instrument Plug-ins (see ↑3.2.2, Loading a Drumsynth and ↑5.3, Using an Instrument Plug-in for the Bass).

In the following practical example, you will try to further shape your "Analovue" bass line by fattening its low frequency content while enhancing its overall warmth. For this, you will use one of the internal effects included with MASCHINE: the Saturator.

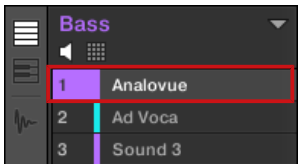
6.1.1 Loading an Effect in the Software

1. In the top part of the MASCHINE window, click the Group Bass to select it.

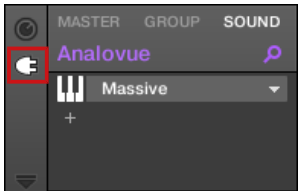
2. In the Control area below, click the SOUND tab to select the Sound level, since you want to apply the saturation to a Sound.



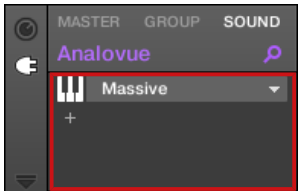
3. The actual Sound that you assign the effect to is always the one in focus. Hence, at the left of the Pattern Editor, click the Sound slot's name (Analovue) to select that Sound slot.



4. At the far left of the Control area, click the small plug icon to display the Plug-ins.

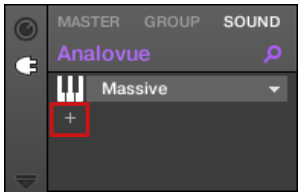


This displays the Plug-in List on the left of the Control area:



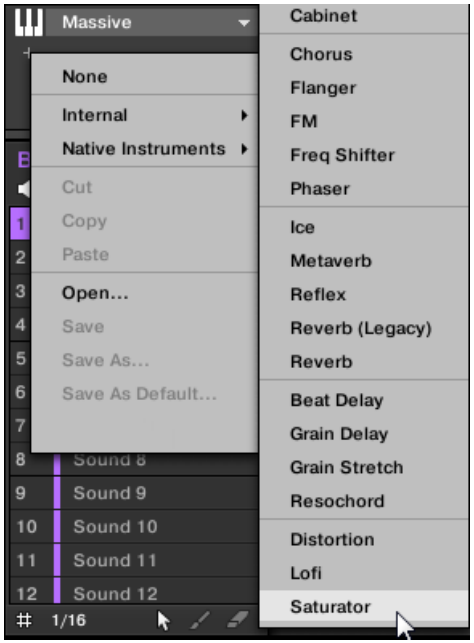
The Plug-in List in this instance contains Massive.

5. Click the "+" icon below to open the Plug-in menu.



The **Plug-in menu** opens and displays a list of all available effects.

6. In this menu, click the *Saturator* entry to load it.



→ The Saturator plug-in is now loaded and is ready to be tweaked.

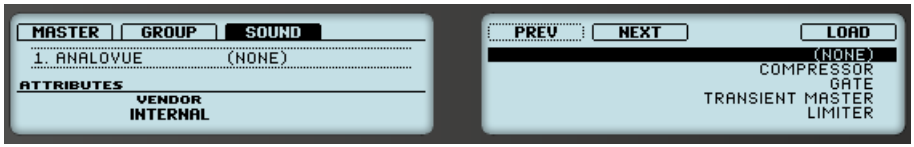
If you have VST/AU effect plug-ins installed, you may also load them from the menu by selecting the *Native Instruments* submenu (for Native Instruments products) or the corresponding vendor submenu (for third-party products).

If you wish to load a Plug-in at the Group level, just follow the same procedure except at the second step click the GROUP tab instead of the SOUND tab! Similarly, if you wish to load a Plug-in at the Master level (to process the audio of the whole Project), click the MASTER tab at this step.

6.1.2 Loading an Effect on the Controller

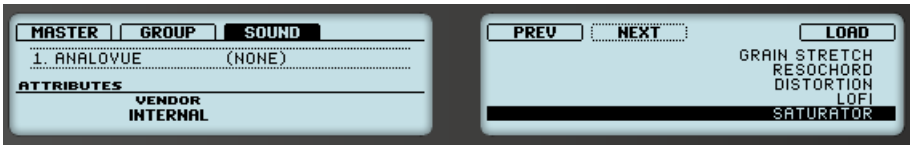
1. Check that the CONTROL button is lit at the top left corner of your controller — if not, press it to enter Control mode.
2. Press button B to select the Group "Bass" containing the bass lines.
3. Press SELECT + pad 1 to select the Sound "Analovue."
4. Press Button 3 to select the SOUND tab.
5. Press Button 6 to select PLUG-IN.
6. Press Button 7 or 8 to select the next free Plug-in slot.

7. Press SHIFT + BROWSE to select an effect.
   If you would have pressed BROWSE alone here, you would have accessed the Browser. By additionally holding SHIFT, you access the Plug-in menu instead!
8. Turn Knob 1 until the VENDOR field is set to INTERNAL.



⇨ The right display shows you the available MASCHINE effects.

9. Turn Knob 5 to select SATURATOR, and press Button 8 to load it.



10. Press SHIFT + BROWSE again to leave the effect selection.

→ The Saturator Plug-in is now loaded and is ready to be tweaked.

To load a Plug-in at the Group level, please follow the same procedure except at the third step press Button 2 (GROUP) instead of Button 3 (SOUND). Similarly, to load a Plug-in at the Master level (to process the audio of the whole Project), press Button 1 (MASTER) at this step.

6.2 Playing with Effects

Once the Saturator Plug-in is loaded into the Plug-in List, you will find its parameters displayed in the Control area when the Saturator effect is selected:

When Saturator is selected from the Plug-in List, the Control area displays its parameters.

6.2.1 Adjusting the Effect Parameters

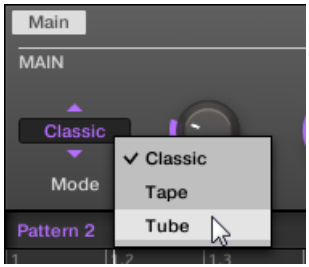
To adjust the effect parameters to your needs, the method is basically the same as when you adjusted the parameters for the MASSIVE plug-in in Accessing the Plug-in Parameters.

Press PLAY on your controller or the [Space] bar on your computer keyboard to start the sequencer. This way, you can directly hear how your settings affect the sound!

6.2.1.1 Adjusting the Effect Parameters in the Software

In the Control area, you can quickly adjust each parameter with the mouse:

1. Click in the display of the Mode selector at the left and select the *Tube* entry in the menu that opens.



   Upon your selection, the other parameters change in the Parameter area, giving you access to settings specific to this saturation mode.

2. To adjust the various parameters, click and drag the knobs to change their values, and click the buttons to activate/deactivate them.

6.2.1.2 Adjusting the Effect Parameters on the Controller

Adjusting the parameters for the Saturator.

1. Check that the CONTROL button is lit — if not, press it to enter Control mode.
2. Press Button 7 or 8 to select the Saturator plug-in.
3. Turn Knob 1 until the MODE field reads TUBE.
   This selects the Tube mode of the Saturator.
4. Similarly, adjust the other parameter values by turning the corresponding Knobs.

6.2.2 Practice Makes Perfect!

Don't hesitate to practice with loading effects in different places of the tutorial Project and adjusting their parameters. For example:

- You could load a Chorus on the Sound "Snare Ektl A 1" of the drum kit Group to slightly widen its sound (use a low value for the Mix parameter of the effect).
- In that same drum kit Group, you could apply a slowly evolving Flanger on the Sound "Shaker Ektl A" to make it livelier.
- On the way, you will note that the drum kit Group itself ("EK-TL A Kit") already has a Maximizer applied that processes the whole drum kit. Why not load a subtle Reverb to make the kit sound more natural?

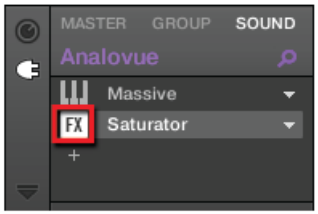
6.2.3 Bypassing Effects

Bypassing effects might come in handy whenever you want to return to a dry, unaltered signal: Such as after applying so much Reverb that you can't hear the dry signal anymore or to get rid of the feedback while using the Delay for example. Bypassing effects is also a great tool when playing live!

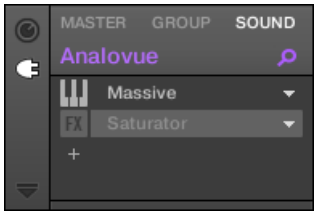
6.2.3.1 Bypassing Effects in the MASCHINE Software

1. At the top left of the Control area, click the tab of the level (either SOUND, GROUP or MASTER) where you want to bypass the effect.
2. If you want to bypass an effect at the Sound or Group level, make sure you have the right Sound (click it on the left of the Pattern Editor) and/or Group (click it on the left of the Arranger) selected.

3. To bypass the effect, click the FX icon at the left of the effect name in the Plug-in List.



The effect is grayed out to indicate that it is now bypassed.



4. To reactivate the bypassed effect, click its FX icon.

Bypassing effects can be very useful when adjusting effect parameters in order to compare the sound with/without an effect. But more than this, bypassing effects is also a powerful creative tool when playing live.

It's also possible to bypass effects directly from the Mix view. When in Mix view click the small square at the left of the effect name in the Plug-in List. Click again to reactivate the effect.

For detailed information on Mix view and using effects, please refer the Maschine Manual.

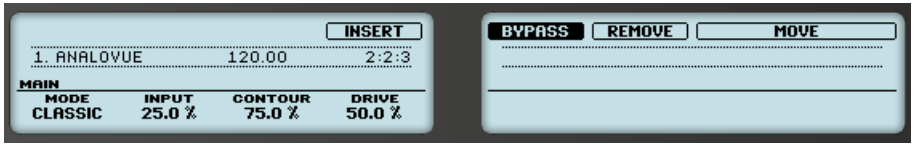
6.2.3.2 Bypassing Effects on the Controller

1. Check that the CONTROL button is lit — if not, press it to enter Control mode.
2. Depending on the level (Master, Group or Sound) the effect you want to bypass is located, do the following:
   Effect on Master: Press Button 1 (MASTER).

- Effect on a Group: Press Button 2 (GROUP) to select the Group level, then press the desired Group button (A–H) to select the corresponding Group.

- Effect on a Sound: Press Button 3 (SOUND) to select the Sound level, press the desired Group button (A–H), then press the desired pad (or SELECT + the desired pad if the Keyboard mode is active) to select the corresponding Sound.

1. Press Button 6 (PLUG-IN).
2. Press Button 7 or 8 to select the effect you want to bypass.
3. Hold SHIFT and press Button 5 above the right display to bypass the selected effect. The effect unit does not affect the sound anymore.



4. To reactivate a bypassed effect, press Button 7 or 8 to select the effect.
5. Hold SHIFT and press Button 5 to reactive the effect.

6.3 Modulating Effect Parameters

One of the really cool features of MASCHINE is the ability to **modulate** parameters from the Control area in a very easy way — both from the controller and in the software. Modulating a parameter means recording an offset to its value over time in order for these changes to be played back again automatically in your song. The modulation data is saved into the current Pattern. As an example, you could use this to create a filter sweep played in loop with your Pattern.

Modulation is not limited to effects: In MASCHINE, you can modulate just about any parameter at the Group or Sound level as soon as it has a continuous range of values — in other terms, almost any parameter controlled by a knob in the Parameter area!

6.3.1 Recording Modulation

Now try to record some simple modulation for the effect parameter of your choice.

6.3.1.1 Recording Modulation in the MASCHINE Software

If you take a closer look at the knobs in the Parameter area you will notice they have an outer ring. This ring serves for recording modulation:

► To record modulation, check that your song is playing, click the outer ring of the desired knob and then drag it vertically.

Recording modulation for a parameter.

- You will note that the colored ring usually representing the current value of the parameter turned to a colored little dash. This dash follows the movements you just recorded.

To remove modulation, do the following:

► To remove the modulation for a parameter, right-click its outer ring.

→ The dash in the outer ring turns back to the usual indicator for unmodulated parameters.

6.3.1.2 Recording Modulation using the Controller

To modulate a parameter from your controller:

1. Check that the CONTROL button is lit — if not, press it to enter Control mode.
2. Press PLAY to start the sequencer.
3. Press Button 7 or 8 to select the Plug-in slot containing the effect you want to modulate.
4. Press and hold AUTO WRITE, and turn Knob 1–8 under the displays corresponding to the parameter that you want to modulate.

→ Your modulation gets recorded now. On the next loop, the parameter changes will be reproduced.

There is also another way to record modulation from your controller: the step sequencer. More on this in ↑7, Creating Beats with the Step Sequencer!

If you want to discard the modulation you just recorded and try again, do the following:

- Press and hold ERASE, and turn the same Knob 1–8 to delete the modulation of the corresponding parameter.

6.3.2 Editing Modulation

You edit any recorded modulation in the software. For this, the Control Lane is at your disposal at the bottom of the Pattern Editor:

The Control Lane displays the changes you recorded for each automated parameter.

To edit the modulation:

1. Click the desired parameter in the list of automated parameters (on the left) to select it.
2. Drag the modulation points vertically in the Control Lane.

For more information on editing modulation and automation, please refer to the Manual.

6.4 Saving Your Project

Again, it is recommended to regularly save your work. You can then open another Project or close MASCHINE and take a break. Your tutorial Project will be recalled as it was the next time you open it.

To save your Project in the software:

► Press [Ctrl] + [S] ([command] + [S] on macOS) to save your Project.

To save your Project on the controller:

► Press SHIFT + SNAP to save your Project.

6.5 To Sum Up...

In this tutorial, you have learned the following:

- The concept of Plug-in List (and Plug-in slot).
- The hierarchic structure of a Project (Sound level, Group level, and Master level).
- How to load Plug-ins using the Plug-in menu.
- How to adjust Plug-in parameters.
- How to bypass Plug-in slots.
- How to automate Plug-in parameters.

Once you feel comfortable with these few tasks, proceed with the next tutorial, where you will discover another great way for creating beats: the step sequencer.

7 Creating Beats with the Step Sequencer

In this chapter you will learn a different way to create Patterns from your controller: the Step mode. The 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. Throughout this tutorial, you will also discover more about the Step Grid and quantization settings.

In this tutorial, you will:

- Switch the controller to Step mode and create a new Pattern in this mode.
- Adjust the Step Grid.
- Use Step mode to record modulation.

Prerequisites

It is assumed here that you have followed the previous tutorials. For this tutorial you will especially need to be acquainted with the following topics:

- Quantization basics (Quantizing the Rhythm)
- Pattern Length (Adjusting the Pattern Length)
- Adjusting Plug-in parameters (Accessing the Plug-in Parameters and ↑6.2, Playing with Effects)
- Modulation (↑6.3, Modulating Effect Parameters)

If you have any doubts about these tasks, please refer to the previous tutorials before proceeding!

In case your tutorial Project “My First Project” is not open, please open it now:

► Open the tutorial Project “My First Project.”

7.1 Building Up a Beat in Step Mode

Until now, you recorded all Patterns "live": You hit the various pads at the desired moments while the sequencer was playing and the sequencer directly recorded your hits. This is the recording workflow when the controller is in Control mode. On the contrary, in **Step mode** you progressively build up the Pattern by programming a sequence for each individual Sound of the selected Group. Notably, the sequencer does not need to be playing.

7.1.1 Using Step Mode

On your controller, do the following:

1. Press button A to select Group A (with the drum kit).
2. Press PATTERN + pad 3 to select the Pattern slot 3 (still empty).
3. Hit the pad with the Sound you want to sequence.
4. Press the STEP button at the top left of your controller to enter Step mode.
   Each pad now represents one step of a 16-step sequence: you can activate each step by pressing a pad once, lighting it up. If you press the pad again, the step is removed. This way it's quick and easy to create a drum pattern.
5. Press PLAY to start the sequencer.
   Now you will hear the sequence and see a light chasing through the pads, starting from pad 1, going up all four rows from left to right and ending at pad 16. You may continue to activate or deactivate pads to build your sequence during playback.
6. To switch to another Sound, press SELECT and the pad with the Sound you want to sequence.

→ Progressively, you build up a new Pattern.

At any time, you can leave Step mode and get back to Control mode:

▶ Press the CONTROL button at the top left of your controller to get back to Control mode.
The STEP button lights off and the CONTROL button lights up.

For now, stay in Step mode, to learn a few more things about this mode, so press STEP MODE again if needed (STEP MODE must be lit).

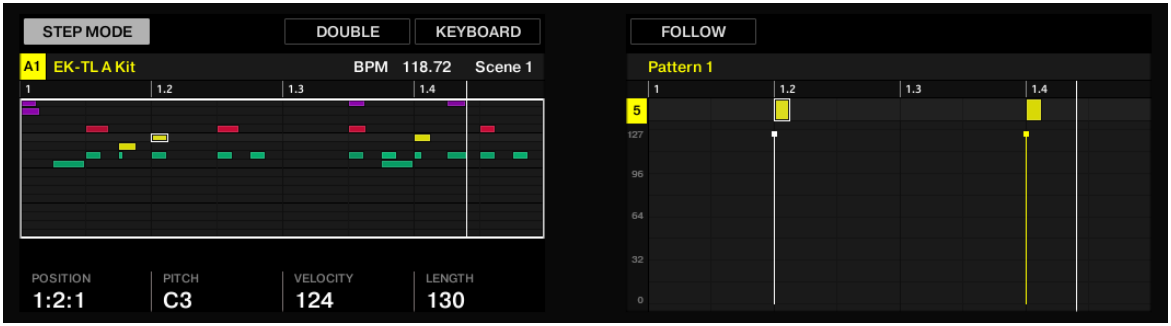
If you decided to create a Pattern more than 16 steps long, you can use Button 7 and 8 above the right display to switch between each bar or alternatively press Button 5 (FOLLOW) and MASCHINE will automatically follow the Pattern and display the steps on the pads accordingly.

7.1.2 Adjusting the Pattern Length in Step Mode

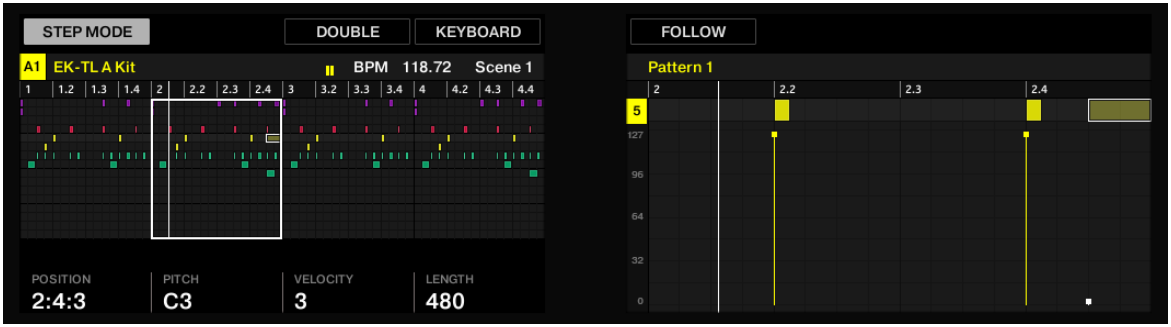
At any time, you can adjust the Pattern Length directly from the Step mode:

1. Press PATTERN and turn Knob 4 to adjust the Pattern Length.
   Only 16 steps will be represented on your pads, so if you want to program longer Patterns, you will have to switch to the previous/next 16 steps using Knob 6, or alternatively:
2. Press FOLLOW (in the Transport section of your controller) and MASCHINE will automatically follow the Pattern and display the next 16 steps of the Pattern on the pads as the sequence plays.

In Step mode, the left display always indicates which part of the Pattern is currently represented on your pads:



The 16 pads representing the full Pattern (the Pattern is one bar long).



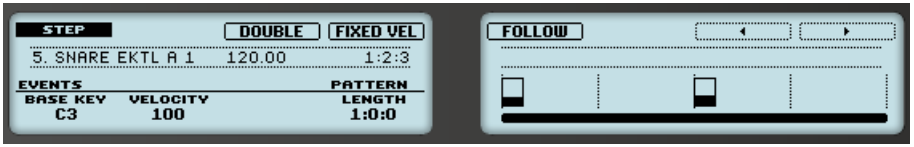
The 16 pads representing the second quarter of the Pattern (the Pattern is four bars long).

► Turn Knob 4 to adjust the Pattern Length.

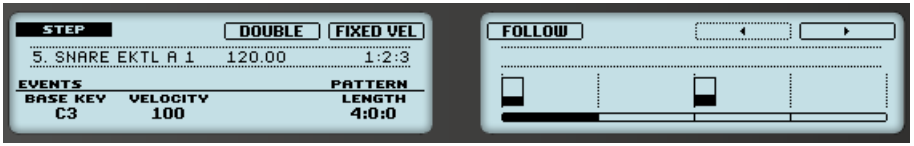
Only 16 steps will be represented on your pads, so if you want to program longer Patterns, you will have to switch to the previous/next 16 steps:

► Use Button 7 and 8 or the Page buttons (at the left of the displays) to switch to the previous/next 16 steps of the Pattern, alternatively press Button 5 (FOLLOW) and MASCHINE will automatically follow the Pattern and display the next 16 steps of the Pattern on the pads as the sequence plays.

In Step mode, the bar on the right display always indicates which part of the Pattern is currently represented on your pads:



The 16 pads representing the full Pattern (the Pattern is one bar long).



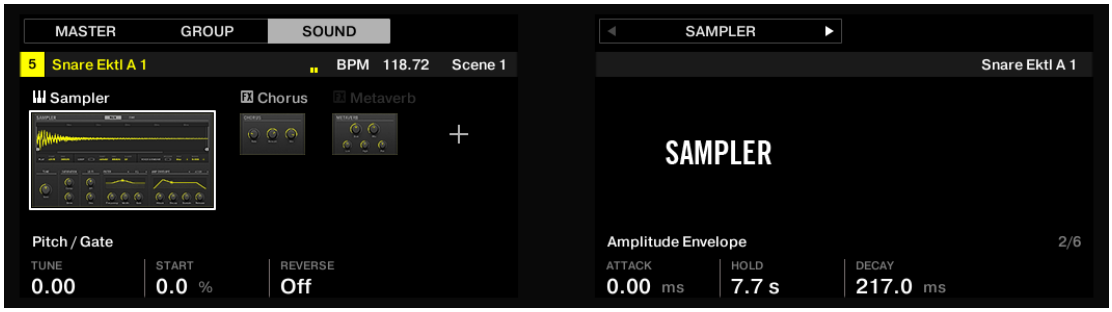
The 16 pads representing the first quarter of the Pattern (the Pattern is four bars long).

7.1.3 Recording Modulation in Step Mode

It is also possible to record modulation in Step mode. This allows you to precisely define value changes for parameters at specific moments.

The procedure is straightforward:

1. Hold the pad representing the step you want to modulate.
   While you are holding the pad, the displays turn back to a mode similar to Control mode:



2. Press Button 1 (MASTER), Button 2 (GROUP) or Button 3 (SOUND) to select the level at which you want to modulate a parameter.
3. Press the PLUG-IN button if the desired parameter is located in a Plug-in, or press the CHANNEL button if the parameter is located in Channel properties.
4. Move the 4-D encoder to the left/right to select the desired Plug-in or Channel properties.
5. Use the Page buttons (the two arrow buttons left of the displays) to select the desired page of parameters.
6. While holding the pad, turn the Knob(s) under the displays with the parameter(s) you want to record modulation for.

→ The value changes are stored for that particular step.

1. Hold the pad representing the step you want to modulate.
   While you are holding the pad, the displays turn back to a mode similar to Control mode.

2. While holding the pad, turn the Knob(s) under the displays with the parameter(s) you want to record modulation for.

→ The value changes are stored for that particular step.

7.1.4 A Few Notes on Step Mode

Here are a few points worth noting on Step mode:

- While you hold SELECT, the lighting behavior of the pads temporarily returns to Control mode: Each pad represents a particular Sound and lights up when this Sound is played. This can be helpful to quickly check which Sounds are currently playing or find a particular Sound for selecting (you then just need to press its pad to select it).
- In Step mode all notes are by definition quantized — i.e. they perfectly sit on the beats and their subdivisions (the steps). See ↑7.2, Adjusting the Step Grid below for more on this.
- You are free to use both Control mode and Step mode on the same Pattern! For example, you could start building a tight, basic beat in Step mode, then switch to Control mode and record live-played ornaments to add a human touch to your Pattern. Or you could record a natural Pattern in Control mode and correct the essential hits in Step mode.

7.2 Adjusting the Step Grid

As you have probably noticed, until now your beats were split into four steps each. In other words, the steps' default size is 1/4th beat (or quarter note), that is 1/16th note (i.e. sixteen steps fill a whole note). The set of all available steps is called **Step Grid**. The Pattern Editor is the place where you create/edit the events of your Pattern. The Step Grid is the grid that is used for the Pattern Editor.

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

Although Step Grid is introduced here in the context of the Step mode, please note that the Step Grid equally affects both the Step mode (size and number of steps) and the Control 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.

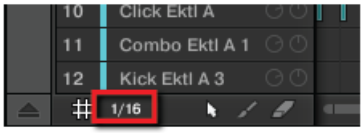
7.2.1 Adjusting the Step Grid in the MASCHINE Software

In the Pattern Editor the Step Grid is represented by vertical lines on each step and each beat:

The Step Grid with the default resolution (1/16th note).

To change the Step Grid resolution, do the following:

1. Click the Step menu at the bottom left of the Pattern Editor.



2. Select the desired step size in the list that opens.

You can directly see your modification to the Step Grid resolution:

The Step Grid after selecting 1/32nd in the Step menu.

Selecting another step size in the Step menu does not move any event in your Pattern. Instead, any edit (position, length) that you make to your events will now snap to the new step size, and in Step mode you have access to other steps on your controller.

If you select *Off* in the Step menu, the Step Grid is disabled. Nevertheless, the default step size (1/16th note) is still used to define your events in Step mode.

Similarly to changing the Pattern Length, changing the Step Grid resolution can result in a greater amount of steps in your Pattern than what your sixteen pads can represent. In that case, as described earlier, you can use the Page buttons to display the previous/next sixteen steps of your Pattern.

7.2.2 Adjusting the Step Grid on Your Controller

On your controller, to change the Step Grid resolution, do the following:

1. Press SHIFT + FOLLOW (Grid).

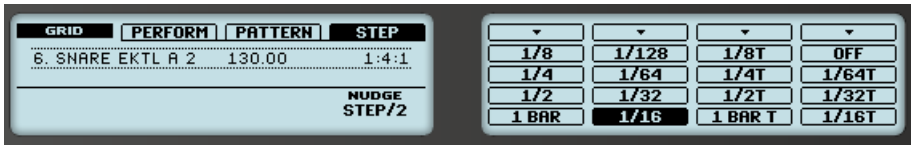
2. Press Button 4 to select STEP and access the Step Grid's resolution setting.
   Now the pads represent the various resolution values available. The available resolutions are indicated on the right display. The selected resolution is also highlighted on the right display and the corresponding pad is lit.

3. Press any pad to select another value.

→ The Step Grid uses the new resolution value.

On your controller, to change the Step Grid resolution, do the following:

1. Press and hold the GRID button.
2. Press Button 4 to select STEP and access the Step Grid's resolution setting.
   Now the pads represent the various resolution values available. The available resolutions are indicated on the right display. The selected resolution is also highlighted on the right display and the corresponding pad is lit.



3. Press any pad to select another value.

7.3 Saving Your Project

Again, it is recommended to regularly save your work. You can then open another Project or close MASCHINE and take a break. Your tutorial Project will be recalled as it was the next time you open it.

To save your Project in the software:

► Press [Ctrl] + [S] ([command] + [S] on macOS) to save your Project.

To save your Project on the controller:

► Press SHIFT + SNAP to save your Project.

7.4 To Sum Up…

In this tutorial, you have learned to:

- Switch the controller to Step mode.
- Use Step mode to record Patterns.
- Record modulation in Step mode.
- Adjust the Step Grid resolution.

Once you feel comfortable with these few tasks, proceed with the next tutorial, where you will discover how to build a full arrangement for your song.

8 Creating Scenes

In the previous tutorials you created a few Patterns for the drum kit Group and bass Group. Using these Patterns you can now start to create your own Scenes. A Scene is made of a variable number of Patterns that each represent a certain part of the song, e.g., intro, verse, chorus, break, another verse… Scenes are a very flexible way to create each part of your song.

In this tutorial, we will:

- Create Scenes by combining together the Patterns we created in the previous tutorials.
- Become familiar with Scene handling and prepare them for the Arranger.
- Discover various MASCHINE tools for performing live.

Prerequisites

It is assumed here that you have followed the previous tutorials. In particular, you already know how to manipulate Groups (↑5.1, Selecting Another Group) and Patterns (↑4.2, Adding a Second Pattern). If you have any doubts about these tasks, please refer to the corresponding tutorials before proceeding.

Furthermore, we assume that while following the previous chapters you accumulated a reasonable amount of Patterns for each Group (at least three or four Patterns per Group). If this is not the case, we invite you to do it now as you will need them to compose your song.

If your tutorial Project "My First Project" is not open, please open it now:

► Open the tutorial Project "My First Project."

8.1 Working with Scenes

The place where you assign Patterns to Scenes is in the Arranger, located in the top right part of the MASCHINE window.

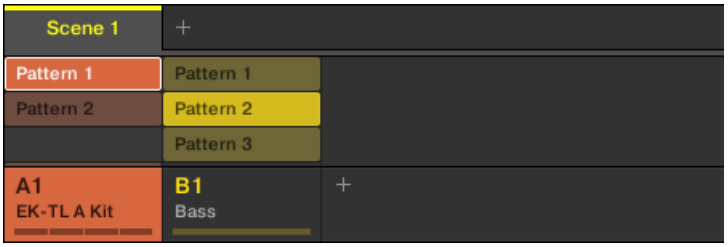
This is how Scenes work:

- Only one Scene is played at a time.

- In each Scene, you can choose to play one particular Pattern from each Group. For example, in Scene 1 we play the Pattern 1 of the Group "EK-TL A Kit" (our drum kit) together with the Pattern 2 of the Group "Bass" (our bass lines).
- In addition, a Pattern can be played in several Scenes: In fact, a Scene only contains a **reference to your Pattern**, and you can place as many references to this Pattern as you want in different Scenes. When you modify your Pattern in the Pattern Editor, all references to it are updated accordingly. This flexibility allows you to quickly experiment with different Patterns to find out how they sound together.

8.2 Assigning Patterns to Scenes

By default a Scene is created when a new Project is started, and **as soon as you select a Pattern slot** an empty Pattern is created in the selected Scene. Since you selected quite a few Pattern slots in both Groups while following the previous tutorials, Scene 1 already contains Patterns for each existing Group in the Arranger.



Scene 1 containing two Patterns: Pattern 1 from the Drum Group and Pattern 2 from the Bass Group.

To select a particular Pattern slot in the selected Scene for playback you must select the Pattern slot:

► Press PATTERN + the corresponding pad on your controller or click the desired Pattern slot in the Pattern Editor.

By repeating this for each Group you want to use in the selected Scene, you quickly compose your Scene.

It is recommend that you create Scenes while the sequencer is playing:

► Press PLAY on your controller or the [Space] bar on your computer keyboard to start the sequencer. This way, you can directly hear if the various Patterns sound good together.

In previous tutorials, when you pressed PLAY the first Scene played because it was selected by default. This is a general rule: **The selected Scene is played in a loop.** As an example, we will now build the second Scene.

Choose Your Own Workflow!

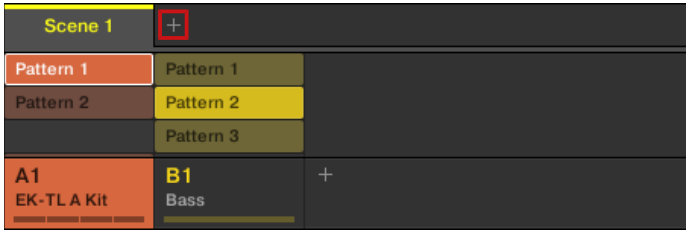
You can follow various workflows when composing Scenes:

- In the procedure described in this chapter, we'll compose Scenes one by one (first selecting a new Scene, then choosing Patterns to include from the various Groups available, then selecting the next Scene, etc.). This method allows you to quickly see how well Patterns from different Groups fit together.
- But you could also compose Scenes "Group by Group," by first selecting a particular Group (for example, the drum kit), filling a few Scenes with Patterns from that Group, then selecting the next Group, etc. This method puts the focus on how well Patterns fit together in the series of Scenes — notably this can be useful to check your transitions are working.
- You could also use any combination of the workflows mentioned above to develop a method that best fits your own way of making music! For example, you could prepare a series of rhythmic Patterns for a number of Scenes, and then go on filling Scenes one by one for the other more melodic Groups.

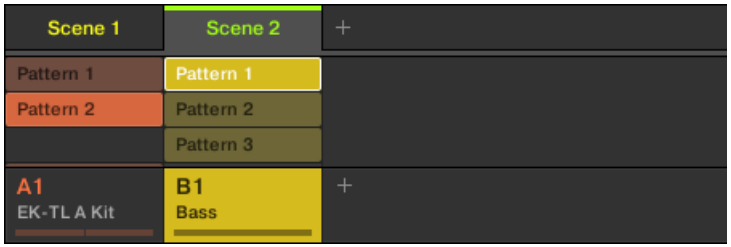
8.2.1 Creating other Scenes in the MASCHINE Software

In the software, do the following:

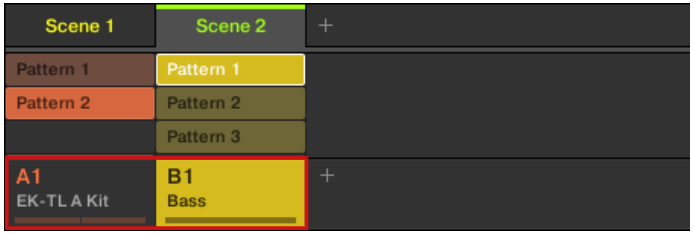
1. In Ideas view, click the + button to the right of the first Scene.



2. Click the desired Patterns for Scene 2.



The selected Patterns will play when Scene 2 is selected.



→ By repeating these two steps for all Groups you want to use in this Scene, you progressively build up a new Scene.

You might also want to remove a Pattern from a Scene:

► To remove a Pattern from a Scene, simply click it.

→ The Pattern is removed from the Scene. You will note that the corresponding Pattern has only been dimmed and not deleted. You can click the Pattern again to reselect it for the Scene.

8.2.2 Creating other Scenes using the Controller

Let's select the second Scene:

1. Press NAVIGATE + Button 2 to enter Ideas view.
2. Press and hold the SCENE button.
   The pads now represent available Scenes. For the moment only pad 1 is lit: This indicates that Scene slot 1 is selected and all other slots are empty.

3. While holding SCENE, press pad 2 to select Scene 2.
   Pad 2 lights up brightly to confirm its selection.
   Pad 1 turns half lit, indicating that Scene 1 is not currently selected.
4. Release the SCENE button.

→ Scene 2 is now selected. If the sequencer is playing, you won't hear anything because this Scene is still empty.

Now we can select one Pattern in each Group to include in this new Scene:

1. Press the desired Group button A–H to select a Group you want to use in Scene 2.
2. Press PATTERN + the desired pad to select the Pattern you want to use in Scene 2.

→ A Pattern has now been selected for Scene 2. By repeating these two steps for all Groups you want to use in this Scene, you progressively build up a new Scene.

You might also want to remove a Clip from the selected Scene:

▶ To remove the Pattern for the selected Group from the selected Scene, press PATTERN + Button 2 (REMOVE).

→ The Pattern is removed from the Scene. You will note that the corresponding Pattern is still there.

You can press SHIFT + pad 1 / pad 2 at any time to undo/redo your actions.

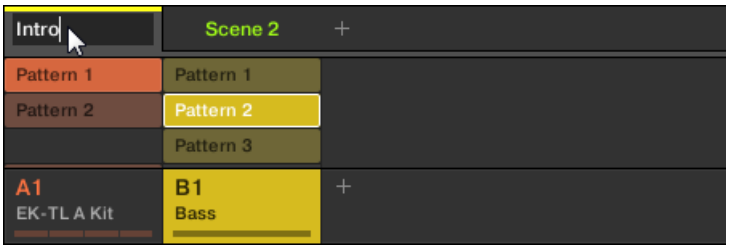
8.3 Managing Scenes

Now that we have created a few Scenes of interest, we want to organize them to make it easier to arrange them into a song when we add them later to the Arranger. For this, the Ideas view provides you with many editing facilities. Let's introduce the most important ones.

8.3.1 Renaming and Coloring Scene Slots

As with Sound slots and Groups, you can change the name and color of your Scene slots for a better visual organization, especially useful in a live situation, and for organizing parts of your song! Renaming and Coloring can only be done in the software.

1. To rename a Scene slot, double-click its current name, type a new name, and press [Enter] on your computer keyboard.



Typing a new name for the first Scene slot.

2. To assign another color to a Scene slot, right-click the Scene slot's label, select *Color* in the context menu, and select the desired color in the palette.

You can also choose custom names and colors for your Pattern slots. Please refer to the Manual for more information on this.

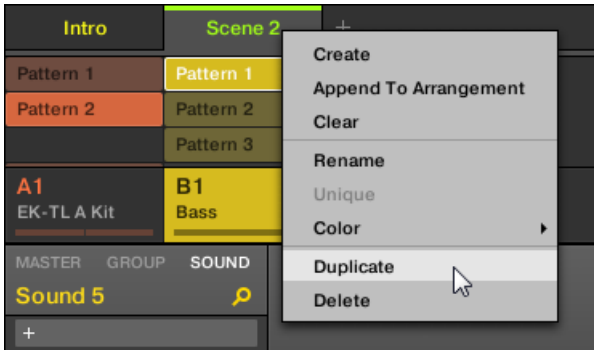
8.3.2 Duplicating and Deleting Scenes

MASCHINE offers you various editing tools for your Scenes and Scene slots. Here are some examples using your controller and a few more using the MASCHINE software.

8.3.2.1 Duplicating and Deleting Scenes in the MASCHINE Software

To duplicate a Scene in the Ideas view:

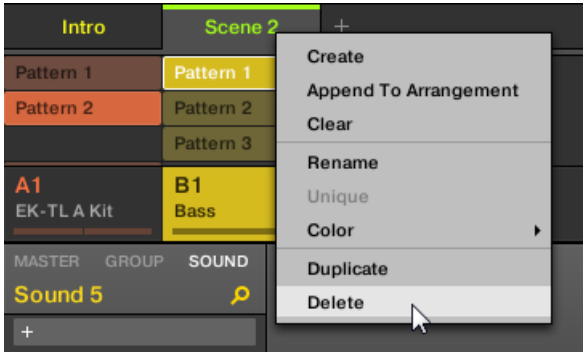
► Right-click for example the Scene slot 2 and select *Duplicate* in the context menu.



→ The content of Scene slot 2 is copied to the next Scene column and all other Scenes are moved one Scene to the right.

To delete a Scene in the Ideas view:

► Right-click for example the Scene slot 2 and select *Delete* in the context menu.



→ The content of Scene slot 2 is deleted and all other Scenes are moved one Scene to the left.

8.3.2.2 Duplicating and Deleting Scenes using the Controller

To duplicate or remove a Scene using your controller:

1. Press NAVIGATE + Button 2 to enter Ideas view.

2. Press and hold SCENE to enter Scene mode (or pin it by pressing SCENE + Button 1).
3. Press for example pad 3 to select Scene slot 3.
4. Press Button 4 (DUPL) to duplicate this Scene slot.
5. Press Button 6 (DELETE) to remove this new Scene.

→ The Scene is removed. Scenes to the right of the removed Scene are shifted one slot to the left to fill the gap.

8.4 To Sum Up…

In this tutorial, we have learned to:

- Create a Scene using our Patterns.
- Select a Scene for playing.
- Pin the various controller modes.
- Rename, color, duplicate, and delete Scenes slots.

Once you feel comfortable with these few tasks, proceed with the next chapter, where you can quickly assign your Scenes to Sections to create an arrangement.

8.5 Saving Your Project

Again, it is recommended to regularly save your work. You can then open another Project or close MASCHINE and take a break. Your tutorial Project will be recalled as it was the next time you open it.

To save your Project in the software:

► Press [Ctrl] + [S] ([command] + [S] on macOS) to save your Project.

To save your Project on the controller:

► Press SHIFT + SNAP to save your Project.

9 Creating an Arrangement

The chapter explains how to arrange your song using MASCHINE. If you followed the previous tutorials you will have created a few **Patterns** for the drum kit Group and bass Group and added them to **Scenes** using the Ideas view. To create a structured arrangement it is necessary to add Scenes to **Sections** in the Song view.

In this tutorial, we will:

- Learn how to switch from the Ideas view to the Song view.
- Learn how to create Sections.
- Learn how to assign Scenes to Sections using both the software and hardware.
- Get familiar with Section handling and prepare our song for production.

Prerequisites

It is assumed here that you have followed the previous tutorials. In particular, you already know how to manipulate Groups (↑5.1, Selecting Another Group), Patterns (↑4.2, Adding a Second Pattern) and that you have created a reasonable amount of Scenes (↑8, Creating Scenes). If you have any doubts about these tasks, please refer to the corresponding tutorials before proceeding.

If your tutorial Project “My First Project” is not open, please open it now:

► Open the tutorial Project “My First Project.”

9.1 Accessing Song view

The tutorials have so far only focused on the Ideas view were you created Patterns and assigned them to a Scene. Now you have created several Scenes you can start to add them to the Timeline in the Song view.

The Song view is where you can sequence Scenes to create your final arrangement. This process involves creating a Section on the Timeline and assigning a Scene to it. Any Scene that exists in the Ideas view can be assigned to a Section in the Song view. You can change the

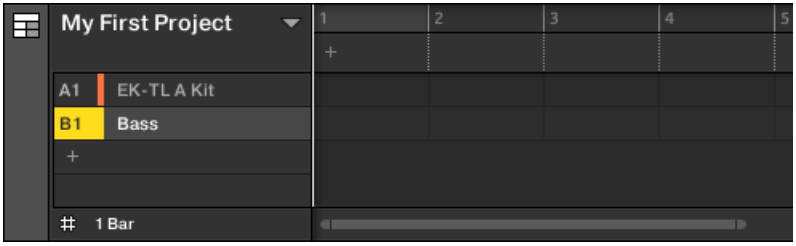
length of the Section (determining the playback length of the Scene) or re-order the Sections as you see fit. You can also re-use the same Scene in multiple Sections in the timeline, or you can choose to assign no Scene to the Section at all.

One powerful aspect of the relationship between the Ideas view and Song view is that the content in these two areas are actually one-in-the-same. This means that if you make a change to a Scene it will affect all other instances of that Scene automatically. If you place a Scene in three different Sections of the Timeline and then proceed to change the Patterns assigned to that Scene, the other two instances of that Scene also play the newly-assigned Patterns. It's therefore very easy to make changes to individual Patterns and Scenes after the arrangement has been made and immediately hear the results in the context of the arrangement, and those changes can be made in either Ideas or Song view.

To access the Song view:

- Click the Arrangement view toggle button.

The Song view is located in the top right part of the MASCHINE window and is where you organize your Sections in order to build up a song. The Arranger is empty when you open it for the first time, but it provides you with unlimited Section slots. Each slot can contain one Scene.



The empty Song view.

This is how Sections work:

- The Song view is a timeline where playback of your Sections progresses from left to right.
- Only one Section is played at a time.
- Each Section contains one only Scene.

9.1.1 Creating your First Section

To begin arranging you must start to populate the timeline with Scenes from the Ideas View. There will be no Sections when you first enter the Song view.

Song view with no Sections

To create a new Section:

► In the Arranger, click the + button above the first column.

- A new empty Section is created.

To create a new Section in the Song view using your controller:

1. Press NAVIGATE + Button 3 SONG to access the Song view.
2. Press SCENE + pad 1.

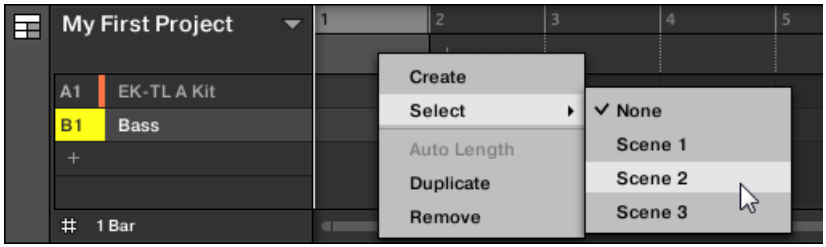
A new empty Scene is created.

9.1.2 Assigning a Scene to a Section

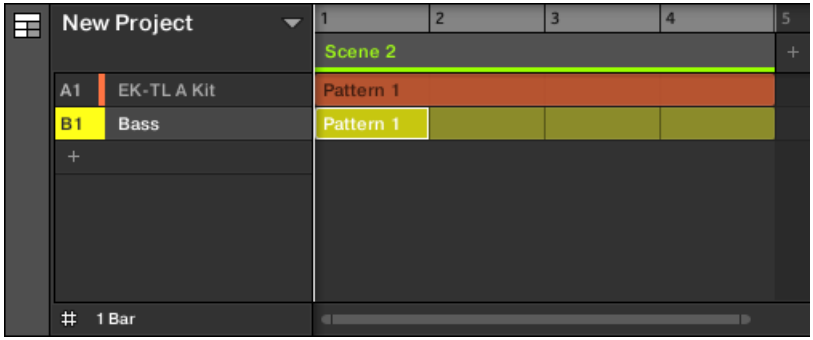
Now you have created an empty Section on the timeline of the Arranger, you can now add a Scene from the Ideas view to the Song view and start to arrange your song.

To add a Scene to a Section on the timeline of the Arranger:

► Right-click a Section slot and click *Select* in the context menu, then for example, select *Scene 2* from the submenu.



→ The selected Scene is added to the Section.



To assign a Scene to a Section in the Song view using your controller:

1. Press NAVIGATE + Button 3 (SONG) to access the Song view.
2. Press SCENE then turn Knob 2 to select the Scene you want to assign to the Section.

→ The selected Scene is assigned to the Section.

By repeating this for each new Section, you can quickly assign Scenes to the Timeline of the Song view.

9.2 Managing Sections

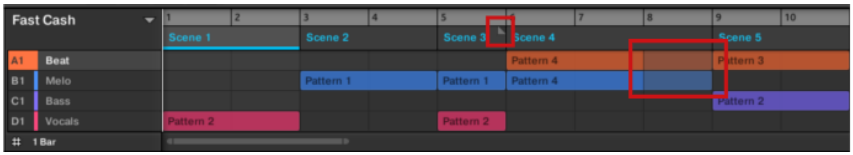
Now that you have added your Scenes to a few Sections, you can start to organize them into a song. For this, the Song view provides you with many editing facilities.

9.2.1 Adjusting the Length of a Section

Before you start to adjust the length of a Section, it's important to understand a few rules on how Sections, Scenes and Patterns are displayed within the Song view:

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

- **Auto Length**: By default, the length of a Section corresponds to the longest Pattern used in the referenced Scene. Inserting a new Pattern that is longer than the Section automatically extends the Section. Removing the longest Pattern from the Section automatically shrinks the Section. Extending/shrinking the longest Pattern automatically extends/shrinks the Section accordingly.
- **Manual Length**: A Section can be manually adjusted to a set length. This can be shorter or longer than the Pattern contained within the referenced Scene. Inserting or removing Patterns from the Scene will not alter the length of the Section, however the length of a Section can be altered by dragging the mouse directly in the timeline or by using your MASCHINE controller.
- If a Pattern is shorter than the Section it is placed in, it is automatically repeated until the end of the Section (the last repetition might be shortened). These repetitions are automatically generated and cannot be edited. They reference the same Pattern placed at the beginning of the Section. Repetitions of a Pattern are indicated by darker blocks in the Arranger, and a Truncated Pattern marker will appear on the right-hand side of the Section to indicate that a section of the Pattern is hidden:



- If a Section has been manually shortened, only the visible part of the Pattern within the set length will be audible.
- Scenes always start at the beginning of the Section.

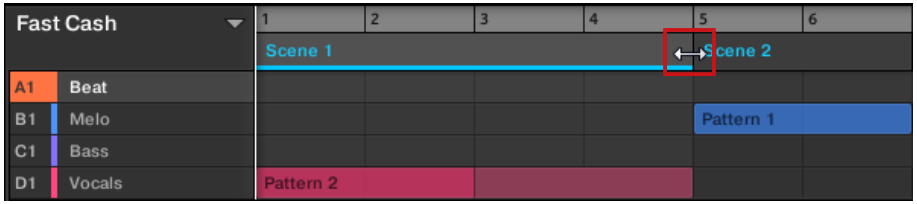
9.2.1.1 Adjusting the Length of a Section Using the Software

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

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

To lengthen a Section:

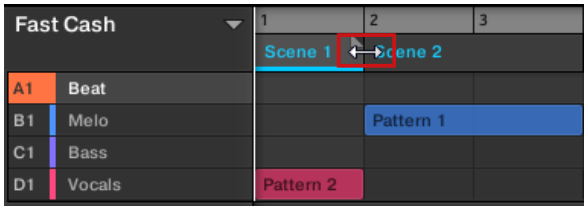
► Click and drag the end marker of the Section to the right.



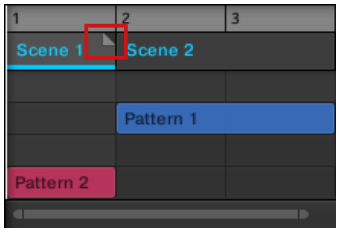
→ The Scene will be repeated if the adjustment is longer than the referenced Pattern.

To shorten a Section:

► Click and drag the end marker of the Section to the left.



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



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

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

9.2.1.2 Adjusting the Length of a Section Using the Controller

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

1. Press NAVIGATE + Button 3 SONG to access Song view (if you are not already in the Song view).
2. Press the SCENE button to enter the Section page.
3. Press Button 1 to pin the page if required.
4. Select the pad representing the Section you want to adjust.
5. Turn Knob 4 to adjust the length of the Section as required. Turning the Knob left will shorten the Section, turning it right will lengthen the Section.

6. Press SHIFT and turn Knob 4 to change the Section length in smaller increments.

→ The Section length is adjusted accordingly.

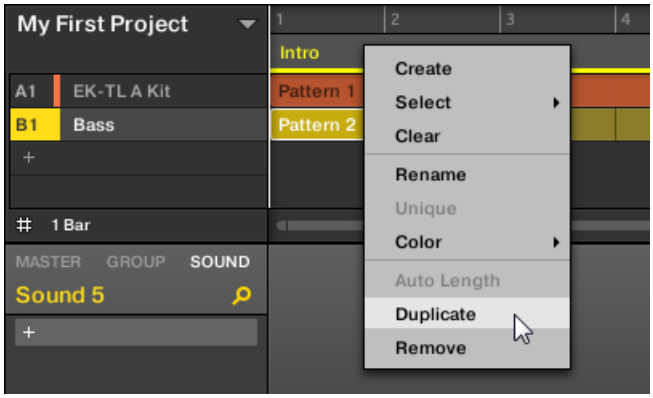
9.2.2 Duplicating and Removing Sections

MASCHINE offers you various editing tools for Section slots. Here are some examples using your controller and a few more using the MASCHINE software.

9.2.2.1 Duplicating and Removing Sections in the MASCHINE Software

To duplicate a Section in the Arranger:

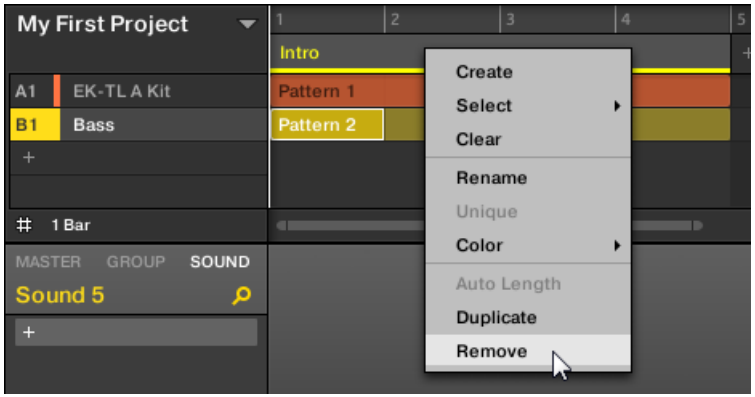
► Right-click for example the Section slot 2 and click *Duplicate* in the context menu.



→ The content of Section slot 2 is copied to the next Section column and all other Sections are moved one Section to the right.

To remove a Section in the Arranger:

▶ Right-click for example the Section slot 2 and click *Remove* in the context menu.



→ The content of Section slot 2 is removed and all other Sections are moved one Section to the left. Note that the Section has only been removed from the arrangement but has not been deleted.

9.2.2.2 Duplicating and Removing Sections using the Controller

To duplicate or remove a Section using your controller:

1. Press NAVIGATE + Button 3 SONG to access Song view (if you are not already in the Song view).
2. Press and hold SCENE to enter Section mode (or pin it by pressing SCENE + Button 1). The right display shows the names of your Section slots. Additionally, the selected Section slot is highlighted.
3. Press for example pad 3 to select Section slot 3.
4. Press Button 2 to select ARRANGE.
5. Press Button 4 (DUPL) to duplicate this Section slot.

⇨ A new Section slot is inserted right after Section slot 3 with the same properties and content (Scene). The existing Section slots are shifted one slot to the right to make way for the new entry.
Note that the duplicate slot is automatically selected.

6. Press Button 6 (REMOVE) to remove this new Section slot from your arrangement.

→ The Section slot is removed. Sections to the right of the removed Section are shifted one slot to the left to fill the gap.

9.3 Selecting a Loop Range

We already learned how to select a Section by clicking its Section slot in the software's Arranger or by pressing SCENE + the desired pad on your controller (see Adding other Sections). A single selected Section is always looping automatically.

But MASCHINE also allows you to select several consecutive Sections and play them one after the other in a loop. Here's how to select the desired range of Sections.

9.3.1 Selecting a Loop Range in the MASCHINE Software

The Arranger provides a timeline located above the slot labels that always show the current loop range:

The Arranger timeline showing that the Section 2 is looped.

To select another loop range:

1. In the Arranger timeline, click the end column of the start Section and hold the mouse button.
2. Drag horizontally onto the column of the end Section and release the mouse button.

→ The start and end Sections along with all Sections in-between are played one after the other in a loop. The Arranger timeline indicates the new loop range.

The loop range now contains three Sections.

You will note that selecting a single Section amounts to selecting a one-Section-long loop range.

9.3.2 Selecting a Loop Range using the Controller

On your controller:

1. Press NAVIGATE + Button 3 SONG to access Song view (if you are not already in the Song view).
2. Press and hold SCENE to enter Section mode (or pin it by pressing SCENE + Button 1).
3. Press and hold the pad corresponding to the start Section.
4. While holding the first pad, press the pad corresponding to the end Section.

→ The start and end Sections along with all Sections in-between are played one after the other in a loop.

9.4 Saving Your Project

Again, it is recommended to regularly save your work. You can then open another Project or close MASCHINE and take a break. Your tutorial Project will be recalled as it was the next time you open it.

To save your Project in the software:

► Press [Ctrl] + [S] ([command] + [S] on macOS) to save your Project.

To save your Project on the controller:

► Press SHIFT + SNAP to save your Project.

9.5 To Sum Up...

In this tutorial, we have learned to:

- Create Sections referencing our Scenes.
- Select a Section for playing.
- Pin the various controller modes.
- Rename, color, move, insert, and delete Sections slots.
- Select the desired loop range for playing.
- Adjust the behavior of the sequencer when jumping between Sections or loop ranges.

Once you feel comfortable with these few tasks, proceed to the MASCHINE Manual, where you can learn about some of the more powerful features of MASCHINE.

10 Playing Live

At last we come to the real point of the Scenes: playing your song!

Creating a Studio Track or Performing Live

If you are composing a studio track that you plan to export as is, you can assign your Scenes to Sections in the Song view and arrange your song so that your whole track can be played in one go from the very first Scene to the very last one. For more information on arranging your song and using Sections, refer to: ↑9, Creating an Arrangement.

If you are preparing a track for a live performance, you will probably want to trigger different Scenes using the pads. To help with this MASCHINE provides some useful tools.

10.1 Performing with Scenes and Sections using the Pads

MASCHINE provides you with settings to fine-tune the timing of the jump between the Scenes and Sections:

- The **Perform Grid** lets you quantize the Scene transitions: You can choose the point at which the playback will leave the current Scene (Ideas view) or Section (Song view). 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/Section, and Off. If you choose Off, the Scene/Section change will be performed immediately after you select the next loop.
- The **Retrigger** setting lets you decide where the next loop will start:
    - If Retrigger is enabled, the next Section (Ideas view) or Section (Song view) that is selected will be forced to play from the start. This is useful if you always want your Scenes or Sections to play from the beginning regardless of what's happening elsewhere in the music.

- If Retrigger is disabled (default setting), the next Scene or Section that is selected will play from the same offset to the beginning: for example, leaving the current Section on beat 3 will cause the new Section to start playing on its beat 3. This ensures that the global groove of your track is not interrupted.

10.1.1 Jumping between Scene or Sections in the Software

In the software, the Perform Grid and the Retrigger setting can be adjusted in the MASCHINE Header.

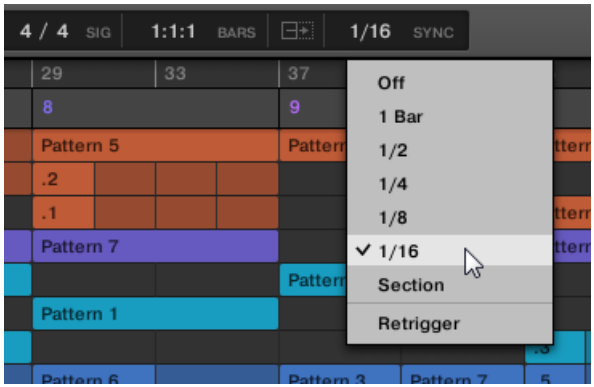
In Ideas view the Perform Grid and the Retrigger controls the setting for jump between **Scenes** and in Song view it sets the grid for the jump between **Sections**.

To set the Perform Grid and the Retrigger settings:

1. Click the Arranger View button to access Ideas view for Scenes or Song view for Sections.

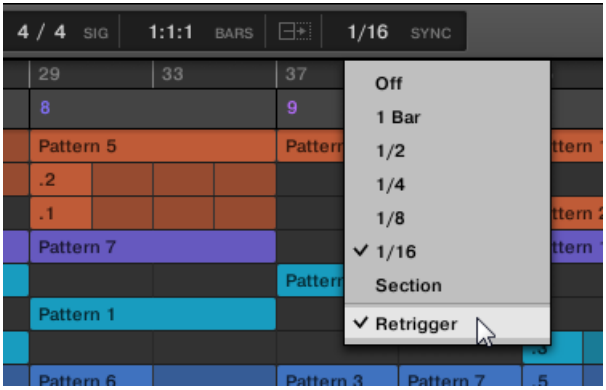
⇨ When the Arranger View button is illuminated, Song view is active.

2. To adjust the Perform Grid, click the Performance Grid menu in the Header and select the desired division from the menu:



→ The next time you select a new Scene/Section or group of Scenes/Sections for looping, the switch will happen on the next division selected here.

▶ To enable/disable the Retrigger setting, click the Performance Grid menu in the Header and select *Retrigger* from the menu.



→ The next time you select a new Scene/Section or group of Scenes/Sections for looping, the new loop will start from the beginning of the first Scene/Section (Retrigger enabled) or from the same position as where it left the current Scene/Section (Retrigger disabled).

10.1.2 Jumping to Other Scenes using the Controller

In Ideas view the Perform Grid and the Retrigger controls the setting for jump between **Scenes** and in Song view it sets the grid for the jump between **Sections**.

To set the Perform Grid and the Retrigger settings:

1. Press CONTROL.
2. Press SCENE.
3. Press SHIFT + SCENE to select Scene mode or Section mode.
4. Press and hold GRID to enter Grid mode (or pin it by pressing GRID + Button 1).
5. Press Button 2 to select PERFORM.
6. Press a pad to select the desired value, for example pad 9 (for 1/4, a quarter note).

→ The next time you select a new Scene/Section or loop range, the switch will happen on the next quarter note.

Adjusting the Scene Retrigger Setting

To adjust the Scene Retrigger setting:

1. Press CONTROL.
2. Press SCENE.
3. Press and hold SHIFT + SCENE to enter Scene mode (or pin it by pressing SCENE + Button 1).
4. At the bottom left corner of the left display you see the current RETRIGGER value (Off by default).
5. Turn Knob 1 to select On.

→ The next time you select a new Scene or loop range, it will start from the beginning.

Adjusting the Section Retrigger Setting

To adjust the Section Retrigger setting:

1. Press CONTROL.
2. Press SCENE.
3. Press and hold SHIFT + SCENE to enter Section mode (or pin it by pressing SCENE + Button 1).
4. Press the Right Page button to access page 2.
5. At the bottom left corner of the left display you see the current RETRIGGER value (Off by default).
6. Turn Knob 1 to select On.

→ The next time you select a new Section or loop range, it will start from the beginning.

11 Quick Reference

This chapter introduces you to the main areas and concepts of MASCHINE. In the following sections, you will find:

- Information that will help you in your every-day work with your controller (↑11.1, Using Your Controller).
- An overview of a MASCHINE Project and a description of both its structure and content (↑11.2, MASCHINE Project Overview).
- A basic reference of your hardware controller, naming and quickly describing each of its control elements (↑11.3, MASCHINE Hardware Overview).
- A basic reference of the MASCHINE software (↑11.4, MASCHINE Software Overview).

For a comprehensive description of every feature and setting, please refer to the Manual.

11.1 Using Your Controller

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

For a complete reference of all shortcuts available on your controller, please refer to the Manual.

11.1.1 Controller Modes and Mode Pinning

The controller has different modes of operation.

In addition to the default Control mode (in which the pads trigger your Sounds), there are many other modes for accomplishing various tasks. These modes are enabled by specific buttons on your controller (e.g., SCENE, BROWSE, GRID, etc.).

For some of these modes, you need to hold the button to keep the mode active. For example, when you press the PAD MODE button, the displays will show pad-specific control options; when you release it, the controller switches back to Control mode.

The buttons that are required to be held are in the middle column of your controller (left of the pads) along with the NOTE REPEAT, GRID, AUTO WRITE, REC buttons:

Each of these buttons needs to be 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:

1. Press and hold a controller mode button, e.g., GRID.
2. Press Button 1 above the left display.

→ You can release the GRID button: The controller will remain in Grid mode until you press GRID 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 the mode button and Button 1.

11.1.2 Controlling the Software Views from Your Controller

Your controller provides you with numerous shortcuts to modify the display in the MASCHINE software window without having to touch your mouse.

To control the software views using the controller:

► Press and hold the NAVIGATE button to enter Navigate mode. You can also press NAVIGATE + Button 1 to pin the Navigate mode so that you can release NAVIGATE and stay in Navigate mode (see ↑11.1.1, Controller Modes and Mode Pinning).

→ The Navigate screen appears.

Controlling the Software

Use the buttons above the screens navigate views:

General Navigation View

Action	Shortcut
Select Ideas view	Button 2
Select Song view	Button 3

Action	Shortcut
Select Mixer view	Button 4
Select Browser	Button 5
Compact/Full Mixer (Mixer view only)	Button 6
Select Modulation Lane	Button 7
Select Follow	Button 8

Use the knobs to navigate the software screen.

Action	Shortcut
Zoom Arranger in/out (Song view only)	Knob 1
Scroll Arranger left/right (Song view only)	Knob 2
Zoom Pattern Editor in/out	Knob 5
Scroll Pattern Editor left/right	Knob 6

Use the pads to control the software.

Action	Shortcut
Scroll Pattern left	Press pad 1
Scroll Pattern right	Press pad 3
Zoom out Pattern	Press pad 2
Zoom in Pattern	Press pad 6
Scroll Arranger left (Song view only)	Press pad 9
Scroll Arranger right (Song view only)	Press pad 11
Zoom in Arranger (Song view only)	Press pad 14
Zoom out Arranger (Song view only)	Press pad 10

Page Navigation View

Action	Shortcut
Select Page Navigation	SHIFT + Button 2
Channel Mode	
Select Channel Properties (Input, Output, Groove, or Macro)	Button 5 and 6
Select Page Bank	Button 7 and 8
Plug-in Mode	
Select Plug-in	Button 5 and 6
Select Page Bank	Button 7 and 8

11.2 MASCHINE Project Overview

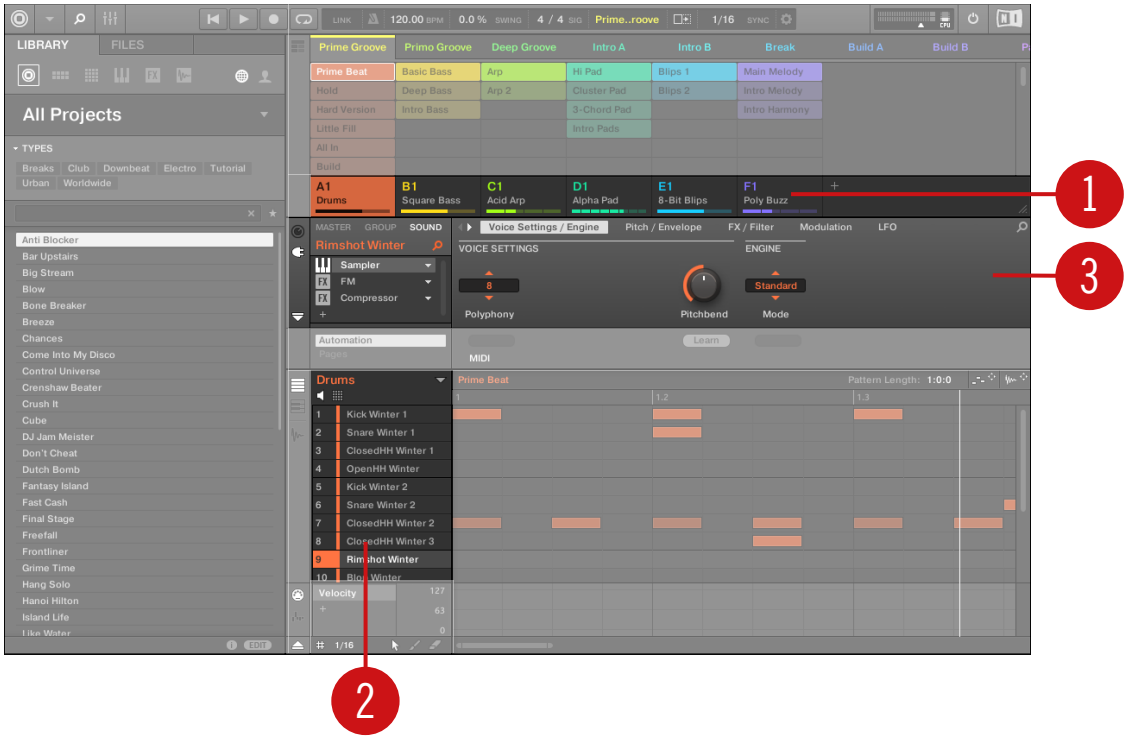
A MASCHINE Project contains all the information stored with a MASCHINE-produced piece of music.

- The Project references all the **sound content**: the instruments, sounds and samples, and all the effects that 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 Sections.

The following section will explain these two aspects in detail.

11.2.1 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 with Ideas view selected.

- Groups (**1**) are available in Banks. Each Bank contains eight Groups (A-H) and each Group contains sixteen Sound slots (1–16) (**2**). 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.

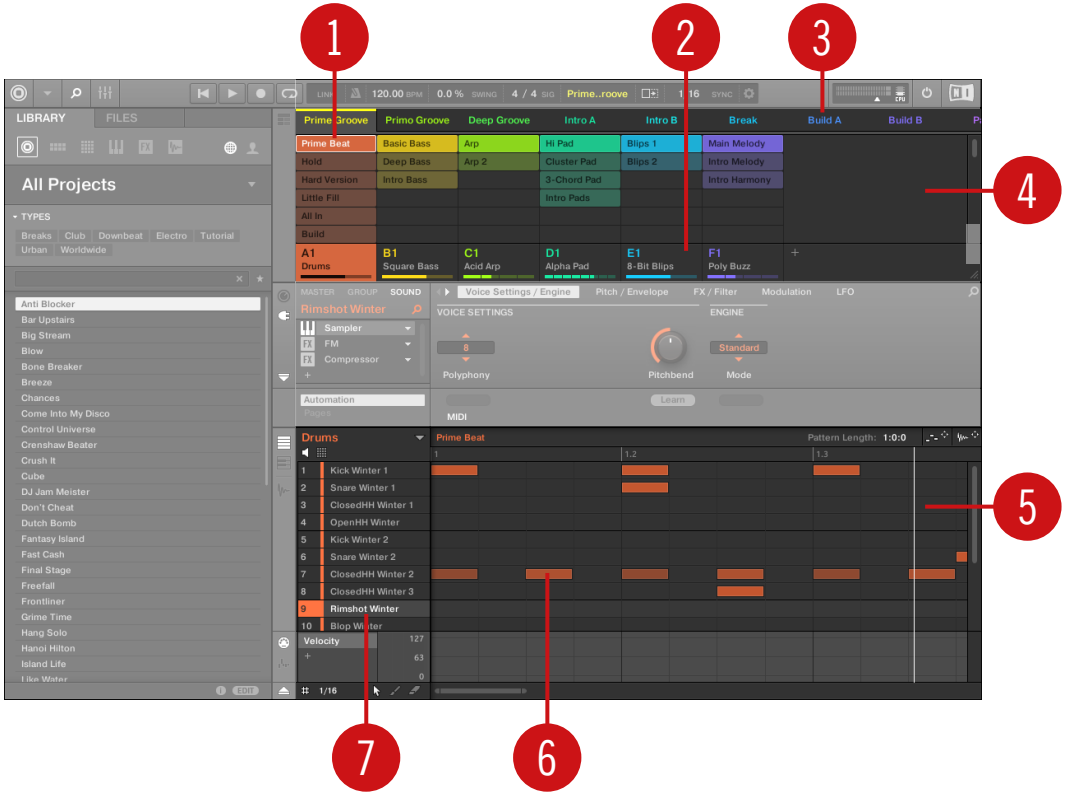
- The controls in the MASTER section affect the sound at the main outputs of MASCHINE, i.e. the sound of all Groups and all Sounds.

11.2.2 Arrangement

The MASCHINE Project is about building patterns, and putting those patterns into a loop or a song structure. In MASCHINE, the process of creating ideas is separated from the process of arrangement to provide a more flexible and creative approach. To reflect this the Arrangement area is split into two views: Ideas view and Song view which you can easily switch between using your controller. The two views reflect the same content but in different ways.

Ideas View

The Ideas view is best equipped to help you develop your Patterns and Scenes. Here you create and record your Patterns and then combine them by assigning them to Scenes. Once you have created a number of Scenes that are ready to be arranged you can add them to the Song view.



The Ideas view of a MASCHINE Project optimized for creating Patterns and building Scenes.

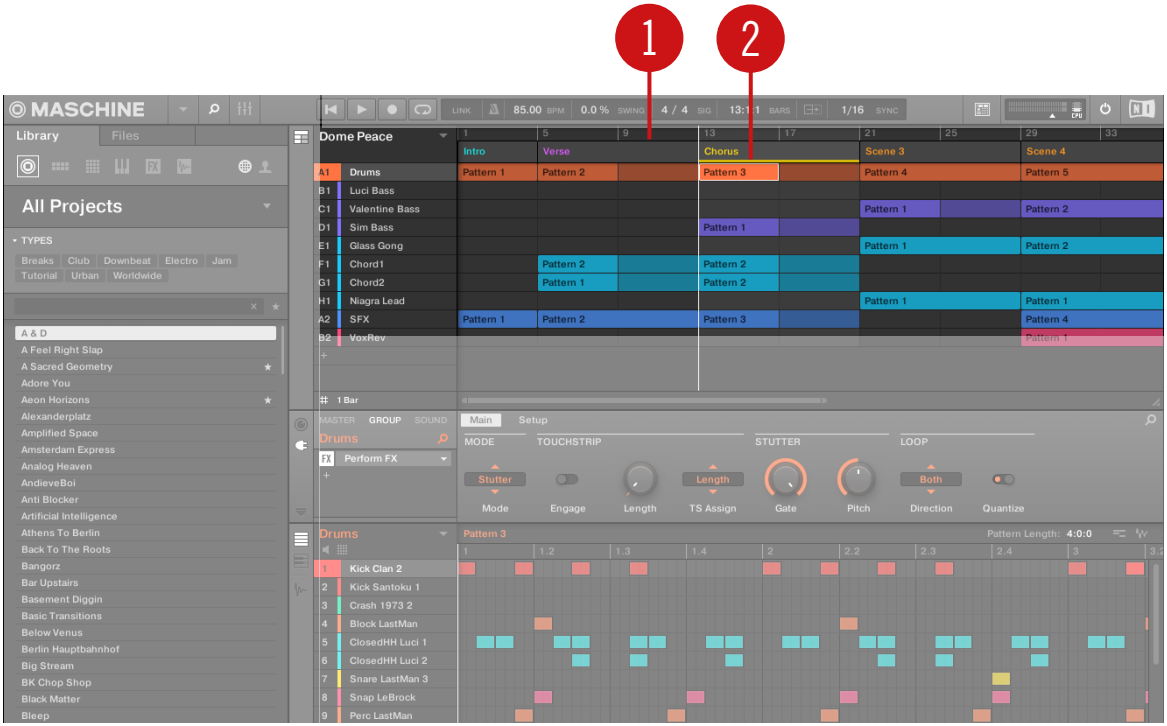
The workflow of creating ideas in MASCHINE is as follows:

- You load samples or plug-ins into the Sound slots (**7**) 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 (**1**) for the selected Group.
- All of this takes place in the Pattern Editor (**5**), where you can create several Patterns for each of your Groups.

- In the upper half of the software, the Ideas view (**4**) allows you to combine your Patterns from each Group.
- Here you combine your Patterns (**1**) into Scenes (**3**).

Song view

In the Song view Scenes are assigned to Sections and placed on the Timeline of the Arranger, where you can move them around to develop an arrangement.



The Song view of a MASCHINE Project.

The workflow of creating an arrangement in MASCHINE is as follows:

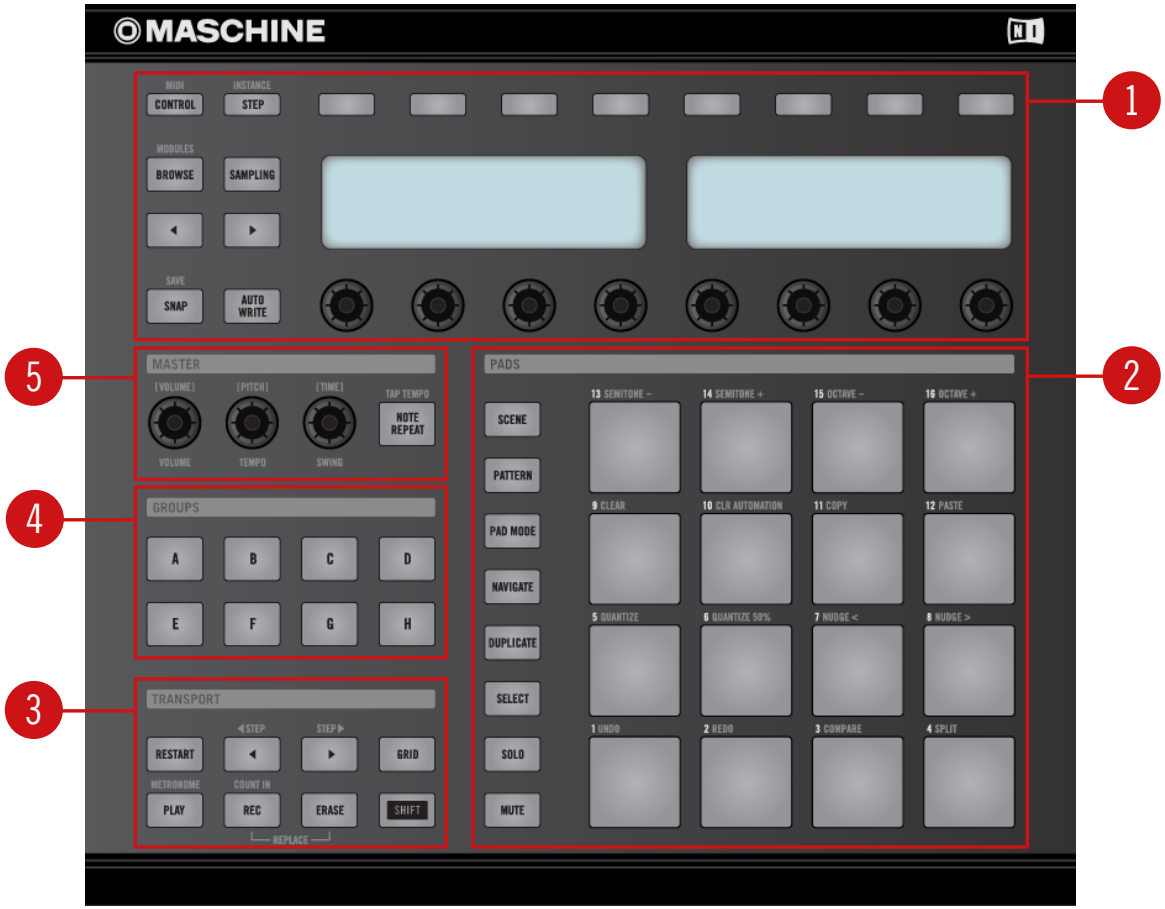
- Create Sections on the Timeline of the Arranger (**1**).
- Assign each Scene to a Section (**2**).

- Change the position of a Section by dragging the Sections slot.

11.3 MASCHINE Hardware Overview

11.3.1 MASCHINE Hardware Overview

This section quickly describes the areas and control elements on your hardware controller.



Overview of the MASCHINE hardware controller.

(**1**) **CONTROL section**: Use this multi-purpose section to access to all parameters of the mode currently selected on your controller. There are also dedicated buttons to access the Browser, Step mode and the Sample Editor. For more information on this section please view ↑11.3.1.1, CONTROL Section.

(**2**) **PADS section**: Access the various controller modes using the column of mode buttons on the left-hand side of this section. Besides playing the Sounds of the selected Group, the 16 pads give you access to many editing and selection commands depending on the selected controller mode. For more information on this section please view ↑11.3.1.5, PADS Section.

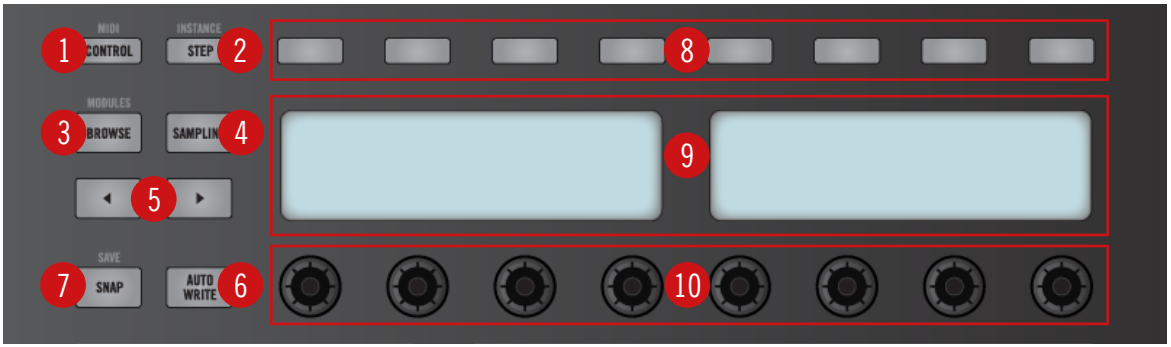
(**3**) **TRANSPORT section**: Start, stop and restart playback, activate record and skip bars while playing, simply by pressing the dedicated buttons. Use SHIFT to access the secondary functions of your controller. For more information on this section please view ↑11.3.1.4, TRANSPORT Section.

(**4**) **GROUPS section**: The dedicated Group buttons allow you to instantly access each Group of Sounds. For more information on this section please view ↑11.3.1.3, GROUPS Section.

(**5**) **MASTER section:** Contains dedicated knobs that control Volume, Tempo and Swing. The NOTE REPEAT button is also positioned here, ready to help with the creative process of making beats. For more information on this section please view ↑11.3.1.2, MASTER Section.

11.3.1.1 CONTROL Section

This section gives an overview of the CONTROL section.



Overview of the CONTROL section.

(**1**) **CONTROL** button: Press CONTROL at any time to return to Control mode — the default mode of the controller. In this mode, the pads represent the Sounds of the selected Group. At the same time, Control mode provides instant access to all Sound, Group and Master parameters via the eight Buttons and eight Knobs above and under the displays. You can also use the

CONTROL button to access MIDI mode by pressing SHIFT + CONTROL. This mode will enable you to use MASCHINE as a MIDI controller (for more information on this, please refer to the Controller Editor Manual).

(**2**) **STEP** button: As a complement to Control mode, MASCHINE in **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 shows the current position of the step sequencer. Pressing the pads creates notes on the corresponding steps (causing them to light up) or it removes them. If your Pattern contains more than 16 steps, use Buttons 7/8 to skip to the previous/next 16 steps of the Pattern. Press SHIFT + STEP to enter **Instance mode**. In this mode you can select which instance of the MASCHINE plug-in you want to control from your hardware controller if you have more than one instance open in your Digital Audio Workstation (DAW).

(**3**) **BROWSE** button: Press the BROWSE button to access the Browser. Press SHIFT + BROWSE to access the Plug-in menu and load a Plug-in (Internal, Native Instruments, and External, as well as Instrument and Effect) in the selected Plug-in slot.

(**4**) **SAMPLING** button: Press the SAMPLING button to access the Sample Editor.

(**5**) **Page** buttons: Almost any feature of MASCHINE can be accessed using the hardware controller. For a clear and simple layout of the displays, the parameters are grouped into different pages — these are selected using the **Page** buttons.

(**6**) **SNAP** button: The SNAP button on its own currently does not have any functionality. However, use the SNAP button to save your project by pressing SHIFT + SNAP.

(**7**) **AUTO WRITE** button: In MASCHINE, automation of almost any parameter on the Sound and Group level is achieved with one-touch simplicity. Press and hold this button while turning any of the eight Knobs (or any combination) under the displays to record automation for the corresponding parameter(s).

The Auto-Write mode can be pinned: Press SHIFT + AUTO WRITE to pin/unpin the Auto-Write mode. See ↑11.1.1, Controller Modes and Mode Pinning for more information.

(**8**) **Buttons 1–8**: About one fourth of the hardware is occupied by the multi-functional control area, which forms the core of MASCHINE's mouse-free workflow. The eight Buttons above the displays dynamically adapt their function to the currently active environment, allowing direct access to the most important sub-sections and functions. The action they perform is shown below each button in the displays.

(**9**) **Displays**: The displays are laid-out to provide you with all essential information — there's no need to glance at the computer screen.

(**10**) **Knobs 1–8**: Each Knob dynamically controls the parameter shown in the display above it. When AUTO WRITE (**7**) is pressed, parameter changes are instantly recorded to an automation track when playback is active.

11.3.1.2 MASTER Section

This section gives an overview of the MASTER section.

Overview of the MASTER section.

(**1**-**3**) **VOLUME**, **TEMPO**, and **SWING** knobs: Control the master volume, tempo and swing of your Project with three dedicated knobs. Press and hold a pad then turn the VOLUME, TEMPO or SWING knob to change the volume, pitch or swing for that individual Sound. Press and hold a Group button then turn the VOLUME, TEMPO or SWING knob to change the volume, pitch or swing for that individual Group.

(**4**) **NOTE REPEAT** 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, hold the pad you want to play: notes will be repeatedly triggered at the rate selected in the right display. With Buttons 4–6, you can select different rates while playing. You can select new rate values for each of these buttons by turning Knobs 5–8. In addition, you can set the tempo of your Project using this button: Press SHIFT and repeatedly tap the NOTE REPEAT button to set the required tempo.

The Note Repeat mode can be pinned: Press NOTE REPEAT + Button 1 to pin/unpin the Note Repeat mode. See ↑11.1.1, Controller Modes and Mode Pinning for more information.

11.3.1.3 GROUPS Section

This section gives an overview of the GROUPS section.

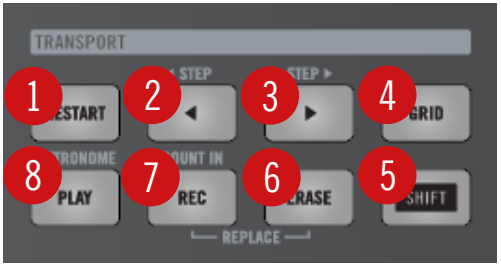
Overview of the GROUPS section.

Group buttons: Press one of the eight dedicated Group buttons A–H to select the Group you want to work in. These buttons are also used to solo and mute Groups on the fly when SOLO or MUTE buttons are held — great for jamming out your Project and performing live! Hold a Group button and turn the VOLUME, TEMPO or SWING knob to change the volume, pitch or swing for that individual group.

Press SHIFT + Group buttons A–H to select a Group Bank. For more information on Group Banks please refer to the Manual.

11.3.1.4 TRANSPORT Section

This section gives an overview of the TRANSPORT section.



Overview of the TRANSPORT section.

Start, stop and restart playback, activate record and skip bars while playing, simply by pressing the dedicated buttons in the TRANSPORT section of the controller. Use the SHIFT button to invoke secondary commands such as the metronome, Count-in and Step Forward and Backward.

(**1**) **RESTART** button: Press the RESTART button at anytime to restart from the beginning of the current loop range. SHIFT + RESTART + encoder moves the Loop. SHIFT + RESTART + control encoder + Step Backward/Step Forward buttons change the start/end point of the Loop.

(**2**) **Step Backward** button: Skip back through the loop range according to the rate set in the Pattern Grid (Press GRID+F2). Press SHIFT + Step Backward to skip backwards step by step.

(**3**) **Step Forward** button: Skip forward through the loop range according to the rate set in the Pattern Grid (Press GRID + F2). Press SHIFT + Step Forward to skip forwards step by step.

(**4**) **GRID** button: Enters Grid mode. The Grid mode allows you to select resolutions for the Step Grid (used for quantization), for changing Pattern Lengths and for transitions between Scenes. Press SHIFT + GRID to access REC MODE. This allows you adjust Metronome parameters (Level, Time signature and Count-In Length) and automatic Quantize mode.

The Grid mode can be pinned: Press GRID + Button 1 to pin/unpin the Grid mode. See ↑11.1.1, Controller Modes and Mode Pinning for more information.

(**5**) **SHIFT** button: While the most important features are accessible through dedicated buttons, many shortcuts are available by holding the SHIFT button and pressing pads 1–16 or several other buttons. You can also use the SHIFT button to change parameters in finer increments when entering values with the Knobs. You can also use the SHIFT button to change parameters in finer increments when entering values with the Knobs, or use it to bypass, remove and move plug-ins from within the Plug-in List.

(**6**) **ERASE** button: When creating music, erasing needs to be as quick and simple as recording, so there is a dedicated button for this! During playback, hold ERASE and hold any number of pads to erase the events for the corresponding Sounds on the fly as the playback goes on. Use the shortcut ERASE + SELECT + pad to quickly erase all events triggered by that pad in your Pattern. If you automated a parameter, hold ERASE and turn the corresponding Knob under the displays to erase the automation of this parameter.

(**7**) **REC** button: When playback is on, press REC to begin recording. Or when playback is off, press SHIFT + REC to begin recording with the Count-in. Press REC a second time to stop recording. Hold the REC button to access Pattern Preset mode, this allows you to select a preset for the Pattern Length before recording any events.

(**8**) **PLAY** button: Press the PLAY button to activate playback. Press PLAY a second time to stop playback. Press SHIFT + PLAY to turn the metronome on/off.

All hardware shortcuts are explained in the Hardware Control Reference, available from the Help menu in the MASCHINE software.

11.3.1.5 PADS Section

This section gives an overview of the PADS section.

Overview of the PADS section.

All the following buttons can be pinned: Simply press the desired button + Button 1 (above the left display) to pin/unpin the corresponding mode. See ↑11.1.1, Controller Modes and Mode Pinning for more information.

(**1**) **SCENE** button: Enters **Scene** mode in Ideas view or **Section** mode in Song view. Use Scene mode to access your Scenes and Section mode for arranging your song.

- Use Scene mode to create, select and manage Scenes to prepare them for assignment to Sections in the Arranger. During playback, you can switch Scenes for quick on-the-fly arrangement by pressing the pads; half-lit pads show existing Scenes, while fully lit pads show the selected Scene. When you are satisfied with a Scene you can append it to the Arranger.
- Use Section mode to create, select, and manage Sections in order to create an arrangement. Here you can create Sections, assign a Scene to Section, position a Section on the Timeline, and set the length of a Section.

Use SHIFT + SCENE to quickly toggle between Ideas view and Song view.

(**2**) **PATTERN** button: Enters Pattern mode. Pattern mode allows you to create different Patterns for the selected Group, switch between different Patterns or create a new one during playback, etc. Half-lit pads show existing Patterns, the fully lit pad shows the selected Pattern.

(**3**) **PAD MODE** button: Enters Pad Mode. This mode allows you to select a different mode for your pads. For example, you can quickly switch the pads to play melodies or even chords! The following pad modes are available:

- In the standard layout mapping, each pad represents one Sound of the Group and the Sounds' velocity is controlled by the pressure applied on the pads.
- In **Keyboard mode**, the pads represent 16 chromatic steps of the currently selected Sound, ascending from the selected root note — this way you can play the selected Sound like a melodic instrument. You can also use Buttons 5 and 8 to adjust the Base Key for your pads. Press SHIFT + PAD MODE to quickly activate Keyboard mode.
- In **16 Velocities mode**, the pads represent 16 levels from the softest to the full velocity of the currently selected Sound — this is especially useful for building up dynamic grooves.

- In **Fixed Velocities mode**, each pad represents one Sound of the Group and all Sounds have the same fixed velocity, whatever pressure you apply on the pads.

You may also change Choke and Link settings in Pad Mode. Please refer to the Manual for more information on these features.

(**4**) **NAVIGATE** button: Enters Navigate mode. When working on large Projects, it is sometimes necessary to look at the computer screen. With NAVIGATE mode there is no need to use the mouse and search for scroll bars or magnifying glasses! Just use the pads and the CONTROL section to zoom in and out or scroll through Patterns and Scenes. See ↑11.1.2, Controlling the Software Views from Your Controller for more information. Furthermore, in Navigate mode the Buttons above the displays allow you to quickly access channel and plug-in parameter pages.

(**5**) **DUPLICATE** button: Enters Duplicate mode. Use the Duplicate mode 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.

(**6**) **SELECT** button: Enters Select mode. This mode allows you to select a Sound without having to play it, or select specific events of a particular Sound, which is useful for limiting quantization, nudging notes and other operations specifically to the selected events. Use the shortcut SHIFT + SELECT + pad to quickly select all events triggered by that pad in your Pattern, or events at that pitch when in Keyboard mode. Use the shortcut ERASE + SELECT + pad to quickly erase all events triggered by that pad in your Pattern or events at that pitch when in Keyboard mode.

(**7**) **SOLO** button: Enters 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.

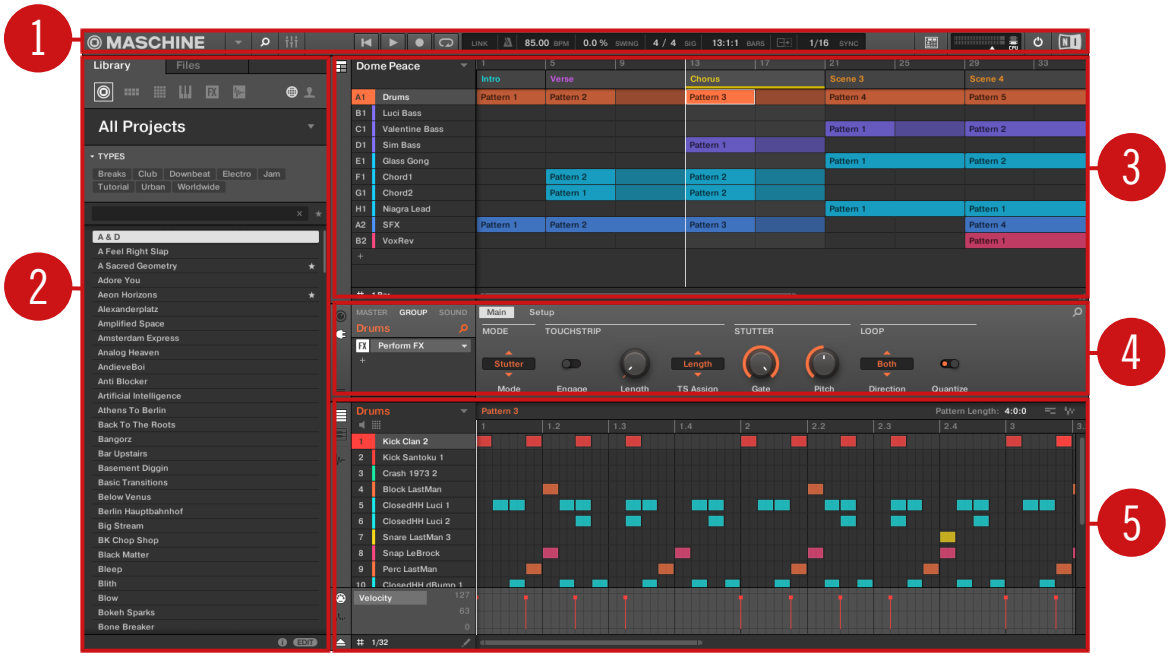
(**8**) **MUTE** button: Enters Mute mode. In this mode, you can instantly mute Sounds and/or Groups by pressing the corresponding pads and/or Group buttons — good for getting on top of your production when you have many sounds playing and especially useful for performing live. Muted Sounds/Groups are represented by half-lit pads, while unmuted (i.e. audible) Sounds/Groups are represented by fully lit pads.

(**9**) **Pads 1–16**: Besides playing and selecting your Sounds, the pads have many functions depending on the controller mode that is currently active. In addition, when used in combination with SHIFT, the pads trigger various commands:

- Press SHIFT + pad 1/2 to undo/redo your last action.
- Press SHIFT + pads 3–16 to access various editing functions in the selected Pattern.

For a detailed explanation of each feature please refer to the Manual.

11.4 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, toggle the Mixer view, connect to your hardware controller and monitor the CPU usage of your computer.

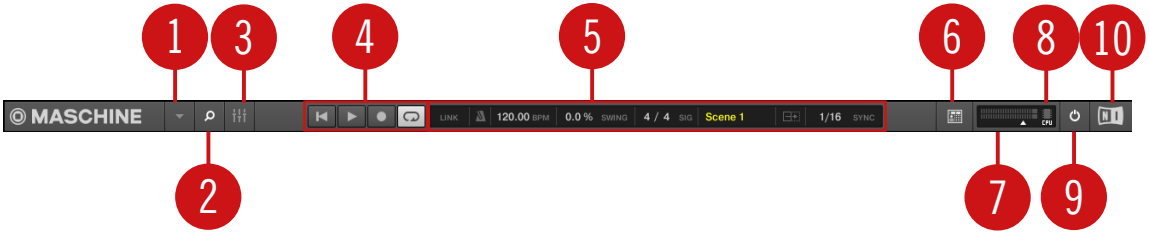
(**2**) **Browser**: The Browser is your tool for managing, finding, tagging and categorizing Projects, Groups, Sounds, Instruments, Effects and Samples. Using the search facility you can quickly find things and Prehear (audition) Samples.

(**3**) **Arranger**: This area has two views: Ideas view and Song view. Ideas view is for creating and experimenting with musical ideas free from the timeline. Song view is for organizing your musical ideas into a song on the Timeline.

(**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 Pattern. Patterns for each Group can be created here and then assigned to Scenes in the Arranger. The Pattern Editor also lets you edit modulation for the Sound, Group, and Plug-in (Internal or External) parameters.

11.4.1 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**) **Mix view button**: Click the Mix view button to access the Mix view. The Mix view provides you with 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.

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

(**5**) **Display area**: The Display area provides control regarding Ableton Link, time signature, tempo, global swing, Follow and Performance Grid (Including Retrigger)

(**6**) **Controller icon**: This area displays an icon each MASCHINE controllers connected to your computer.

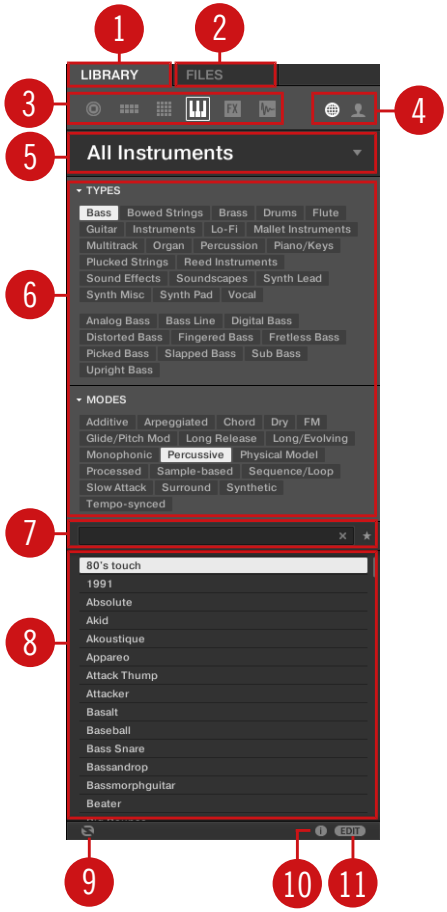
(**7**) **Master Volume slider**: Shows and adjusts the level of the MASCHINE audio output.

(**8**) **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).

(**9**) **Audio Engine button**: Click the Audio Engine button to disable the entire sound processing of MASCHINE.

(**10**) **NI logo**: The NI logo and MASCHINE logo open the About screen which displays the version number and edition of your MASCHINE software.

11.4.2 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 (speaker icon) allows you to quickly hear each Sample you select in the Results list, at the volume set by the slider.

Audition control volume slider.

When browsing **Groups**, the +PATTERNS and +ROUTING buttons appear in the Control bar of the Browser.

+PATTERNS and +ROUTING in the Control bar of the Browser.

When the +ROUTING button is on, the audio and MIDI routings stored in the Group will also be loaded (potentially overwriting previous routings in the selected Group). When the +ROUTING button is off, any audio and MIDI routings saved in the Group will not be loaded, thus preserving any existing routings in the active Group.

The +PATTERNS button allows you select whether a Group is loaded with or without a saved Pattern. This button conveniently allows you to load new kits without a Pattern so you can try them with your existing pattern, or load kits with Patterns you have previously created. When the +PATTERNS button is selected the Sounds and Patterns of the selected Group will be loaded. When the +PATTERNS is deselected, only the Sounds of the selected Group will be loaded.

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

(**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.

11.4.3 Arranger

The Arranger is has two different views: **Ideas view** and **Song view**. Each view has a specific purpose in the workflow of creating a song, but essentially they represent the same content. The Ideas view allows you to experiment with your musical ideas without being tied to a timeline or any kind of arrangement. Here you can create Patterns for each Group and combine them into a Scene. The Song view allows you to structure your song by allowing you to assign the Scenes you created in the Ideas view to Sections, and move them around to quickly create a larger musical structure.

Switching between Ideas View and Song view

The Arranger View button.

► Click the Arranger View button to switch between the Ideas view and the Song view.

→ When the button is unlit Ideas view is active, when the button is lit Song view is active.

The Ideas View

The Ideas view for creating and experimenting with musical ideas free from the Timeline.

(**1**) **Scenes**: This area displays all the current Scenes in your project. After creating a Scene by clicking the + symbol, you can build the Scene by selecting a Pattern from each Group. By clicking each Scene name (Scene slot) you can switch between Scenes to see how your musical ideas work together.

Using your mouse you can right-click the Scene slot and select to *Append to Arrangement* from the menu and then arrange your song in the Song view. You can also use the right-click menu to *Clear*, *Duplicate*, or *Delete* Scenes, as well as organize your Scenes by selecting the *Rename* or *Color* options

(**2**) **Pattern area**: All Patterns in your Song are represented here. You can double-click a blank slot to create and new Pattern or click an existing Pattern to assign it to the selected Scene. Once assigned, a Pattern will become highlighted, click it again to remove it from the selected Scene. Using your mouse you can right-click the name of a Pattern and select to *Clear*, *Duplicate*, or *Delete* a Pattern. You can also organize your Patterns by selecting the *Rename* or *Color* options.

(**3**) **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 ↑11.4.5, Pattern Editor) and the Group's Channel properties and Plug-in parameters in the Control area (see ↑11.4.4, Control Area). To mute a Group click the Group letter, for example A1, and right-click on the letter to solo the Group. Using your mouse you can also right-click the name of a Group to access the many options available to manage them.

The Song view

The Song view for organizing your musical ideas into a song on the Timeline.

(**1**) **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 ↑11.4.5, Pattern Editor) and the Group's Channel properties and Plug-in parameters in the Control area (see ↑11.4.4, Control Area).

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

(**3**) **Section slots**: This area displays Section slots. A Section is a container for Scene placed on the Timeline. A Section can be moved freely by clicking the name of the Section and dragging and dropping it into place. You can change the length of a Section by dragging the Section end marker to the left to shorten it, or to the right to lengthen it. Using your mouse you can right-click a Section and use *Select* in the menu to assign a Scene to a Section. It is also possible to use the menu to *Insert, Duplicate*, *Delete*, *Clear* or *Remove* Sections as well as organize them by selecting the *Rename* or *Color* options.

(**4**) **Pattern area**: In each Section of the Arrangement, you can see the name of the Scene assigned to the Section along with the Scene's Patterns stacked vertically for each Group in the Project. The Patterns seen here are the same as those seen when viewing the same Scene in the Ideas view.

11.4.4 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).

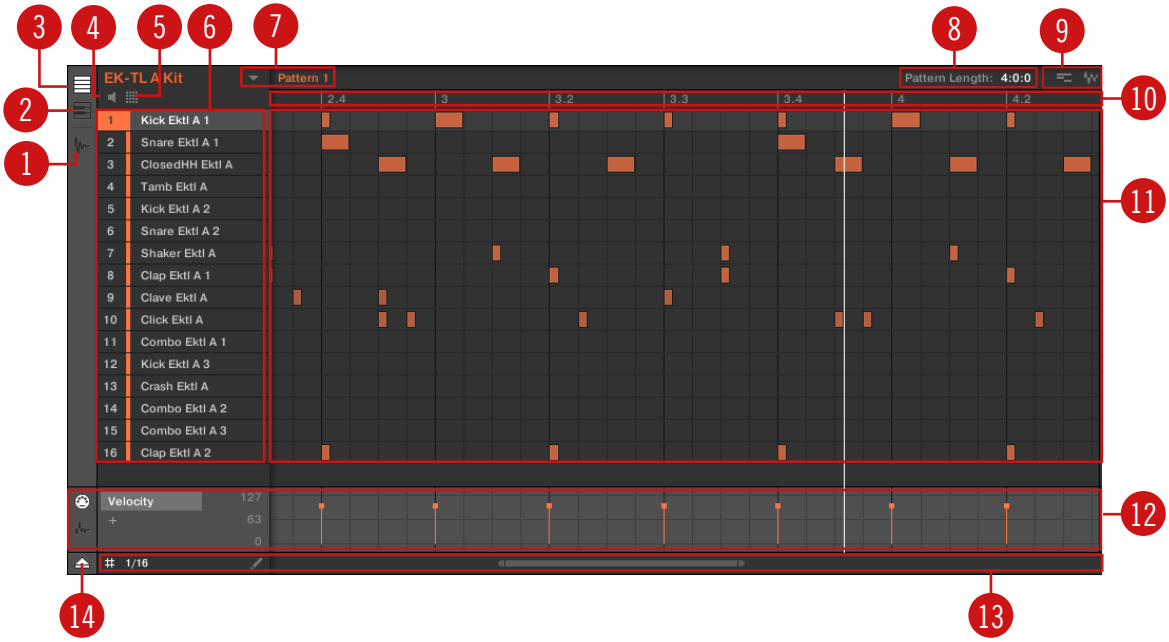
(**5**) **SOUND tab**: Click the SOUND tab to gain access to Plug-ins and Channel properties of the Sound in the selected Sound slot (1-16).

(**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.

11.4.5 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 ↑11.4.4, 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 ↑11.4.3, 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 Pencil icon to toggle the Pencil 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 Manual.

12 Troubleshooting

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.

Before getting help please make sure you have downloaded the latest MASCHINE software from Native Access.

12.1 Knowledge Base

The Online Knowledge Base gathers useful information about your Native Instruments product and can be of great help to solve possible issues you may encounter. You can reach the Knowledge Base via: www.native-instruments.com/knowledge.

12.2 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: 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 and the version of your software

- The brand and specifications of your computer

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

12.3 Registration Support

If problems occur during the product activation procedure, please contact our Registration Support team: www.native-instruments.com/regsuppfrm.

12.4 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 as described above. You can reach the User Forum via: http://www.native-instruments.com/forum.

13 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. It is has two views: Ideas view for creating Patterns and Scenes, and Song view for creating an arrangement.

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.

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 is the default mode of your controller. In this mode, you can play or record your actions in real-time. Control mode also allows you to easily adjust any parameter of your Groups and Sounds 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 select 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).

Ideas View

The Ideas view allows you to experiment with your musical ideas without being tied to a timeline or arrangement. You can create Patterns for each Group and combine them into a Scene. These Scenes can then be added to Sections in the Song view to create a larger musical structure.

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 and automated 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 automation 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 all 16 pads (Keyboard mode and 16 Velocities mode) or trigger each Sound with a distinct pad (default mode and Fixed Velocity mode). 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 a Group. Patterns are the building blocks for Scenes. One Pattern from each Group can be added to a Scene. You can reference the same Pattern in different Scenes. When you modify a Pattern in the Pattern Editor, all references to this Pattern are updated 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.

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 Patterns for each Group. They can be used to combine Patterns in order to create musical ideas. Scenes are created in the Ideas view and then added to Sections in the Song view to create an arrangement.

Section

A Section is a reference to a specific Scene on the Timeline of the Song view and is used to arrange the Scenes into a larger musical structure. The benefit of using Sections is that any changes made to a Scene are replicated in each Section where the Scene is referenced therefore making the process of changing parts of a song quick and easy.

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 View

The Song view allows you to combine Sections (references to Scenes), and arrange them into a song on the Timeline.

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 16 pads represent a step in the Step Grid. Just as on classical drum machines, a light representing the sequence runs from pad 1 up to pad 16, 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.

Swing

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

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