

Table of Contents

1. Disclaimer	1
2. Welcome to KOMPLETE KONTROL	2
2.1. Document Conventions	3
2.2. New Features in KOMPLETE KONTROL 2.6.0	
2.3. New Features in KOMPLETE KONTROL 2.1.6	
2.4. New Features in KOMPLETE KONTROL 2.1.3	
2.5. New Features in KOMPLETE KONTROL 2.1.0	
2.6. Box Contents	
2.7. System Requirements	
3. Accessibility	7
3.1. Keyboard Overview	
3.2. Activating Accessibility Features	
3.3. Training Mode	
3.4. Feature Overview and Keyboard Shortcuts	
3.5. MASCHINE Accessibility	
3.5.1. MASCHINE Software Overview	
3.5.2. Known Issues	
3.5.3. MASCHINE Keyboard Overview	
3.5.4. MASCHINE Workflows	
4. The KOMPLETE KONTROL Workflow	17
5. Setting up KOMPLETE KONTROL	18
5.1. Connecting the Keyboard to the Computer	
5.2. Setting up the Stand-Alone Application	
5.3. Setting up Host Integration	
5.3.1. Setting up Apple Logic Pro X and GarageBand	
5.3.2. Setting up Steinberg Cubase/Nuendo	
5.3.3. Setting up Ableton Live	
5.3.4. Setting up PreSonus Studio One	
5.4. Connecting Pedals to the Keyboard	23
5.5. Connecting External MIDI Equipment to the Keyboard	
6. Software Overview	27
6.1. Header	27
6.2. Browser	28
6.2.1. Library Pane	28
6.2.2. Product Selector	30
6.2.3. Files Pane	31
6.2.4. Browser on the Keyboard	
6.3. Perform Panel	
6.4. Plug-in Panel	
6.5. Plug-in Chain Panel	
6.6. MIDI Assignment Editor	
6.7. Plug-in Area	
6.8. Sampler Plug-In	
6.8.1. Envelopes	
6.9. Audio Plug-In	

7. Keyboard Overview	40
7.1. Perform and Edit Section	41
7.2. Transport Section	
7.3. Control Section	
7.4. Mode Buttons	
7.5. 4-D Encoder	
7.6. Keybed and Light Guide	
7.7. Touch Strip	
7.8. Transpose and Fixed Velocity Buttons	
8. Global Controls and Preferences	47
8.1. Instrument Views	
8.1.1. Default View	
8.1.2. Additional View	
8.1.3. Edit View	
8.2. Switching Instances	
8.3. Transport and Tempo	
·	
8.3.1. Resetting the Clock	
8.3.2. Adjusting Tempo	
8.4. Adjusting Master Volume	
8.5. Preferences	
8.5.1. Preferences – Audio Page	
8.5.2. Preferences – MIDI Page	
8.5.3. Preferences – General Page	
8.5.4. Preferences – Library Page	
8.5.5. Preferences – Plug-ins Page	
8.5.6. Preferences - Features Page	
8.6. Keyboard Settings	
8.7. Loading a Plug-in in Default State	62
9. MIDI Communication	64
9.1. Mapping MIDI Controls to Third-Party Controllers	64
9.1.1. Setting up a Third-Party Controller	67
9.1.2. Assigning Knobs to a Third-Party Controller	
9.1.3. Assigning Buttons to a Third-Party Controller	68
9.1.4. Enabling Takeover Mode	
9.1.5. Hardware Configuration for MIDI Mapping	
9.1.6. Share Mapping Across Instances	
9.2. Host Automation	
9.2.1. Recording Automation	
9.2.2. Automation IDs for the Perform Panel	71
9.3. Using the Keyboard in MIDI Mode	
9.4. Using the Keyboard as Stand-Alone MIDI Controller	
10. Using the MIDI Assignment Editor	75
10.1. The Mapping System	
10.2. Opening the MIDI Assignment Editor	
10.3. Assigning MIDI Messages to Control Elements	
10.4. Renaming Control Elements	
10.5. Creating a New MIDI Template	
10.6. Renaming MIDI Templates	
10.7. Creating Key Zones	
10.7.1. About Key Zones	
10.1.1.7 bode Rey Zorico	1 3

	10.7.2. Splitting Key Zones	
	10.7.3. Selecting MIDI Channels for Key Zones	. 81
	10.7.4. Recoloring Key Zones	. 82
	10.7.5. Resizing Key Zones	
	10.7.6. Disabling Key Zones	. 83
	10.7.7. Deleting a Key Zone	
	10.7.8. Transposing Key Zones	
	10.8. MIDI Message Types and Assignments	
	10.8.1. MIDI Message Types - Type Menu	
	10.8.2. Assignments for Knobs	
	10.8.3. Assignments for Buttons	. 88
	10.8.4. Assignments for Key Zones	
	10.8.5. Assignments for the Touch Strip	
	10.8.6. Assignments for Switch Pedals	
	10.8.7. Assignments for Continuous Pedals	. 91
11.	Host Integration	. 92
	11.1. Integration with MASCHINE	
	11.1.1. Basic Control Functions	
	11.1.2. Advanced Integration Control Functions	
	11.2. Integration with Apple Logic Pro X and GarageBand	
	11.3. Integration with Ableton Live	
	11.4. Integration with Steinberg Cubase and Nuendo	
	11.5. Integration with PreSonus Studio One	
	11.6. Integration with Hosts using MCU Protocol	
12	Browsing the Library	106
	12.1. Browser Basics	
	12.1.1. Product Types: Instruments, Loops, One-shots and Effects	
	12.1.2. Loops and One-shots	
	12.1.3. About the Library and Meta-Information	
	12.1.4. Browsing the Library vs. Browsing Your Hard Disks	107
	12.1.4. Drowsing the Library vs. Browsing rour riard bisks	
	12.3. Loading Preset Files	
	12.4. Choosing Between Factory Content and User Content	
	12.5. Filtering Preset Files by Product	
	12.6. Filtering Preset Files by Bank	
	12.7. Resetting the Product Selection	
	12.8. Types and Characters Tags	
	12.8.1. Filtering Preset Files by Types and Characters	
	12.8.2. Selecting Multiple Tags from the Same Level	
	12.9. Working with Favorites	
	12.9.1. Adding Preset Files to the Favorites	127
	12.9.2. Displaying Favorites in the Results List	
	12.9.3. Removing Preset Files from the Favorites	
	12.10. Performing a Text Search	
	12.11. Displaying Preset File Information	
	12.12. Auditioning your Preset Files	
10		
١٥.	Working with Effects	
	13.1. Opening the Plug-in Chain Panel	
	13.2. Adding Effects	
	L3.3. Selection Pilia-in Siots	1.31

	13.4. Reordering Effects	
	13.6. Bypassing Effects	
	13.7. Removing Effects	
14.	Working with Loops and One-Shot Samples	136
	14.1. Sampler Plug-In and Audio Plug-In Use Cases	136
	14.2. Loading One-Shot Samples and Loops	
	14.3. Opening the Audio Plug-In or Sampler Plug-In	137
	14.4. Switching between the Audio Plug-In and the Sampler Plug-In	
	14.5. Playback Behavior of Audio Plug-In in Host Software	
15.	Managing the Library	139
	15.1. Saving Preset Files to the User Library	
	15.2. Deleting User Preset Files from the User Library	
	15.3. Editing the Tags and Properties of User Preset Files	
	15.4. Syncing Multiple Instances	
	15.5. Working with the Files Pane	
	15.5.1. Additional Results List Features List in the Files Pane	
	15.5.2. Navigating to File Locations with the Location Bar	
	15.5.3. Navigating to Recent File Locations	
	15.5.4. Working with File Location Favorites	
	15.6. Loading VST Plug-ins	
	15.7. Installing NKS Instruments	
	15.8. Importing KOMPLETE KONTROL-Compatible User Files	
16.	Controlling Instrument, Loop, One-shot and Effect Parameters	152
	16.1. About Pre-Mapped Instruments, Loops, One-shots and Effects	152
	16.2. Adjusting Parameters	152
	16.3. Switching Parameter Pages	
	16.4. Customizing Parameter Mappings using the Plug-in Panel	152
17	Consent Diagram and Edition Control and Chands	166
17.	Smart Play - Playing and Editing Scales and Chords	
	17.1. A Note about Music Theory	
	17.2. Activating the Scale Engine	
	17.3. Selecting and Playing a Scale	
	17.4. Playing Chords	
	17.5. Editing Scales and Chords	
	17.6. Setting the SCALE Parameters	
	17.6.1. SCALE Root Note	
	17.6.2. SCALE Bank and Type	
	17.7. Setting the KEY MODE Parameter	
	17.8. Setting the CHORD Parameters	
	17.8.1. CHORD Mode	
	17.8.2. CHORD Type	
	17.8.3. CHORD Position	108
18.	Smart Play – Playing and Editing Arpeggiator Sequences	169
٠ -	18.1. Playing Arpeggiator Sequences	
	18.2. Using a Sustain Pedal to Control the Arpeggiator	
	18.3. Using Arpeggiator Snapshots on the Keyboard	
	18.4. Editing the Arpeggiator	
	18.5. MAIN Parameters	

18.5.1. MAIN Mode	172
18.5.2. MAIN Type	172
18.6. RHYTHM Parameters	
18.6.1. RHYTHM Rate	173
18.6.2. RHYTHM Sequence	173
18.6.3. RHYTHM Swing	174
18.7. OTHER Parameters	
18.7.1. OTHER Octaves	174
18.7.2. OTHER Dynamic	175
18.7.3. OTHER Gate	175
18.8. ADVANCED Parameters	175
18.8.1. ADVANCED Retrigger	176
18.8.2. ADVANCED Repeat	176
18.8.3. ADVANCED Offset	176
18.8.4. ADVANCED Inversion	177
18.9. RANGE Parameters	177
18.9.1. RANGE Min. Key	177
18.9.2. RANGE Max. Key	
18.10. HOLD Parameter	178
19 Envelones	179

1. Disclaimer

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

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

Mac, macOS, GarageBand, Logic and iTunes are registered trademarks of Apple Inc., registered in the U.S. and other countries.

Windows and DirectSound are registered trademarks of Microsoft Corporation in the United States and/or other countries.

Ableton Live[™] and LINK[™] are a trademarks of Ableton AG.

ASIO and VST are a trademark and software of Steinberg Media Technologies GmbH.

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

Document authored by: Native Instruments GmbH

Software version: 2.6 (03/2021)

Hardware version: KOMPLETE KONTROL S-Series MK2

Special thanks to the Beta Test Team, who were invaluable not just in tracking down bugs, but in making this a better product.

2. Welcome to KOMPLETE KONTROL

Thank you for choosing KOMPLETE KONTROL!

The KOMPLETE KONTROL software and its dedicated keyboard—the KOMPLETE KONTROL S-Series-form a tightly integrated music production and performance system that brings all the sounds from KOMPLETE and the Native Kontrol Standard (NKS) to the heart of your workflow.

KOMPLETE KONTROL offers advanced integration with a number of hosts and provides full control of any Instruments supporting NKS, both from Native Instruments and partners. The keyboard lets you browse your Instruments, Loops, One-Shots and Effects in an intuitive way and play them creatively with KOMPLETE KONTROL's unique Scale engine and Arpeggiator.

We hope you enjoy this instrument as much as we do.

- The team at Native Instruments

2.1. Document Conventions

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

Italics	Italics Indicates paths to locations on your hard disk or other storage devices		
Bold Highlights important names, concepts, software interface elements hardware controls.			
[Brackets]	References keys on a computer's keyboard.		
	Single item instructions are represented by a bullet icon.		
\rightarrow	Results in procedures are represented by an arrow icon.		

The following three icons represent different types of information:



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



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



The **warning** icon alerts you of serious issues and potential risks that require your full attention.

Naming Conventions

Throughout the documentation, we will refer to the KOMPLETE KONTROL keyboard (or just keyboard) as the hardware controller and KOMPLETE KONTROL software as the software installed on your computer.

Unlabelled Buttons on the Keyboard

The buttons and knobs above and below the displays on the KOMPLETE KONTROL keyboard do not have labels.



The unlabelled buttons and knobs on the KOMPLETE KONTROL keyboard.

For better reference, we applied special formatting here: throughout the document, the elements are capitalized and numbered, so the buttons above the displays are written Button 1 to Button 8, while the knobs under the displays are written Knob 1 to Knob 8.

2.2. New Features in KOMPLETE KONTROL 2.6.0

The following new features have been added to KOMPLETE KONTROL:

Accessibility from S-Series MK2 to MASCHINE

 Accessibility for visually-impaired users has been added when using KOMPLETE KONTROL S-Series MK2 keyboards to control MASCHINE software. For more information, see MASCHINE Accessibility.

Audible Indicator During Background Scanning

• When Accessibility is activated, the start and end of a Background Content Scan are announced via an audible indicator.

Big Sur compatibility on Intel-based Macs

- KOMPLETE KONTROL is now supported on macOS Big Sur when running as a VST, AAX or standalone.
- KOMPLETE KONTROL and MASCHINE are not yet supported on Apple Silicon based Macs. Even though they can be installed from Native Access on these computers, there is a small possibility of data loss within KOMPLETE KONTROL and MASCHINE between sessions, meaning that Project settings, loaded Instruments, and Amp parameters may intermittently be lost when re-opening a saved project in Logic. We are working with Apple to resolve the issue. Please see this article for updates.

Background Scanning Improvements

- Background Content Scan now occurs when KOMPLETE KONTROL is hosted as a plug-in.
- UI and performance improvements whilst the Background Content Scan is running.

Additional Bug Fixes

- Super 8 R2 UI appears blank when loaded inside of KOMPLETE KONTROL.
- · User edited tags were not saved.
- Dragging an item from the Browser shows one more item than what is dragged.
- Saved items are not shown in the Browser if a scan is running in the background.
- Samples with special unicode characters were not recognised on Windows.
- Browsing tags on the Hardware was slow when a Character tag was selected.

2.3. New Features in KOMPLETE KONTROL 2.1.6

The following new features have been added to KOMPLETE KONTROL:

PreSonus Studio One Support for KOMPLETE KONTROL

• KOMPLETE KONTROL keyboards now support integration in PreSonus Studio One. For more information, refer to Integration with PreSonus Studio One.

Steinberg Cubase/Nuendo Support for KOMPLETE KONTROL A-Series and M32

 KOMPLETE KONTROL A-Series and M32 keyboards now support integration in PreSonus Studio One.

2.4. New Features in KOMPLETE KONTROL 2.1.3

The following new features have been added to KOMPLETE KONTROL:

Audio Plug-in

• The new Audio plug-in specializes in keeping audio loops playing in-sync with the project in your host software and has the optional ability to do so without influencing the key of the loop. Furthermore, you can transpose the loop while it plays so that it fits the key of your song. For more information on the Audio plug-in, refer to Audio Plug-In. For more information on using the Audio plug-in, refer to Working with Loops and One-Shot Samples.

MCU Support for KOMPLETE KONTROL S-Series MK2

• KOMPLETE KONTROL S-Series MK2 now supports integration in hosts with MCU control. For more information, refer to Integration with Hosts using MCU Protocol.

MIDI Control Takeover Mode for Third-Party Controllers

When using third-party controllers, you can now enable Takeover mode to prevent potential
parameter jumps caused by mismatching knob positions between software and hardware. For
more information, refer to Enabling Takeover Mode.

Improvements to Host Integration

 Previously, you had to start KOMPLETE KONTROL as a stand-alone application to scan your library for Instruments, Samples, and Effects before using the plug-in in your host. This step is now no longer necessary. Instead, when using KOMPLETE KONTROL in your host directly after installation, a dialog is presented allowing you to scan your library.

2.5. New Features in KOMPLETE KONTROL 2.1.0

The following new features have been added to KOMPLETE KONTROL:

MIDI Mapping for Third-Party Controllers

• It is now possible to control some of KOMPLETE KONTROL's parameters via a third-party MIDI controller. For more information, refer to MIDI Communication.

Sounds.com Integration

• Browse on Sounds.com, create your own collections of loops and one-shots and send them directly to the KOMPLETE KONTROL Browser.

Improvements to the Browser

- Samples are now cataloged in separate Loops and One-shots tabs in the Browser. For more information, refer to Loops and One-shots.
- Previews of Loops selected in the Browser will be played in sync with the current project.
 When a loop is selected with Prehear turned on, it will begin playing immediately in-sync with the project if transport is running. For more information, refer to Loops and One-shots
- Filters and product selections will be remembered when switching between Content types and Factory/User Libraries in the Browser.
- Browser content synchronization between multiple running instances. When running multiple instances of KOMPLETE KONTROL, either as Standalone and/or as a plug-in, updates to the Library will be synced across the instances. For example, if you delete a sample from your User Library in one instance, the sample will no longer be present in the other instances. Similarly, if you save a preset in one instance, that preset will then be available in the other instances also.

2.6. Box Contents

The box contains the following items:

- KOMPLETE KONTROL keyboard
- · USB cable
 - **(i)**

The included 3 meter USB cable only works in conjunction with the KOMPLETE KONTROL S88 keyboard.

- Power supply (only included in the KOMPLETE KONTROL S88 box)
- · Information flyer providing:
 - the hardware **serial number** of the KOMPLETE KONTROL keyboard
 - a web link for downloading the **KOMPLETE KONTROL software** and the **KOMPLETE SELECT software bundle**
- Safety Instructions flyer

2.7. System Requirements

For KOMPLETE KONTROL to fully function as indented, your system needs to meet certain requirements. The latest KOMPLETE KONTROL system requirements and compatibility information is available here:

http://www.native-instruments.com/komplete-kontrol-s-series/specifications/

KOMPLETE

KOMPLETE KONTROL is optimized for use with KOMPLETE SELECT, KOMPLETE and KOMPLETE ULTIMATE.

The latest KOMPLETE system requirements and compatibility information is available here:

http://www.native-instruments.com/products/komplete/

3. Accessibility

KOMPLETE KONTROL offers a set of accessibility features for visually-impaired users. These are focused exclusively on the KOMPLETE KONTROL keyboard itself and include speech output via your computer for the following features:

- Perform, Transpose, Page left / right buttons
- All Browser functions
- Instance switching
- The current edit mode, including the Plug-in panel and the Perform panel (Scale, Arp)
- Names of parameters and parameter sections when touching knobs, including all edit modes
- Tempo (KOMPLETE KONTROL stand-alone application only)



The accessibility features are particularly useful when combined with KOMPLETE KONTROL's host integration and Apple VoiceOver in Apple Logic Pro X and GarageBand.

3.1. Keyboard Overview

The buttons and knobs on the KOMPLETE KONTROL keyboard are organized in the following groups:

- Perform and Edit section
- Transport section
- Solo and Mute buttons
- Preset and Page buttons
- Arrange buttons (only functional in MASCHINE)
- Control section
- Navigation and Mode buttons
- 4-Directional Push Encoder (referred to as the 4-D encoder)
- Transpose and Fixed Velocity buttons

The Perform and Edit section is located at the top left of the keyboard. It contains six buttons that are arranged in two rows.

The buttons in the first row are (from left to right):

- **SHIFT**
- SCALE (Edit)
- ARP (Edit)

The buttons in the second row are (from left to right):

- **UNDO** (Redo)
- **QUANTIZE**

The Transport section is located directly below the Perform and Edit section. It contains six buttons that are arranged in two rows.

The buttons in the first row are (from left to right):

- LOOP
- METRO
- TEMPO

The buttons in the second row are (from left to right):

- PLAY (Restart)
- REC (Count-In)
- STOP

The Solo and Mute buttons are located to the top right of the Perform and Edit section. The two buttons are arranged in a row.

The buttons are (from left to right):

- Mute
- Solo

The Preset and Page buttons are located to the bottom right of the Perform and Edit section, below the Solo and Mute buttons. The four buttons are arranged in a column.

The buttons are (from top to bottom):

- PRESET Up
- **PRESET** Down
- Page Left and Page Right (next to each other)

The Arrange buttons, which are only functional in MASCHINE, are located to the right of the Solo and Mute buttons and the Preset and Page buttons. The five buttons are arranged in a column.

The buttons are (from top to bottom):

- · SCENE
- PATTERN
- · TRACK
- KEY MODE
- · CLEAR

The Control section is located in the center of the KOMPLETE KONTROL keyboard. It contains eight buttons and eight knobs. The buttons are arranged in a row at the very top of the keyboard. The knobs are arranged in a row directly above the keybed.

The Navigation and Mode buttons are on the top right of the KOMPLETE KONTROL keyboard. The six buttons are arranged in two rows.

The buttons in the first row are (from left to right):

- BROWSER
- PLUG-IN
- MIXER

The buttons in the second row are (from left to right):

- · INSTANCE
- · MIDI
- SETUP

The 4-D encoder is located directly below the Navigation and Mode buttons.

The Transpose and Fixed Velocity buttons are located at the far left of the keyboard next to the keybed and directly above the Pitch and Modulation wheels. The three buttons are arranged in a row.

The buttons are (from left to right):

- FIXED VEL (TS Mode)
- **OCT** Down
- **OCT** Up

3.2. Activating Accessibility Features

In order to activate or deactivate the accessibility features from the KOMPLETE KONTROL keyboard while the KOMPLETE KONTROL software is running:

- 1. Press and hold the **SHIFT** button on the top left of the keyboard.
- 2. While holding **SHIFT**, press the **MIXER** button on the top right of the keyboard.
- → The accessibility features are activated or deactivated.

When the accessibility features are activated, you can choose whether or not speech output should be enabled for names of Preset files while browsing:

- 1. Press and hold the **SHIFT** button on the top left of the keyboard.
- 2. While holding **SHIFT**, press Button 5 in the Control section.
- → Speech output for names of Preset files while browsing is enabled or disabled.



(i) The accessibility features are designed to be used with the KOMPLETE KONTROL plug-in. However, the KOMPLETE KONTROL stand-alone application must be opened after initial installation and after installing additional Instruments and Effects. This will ensure that all Instruments, Loops, One-shots and Effects are displayed correctly in the KOMPLETE KONTROL Browser.

3.3. Training Mode

KOMPLETE KONTROL Training Mode makes it easy to locate a specific button or parameter without accidentally triggering an action. When Training Mode is activated, all button presses and parameter names are announced but the corresponding action is not triggered.

Activating Training Mode

To activate or deactivate Training Mode from the KOMPLETE KONTROL keyboard while the KOMPLETE KONTROL software is running:

▶ Double-press the **SHIFT** button on the top left of the keyboard.



Training Mode is only available when the accessibility features have been activated.

3.4. Feature Overview and Keyboard Shortcuts

	Feature	Accessible from Keyboard	Keyboard Shortcut
Accessibility Mode	Activate or deactivate Accessibility mode	Yes	SHIFT + MIXER
	Activate or deactivate speech output for names of Preset files		SHIFT + Button 5
Browser	Browse for Factory and User Preset files	Yes	Page left button or Page right button
	Switch between Category and Vendor sorting	Yes	SHIFT + Knob 1
	Set Preset file Favorites	Yes	SHIFT + Knob 4
	Sort by Favorites		SHIFT + Knob 3
	Save and edit User Preset files	No	
	Browse for NKS plug-ins from other vendors	Yes	Supported by default
Instrument control	Adjust key Instrument parameters	Yes	Knob 1 – 8
	Custom map Instrument parameters	No	
Smart Play	Accessing Scale and Chord Parameters	Yes	SHIFT + SCALE Edit
	Adjust Scale & Chord parameters		Knob 1 – 8
	Accessing Arp Parameters	Yes	SHIFT + ARP Edit
	Adjust Arp parameters		Knob 1 – 8
	Selecting Parameter Pages		Page left or Page right
Touch Strips	Adjust Touch Strip parameters	No	
Tempo	Adjust BPM	Yes	TEMPO + Knob 1
Training mode	Find a control without accidentally triggering actions	Yes	
	Activate or deactivate Training mode	Yes	Double-press SHIFT
Preferences	Adjust software & hardware preferences	No	
Software dialog	Be notified if a dialog box opens in the software (dialog content is not available for speech output)	Yes	Supported by default



(i) Accessibility for KOMPLETE KONTROL's host integration is only available when using Apple VoiceOver in Logic Pro X and GarageBand. For more information about KOMPLETE KONTROL's host integration features, refer to Host Integration.

3.5. MASCHINE Accessibility

Maschine software is Native Instruments' groove production software, bundled with Maschine pad controllers and Komplete Kontrol keyboards. The release of Maschine 2.13 software adds Accessibility from all Komplete Kontrol S-Series MK2 keyboard models (S49 MK2, S61 MK2, and S88 MK2).

Maschine pad controllers, such as Maschine MK3 or Mikro MK3, are not required to make use of the Accessibility features. However, a Maschine controller can be used alongside a Komplete Kontrol S-Series MK2 keyboard, but only the keyboard will be accessible.

Our approach to product development is incremental and we aspire to deliver value when possible, rather than constraining features and functionality to yearly releases. This allows us to share features with our customers as soon as they are ready, and learn what users do and do not like, allowing us to further iterate and refine.

This first release of Maschine Accessibility represents a starting point, rather than an end goal. There are limitations in this release that we will address in future updates, and we still very much aspire to extend this to other controllers.

3.5.1. MASCHINE Software Overview

Maschine shares similarities with popular non-linear DAWs such as Ableton Live. You can create Patterns for each instrument (Group), and add combinations of Patterns into Scenes, which are song sections (verse, chorus, middle-8, etc). You can then arrange your Scenes into a full song on the Timeline.

Groups in Maschine contain up to 16 Sounds. A Sound can be a One-shot sample, a loop, or an Instrument, and can also contain Effect plug-ins within the signal chain. The Maschine browser is home to individual presets for One-shot samples, loops, and instruments, as well as pre-configured Sounds which load an effects chain, and pre-configured Groups which contain 16 Sounds, all ready to go! Groups are labeled A-H, and Sounds are labeled 1-16, for example, A1.

Instruments, One-Shots, and (time-stretched) Loops can be played chromatically across the keyboard. Groups can also be played across 16 keys, with each key mapped to a single pitch from each of the contained Sounds; particularly great for playing drums. You can switch between these by pressing the Key Mode button.

You can control many of Maschine's functions directly from the S-Series keyboard. Maschine can operate as a standalone application, or run as a plug-in in a DAW. The setup and configuration of your keyboard will differ for each mode of use. If you are using Maschine in a DAW, you will first need to configure the host for use with your keyboard. Using Maschine in a DAW gives you access to additional tracks, and easy editing of preferences. Computer keyboard shortcuts like Command + O are not available, but operations such as saving and opening can be done directly in the DAW, as Maschine will recall it's loaded contents and settings between DAW sessions.

3.5.2. Known Issues

There are some issues and limitations that will be resolved in future updates. These include:

Speech-related Bugs

- When the keyboard is in Pattern mode, Knob 1 is used to select Sound. This isn't always announced, even though the Sound selection is changing. By releasing the knob and tapping it, you can hear the currently selected sound name.
- When the keyboard is in Scene mode, the page left and right buttons select between banks of Scenes (1-8, 9-16, etc). Pressing these buttons may cause a readout of an unrelated parameter page.

Transport

Control of transport in Maschine is slightly different from that of conventional linear DAWs. We have chosen to maintain this behavior as a starting point and will investigate ways to improve this for future releases. Currently, two potential limitations exist that may affect usability for visually impaired users:

- The 4-D encoder is not used to relocate the playhead, so it is not possible to relocate to another position on the timeline.
- Pressing Stop whilst transport is stopped does not relocate the playhead to the start of the project or section.

The following interactions can be used to work around this:

- Shift + Play buttons will start transport from the beginning of the project, or selected Scene if Loop is enabled.
- When Record Arm is enabled, Shift + Rec buttons will play a bar of count-in then begin recording.

Quitting and Saving in Standalone Mode

Quit, Save, and Open commands can be applied when Maschine is running as a standalone application only. We plan to enable some of these commands from the keyboard in a future release. For more information, see MASCHINE Workflows.

3.5.3. MASCHINE Keyboard Overview

The S-Series MK2 keyboard is divided into the following sections:

- **Keybed Controls** are located at the bottom left corner, above the pitch and modulation wheels.
- Central Console is located in the center of your keyboard and contains touch-sensitive knobs and screen buttons. Screen buttons and knobs are referred to as 1-8 from left to right.
- Navigation Controls are located to the right of the Central Console, and feature six buttons and a 4-Directional (4-D) push encoder. These controls set the keyboard's mode and navigate through Maschine.
- Maschine Controls are located directly left of the Central Console, and feature five dedicated buttons for Maschine.
- Mute, Solo, Preset Up / Down, Page Left / Right buttons are located immediately left of the Maschine controls.
- Edit Controls are located in the upper, leftmost cluster of buttons. They are used to Undo, Redo, activate and deactivate the Scale and Arpeggio modes, and more. The Shift button is an important global modified key and is located with the Edit controls.
- **Transport Controls** are found in the lower, leftmost cluster of buttons.

3.5.4. MASCHINE Workflows

The following workflows describe how to navigate Maschine software from your S-Series MK2 keyboard. Follow these steps to setup your software and keyboard, then learn how to make use of the Browser, Plug-in page, Transport controls, Scenes and Patterns, and Mixing mode from your keyboard.

Setup

To get started, open Maschine software and start with a new project. Note that sighted assistance may be needed to pass through any dialogue boxes that might appear during plug-in scanning, and to enable the MIDI ports from your Komplete Kontrol S-Series MK2 Preferences.

- 1. Launch Maschine software.
- 2. Create a new project by pressing Command + N (macOS) or Ctrl + N (Windows) on your computer keyboard.
- → Maschine is now ready to start creating music. Next, setup the keyboard's Accessibility features.
- 3. In Accessibility mode, most actions from the keyboard will trigger a speech announcement. To activate Accessibility mode, hold the top left button (Shift) and press the top right button (Mixer) on the keyboard.
- 4. In Training mode, all button presses and parameter names are announced but the corresponding action is not triggered. Press Shift twice to enter Training mode.

Browser

The Browser allows you to load Groups, Sounds, Instruments, and Effects from an S-Series keyboard. Next, load a Drum Kit from the Groups tab of the Browser:

- 1. Press Browser, located in the Navigation Controls, to the right of the Central Console.
- 2. Use Screen Buttons 1 and 2 to navigate through the available file types and select Groups.
- 3. Use the knobs to filter through different search results. Adjust the knob to filter the respective tag: Products (Knob 2), Banks (Knob 3), Types (Knob 5), Sub-Types (Knob 6). Knob 8 and the 4-D encoder are used to scroll through the available results.
- 4. You will hear both sound previews and the name of each preset whilst scrolling through the results list. Use the up and down arrows to move to the next and previous presets without hearing the preset name. To toggle prehear (audition), press Shift + Screen Button 8.
- 5. Press Screen Button 8 or the 4-D encoder to load a Group.

Plug-ins

Using your keyboard, you can navigate and edit your Plug-in chains, and adjust parameters. The Plug-in button is located top and center of the Navigation Controls

- 1. Press Plug-in to display the Plug-in page.
- 2. Press Button 1 to select the Master channel. Press Button 2 to select the Group channel. Press Button 3 to select the Sound channel.
- 3. Move through the Plug-in chain using Buttons 5 and 6 to select the next or previous plug-in. You can also push the 4-D encoder left or right to move between plug-ins.
- 4. If you want to replace a Plug-in, push the 4-D encoder to open the Plug-in Browser. Turn the 4-D encoder to select a Plug-in, and push the encoder to insert the Plug-in in the chain.

- 5. Press Button 8 to quick browse preset files for the selected Plug-in. Push the 4-D encoder to select the preset file.
- 6. To delete a Plug-in from the chain, press Clear.
- 7. Adjust the parameter values of the Plug-in using Knobs 1-8. The Page buttons provide access to other pages containing further functions to control. Select the next or previous parameter page using the Page Left/Page Right buttons.

Performance

Use the Edit Controls, located in the upper, leftmost cluster of buttons, to access the Arpeggiator and Scale Engine. Adjust the settings according to your performance needs.

- 1. To activate the scale engine for the selected Group, press Scale.
- 2. Edit the scale engine by pressing Shift + Scale.
- 3. To activate the Arpeggiator for the selected Group, press Arp.
- 4. Edit the Arpeggiator settings by pressing Shift + Arp.
- 5. To activate quantization, press Quantize + turn Knob 1. To adjust the quantization value press Ouantize + turn Knob 2.

Transport controls can be used to operate Maschine's playback. They are located on the lower left side of the keyboard.

- 1. Press Play to start playback.
- 2. Press Metro to activate/deactivate the metronome.
- 3. To adjust the Master tempo, press Tempo and turn Knob 1.
- 4. Press Shift + Play to restart playback.

Recording

Pattern mode is the recommended mode for recording. The Pattern button is the second of the Maschine Controls, located left of the Central Console. In Pattern mode, you can create and edit Patterns, and use the 4-D encoder to move and edit note events. When you are ready to record a Pattern:

- 1. Press Pattern on the keyboard.
- 2. Use Buttons 1-8 to select a Pattern or create a new Pattern for the selected Scene.
- 3. Push 4-D encoder left or right to select another Group, and use Knob 1 to select another Sound in the Pattern.
- 4. Double the Pattern length by pressing Shift + Button 3.
- 5. Insert a copy of the selected Pattern by pressing Shift + Button 4, and insert an empty Pattern by pressing Shift.
- **6.** Activate the count-in by pressing Shift + Rec.
- 7. Start recording by pressing Rec and stop recording by pressing Stop.
- 8. Adjust the Position using Knob 2. Adjust the Start position using Knob 3. Adjust the Length of the pattern using Knob 4.

Scene

Record multiple patterns, then add them into Scenes to create song sections. The Scene button is located at the top of the five Maschine Controls, on the left side of the Central Console. Press Scene to access the identical Ideas view of the Maschine software. This gives you instant control over your Scenes and Patterns.

- 1. Press Scene on the keyboard to enter Ideas view.
- 2. Use Buttons 1-8 to select a Scene or create a new Scene.
- 3. Use Knobs 1–8 to select another Pattern in the Scene and select the corresponding Group.
- 4. Insert an empty Scene by pressing Shift + Button 5, and insert a copy of a selected Scene by pressing Shift + Button 4.
- 5. To delete a selected Scene press Shift + Button 6, and to delete the selected Pattern press
- 6. Press Shift + Button 8 to activate retrigger. When active, the next Scene that is selected will be forced to play from start.

Mixing

In Mix mode, you can access volume and pan settings, and make adjustments to the mix from your S-Series keyboard. The Mixer button is located on the top right of the keyboard.

- 1. Press Mixer to access eight of the 16 channel strips with Sounds and Groups. The further eight Sounds can be accessed by pressing the Page buttons.
- 2. Press the 4-D encoder to toggle between volume and panorama control for Knobs 1-8.
- 3. Push the 4-D encoder up to enter Group mode and buttons 1-8 will control Groups. Push the 4-D encoder down to enter Sound mode and buttons 1-8 will control Sounds.
- 4. Use Buttons 1-8 to jump to another Group or Sound, respective of the selected mode.
- 5. To adjust the output volume of the respective Group or Sound, turn Knobs 1-8. To fine-adjust the output volume, press Shift + turn Knobs 1-8.
- 6. Push the 4-D encoder left or right to select the previous or next Sound or Group.
- 7. Turn the 4-D encoder to adjust the output volume of the respective Group or Sound.

Quitting & Saving in Standalone Mode

The following commands apply when Maschine is running as a standalone application. We plan to enable some of this from the keyboard in a future release:

- To launch the Save As dialog, press Command + Shift + S (macOS) / Ctrl + Shift + S (Windows). This is a system dialog, and so can be navigated and read by screen readers.
- To launch the Open dialog, press Command + O (macOS) / Ctrl + O (Windows). This is also a system dialog. Note that projects can be opened from the Browser by setting Filetype to 'Project'.
- If the current project has no unsaved changes, pressing Command + Q (macOS) / Alt + F4 (Windows) will guit Maschine.
- On macOS, if the current project has unsaved changes, pressing Command + Q will launch a Quit dialog which is not screen readable. Pressing Esc will dismiss the dialog and go back to Maschine. Please note that it is not possible to guit Maschine when there are unsaved changes.

On Windows, if the current project has unsaved changes, pressing Alt + F4 will launch a Quit dialog which is not screen readable. Pressing Esc will dismiss the dialog and go back to Maschine.

4. The KOMPLETE KONTROL Workflow

KOMPLETE KONTROL brings all the sounds from KOMPLETE and the Native Kontrol Standard (NKS) to the center of your workflow. Its advanced integration in a number of hosts enables you to quickly capture ideas, with immediate access to the sounds you need, all directly from the KOMPLETE KONTROL keyboard.

The KOMPLETE KONTROL workflow is streamlined to remove any obstacles when sketching out a new song in a supported host:

- 1. Select a track that hosts the KOMPLETE KONTROL plug-in with the navigation controls on the keyboard. This is made possible by KOMPLETE KONTROL's advanced host integration.
- 2. Find Preset files you like from any of the Instruments and Effects in your KOMPLETE KONTROL Library by browsing with the keyboard, supported by the Browser's filters and Preview functions.
- 3. Use the keyboard's Control section to adjust the loaded Instrument and Effect(s) and create your own unique sound.
- 4. Optionally, you can enable KOMPLETE KONTROL's Smart Play features to enrich your playing with the Scale engine and the Arpeggiator.
- 5. Record a new clip in the host, conveniently controlling transport and loop functions directly from the keyboard. Again, made possible by KOMPLETE KONTROL's advanced host integration.
- 6. If you need to start over, undo and redo functions are right at your fingertips. To further refine your recording, you can apply quantization and automation to a clip by pressing the corresponding buttons on the keyboard.
- → You have quickly captured a musical idea and can continue sketching out a new song by repeating the process and layering more tracks.

Key Features

The following key features facilitate the KOMPLETE KONTROL workflow:

- Browser: The Browser is your interface for finding, loading and organizing Instruments, Loops, One-Shots, Effects, and Preset files from the KOMPLETE KONTROL Library. For more information, refer to Browsing the Library, Working with Effects, and Managing the Library.
- Instrument and Effect control: The Touch Strip and knobs on the keyboard are pre-mapped to all KOMPLETE and NKS Instruments, Loops, One-shots and Effects for immediate control. For more information, refer to Controlling Instrument, Loop, One-shot and Effect Parameters and Assignments for the Touch Strip
- Smart Play: The Scale engine and the Arpeggiator let you play and generate scales, chords, and arpeggiator sequences. For more information, refer to Smart Play - Playing and Editing Scales and Chords and Smart Play – Playing and Editing Arpeggiator Sequences.
- Host integration: Advanced integration in a number of hosts allows you control core functionality directly from the keyboard. For more information, refer to Setting up Host Integration and Host Integration.

5. Setting up KOMPLETE KONTROL

This section provides basic setup information for using the KOMPLETE KONTROL stand-alone software, and guides you through the process of integrating KOMPLETE KONTROL in supported hosts.

The KOMPLETE KONTROL software is installed both as a stand-alone application as well as a VST, Audio Unit, and AAX plug-in.

The KOMPLETE KONTROL stand-alone application directly communicates with your audio and MIDI interfaces, which you can configure in the KOMPLETE KONTROL Preferences. When KOMPLETE KONTROL is used as a plug-in within a host, the communication with your audio and MIDI interfaces is managed by the host.

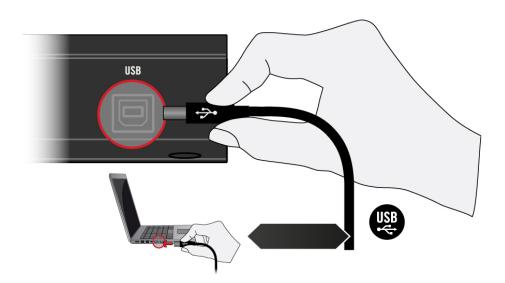


For details about the audio and MIDI configuration of the host, and how to load plugins, please refer to its documentation.

5.1. Connecting the Keyboard to the Computer

To connect the KOMPLETE KONTROL keyboard to your computer:

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



- 3. Press the power switch on the rear panel of the keyboard to switch it on.
- → The keyboard is now detected by the operating system.



Non-powered USB hubs are not supported. The keyboard should always be connected directly to the USB port of the computer, or be used with a powered USB

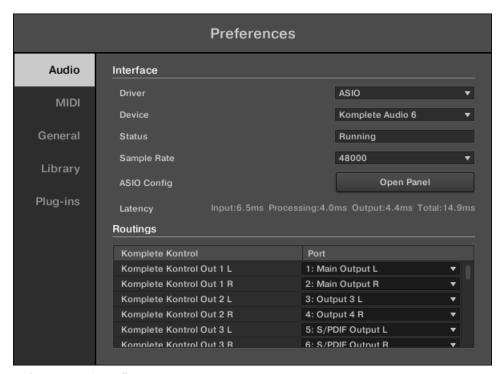
5.2. Setting up the Stand-Alone Application

When you launch the KOMPLETE KONTROL software from its installation directory, it starts as a stand-alone application independently from a host.

By default, the application uses the standard audio interface of your computer. In order to use another audio interface, and receive MIDI notes from the keyboard, you need to configure the application in the Preferences.

Configuring Audio Interface

- 1. In the KOMPLETE KONTROL menu click on Edit > Preferences to open the Preferences.
- 2. Click on **Audio** to display the **Audio** page.
- 3. Select the hardware driver supported by your audio interface from the **Driver** drop-down menu.
- 4. Select the audio interface from the **Device** drop-down menu.
- 5. Under Routings, select the left and right output channels of your audio interface you want to use for KOMPLETE KONTROL's master output in the Komplete Kontrol Out 1 L and Komplete Kontrol Out 1 R drop-down menus.

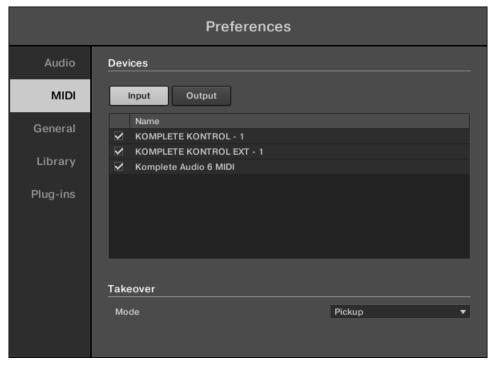


Preferences panel - Audio page.

Enabling MIDI Control

1. Click on MIDI to display the MIDI page.

- 2. Click on **Input** to display the available devices for incoming MIDI signals.
- 3. Click the **Komplete Kontrol** checkboxes to activate incoming MIDI signals from the keyboard.



Preferences panel - MIDI page (entries may vary on your computer).

→ The software is configured and ready to be controlled with the keyboard.



The MIDI Output settings are required for using KOMPLETE KONTROL's Smart Play features with other MIDI instruments.

5.3. Setting up Host Integration

KOMPLETE KONTROL integrates with a number of hosts to facilitate a fluent workflow for performing and recording music with your KOMPLETE KONTROL Library.

Advanced integration of KOMPLETE KONTROL is available in the following hosts:

- MASCHINE 2
- Apple Logic Pro X
- Apple GarageBand
- Ableton Live 10
- Steinberg Cubase Artist 8.5/9/9.5/10
- Steinberg Cubase Pro 8.5/9/9.5/10
- Steinberg Nuendo 7/8/9/10
- PreSonus Studio One 4.5

Before using the KOMPLETE KONTROL keyboard to control a supported host, a few configuration steps are required:

Configuring Your Host for Use with the Keyboard

For some of KOMPLETE KONTROL's advanced integration features to function as intended, the host must support these features. For an overview of which features are supported by which host, refer to the following Knowledge Base article: https://support.native-instruments.com/hc/en-us/ articles/115005195369.

For detailed instructions about setting up supported hosts for use with the KOMPLETE KONTROL S-Series MK2 keyboard, refer to these Knowledge Base articles:

- Setting Up Apple Logic Pro X for KOMPLETE KONTROL: https://support.nativeinstruments.com/hc/articles/210279905
- Uр Ableton Live for KOMPLETE KONTROL: https://support.nativeinstruments.com/hc/articles/209557689
- Setting Up Apple GarageBand for KOMPLETE KONTROL: https://support.nativeinstruments.com/hc/articles/210844489
- Setting Up Steinberg Cubase / Nuendo for KOMPLETE KONTROL: https://support.nativeinstruments.com/hc/articles/209557849



You can also find instructions about configuring Ableton Live for use with KOMPLETE KONTROL in the Ableton Live Setup document available as a PDF file in the Host Integration Files subfolder of the KOMPLETE KONTROL installation folder on your hard drive.

5.3.1. Setting up Apple Logic Pro X and GarageBand

Apple Logic Pro X and GarageBand are automatically configured for advanced integration with KOMPLETE KONTROL once you launch the respective application for the first time after installing the KOMPLETE KONTROL software. Ensure that the keyboard is connected and switched on before launching the application.

A dialog asks you to confirm this after launching the application:

▶ When the message OSC app "KOMPLETE KONTROL S-Series" wants to connect to Logic Pro **X** / **GarageBand** appears on screen, click **OK**.



If you have not started KOMPLETE KONTROL as stand-alone application once before using the plug-in within your DAW for the first time, KOMPLETE KONTROL will ask you to scan your library for installed Instruments and Effects. In this case, click the Scan **Library** button to scan your library.

For a detailed overview of Integration controls for Logic Pro X / GarageBand refer to Integration with Apple Logic Pro X and GarageBand

5.3.2. Setting up Steinberg Cubase/Nuendo

Steinberg Cubase/Nuendo be configured for must advanced integration with KOMPLETE KONTROL.

1. Ensure that the keyboard is connected and switched on before launching the application.

- 2. Launch Steinberg Cubase/Nuendo.
- 3. In Steinberg Cubase/Nuendo, open the **Device Setup.** from the **Devices** menu (Steinberg Cubase 9.5: Studio Setup from the Studio menu).
- 4. Click the + button in the upper left corner of the Device Setup and select Komplete Kontrol S-**Series** from the drop-down menu.
- 5. Set MIDI Input and MIDI Output for Komplete Kontrol S-Series to the ports named Komplete Kontrol DAW (macOS) / KOMPLETE KONTROL (not KOMPLETE KONTROL EXT. Windows).
- → Steinberg Cubase Nuendo is now ready to be used with KOMPLETE KONTROL.



(i) If you have not started KOMPLETE KONTROL as stand-alone application once before using the plug-in within your DAW for the first time, KOMPLETE KONTROL will ask you to scan your library for installed Instruments and Effects. In this case, click the Scan **Library** button to scan your library.

For a detailed overview of Integration controls for Steinberg/Nuendo refer to Integration with Steinberg Cubase and Nuendo

5.3.3. Setting up Ableton Live

Before you can load KOMPLETE KONTROL instances into Ableton Live, you must configure Ableton Live for advanced integration with KOMPLETE KONTROL.

Configuring Ableton Live for KOMPLETE KONTROL

To add KOMPLETE KONTROL as a control surface in Ableton Live's preferences:

- 1. Launch Ableton Live.
- 2. In Ableton Live, go to the **Preferences** and open the **Link / MIDI** tab.
- 3. Assign a free **Control Surface** slot to KOMPLETE KONTROL by selecting **KOMPLETE KONTROL MK2** from the drop-down menu.
- 4. Leave both the Input and the Output for the KOMPLETE KONTROL control surface set to None.

Loading KOMPLETE KONTROL in Ableton Live

To load KOMPLETE KONTROL:

- 1. Ensure that the keyboard is connected to your computer and switched on.
- 2. In Ableton Live, select the **Plug-ins** folder in the Browser to display the installed plug-ins.
- 3. Drag the **KOMPLETE KONTROL** entry from the Browser list to an empty MIDI track.
- → You are now ready to use KOMPLETE KONTROL within Ableton Live.



(i) If you have not started KOMPLETE KONTROL as stand-alone application once before using the plug-in within your DAW for the first time, KOMPLETE KONTROL will ask you to scan your library for installed Instruments and Effects. In this case, click the Scan **Library** button to scan your library.

For a detailed overview of Integration controls for Ableton Live refer to Integration with Ableton Live.

5.3.4. Setting up PreSonus Studio One

PreSonus Studio One must be configured for advanced integration with KOMPLETE KONTROL.

- 1. Ensure that the keyboard is connected and switched on before launching the application.
- 2. Launch PreSonus Studio One.
- 3. In Studio One, open the **Preferences** menu, then select **External Devices**.
- 4. Press **Add** and select **Komplete Kontrol S-Series** from the drop-down menu.
- 5. Set MIDI Input and MIDI Output for Komplete Kontrol S-Series to the ports named Komplete Kontrol DAW (macOS) / KOMPLETE KONTROL (Windows).
- → PreSonus Studio One is now ready to be used with KOMPLETE KONTROL.



If you have not started KOMPLETE KONTROL as stand-alone application once before using the plug-in within your DAW for the first time, KOMPLETE KONTROL will ask you to scan your library for installed Instruments and Effects. In this case, click the Scan **Library** button to scan your library.

For a detailed overview of Integration controls for PreSonus Studio One refer to Integration with PreSonus Studio One.

5.4. Connecting Pedals to the Keyboard

The KOMPLETE KONTROL keyboard provides you two pedal inputs (in the form of 1/4" sockets) on its rear panel: PEDAL A and PEDAL B.



The pedal inputs on the rear panel of the keyboard.

These inputs both allow you to connect either a continuous or a switch pedal in order to further refine your performance. They can be freely configured for sustain or expression behavior.



You can define the MIDI messages assigned to the pedal inputs in KOMPLETE KONTROL'S MIDI Assignment editor. For more information, refer to Using the MIDI Assignment Editor

Connecting Pedals

Connect a continuous or switch pedal to the **PEDAL A** or **PEDAL B** inputs on the rear panel of the keyboard.

Configuring the Pedal Input for a Sustain Pedal

When a switch pedal is connected:

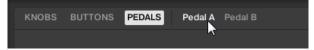
1. Click the MIDI Assignment editor button in the Header to open the MIDI Assignment editor.



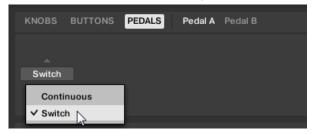
2. Select the control element type **PEDALS**.



3. Select the pedal input you want to configure, either Pedal A or Pedal B.



4. Select **Switch** from the **Mode** drop-down menu.



5. Depending on inverted tip/ring connectivity of the pedal, select either **Tip** or **Ring**.



→ The pedal input is configured for a switch pedal with sustain behavior. If you need to change the MIDI Control Change message assigned to the pedal input, refer to Using the MIDI Assignment Editor.

Configuring the Pedal Input for an Expression Pedal

When a continuous pedal is connected:

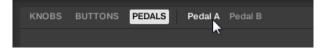
1. Click the MIDI Assignment editor button in the Header to open the MIDI Assignment editor.



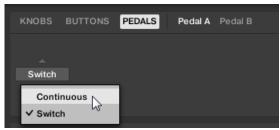
2. Select the control element type PEDALS.



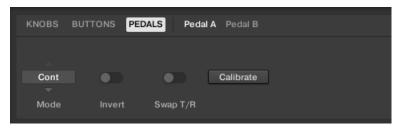
3. Select the pedal input you want to configure, either **Pedal A** or **Pedal B**.



4. Select **Continuous** from the **Mode** drop-down menu.



→ The pedal input is configured for a continuous pedal with expression behavior. If you need to change the MIDI Control Change message assigned to the pedal input, refer to Using the MIDI Assignment Editor.



Depending on the type of pedal, you need to make further adjustments by using the provided options. The following table gives you an overview of these options:

Option	Description
Invert toggle switch	Some continuous pedals internally support the inverted pedal range but cannot be configured on the pedal directly. The Invert Range function allows you to invert the range of the pedal connected to the keyboard.
Swap T/R toggle switch	Allows you to use pedals with inverted tip/ring connectivity.
Recalibrate button	Allows you to recalibrate the input.



(i) When using the MIDI Assignment editor, all keyboard controls (i.e. navigation, transport, etc.) are blocked.

5.5. Connecting External MIDI Equipment to the Keyboard

The KOMPLETE KONTROL keyboard has dedicated MIDI sockets that allow you to directly connect other MIDI devices using a 5-pin DIN MIDI cable and integrate the keyboard into your MIDI setup.



The MIDI sockets on the rear panel of the KOMPLETE KONTROL keyboard.

To connect your external MIDI equipment:

1. Connect the device receiving MIDI signals to the MIDI OUT socket on the rear panel of the keyboard using a 5-pin DIN MIDI cable.

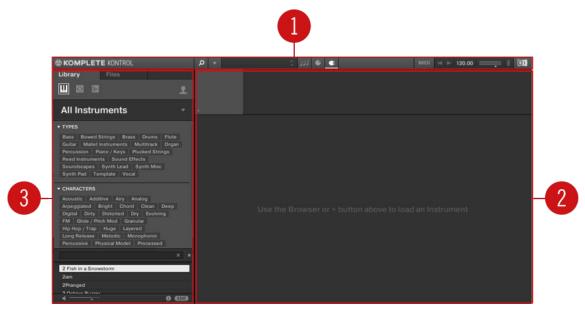
- 2. Connect the device sending MIDI signals to the **MIDI IN** socket on the rear panel of the keyboard using a 5-pin DIN MIDI cable.
- → The MIDI equipment is connected.

Depending on your use case, additional configuration is required in the software:

- If KOMPLETE KONTROL is running as a stand-alone application, you need to activate the corresponding MIDI inputs and outputs of the keyboard on the MIDI page of the Preferences. For more information refer to Using the Keyboard as Stand-Alone MIDI Controller.
- If KOMPLETE KONTROL is running as a plug-in in a host, the MIDI configuration is managed by the host. For more information refer to Using the Keyboard in MIDI Mode.
- If you are using the keyboard as MIDI controller without a USB connection, MIDI data is directly sent and received via the keyboard's MIDI IN and MIDI OUT sockets. For detailed information on MIDI mapping refer to Using the MIDI Assignment Editor.

6. Software Overview

This section gives an overview of the areas and controls of the KOMPLETE KONTROL software.



Overview of the KOMPLETE KONTROL software.

- (1) **Header**: Provides access to general functions like the Main menu, the Preset display, the Transport and Master Volume controls, as well as options to show and hide user interface areas. For more information, refer to **Header**.
- (2) **Plug-in area**: Shows your loaded Instrument, Loop, One-shot or Effect and enables you control it directly in the software. For more information, refer to **Plug-in Area**.
- (3) **Browser**: Provides access to your Instruments, Loops, One-shots and Effects. It also enables you to add, edit, and manage your Preset files. For more information, refer to Browser.

6.1. Header

The header is where you find general settings that affect KOMPLETE KONTROL globally. It also lets you access additional user interface areas.



The header.

- (1) **KOMPLETE KONTROL logo**: Opens the About screen, which shows the version number of the KOMPLETE KONTROL software.
- (2) Browser button: Shows or hides the Browser. For more information, refer to Browser.
- (3) **KOMPLETE KONTROL menu**: Opens the KOMPLETE KONTROL menu, which contains a number of general functions and settings, including the Preferences.

- (4) Preset display: Displays the name of the loaded Preset file or KONTAKT key switch. The arrow buttons on the right skip to the next Preset file in the Browser's Results list.
- (5) Perform panel button: Shows or hides the Perform panel, which gives you access to the parameters of the Scale engine and the Arpeggiator. The Perform panel button lights up blue when the Scale engine and/or the Arpeggiator are enabled. For more information, refer to Perform Panel.
- (6) Plug-in panel button: Shows or hides the Plug-in panel, which allows you to customize the parameter mapping for the Control section on the keyboard for every Preset file. For more information, refer to Plug-in Panel.
- (7) Plug-in chain panel button: Shows or hides the Plug-in chain panel and lights up white when enabled. For more information, refer to Plug-in Chain Panel.
- (8) View button: Switches between Default view and Additional view of the loaded Instrument. The View button only appears if the loaded Instrument contains an Additional view. The View button is not available when an Effect is selected.
- (9) Keyboard button: Shows the currently connected keyboard, S49, S61, or S88. If multiple instances of the KOMPLETE KONTROL software are running (for example in a host), clicking the button connects the keyboard to this instance. This indicator only appears if at least one compatible device is connected. When a third-party keyboard is used, the MIDI button will be displayed instead of the Keyboard. Use the MIDI button to assign third-party controllers to Native Map. For more information, refer to Switching Instances.
- (10) Transport controls: Lets you start, stop, and reset the internal clock. When KOMPLETE KONTROL is loaded as a plug-in in a host, the transport automatically follows the host transport and this feature is greyed out. For more information, refer to Transport and Tempo.
- (11) Tempo control: Lets you adjust the tempo in BPM (beats per minute). For more information, refer to Transport and Tempo.
- (12) Master Volume control: Lets you adjust the overall output volume of KOMPLETE KONTROL. The meter shows the current peak level of the output signal. For more information, refer to Adjusting Master Volume
- (13) CPU meter: Represents the current load on your computer's processor; it should not go above 70% to avoid clicks and interruptions.
- (14) MIDI Assignment editor button: Lets you to access all the settings related to the keyboard's MIDI mode, as well as pedals. This button only appears in the KOMPLETE KONTROL stand-alone application. For more information, refer to Using the MIDI Assignment Editor.
- (15) NI logo: The NI logo opens the About screen, which shows the version number of the KOMPLETE KONTROL software.

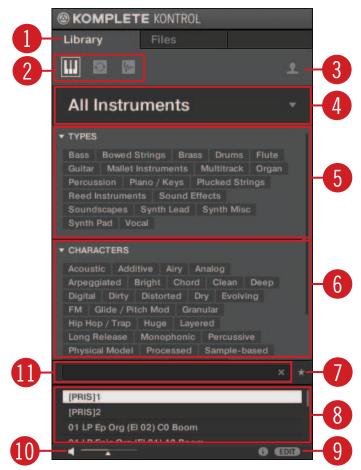
6.2. Browser

The Browser provides you access to your KOMPLETE KONTROL Library and lets you add, edit, and organize Preset files. It consists of the **Library** pane together with the Product selector, and of the **Files** pane which are explained in the following overviews.

For more information on using the Browser and managing your Preset files, refer to Browsing the Library, Working with Effects, and Managing the Library.

6.2.1. Library Pane

The **Library** pane is where you browse for Instruments, Loops, One-shots, Effects, and Preset files. It consists of the following elements:



The **Library** pane.

- (1) Library: Displays the Library pane.
- (2) Product Type icon: Displays if you are currently browsing for Instruments, Loops or One-shots, or Effects. This is dependant on which Plug-in slot in the Plug-in chain is selected. For more information on switching between Product Types, refer to Product Types: Instruments, Loops, One-shots and Effects.
- (3) Content selector: The Globe icon selects factory content and the User icon selects user content. Only Preset files of the selected content type are displayed in the Results list (8). For more information, refer to Choosing Between Factory Content and User Content.
- (4) Product selector: Selects a particular Product or Effect, Product category, and Bank of the selected Product. Only Preset files matching your selection are displayed in the Results list (8). For more information, refer to Product Selector.
- (5) TYPES: Browse for Preset files based on Type and Sub-Type tags that have been applied to them. You can collapse or expand this section by clicking on the arrow next to TYPES. For more information, refer to Types and Characters Tags.
- (6) CHARACTERS: Lets you browse for Preset files based on Characters tags that have been applied to them. You can collapse or expand this section by clicking on the arrow next to **CHARACTERS**. For more information, refer to Types and Characters Tags.
- (7) Favorites: When the icon is enabled, only favorite Preset files are displayed in the Results list (8). For more information, refer to Working with Favorites.
- (8) Results list: Displays all Preset files that match your entered search criteria. For more information, refer to Loading Preset Files.

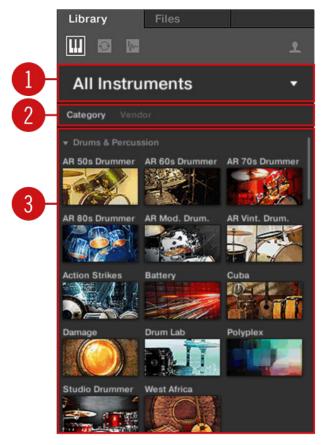
- (9) Control bar: Provides useful tools when browsing and editing the KOMPLETE KONTROL Library:
- The Information button (i) displays additional information for the selected Preset file(s).
- The EDIT button opens the Attribute editor for displaying and editing the tags and properties of the selected Preset file(s).

For more information, refer to Displaying Preset File Information.

- (10) Prehear controls: Lets you audition Preset files. For more information, refer to Auditioning your Preset Files.
- (11) Search field: Lets you perform a text search. For more information, refer to Performing a Text Search.

6.2.2. Product Selector

When browsing for Instruments, Loops, One-shots or Effects, the Product selector enables you to limit your search to a specific Category/Vendor, Product, and Bank. Only Preset files matching your selection are displayed in the Results list.



The Product selector.

- (1) Product selector header: The header displays the selected Product. If there is no selection it shows a generic label (All Instruments or All Effects). A click on the header opens or closes the Product selector.
- (2) Category / Vendor selector: Allows you to sort the Product list by Category or Vendor.
- (3) Product list: Displays all Products that are available in your KOMPLETE KONTROL Library.

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

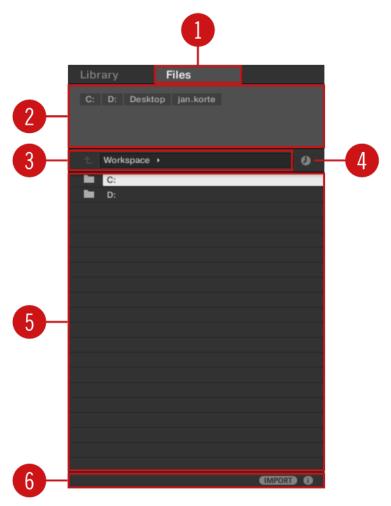
- DRUMS & PERCUSSION
- SAMPLED INSTRUMENTS
- SYNTHESIZERS
- NO CATEGORY

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

For more information, refer to Filtering Preset Files by Product and Filtering Preset Files by Bank.

6.2.3. Files Pane

The **Files** pane contains following elements:



The Files pane in the Browser.

- (1) Files: Displays the Files pane. For more information, refer to Working with the Files Pane.
- (2) **Favorite bar**: Displays all your favorite folders. A click on any favorite folder lets you jump directly to that particular path and display its content in the Result list (5). For more information, refer to Working with File Location Favorites.

- (3) Location bar: Displays the selected path. The Location bar provides various tools to quickly navigate your file system. For more information, refer to Navigating to File Locations with the Location Bar.
- (4) Recent Locations button: Opens a list of the last visited locations for quickly jumping to any of them. For more information, refer to Navigating to Recent File Locations.
- (5) Results list: Displays the content (files and folders) of the folder shown in the Location bar. Only files compatible with KOMPLETE KONTROL are displayed. For more information, refer to Additional Results List Features List in the Files Pane.
- (6) **Control bar**: Provides useful tools when browsing your file system:
- The **Information button** (i) displays additional information about the selected files.
- The IMPORT button lets you import the content of the selected folder to the KOMPLETE KONTROL Library. Before any files are imported, you can choose which tags will be assigned to the files in the **Attribute editor**.

For more information, refer to Editing the Tags and Properties of User Preset Files and Importing KOMPLETE KONTROL-Compatible User Files.

6.2.4. Browser on the Keyboard

On the keyboard displays, the Browser is organized as follows:



The Browser on the keyboard displays.

- The left display shows the Product selector parameters which allow you to narrow your search by selecting the content type (factory or user content), as well as a Product category, a Product, a BANK, and a SUB-BANK.
- The right display shows the parameters to further refine your search by selecting the desired TYPES and CHARACTERS tags. It also shows you the corresponding Results list.

6.3. Perform Panel

The Perform panel lets you access all the parameters related to the Scale engine and the Arpeggiator.



The Perform panel.

- (1) **SCALE**: Clicking the round button left of **SCALE** switches the Scale engine on or off. Clicking the **SCALE** label displays the Scale engine's parameters. See Smart Play Playing and Editing Scales and Chords for details.
- (2) **ARP**: Clicking the round button left of **ARP** switches the Arpeggiator on or off. Clicking the **ARP** label displays the Arpeggiator's parameters. See Smart Play Playing and Editing Arpeggiator Sequences for details.
- (3) **Parameter pages**: If multiple pages of parameters are available, you can switch between them here.

For more information, refer to Smart Play – Playing and Editing Scales and Chords.

6.4. Plug-in Panel

The Plug-in Panel lets you view and customize the parameters mapped to the Control section on the KOMPLETE KONTROL keyboard for individual Preset files. The amount of pages and parameters vary depending on the loaded Instrument or Effect.



The Plug-in panel.

For more information, refer to Customizing Parameter Mappings using the Plug-in Panel.

6.5. Plug-in Chain Panel

The Plug-in chain panel is situated at the top of the Plug-in area. The Plug-in chain is the place where you can directly load Instrument Plug-ins and Samples (Plug-in slot 1), and Effect Plug-ins (Plug-in slot 2 onwards) and arrange them in horizontal series. Each Plug-in is loaded into a Plug-in slot to create the Plug-in chain. The arrangement of the Plug-ins is customizable, but only an Instrument or a Sample can be loaded in to the first Plug-in slot.



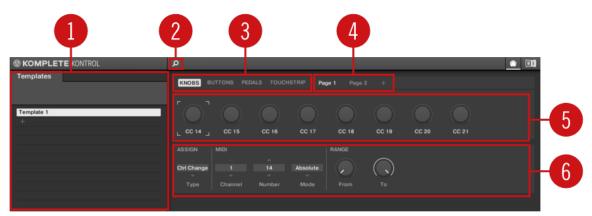
Overview of the Plug-in Chain panel.

- (1) Plug-in chain: Displays the loaded Instrument or Sample, and Effects.
- (2) **Plug-in slot**: Each Plug-in slot represents a Plug-in and displays the Product's name and image. Use the Plug-in slots to directly load Plug-ins, bypass Effects and customize the order.

For more information, refer to Working with Effects.

6.6. MIDI Assignment Editor

The MIDI Assignment editor allows you to define what kind of MIDI messages are assigned to the controls on the KOMPLETE KONTROL keyboard in MIDI mode. This way you can use the keyboard with MIDI applications or MIDI devices that require specific MIDI messages to be sent in order to control certain parameters or functions. Multiple templates can be configured for quick recall, allowing you to prepare controller assignments for different applications and/or devices. The MIDI Assignment editor lets you change the assignments for the knobs, buttons, the Touch Strip in the keyboard's Control section, as well as for connected pedals.



Overview of the MIDI Assignment editor.

- (1) **Templates pane**: Allows you to create and manage your Templates for MIDI assignments.
- (2) **Templates pane button**: Shows/hides the Templates pane.

- (3) KNOBS, BUTTONS, PEDALS, TOUCHSTRIP: Here you can select the type of control element to which you can make MIDI assignments.
- (4) Pages / Pedal A and Pedal B: For the knobs and buttons you can have multiple assignments, organized in pages. Here you can select and manage up to four pages. Pedal Assignments are global and not distinct per Template. Pedals A and B can be independently configured.

For the pedals it is not possible to have multiple assignments.

- (5) Control elements: Here you can select the control element for a MIDI assignment.
- (6) Definition area: Defines the MIDI assignment properties for the selected control element.

For more information, refer to Using the MIDI Assignment Editor.

6.7. Plug-in Area

The Plug-in area of the KOMPLETE KONTROL software is where your Instruments, Loops, Oneshots and Effects are displayed once you have loaded them from the Browser. Each Product offers a different set of controls and parameters that are all easily controlled directly on the computer screen or from the keyboard. Parameter changes are mutually reflected by both the displays on the keyboard and the Instrument's user interface in the Plug-in area.



For most Instruments, additional views are available that give you access to another set of controls. See Instrument Views for details.

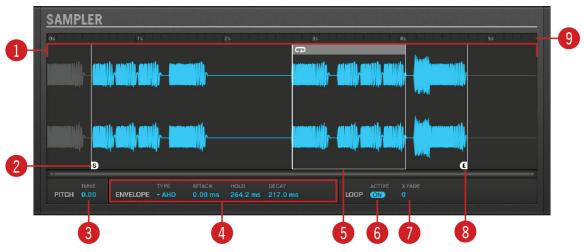


The Plug-in area displaying the Instrument Form.

6.8. Sampler Plug-In

When loading a sample from the One-shots tab in the Browser, the sample will be automatically loaded into the Sampler plug-in so it can be played immediately. Important parameters can be accessed via the GUI, but all parameters for the Sampler plug-in can be accessed via the Plug-in Panel or a connected keyboard.

For more information on using the Sampler plug-in, refer to Working with Loops and One-Shot Samples.



Sampler plug-in.

- (1) Waveform display: Shows the waveform of the Sample.
- (2) **Start**: Determines the Start point of the sample. When Loop is active, the Loop Point determines the start of the loop.
- (3) **PITCH**: Defines the pitch of your sample and adjusts the pitch within three octaves up or down. As this is a traditional sampler.
- (4) **ENVELOPE**: Selects one of three envelope types (One-shot, AHD and ADSR). For more information, refer to **Envelopes**.
- (5) **Loop Point**: Sets the point at which the loop will start playing. The Loop Point can be set independently of the Start Point.
- **(6) LOOP**: When the ON button is enabled, the sample will loop at a length determined by the Loop Point and End Point.
- (7) **X FADE**: Determines the type of fade between the loop points.
- (8) End Point: Sets the End point of the sample. When Loop is active, the End Point determines the length of the loop.
- (9) Timeline: Shows the time scale in seconds.

6.8.1. Envelopes

An envelope allows you to modify the shape and timing of your sample, so you can create more expressive and dynamic sounds. There are three Envelope types available in the Sampler plug-in; **One Shot**, **AHD** and **ADSR**. Each Envelope will affect the playback and behavior of the sample.

One-shot

One-shot operates like a typical vintage drum machine; the sample is played in its entirety from beginning to end, with no envelope. When this type is selected, no parameters are displayed.



The One-shot Envelope.

AHD

AHD disables the Sustain and Release controls of the ADSR envelope and replaces them with the Hold parameter. AHD mode is ideal for triggering a sample for a certain amount of time, regardless of how long the pad is held.



The AHD Envelope.

ATTACK: Attack determines how quickly the sample reaches full volume after being triggered.

HOLD: Hold determines how long the envelope will stay at its maximum level.

DECAY: Decay is used to adjust how fast the sample takes to fade to out.

ADSR

The ADSR Envelope is generally used for longer, sustained samples that require complex dynamic control.



The ADSR Envelope.

ATTACK: Attack determines how quickly the sample reaches full volume after being triggered.

DECAY: Decay determines how fast the envelope drops to the Sustain level.

SUSTAIN: Sustain determines the constant level being kept after Decay until the note ends.

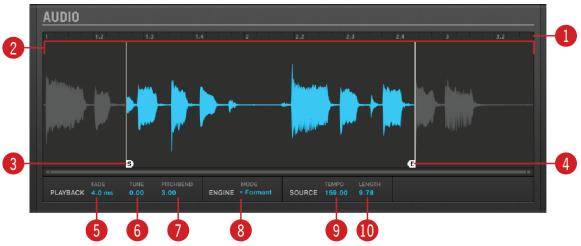
RELEASE: Release determines how long the sound takes to fade out after the note has ended.

6.9. Audio Plug-In

When you load a sample of content type Loop from the Browser, the sample is automatically loaded into the Audio plug-in so you can play it immediately. The Audio plug-in specializes in keeping audio loops playing in-sync with the project in your host software and has the optional ability to do so without influencing the key of the loop. Furthermore, you can transpose the loop while it plays so that it fits the key of your song. Important parameters can be accessed via the GUI, but all parameters for the Audio plug-in can be accessed via the Plug-in panel or a connected keyboard. As for any Instrument or the Sampler plug-in, the Audio plug-in uses the first Plug-in slot in the Plug-in chain.

For more information on using the Audio plug-in, refer to Working with Loops and One-Shot Samples.

The Audio plug-in provides you with the following elements and parameters:



Audio plug-in.

- (1) **Timeline**: Shows the timeline of the loop in musical units, including bars and beats.
- (2) Waveform display: Shows the waveform of the loaded loop. When a sample is played back, a playhead is shown in the waveform display. With the scroll wheel of your mouse, you can zoom in and out the waveform display. Right-clicking on the waveform display opens a context menu for finding the loop on your computer.
- (3) **Start Marker**: Determines the start point of the loop by moving it left or right. You can adjust the Start Marker only from within the software.
- (4) **End Marker**: Determines the end point of the loop by moving it left or right. You can adjust the End Marker only from within the software.
- (5) Fade: Sets a simple fade-in/fade-out amount to avoid pops or clicks that may occur when playing loops with the Audio Plug-in.
- **(6) Tune**: Transposes the tune of the loop within the range of -36 to +36 semitones. You can use this control to set the playback pitch of the loop to 'C', and then the loop's pitch will match the pitch of notes programmed into the host sequencer. This parameter is only available in **Stretch** and **Formant** Engine mode **(8)**.
- (7) **Pitchbend**: Sets the Pitchbend range of the loop from -12 to +12 which is relative to the **Tune** parameter. This parameter controls the effect of the Pitch Wheel/Slider on your MIDI controller. This parameter is only available in **Stretch** and **Formant** Engine mode (8).
- **(8) Engine**: Here you can choose from three different playback engine modes from the drop-down menu:

- Re-pitch: This playback engine mode matches the tempo of the loop to the host sequencer's tempo by changing the playback rate of the loop, and playback rate changes will result in pitch changes to the loop. Like a vinyl record, playing it faster will also cause the pitch of the loop to rise, whereas slowing it down causes the overall pitch to drop. This mode is therefore more suitable for non-pitched material, like drums and percussion, and has the benefit that the transients of sounds remain sharp and also uses significantly less CPU than the other Engine modes. Since tempo and pitch are not independently adjustable with this Engine, any pitch automation you may have done via Events entered will be ignored, only the rhythm of the Events will be used to gate the Loop on and off.
- Stretch: This playback engine mode provides complete independence between tempo and pitch. With this engine, you can change the tempo of a loop without changing its pitch, you can change its pitch without changing its tempo, or you can change both the tempo and pitch simultaneously. This mode even allows you to automate pitch changes by entering notes into the host sequencer. As this mode provides complete tempo and pitch independence, and also works on polyphonic material, it requires more CPU power than other Engines.
- Formant: This playback engine mode is best suited to pitched (tonal) audio as it preserves the formant of the sound. By preserving the formant, it retains the intrinsic character and avoids any shifts in pitch that would normally result in the undesirable cartoon-like effects on vocals when they are pitched upwards or downwards.
- (9) Tempo: Sets the original tempo of your loop so that the Audio plug-in can accurately play it in sync, no matter what tempo you choose in your host sequencer. This is useful if your host software has miscalculated the tempo while importing the loop. However, be aware that changing **Tempo** during playback could affect the synchronization of your loop.
- (10) Length: Sets the original length of your loop so that the Audio plug-in can accurately play it in sync, no matter what tempo you choose in your host sequencer. This is useful if your host software has miscalculated the length while importing the loop. However, be aware that changing **Length** during playback could affect the synchronization of your loop.

All parameters of the Audio plug-in can be adjusted by clicking the parameter and dragging the mouse upwards or downwards. Pressing the [SHIFT] key on your computer keyboard while dragging sets finer increments.

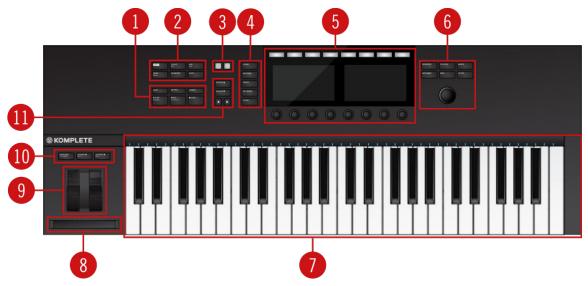
7. Keyboard Overview

The KOMPLETE KONTROL keyboard is tightly integrated into the software and can be used to browse, control and play your Products as well as to control supported hosts.

The keyboard is available in three sizes: The S49, and S61 are equipped with the same top-quality semi-weighted Fatar keybed with aftertouch. The S88 comes with professional, fully-weighted, hammer-action keys, also made by Fatar. Beyond the keybed, all keyboards come with identical features

The keyboard is equipped with the following sections:

Top View



KOMPLETE KONTROL S49 top view.

- (1) **Transport section**: Controls the transport of supported hosts when KOMPLETE KONTROL is used as a plug-in. For more information, refer to **Transport Section**.
- (2) **Perform and Edit section**: Lets you edit and control the Smart Play features, e.g., playing scales, chords, and arpeggiator sequences. The settings made in the Perform and Edit section are displayed in the Control section (5) and are reflected by the Light Guide and keybed (7). For more information, refer to Perform and Edit Section.
- (3) **Solo and Mute buttons**: Let you instantly solo and mute any Sound or Group in supported hosts. For more information, refer to **Host Integration**.
- **(4) Arrange buttons**: Let you switch between the different arrangement views and modes in supported hosts. For more information, refer to **Host Integration**.
- **(5) Control section**: The knobs and displays are automatically assigned to parameters of the loaded Product or selected mode. For more information, refer to Control Section.
- **(6) Navigation and Mode buttons**: Lets you browse your KOMPLETE KONTROL Library and navigate in your DAW with the 4-D encoder, as well as directly access functions like the Mixer and MIDI mode. For more information, refer to 4-D Encoder and Mode Buttons.

- (7) Keybed and Light Guide: Reflect the Smart Play functions by switching LEDs on or off to indicate active and inactive keys. The Light Guide also reflects the settings of the loaded Instrument and can be very helpful to illustrate e.g., BATTERY or KONTAKT mappings. For more information, refer to Keybed and Light Guide.
- (8) Touch Strip: The Touch Strip can be assigned to parameters via the MIDI learn function of the loaded Instrument. For more information, refer to Touch Strip.
- (9) Pitch and Modulation Wheels: The Pitch Wheel on the left lets you adjust the pitch of the loaded Instrument. The Modulation Wheel on the right lets you adjust the default modulation parameter of the loaded Instrument.
- (10) Transpose and Fixed Velocity buttons: The FIXED VEL (TS Mode) button sets the note velocity for all keys to a fixed value of 127. The OCTAVE (Semi) down / up buttons transpose the entire keybed an octave down / up. Pressing SHIFT + OCTAVE (Semi) down / up transposes the entire keybed a semitone down / up. For more information, refer to Transpose and Fixed Velocity Buttons.
- (11) Preset and Page buttons: The PRESET up / down buttons let you skip to the next or previous Preset file of the loaded Product. The Page left / right buttons let you skip to the next parameter page and thus remap the knobs and displays to another set of parameters.

Rear View

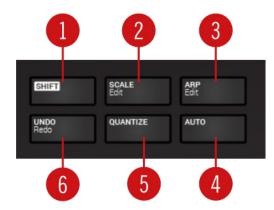


KOMPLETE KONTROL S49 rear view.

- (1) Kensington Lock: Allows you to attach a Kensington Lock to secure your device from theft.
- (2) MIDI IN/OUTsocket: Connect devices for MIDI control. For more information, refer to Connecting External MIDI Equipment to the Keyboard
- (3) Pedal A and Pedal B sockets: Connects sustain and expression pedals. For more information, refer to Connecting Pedals to the Keyboard.
- (4) PSU socket (15V 1.2A): Connects the optional power supply which can be purchased separately in the Native Instruments online shop.
- (5) USB connector: Connects the keyboard to your computer with the supplied USB cable.
- (6) Power button: Switches the keyboard on and off.

7.1. Perform and Edit Section

The buttons in the Perform and Edit section on the far left of the KOMPLETE KONTROL keyboard allow you to activate the Scale engine, the Arpeggiator, and also access their parameters. The parameters are visible in the display and can be adjusted using the knobs in the Control section.

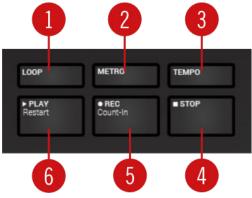


The Perform and Edit section.

- (1) **SHIFT**: Lets you access the secondary functions of buttons labeled as such, for example, the **Edit** functions of the **SCALE** (**Edit**) and **ARP** (**Edit**) buttons.
- (2) **SCALE** (**Edit**): Switches the Scale engine on or off, and lets you edit the Scale engine parameters. For more information, refer to Smart Play Playing and Editing Scales and Chords.
- (3) ARP (Edit): Switches the Arpeggiator on or off, and lets you edit the Arp parameters. For more information, refer to Smart Play Playing and Editing Arpeggiator Sequences.
- **(4) AUTO**: Lets you activate or deactivate automation in supported hosts. For more information, refer to Host Integration.
- **(5) QUANTIZE**: Lets you quantize events to the step grid in supported hosts. For more information, refer to **Host Integration**.
- **(6) UNDO (Redo)**: Lets you undo or redo your last action in supported hosts. For more information, refer to Host Integration.

7.2. Transport Section

In supported hosts, the **TRANSPORT** section at the far left on the keyboard provides you quick and easy access to functions like play, record, loop, etc.



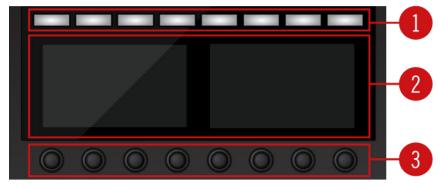
Transport section.

- (1) LOOP: Switches between standard and loop playback.
- (2) METRO: Switches the metronome on or off.
- (3) **TEMPO**: Tapping this button lets you set the tempo.
- (4) STOP: Ends playback.

- (5) REC(Count-in): REC(Count-in) switches record on or off. SHIFT + REC(Count-in) switches the count-in on or off.
- (6) PLAY(Restart): PLAY(Restart) starts playback. SHIFT + PLAY(Restart) starts playback from the beginning.

7.3. Control Section

The Control section is located at the center of the KOMPLETE KONTROL keyboard. The knobs, buttons, and displays are automatically assigned to parameters of the loaded Product or selected mode. They provide immediate control and allow for deep editing of various aspects of KOMPLETE KONTROL.



Control section overview.

- (1) Buttons 1-8: The eight buttons dynamically adapt their assignment to the selected mode, allowing for direct access to the most important functions and sub-sections. The displays show the current assignment below each button.
- (2) Displays: The displays give you information related to the shown Product or selected mode, and show the functions and parameters assigned to the buttons and knobs.
- (3) Knobs 1-8: The eight knobs dynamically adapt their assignment to the selected mode, allowing for direct access to the available parameters. The displays show the current assignment above each knob. As the knobs are touch-sensitive, you can tap them to see additional information.

7.4. Mode Buttons

The Mode buttons let you browse your KOMPLETE KONTROL Library as well as directly access functions like the Mixer and MIDI mode.



Mode buttons.

- (1) **BROWSER**: Displays the Browser in the Control section. For more information, refer to Browsing the Library.
- (2) **PLUG-IN**: Displays the Plug-in Chain and the selected plug-in the Control section. For more information, refer to Working with Effects.
- (3) **MIXER**: Displays the mixer of supported hosts in the Control section. For more information, refer to Host Integration.
- (4) **SETUP**: Displays the hardware serial number and the firmware version, and lets you change the display brightness. For more information, refer to **Keyboard Settings**.
- (5) **MIDI**: Accesses MIDI mode that allows you to use the KOMPLETE KONTROL keyboard as a MIDI controller. For more information, refer to MIDI Communication.
- **(6) INSTANCE**: When using KOMPLETE KONTROL as a plug-in in a host without advanced integration, this button lets you switch between KOMPLETE KONTROL instances and MIDI Mode. For more information, refer to Switching Instances and Host Integration.

7.5. 4-D Encoder

The 4-Directional Push Encoder (referred to as the 4-D encoder) combines the functionalities of a conventional joystick, a button, and a continuous encoder. These aspects make it a multifunctional control element that can be used for navigation, for adjusting values of parameters, and for controlling Products. Hence, it can be pushed to the four directions: up, down, left, and right, as well as being pressed and rotated.



The 4-D encoder situated below the Mode buttons.

Depending on the menu or context, the available actions differ:

- The displays are navigated by pushing the 4-D encoder in a direction indicated by the four
- Entries in a list are browsed by turning the 4-D encoder.
- The value of a highlighted parameter is adjusted by turning the 4-D encoder.
- A selection is confirmed by pressing the 4-D encoder.

For more information, refer to Browsing the Library, Working with Effects, and Controlling Instrument, Loop, One-shot and Effect Parameters.

7.6. Keybed and Light Guide

The keybed enables you to play the loaded Instrument, Loop or One-shot. The Light Guide above the keybed visualizes the key mapping of loaded Instruments and samples by color coding. Active and inactive keys respectively sample based Instruments are indicated by the LEDs. The Light Guide also reflects the Smart Play settings. This means when you select e.g., a scale or chord, the LEDs corresponding to the keys contained in that scale or chord will light up, whereas inactive keys remain unlit. The Light Guide also gives you visual feedback when you play back incoming MIDI note patterns from the host.



The Keybed and the Light Guide.

For more information, refer to Controlling Instrument, Loop, One-shot and Effect Parameters, Smart Play - Playing and Editing Scales and Chords, and Smart Play - Playing and Editing Arpeggiator Seguences

7.7. Touch Strip

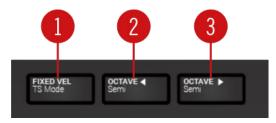
The Touch Strip is an intuitive control element that gives you immediate control over Instrument parameters. It can send MIDI pitch bend or control change messages and can be configured in the MIDI Assignment editor.



The Touch Strip.

For more information, refer to .

7.8. Transpose and Fixed Velocity Buttons



Transpose and Fixed Velocity buttons.

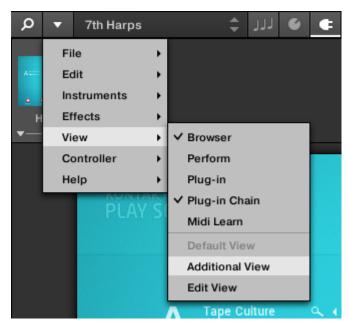
- (1) FIXED VEL (TS Mode): Sets the note velocity for all keys to a fixed value of 127. By default, the keys are sensitive to velocity: The harder you hit them, the louder the sound will be. With Fixed Velocity enabled, your pads play at the same volume no matter how hard you hit them.
- (2 3) OCTAVE (Semi) down and OCTAVE (Semi) up: Transpose the entire keybed one octave down / up. Pressing SHIFT + OCTAVE (Semi) down / up transposes the entire keybed a semitone down / up. Pressing both buttons simultaneously resets the keybed to the central octave.

8. Global Controls and Preferences

This sections introduces the global controls and the Preferences you can access via the Header of KOMPLETE KONTROL.

8.1. Instrument Views

Once you have loaded an Instrument from the Browser, it appears in the Plug-in area of the KOMPLETE KONTROL software. Most KOMPLETE Instruments come equipped with more than one view, giving you access to another set of controls or letting you edit certain features in finer detail. The three possible Instrument views are Default View, Additional View, and Edit View which can be selected directly in the KOMPLETE KONTROL menu.



Instrument views in the KOMPLETE KONTROL menu.

▶ Alternatively, you can switch between Default View and Additional View by clicking on the View button in the Header (+ icon).

All Instrument parameters can be controlled at all time from the KOMPLETE KONTROL keyboard, regardless of the selected Instrument view in the KOMPLETE KONTROL software.



The available views may vary with the loaded Instrument.

8.1.1. Default View

The Default View is the view that first appears when you load an Instrument from the Browser. It gives you access to some of the most important features of each NKS Instrument with an easy-touse interface.



POLYPLEX in Default view.

8.1.2. Additional View

Most NKS Instruments have more parameters that can be displayed at once in small surface and therefore come with a second, Additional View. The Additional View can give you access to detailed edit controls or to a completely different set of controls altogether depending on the loaded Instrument.



POLYPLEX in Additional view.

Besides of selecting Additional View via the KOMPLETE KONTROL Menu and the application menu, you can also do this by clicking the + button in the KOMPLETE KONTROL header. Clicking it again will return to the Default View.



The + button opens and closes the Additional view.

8.1.3. Edit View

(i)

Edit view is only available for Instruments powered by KONTAKT or REAKTOR.

In the Edit View you have also the possibility to open any KOMPLETE Instrument that can be loaded or played by either the KONTAKT PLAYER or REAKTOR PLAYER. This gives you access to all the flexible controls and features you would normally have when using KONTAKT or REAKTOR in stand-alone mode.



POLYPLEX in Edit View.



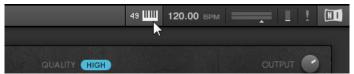
Edit view enables you to access files that cannot be loaded from the KOMPLETE KONTROL Browser, e.g., KONTAKT Multis which can be loaded from the KONTAKT Browser in edit view.

8.2. Switching Instances

When two or more instances of the KOMPLETE KONTROL software are running (e.g., as a plug-in on different tracks of the host), you can choose which instance you want to control from the KOMPLETE KONTROL keyboard.

Switching to an Instance from the Software

To switch the keyboard to a particular instance of the KOMPLETE KONTROL software, click the Connect button (keyboard icon) in the header of that instance.



Automatic Switching in a Host

When using KOMPLETE KONTROL as a plug-in in a host with advanced integration, the keyboard automatically switches between controlling the KOMPLETE KONTROL software and MIDI mode, depending on the content of the selected track.

- If you select a track that hosts the KOMPLETE KONTROL plug-in, the keyboard automatically switches to this instance of the KOMPLETE KONTROL software. This allows you to immediately control all of your Product's parameters from the keyboard.
- If you select a track that does not host the KOMPLETE KONTROL plug-in, the keyboard automatically switches to MIDI mode. This allows you to assign the available controls on the keyboard to parameters in the host or in an inserted plug-in via MIDI learn (if supported).
- To select a track in a supported host from the keyboard, push the 4-D encoder up or down until the track is highlighted.

Switching to an Instance from the Keyboard

If you use KOMPLETE KONTROL as a plug-in in a host without advanced integration, you cannot rely on automatic switching between instances. However, you can still select a particular instance of the KOMPLETE KONTROL software from the keyboard using its displays and 4-D encoder.

To display and switch between KOMPLETE KONTROL instances from the keyboard, follow the instructions below:

- 1. Press the **INSTANCE** button to show all active instances of the KOMPLETE KONTROL software on the keyboard displays.
- 2. Use the 4-D encoder to select an instance.
- Press the 4-D encoder to switch to the selected instance.
- → You can now control the selected instance of the KOMPLETE KONTROL software from the keyboard.

8.3. Transport and Tempo

If KOMPLETE KONTROL is used as a stand-alone application, it features its own Transport and Tempo controls. They are used by sequenced KONTAKT and REAKTOR Instruments as well as the Arpeggiator. Additionally, the tempo is used by all Instruments that allow you to set timing parameters in relation to the musical tempo (e.g., rhythmic modulation, delay effects).

You can find the Transport and Tempo controls in the Header:



Transport and tempo controls in KOMPLETE KONTROL.

- (1) Play button: Starts and stops the internal clock. This can be used to control the playback of sequenced KONTAKT and REAKTOR Instruments.
- (2) Reset button: Resets the internal clock to its start position. Consequently, sequencers in KONTAKT and REAKTOR Instruments will start their playback from the beginning. The same applies to the Arpeggiator.
- (3) Tempo control: Sets the tempo in BPM (beats per minute).

When using KOMPLETE KONTROL as a plug-in, it is automatically synchronized to the host. Therefore the Transport and Tempo controls are grayed out and inactive.

8.3.1. Resetting the Clock

You can reset the clock in the software and from the keyboard.

Resetting the Clock in the Software

When the internal clock is stopped:

- 1. Click the Reset button to reset the internal clock.
- 2. Click the Play button to start playback from the beginning.

When the internal clock is running:

Click the Reset button to reset the internal clock and to resume playback from the beginning.

Resetting the Clock from the Keyboard

When the internal clock is stopped:

- 1. Press **STOP** to reset the internal clock.
- 2. Press PLAY (Restart) to start playback from the beginning.

When the internal clock is stopped:

Press SHIFT and PLAY (Restart) to reset the internal clock and to start playback from the beginning.

When the internal clock is running:

Press SHIFT and PLAY (Restart) to reset the internal clock and to resume playback from the beginning.

8.3.2. Adjusting Tempo

You can adjust the tempo in the software and from the keyboard.

Adjusting Tempo in the Software

The Tempo control allows you to set the tempo in BPM (beats per minute):

- 1. Click the display and drag the mouse up or down.
- 2. Alternatively, double-click the display and enter a value numerically.
- → The tempo adjusts in increments of one.

Adjusting Tempo from the Keyboard

You can also use the KOMPLETE KONTROL keyboard to set the tempo in BPM (beats per minute):

- ► Hold **TEMPO** and turn Knob 1 in the Control section.
- → The tempo adjusts in increments of 1 BPM.

8.4. Adjusting Master Volume

The Master Volume slider lets you adjust the overall output volume of KOMPLETE KONTROL. The Volume meter shows the current peak level of the output signal.



Master Volume controls.

In order to adjust the output volume:

- Click and drag the slider to the left or to the right.
- → This will adjust the output volume in 0.5 dB increments from -30 dB to +10 dB. Below -30 dB, the keyboard's volume control is exponentially scaled and quickly lowers the output signal to complete silence.

Adjusting Master Volume with the Keyboard

To adjust the output volume on the keyboard:

▶ Press and hold **SHIFT** and turn the Knob 1.

8.5. Preferences

In the **Preferences** you can specify various settings for KOMPLETE KONTROL.

To open the **Preferences**:



Click **Edit** > **Preferences** in the KOMPLETE KONTROL menu:

8.5.1. Preferences - Audio Page

Controller

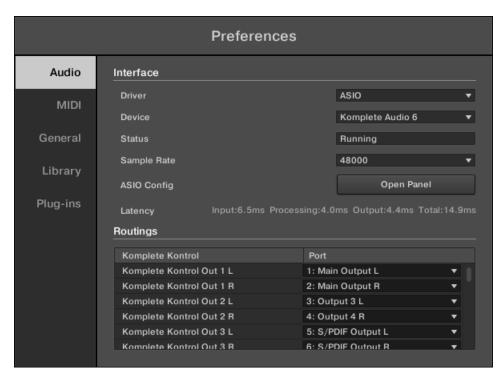
Help

The Audio page holds settings related to your audio interface when KOMPLETE KONTROL is running as a stand-alone application.



When using KOMPLETE KONTROL as a plug-in, the audio configuration is managed by the host, and the **Audio** page is not available.

The Routings section allows you to configure the connections between the virtual outputs of KOMPLETE KONTROL and the physical outputs of your audio interface.



Preferences panel — Audio page.

Setting	Description	
Driver	Here you can select the audio driver.	

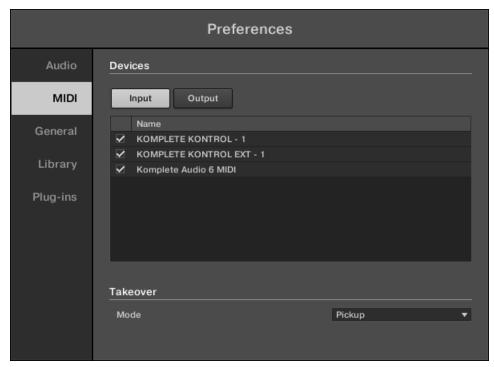
Setting	Description		
Device	This allows you to choose from the available devices if you have connected more than one audio interface.		
Status	This shows you whether your audio interface is currently running.		
Sample Rate	This displays the selected sample rate of your audio interface. Please restart KOMPLETE KONTROL after changing the sample rate.		
Buffer Size	macOS: This slider allows you to adjust the buffer size of your audio interface in samples. Lower values result in a more immediate playing response but increase the CPU load, and may result in audible clicks and pops. Larger values decrease the CPU load but introduce a larger latency (a small delay between hitting a pad and hearing it). It is recommended to find the lowest value that does not cause clicks and pops even when playing more demanding Products.		
	Windows: When using an ASIO driver, the Audio page shows an ASIO Config button instead of the Buffer Size slider. Click this button to open the settings window of the selected ASIO driver.		
Latency	This shows the delays introduced by the current Buffer Size setting.		
Routings	Under Routings , you will be presented with a list of the 16 stereo outputs from KOMPLETE KONTROL: In the right column, you can assign them to the outputs of your audio interface. Click the fields in the right column to select the desired outputs via a drop-down menu.		

8.5.2. Preferences - MIDI Page

The MIDI page allows you to set up the MIDI input and output ports that you want to use when KOMPLETE KONTROL is running as a stand-alone application.



(i) When using KOMPLETE KONTROL as a plug-in, the MIDI configuration is managed by the host, and the MIDI page is not available.



Preferences panel — **MIDI** page (entries may vary on your computer).

Element	Description		
Input	Clicking Input displays a list of all the available MIDI inputs of your system. You can activate/deactivate each input by clicking the checkbox next to its name.		
Output	Clicking Output displays a list of all the available MIDI outputs of your system. You can activate/deactivate each input by clicking the checkbox next to its name.		
Takeover Mode	When using third-party controllers, you can select Pickup from the Takeover mode drop-down menu to prevent potential parameter jumps caused by mismatching knob positions between software and hardware. For more information, refer to Enabling Takeover Mode .		

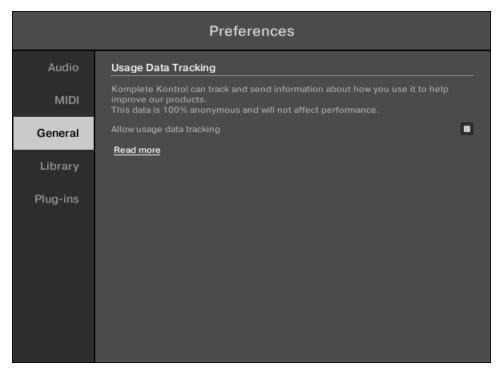
The MIDI Output settings are required for using KOMPLETE KONTROL'S Smart Play features with other MIDI instruments.

8.5.3. Preferences – General Page

The **General** page holds Usage Data Tracking settings. Usage Data Tracking technology enables KOMPLETE KONTROL to automatically track anonymous usage data that you can choose to share with us.

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

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



Usage Data Tracking in the KOMPLETE KONTROL Preferences.

Enabling or Disabling Usage Data Tracking

To enable or disable Usage Data Tracking:

- 1. Open the **General** page of the **Preferences** by clicking **Preferences...** in the KOMPLETE KONTROL menu.
- 2. Click the Allow usage data tracking checkbox to enable or disable user data tracking.

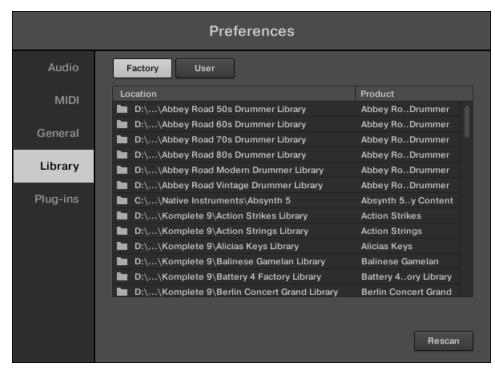
8.5.4. Preferences - Library Page

The Library page allows you to edit the locations of all KOMPLETE KONTROL Library files (both Factory and User) that appear in the **Library** pane of the Browser.

At the top of the page, the Factory and User buttons allow you to switch between the Factory pane and the User pane.

Factory Pane

The Factory pane shows all factory libraries available. These libraries will appear in the Factory view of the Browser's **Library** pane.

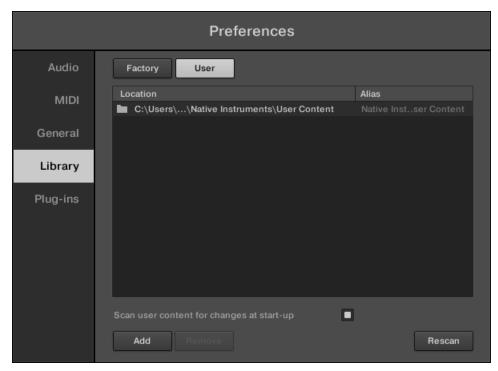


Preferences panel – the Library page's Factory pane.

Element Description		
Location column	Shows the path of each library. If you have moved any library to another location on your computer, click the folder icon on the left of that library and select its new path.	
Product column	Shows the name of each product. These names cannot be edited.	
Rescan button	If you have made any change to a library (e.g., changed its location), select it in the list and click the Rescan button to rescan that library.	

User Pane

The User pane shows all user libraries currently used. These include KOMPLETE KONTROL's standard user directory as well as any other user directory you might have defined. These libraries will appear in the User view of the Browser's **Library** pane.



Preferences panel – the Library page's User pane.

Element	Description	
Location column	Shows the path of each library. If you have moved any library to another location on your computer, click the folder icon on the left of that library and select its new path.	
Alias column	Shows the alias stored for each library. Click an alias to edit it. Defining aliases for your user folders is not mandatory, but it can be of great help when working on different computers (see description below). After adding a location (see Add below), click the field in the new row and in the Alias column to set the alias for that new location. The alias of the default user folder, Native Instruments User Directory , cannot be edited — this is the location where all your user files will be stored by default.	
Scan user content for changes at start-up	Enabled by default, this option automatically detects any new added user content when starting KOMPLETE KONTROL.	
Add button	Click Add to manually add directories to the user library. See below for more details.	
Remove button	Click Remove to remove the selected user library. Files will only be removed from the KOMPLETE KONTROL Browser, not from your hard disk.	
Rescan button	If you have made any change to a library (e.g., added/removed files), select it in the list and click the Rescan button to rescan that library.	



You can resize the **Preferences** panel at your convenience using the usual method on your operating system. You can also resize each column by clicking and dragging the limit between both column headers.

Adding Folders to the User Library

In the User pane of the Library page, you can add other folders to the user content of your KOMPLETE KONTROL Library. To do this:

- 1. Click **Add** at the bottom of the pane. A folder selection dialog opens up.
- 2. In the dialog, navigate to the desired folder on your computer and click **OK** (Choose on macOS).
- → All KOMPLETE KONTROL-compatible files found in the selected folder are added to your user content in KOMPLETE KONTROL.



KOMPLETE KONTROL-compatible files include ens, rkplr, nrkt, nksn, nfm8, nabs, nki, nmsv, nbkt, nis.

Furthermore, the attributes (Instrument/Bank/Sub-Bank, Type/Sub-Type/Characters tags, as well as properties) of all imported files will be retained.

By adding a folder to the user content of your KOMPLETE KONTROL Library, you make their files available in the Browser's **Library** pane for quick searching and loading.



(i) Paths to folders added via the IMPORT button in the Browser's Files pane will also show up here. The only difference between adding folders via the Add button in Preferences panel described here, and via the IMPORT button in the Files pane of the Browser is that the latter allows you to directly tag the files as they are imported.

Note that the selected folder cannot contain, or be contained within, a folder already listed in the User or Factory pane. If KOMPLETE KONTROL detects such a folder as you press OK (Choose on macOS) in the folder selection dialog, a Duplicate Location message appears: Click OK to return to the folder selection dialog and select another folder on your computer.

Removing Folders from the User Library

You can also remove any user folder from your library—except the default user content directory Native Instruments User Content.

8.5.5. Preferences – Plug-ins Page

The **Plug-ins** page allows you to manage your VST plug-ins in KOMPLETE KONTROL.

At the top of the page, the Manager and Locations buttons allow you to switch between the Manager pane and the Locations pane.

Manager Pane

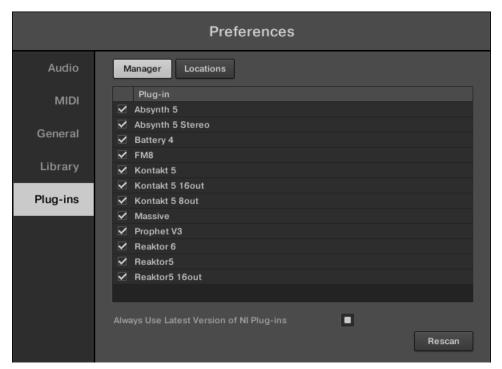
The **Manager** Pane allows you to view and manage all VST plug-ins available in KOMPLETE KONTROL. By default, all available plug-ins are activated for use in KOMPLETE KONTROL.

▶ To deactivate a plug-in for use in KOMPLETE KONTROL, click on the checkbox icon next to its name so it is unchecked.

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



For example, this option is required if you have installed both the full version of REAKTOR 5 as well as a KOMPLETE Instrument that came with REAKTOR 6 Player. By disabling the option, the REAKTOR 5 Factory Library will be loaded with the full version of REAKTOR 5, while the KOMPLETE Instrument will be loaded with REAKTOR 6 Player. This is necessary since the REAKTOR 5 Factory Library is not authorized for use with REAKTOR 6 Player.

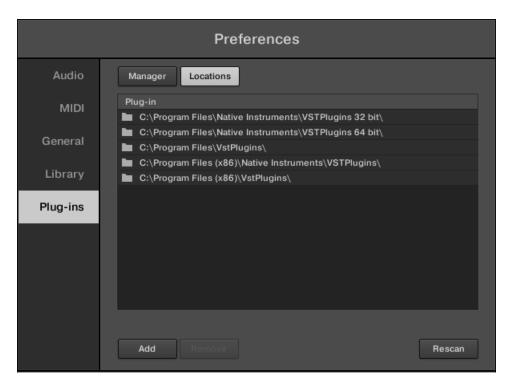


Preferences panel — the **Plug-ins** page's **Manager** pane.

Element	Description
Checkbox column	Activates or deactivates a plug-in for use in KOMPLETE KONTROL.
Plug-in column	Lists all available VST plug-ins in KOMPLETE KONTROL.
Always use latest version of NI Plug-	If this option is enabled (default), Library content is loaded with the latest version of the associated plug-in.
ins	If this option is disabled, Library content is loaded with the lowest required version of the associated plug-in.

Locations Pane

The **Locations** pane allows you manage the folders containing your plug-ins on the hard drive. KOMPLETE KONTROL scans these folders for VST plug-ins and adds them to the Manager pane. You can Add and Remove folders from the list, as well as use the Rescan function to update the available plug-ins in KOMPLETE KONTROL according to any changes made to the folders or their contents.



▶ To display the **Locations** pane, click the **Locations** button at the top of the **Plug-ins** page.

Preferences panel — the **Plug-ins** page's **Locations** pane.

Setting	Description		
Plug-in column	Lists all folders that KOMPLETE KONTROL scans for VST plug-ins.		
Add	Opens a file dialogue that lets you add another folder to the list.		
Remove	Removes the selected folder from the list.		
Rescan	Scans all folders in the list for compatible plug-ins and updates the Manager pane accordingly.		

8.5.6. Preferences - Features Page

Using the Features page, you can enable different configurations of KOMPLETE KONTROL. Whenever a feature toggle is activated or deactivated, the software must be restarted for the changes to take effect.

Element			Description
Auto-Scan Content	of	Sounds.com	Automatically scans the software for content from Sounds.com
Browser Tag Remapping		pping	Remaps the tags found in the Browser

8.6. Keyboard Settings

The KOMPLETE KONTROL keyboard's **SETUP** page gives you access to information and settings related to the hardware.



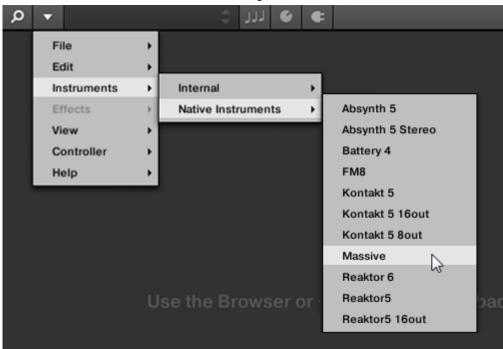
To open the **SETUP** page, press the **SETUP** button on the keyboard.

The following information and settings are available:

- **Firmware**: The version number of the firmware installed on the keyboard.
- **Serial Nr.**: The hardware serial number of the keyboard.
- Velocity / SCALING: Lets you adjust the velocity response curve of the keybed. Use the Soft 3, Soft 2, Soft 1 settings to compensate for gentle playing (velocity response is more sensitive), and the Hard 1, Hard 2, Hard 3 settings to compensate for strong playing (velocity response is insensitive).
- **Displays** / **BRIGHTNESS**: Lets you adjust the brightness of the keyboard's displays.

8.7. Loading a Plug-in in Default State

You can load a Plug-in in default state directly from the KOMPLETE KONTROL menu:



▶ In the KOMPLETE KONTROL menu select e.g., Instruments > Native Instruments > Massive.

→ The Plug-in is loaded. All parameters are set to their default values.



Loading Plug-ins in default state is only possible in the software.

9. MIDI Communication

KOMPLETE KONTROL provides you with flexible MIDI control and host automation capabilities for easy integration with your MIDI environment. In this section you are provided with overall information about MIDI communication and Host automation and you learn how to use the keyboard in MIDI mode and as stand-alone MIDI controller.

Incoming MIDI

KOMPLETE KONTROL and the Instruments you load inside it can be controlled via MIDI and the host (when KOMPLETE KONTROL is loaded as a plug-in):

- Triggering Instruments via MIDI notes: By default, incoming MIDI notes trigger the loaded Instrument and will also be visually reflected by the Light Guide.
- Controlling parameters via host automation: You can control parameters of both KOMPLETE KONTROL and your loaded Instruments via host automation (when KOMPLETE KONTROL is loaded as a plug-in).

Receiving MIDI Clock

KOMPLETE KONTROL does not receive MIDI Clock. However, when using KOMPLETE KONTROL as a plug-in, it is automatically synchronized to the host tempo. The tempo display in KOMPLETE KONTROL's header is graved out and tempo is adjusted in the host.

Outgoing MIDI

You can also send MIDI data from KOMPLETE KONTROL:

- Triggering MIDI instruments and recording MIDI notes: KOMPLETE KONTROL sends MIDI Note, Pitch Bend, and Channel Pressure (aftertouch) messages to the host and to any MIDI application or device.
- Controlling MIDI applications and devices: KOMPLETE KONTROL'S MIDI mode allows you to send Control Change and Program Change messages to any MIDI application or device.
- Routing and recording processed MIDI notes: KOMPLETE KONTROL outputs the MIDI notes generated by the Scale engine and the Arpeggiator through the MIDI outputs of the standalone application as well as the plug-in. You can route the MIDI notes to other MIDI instruments or record them as a MIDI pattern in the host.



MIDI output is only supported by the stand-alone application as well as the VST and AAX versions of the plug-in. The AU (Audio Unit) version of the plug-in does not support MIDI output.

9.1. Mapping MIDI Controls to Third-Party Controllers

MIDI Mapping enhances the user experience and provides more control over sound, workflows and performance. KOMPLETE KONTROL keyboards are ready-mapped to the software. Third-party keyboards and controllers can also be used to control some of the parameters in the KOMPLETE KONTROL software. These parameters include the eight knobs of the Native Map, parameter page switching, preset switching and plug-in switching.

Setting up a Third-Party Controller

To map a third-party controller to the KOMPLETE KONTROL software:

- 1. Connect your third-party controller to your computer.
- 2. Start KOMPLETE KONTROL.
- 3. Open the Preferences dialog, and select the MIDI tab.
- 4. Click the checkbox next to the corresponding name of the third-party controller.
- → The third-party controller is now ready to be used.

Assigning Knobs to a Third-Party Controller

To map a knob on your third party controller to KOMPLETE KONTROL:

- 1. Click MIDI in the panel header of the software, to open the MIDI Learn panel.
- 2. Select a MIDI Learn knob in the software and then turn a knob on your keyboard.
- 3. It is now connected and the knobs should move in line with each other.
- 4. To map the remaining knobs, repeat this process.



MIDI Learn - Knobs page.

Assigning Buttons to a Third-Party Controller

You can also map buttons on your third-party controller to the software. This will allow you to select another page of eight control knobs in the software using your keyboard. You can assign MIDI CCs to move between parameter pages and switch between presets. To map a button to your keyboard:

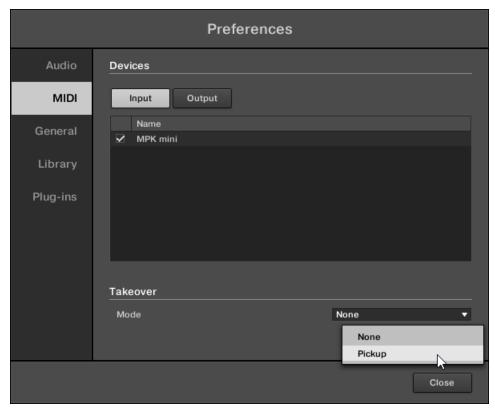
- 1. Click MIDI in the panel header of the software.
- 2. Select the Buttons tab.
- 3. Select a button in the software and then press and button on you keyboard.
- 4. It is now connected and the button should act in accordance with the software.
- 5. To map the remaining buttons, repeat these steps.



MIDI Learn - Buttons page.

Enabling Takeover Mode Pickup for Knobs to prevent Parameter Jumps

When switching parameter pages, it can happen that knob positions in the software do not match with the knob positions on your third party MIDI controller. To prevent potential parameter jumps, you can enable the Takeover mode **Pickup** in the Preferences page **MIDI**.



Takeover mode option on the MIDI page in the Preferences.

When Pickup is enabled, turning the knobs on your third party MIDI controller will only change the value of the corresponding parameter, when the knob pointer reaches (picks up) the respective value in the software. KOMPLETE KONTROL highlights the difference between the knob positions using white circles around the knobs in the Plug-in panel. The white circle indicates the knob position in the software. The knob pointer indicates the position on the hardware.



Differences between knob positions in the software and on the hardware.

Hardware Configuration for MIDI Mapping

When using the MIDI mapping feature in KOMPLETE KONTROL, a MIDI button can be configured to send a CC message on push and also on release. This mode is referred to as 'Toggle' mode. A MIDI button can also be configured to send a single message when it is clicked, as opposed to the two that are sent in Toggle mode. This mode is referred to as 'Trigger' mode. To use the MIDI mapping functionality with a third-party controller, you must configure your third-party controller to use Trigger mode.

Share Mapping Across Instances

You need to map your keyboard to KOMPLETE KONTROL only once and you can then instantiate new instances of the software, and the mapping will continue working across all of them.



Instances that are already open as the mapping is changed, will not receive the new mapping automatically; for them to be updated to the new mapping you must close your DAW and reopen it.

9.1.1. Setting up a Third-Party Controller

To map a third-party controller to the KOMPLETE KONTROL software:

- 1. Connect your third-party controller to your computer.
- Start KOMPLETE KONTROL.

- 3. Open the Preferences dialog, and select the MIDI tab.
- 4. Click the checkbox next to the corresponding name of the third-party controller.
- → The third-party controller is now ready to be used.

9.1.2. Assigning Knobs to a Third-Party Controller

To map a knob on your third-party controller to KOMPLETE KONTROL:

- 1. Click MIDI in the panel header of the software, to open the MIDI Learn panel.
- 2. Select a MIDI Learn knob in the software and then turn a knob on your keyboard.
- 3. It is now connected and the knobs should move in line with each other.
- 4. To map the remaining knobs, repeat this process.



MIDI Learn - Knobs page.

9.1.3. Assigning Buttons to a Third-Party Controller

You can also map buttons on your third-party controller to the software. This will allow you to select another page of eight control knobs in the software using your keyboard. You can assign MIDI CCs to move between parameter pages and switch between presets. To map a button to your keyboard:

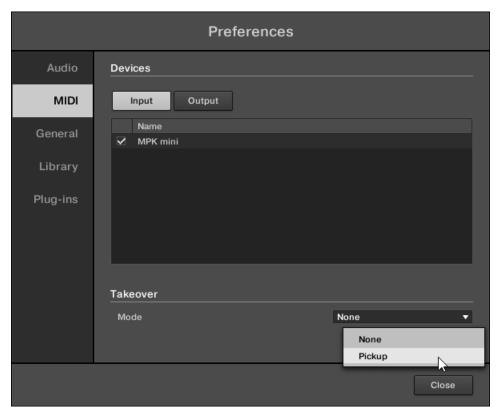
- 1. Click MIDI in the panel header of the software.
- 2. Select the **Buttons** tab.
- 3. Select a button in the software and then press and button on you keyboard.
- 4. It is now connected and the button should act in accordance with the software.
- 5. To map the remaining buttons, repeat these steps.



MIDI Learn - Buttons page.

9.1.4. Enabling Takeover Mode

When you switch parameter pages, it can happen that knob positions in the software mismatch with the knob positions on your third-party MIDI controller. To prevent potential parameter jumps when turning the knobs, you can enable Takeover mode by selecting Pickup in the Preferences page MIDI.



Takeover mode option on the MIDI page in the Preferences.

When the Takeover mode is enabled, turning the knobs on your third-party MIDI controller will only change the value of the corresponding parameter, when the knob pointer reaches (picks up) the respective value in the software. KOMPLETE KONTROL highlights the difference between the knob positions with white circles around the knobs in the Plug-in panel. The white circle indicates the knob position in the software. The knob pointer indicates the position on the hardware.



Differences between knob positions in the software and on the hardware.

9.1.5. Hardware Configuration for MIDI Mapping

When using the MIDI mapping feature in KOMPLETE KONTROL, a MIDI button can be configured to send a CC message on push and also on release. This mode is referred to as 'Toggle' mode. A MIDI button can also be configured to send a single message when it is clicked, as opposed to the two that are sent in Toggle mode. This mode is referred to as 'Trigger' mode. To use the MIDI mapping functionality with a third-party controller, you must configure your third-party controller to use Trigger mode.

9.1.6. Share Mapping Across Instances

You need to map your keyboard to KOMPLETE KONTROL only once and you can then instantiate new instances of the software, and the mapping will continue working across all of them.



Instances that are already open as the mapping is changed, will not receive the new mapping automatically; for them to be updated to the new mapping you must close your DAW and reopen it.

9.2. Host Automation

When you load KOMPLETE KONTROL as a plug-in in a host, the parameters of the loaded Instrument, the Scale parameters, and the Arpeggiator parameters can be automated from the host.

9.2.1. Recording Automation

Once your host is set up to record automation you can perform the following actions in the software as well as from the keyboard:

- You can enable or disable Scale and Arpeggiator functions by clicking individual buttons in the software or by pressing the corresponding buttons on the keyboard.
- You can select values of parameters by turning individual knobs in the software or on the keyboard.



For detailed information about recording automation in your host, refer to the documentation of your host software.

Some hosts allow you to handle automation by using automation IDs that are mapped to specific parameters of the plug-in. KOMPLETE KONTROL comes with a predefined list of automation IDs which allows the host find them automatically.

9.2.2. Automation IDs for the Perform Panel

The following automation IDs are reserved for parameters in KOMPLETE KONTROL's Perform panel:

Automation ID	Parameter
000	Reserved for Instance Recognition and Automatic Focus Follow
001	Scale On / Off
002	Root Note (Scale)
003	Scale Type (Scale)
004	Key Mode (Scale)
006	Chord Mode (Scale)
007	Chord Type (Scale)
026	Arp On / Off
027	Mode (Arp)
028	Type (Arp)
029	Rate (Arp)
030	Sequence (Arp)
031	Swing (Arp)
032	Octaves (Arp)
033	Dynamic (Arp)
034	Gate (Arp)
035	Retrigger (Arp)
036	Repeat (Arp)
037	Offset (Arp)
038	Inversion (Arp)
039	Min. Key (Arp)
040	Max. Key (Arp)

Automation ID		Parameter
041	Hold (Arp)	

9.3. Using the Keyboard in MIDI Mode

Besides using the KOMPLETE KONTROL keyboard in combination with the KOMPLETE KONTROL software, you can also use it in MIDI mode as a versatile MIDI controller to pilot MIDI applications or devices, both via USB or via 5-pin DIN MIDI connections.

KOMPLETE KONTROL sends MIDI Note, Pitch Bend, and Channel Pressure (aftertouch) messages to trigger MIDI instruments, as well as Control Change and Program Change messages to control any MIDI application or device.

- When you switch on the keyboard and the displays show the message PRESS BROWSE, you are controlling an instance of the KOMPLETE KONTROL software.
- When you switch on the keyboard and the displays show various MIDI CC numbers, the keyboard is in MIDI mode. The keyboard directly launches into MIDI mode when the KOMPLETE KONTROL software is not running.

Switching to MIDI Mode

To switch the keyboard between controlling the KOMPLETE KONTROL software and MIDI mode:

- 1. Press MIDI on the keyboard.
- 2. To leave MIDI mode, press any button switching to another mode.



When using the KOMPLETE KONTROL plug-in in a supported host, the keyboard automatically switches between controlling the KOMPLETE KONTROL software and MIDI mode, depending on the content of the selected track.

MIDI Assignment

The MIDI mode's versatility is made possible by the MIDI Assignment editor, which allows you to freely define MIDI assignments for the controls on the keyboard. For more information, refer to Using the MIDI Assignment Editor

- 1. Use the Page left / right buttons on the keyboard to switch between Pages you created in the MIDI Assignment editor.
- 2. Use the PRESET up/down buttons on the keyboard to switch between Templates you created in the MIDI Assignment editor.

9.4. Using the Keyboard as Stand-Alone MIDI Controller

If you power up the KOMPLETE KONTROL keyboard without a USB connection (while the power supply is connected), you can use it as a stand-alone MIDI controller by connecting MIDI devices to the 5-pin DIN MIDI sockets on the keyboard's rear panel.

The keybed and the controls on the keyboard send out the following MIDI messages:

Control Element	Message Type	CC#	Mode / Type	Range / Values	Control Function
Pedal A	Controller	Tip 64 Ring 65	Gate	0-127	Damper Pedal On / Off (Sustain)
Pedal B	Controller	11	-	0-127	Expression Controller
Pitch Wheel	Pitch Bend	-	-	0-16384	Pitch Bend
Modulation Wheel	Controller	1	-	0-127	Modulation Wheel or Lever
Touch Strip	Controller	11	Mode: Standard	0-127	Expression Controller
			Display: Unipolar		
			LED Mode: Bar		
Knob 1	Controller	14	Absolute	0-127	Undefined
Knob 2	Controller	15	Absolute	0-127	Undefined
Knob 3	Controller	16	Absolute	0-127	General Purpose Controller 1
Knob 4	Controller	17	Absolute	0-127	General Purpose Controller 2
Knob 5	Controller	18	Absolute	0-127	General Purpose Controller 3
Knob 6	Controller	19	Absolute	0-127	General Purpose Controller 4
Knob 7	Controller	20	Absolute	0-127	Undefined
Knob 8	Controller	21	Absolute	0-127	Undefined
Button 1	Controller	112	Toggle (Action on Down)	Off 0 / On 127	Undefined
Button 2	Controller	113	Toggle (Action on Down)	Off 0 / On 127	Undefined
Button 3	Controller	114	Toggle (Action on Down)	Off 0 / On 127	Undefined

Control Element	Message Type	CC#	Mode / Type	Range / Values	Control Function
Button 4	Controller	115	Toggle (Action on Down)	Off 0 / On 127	Undefined
Button 5	Controller	116	Toggle (Action on Down)	Off 0 / On 127	Undefined
Button 6	Controller	117	Toggle (Action on Down)	Off 0 / On 127	Undefined
Button 7	Controller	118	Toggle (Action on Down)	Off 0 / On 127	Undefined
Button 8	Controller	119	Toggle (Action on Down)	Off 0 / On 127	Undefined

10. Using the MIDI Assignment Editor

This section guides you through the process of assigning MIDI messages to control elements and creating Key Zones using the MIDI Assignment editor. It also makes you familiar with the mapping system and gives you the reference information of MIDI message types and assignments.



When using the MIDI Assignment editor, all keyboard controls (i.e. navigation, transport, etc.) are blocked.

10.1. The Mapping System

Whatever you do on the keyboard, the MIDI Assignment editor translates it into a MIDI message that is then sent to your computer via USB connection. This is what the MIDI Assignment editor is all about: mapping human actions to MIDI events.

The MIDI Assignment editor's mapping system is structured in a way that allows you to efficiently organize your assignments. This makes the entire mapping process a lot easier and informs you about what will happen whenever you actuate a control element on the keyboard. The next paragraphs will introduce you to some basic concepts.

Assignable Controls Elements

Assignable control elements are knobs, buttons, keys, pedals, and the Touch Strip. All other controls and buttons are not assignable.

Assignments

An assignment defines which MIDI event is triggered by a particular control element. Available MIDI event types are MIDI messages such as Control Change and Program Change. Every action on a control element is translated into one MIDI event, the corresponding assignment defines the rules of that translation.

Depending on the type of control element (buttons, knobs, keys, pedals, and Touch Strip), the available assignments differ. For more information, refer to MIDI Message Types and Assignments.

Pages

You can have multiple assignments, organized within Pages. A Page contains eight knobs and eight buttons, and corresponds to the hardware. One Page can be selected and loaded at a time. You can have up to four Pages which can be directly selected in the MIDI Assignment editor and from the keyboard.

When you select another Page, all assignments for the control elements in the Page area are updated accordingly.

MIDI Templates

A MIDI Template holds a mapping configuration for knobs, buttons, and keys on the keyboard, including all Pages that might exist. One MIDI Template can be selected at a time. Switching between different MIDI Templates can be used, for example, to address different applications on your computer or different MIDI instruments.



The configuration of the Touch Strips and the Pedals are saved globally and not per Template. This means all settings made under TOUCHSTRIP and PEDALS remain the same when switching between Templates.

10.2. Opening the MIDI Assignment Editor

You can open the MIDI Assignment editor with the MIDI Assignment editor button.

Click on the MIDI Assignment editor button in the Header.



→ The MIDI Assignment editor opens. Now you have access to all the settings related to the keyboard's MIDI mode.



The MIDI Assignment editor button is only visible when the KOMPLETE KONTROL keyboard is connected to your computer and switched on.

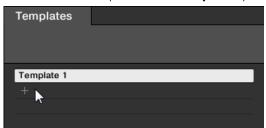
10.3. Assigning MIDI Messages to Control Elements

This tutorial covers the workflow of assigning MIDI messages to the knobs, buttons, pedals, and the Touch Strip. If you intend to create new Key Zones, refer to section Creating Key Zones. In order to assign MIDI messages to control elements:

1. Click on the MIDI Assignment editor button to open the MIDI Assignment editor.



2. Select a MIDI Template in the **Templates** pane.



3. Select the type of control element.



4. Select the control element you want to assign a MIDI message to.



5. Select the MIDI message using the drop-down menus and options in the Definition area.



- → The available drop-down menus and options in the Definition area vary depending on the selected type of control element as well as from the selections in the Definition area itself.
- 6. If required select or create another page for making multiple assignments.



- 7. When you have finished assigning MIDI messages, close the MIDI Assignment editor.
- → Your edits are saved to the MIDI Template.

For more information on MIDI message types and assignments, refer to MIDI Message Types and Assignments.

10.4. Renaming Control Elements

As the default names do not reveal which parameters they are assigned to, you can rename them:

1. Double-click the name of the control element.



2. Enter the desired name with a maximum length of seven characters.



- 3. Press the enter key to confirm.
- → The name of the control element has changed.

10.5. Creating a New MIDI Template

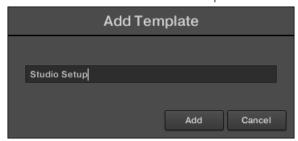
When using the keyboard in different situations, e.g., in a studio or live on stage, you can create a different MIDI Template for each setup.

To create a new Template:

1. In the **Templates** pane click the + icon.



- → The **Add Template** dialog appears.
- 2. Enter a name for the new MIDI Template.

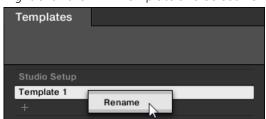


- 3. Click Add.
- → The new MIDI Template is created. The MIDI Templates are arranged in alphabetical order.



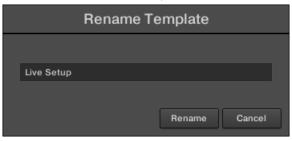
10.6. Renaming MIDI Templates

If you want to change the name of an existing MIDI Template, proceed as follows:

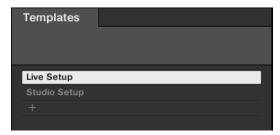


1. Right-click the MIDI Template and select **Rename** from the context menu.

- → The **Rename Template** dialog with the current MIDI Template name appears.
- 2. Enter the desired MIDI Template name.



- 3. Click Rename to confirm.
- → The MIDI Template name has changed.



10.7. Creating Key Zones

The MIDI Assignment editor allows you to manage **Key Zones**. Key Zones can be used to assign different MIDI channels to certain keys. In this section you learn about Key Zones, how you can create them, how you select another MIDI channel and set the Light Guide color, and how you transpose key pitches.

10.7.1. About Key Zones

A Key Zone is a group of contiguous keys to which you can assign a particular MIDI channel. Key Zones are a flexible and handy tool that allows you to quickly set up advanced key mappings.

- You do not have to assign each key individually. Instead, assigning a key range to the Key Zone will automatically set the correct assignments to all included keys.
- Each Key Zone can have its own MIDI channel, and color setting. These settings are applied to all of the keys in a Key Zone.
- Key Zones span the entire range of MIDI notes. You can have between 1 and 16 Key Zones. Key Zones cannot overlap (i.e. each key can only belong to one single Key Zone), and they cannot have gaps between them (i.e. each key must belong to a Key Zone). You can disable particular Key Zones: in this case their keys will not send any MIDI Note message (dead keys).

Key Zone assignments are valid per MIDI Template.

Key Zones in the KEYS Tab

At the top of the KEYS tab, the depicted Keybed area allows you to define and manage your Key Zones over the full range of notes:



The Keybed area lets you easily create and modify your Key Zones.

The Keybed area shows 128 keys along with a few additional elements:

- Each existing Key Zone is shown with its color and borders on the keybed.
- The octave markers under the keybed indicates the beginning of each octave.
- The white frame indicates the selected Key Zone.
- Disabled Key Zones are grayed out.

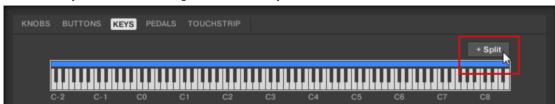
10.7.2. Splitting Key Zones

The process of creating a new Key Zone is straight-forward, and can be achieved by selecting and splitting an existing Key Zone.

In order to split a Key Zone:

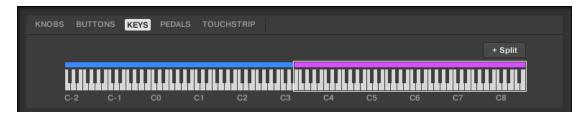
1. Select an existing Key Zone. If there is only one Key Zone it is always selected by default.





2. Click the +Split button to the right above the keybed area.

→ The Key Zone is split into two halves. The right half appears in a different color but has the same MIDI channel of the left half.



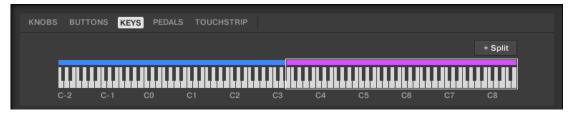
- If you already have 16 Key Zones, the **+Split** button is disabled.
- If the selected Key Zone is only one-key-wide, the **+Split** button is disabled.

10.7.3. Selecting MIDI Channels for Key Zones

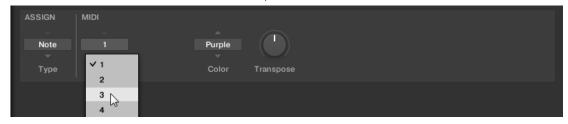
After creating a new Key Zone you can select another MIDI channel for the Key Zone so that it can be used to control another instrument.

To select another MIDI channel for a Key Zone:

1. Select the Key Zone for which you want to select another MIDI channel.



2. Select a MIDI channel from the Channel drop-down menu.



→ The Key Zone's MIDI channel has changed.

10.7.4. Recoloring Key Zones

When splitting Key Zones the newly created Key Zone automatically gets one of 16 different colors assigned. If you want to recolor a Key Zone, proceed as follows:

1. Select the Key Zone you want to recolor.



2. Select a color from the Color drop-down menu.



The Key Zone's color has changed and is reflected by the Light Guide. Repeat the aforementioned steps if you want to change the colors for other Key Zones.



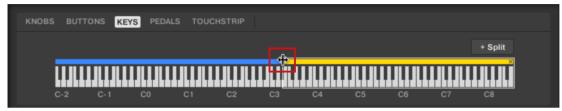
10.7.5. Resizing Key Zones

To resize a Key Zone:

1. Select the Key Zone you want to resize.



2. Hover the mouse over the selected Key Zone's lower or upper border.



KNOBS BUTTONS KEYS PEDALS TOUCHSTRIP

3. Click and drag your mouse horizontally to the position of your liking and release.

→ The Key Zone is resized. Since Key Zones cannot overlap, dragging the border of a Key Zone simultaneously resizes the neighbouring Key Zone so that both Key Zones stay "in contact".

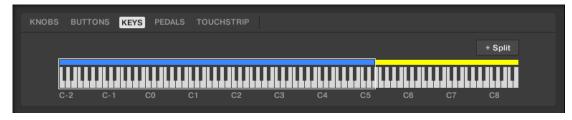
When resizing Key Zones the lower border of the leftmost Key Zone as well as the upper border of the rightmost Key Zone are fixed and cannot be dragged. You cannot resize a Key Zone to less than one key, this is also true for the neighbouring Key Zone that is simultaneously resized.

10.7.6. Disabling Key Zones

Disabling a Key Zone disables the assignments for all included keys: from then on, these keys will no longer trigger any notes. For example, this can be useful when you want to avoid triggering unwanted MIDI messages by mistake as you play keys in the neighboring Key Zones, or simply to have a clean, better organized keybed.

To disable a Key Zone:

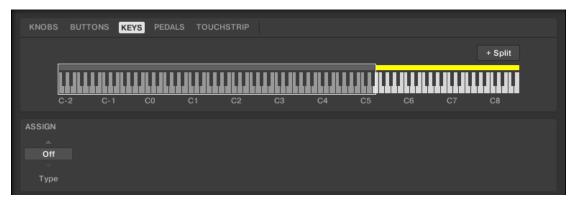
1. Select the Key Zone you want to disable.



2. Select the value **Off** from the **Type** drop-down menu.



The Key Zone and its MIDI assignment are disabled and grayed out in the Keybed area. Repeat the aforementioned steps if you want to disable other Key Zones.

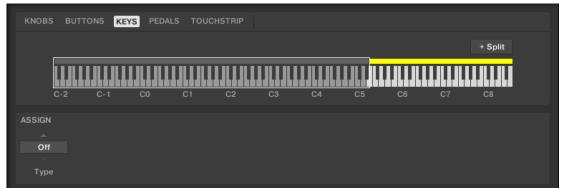


On the Light Guide of your KOMPLETE KONTROL keyboard, a disabled Key Zone will be indicated by unlit LEDs for the corresponding keys.

You can re-enable a Key Zone at any time.

To re-enable a Key Zone:

1. Select the Key Zone you want to re-enable.



2. Select the value **Note** from the **Type** drop-down menu.

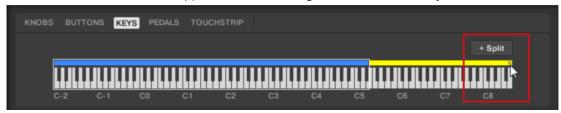


→ The Key Zone with its MIDI assignment is re-enabled. Repeat the aforementioned steps if you want to re-enable other Key Zones.

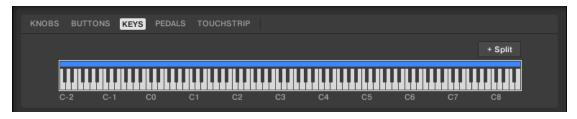
10.7.7. Deleting a Key Zone

You can delete a Key Zone as follows:

- 1. Hover the mouse over the Key Zone you want to delete.
- 2. Click the little cross icon that appears when hovering the mouse over a Key Zone.



The Key Zone is deleted and its keys are incorporated into the next Key Zone to the left. If you delete the leftmost Key Zone, its keys are incorporated into the next Key Zone to its right.



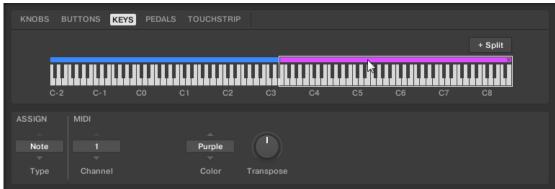
If you only have one Key Zone set up, the cross icon is not available when hovering the mouse the Key Zone.

10.7.8. Transposing Key Zones

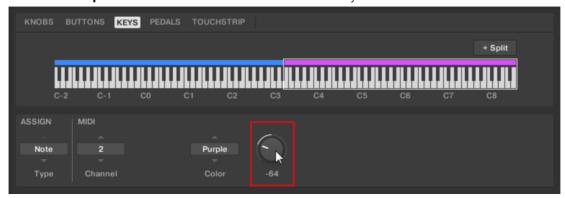
By transposing a Key Zone you raise or lower the MIDI notes assigned to all keys included in a Key Zone by the same interval, for example, this is useful if you want the keys in separate Key Zones to trigger the same MIDI notes. Using the Transpose knob you can transpose any Key Zone within the range from -127 to 127 MIDI notes. The Transpose knob is set to the default value 0 if a Key Zone is not transposed.

To transpose a Key Zone, proceed as follows:

1. Select the Key Zone you want to transpose.



2. Turn the **Transpose** knob to raise or lower the MIDI notes by the desired value.



→ The Key Zone is transposed.

When splitting a transposed Key Zone, the original transpose value is also applied to the newly created Key Zone.



The original transpose value also is applied to the newly created Key Zone.



If you transpose one-key wide Key Zones, you can specify the pitch for one-shot samples.

10.8. MIDI Message Types and Assignments

In this section you find reference information about the MIDI message types provided in the **Type** menu and about the several assignments for control elements and for Key Zones.

10.8.1. MIDI Message Types – Type Menu

For all control elements, the assignment definition starts with the same menu: the **Type menu**.

The **Type** drop-down menu specifies the type of MIDI message that has to be sent upon action on this control element. Depending on the type of control element, the entries in this menu will differ (for example, sending a "play" command from a knob wouldn't make much sense).

All other parameters displayed in the Definition area depend both on the type of control element that you are working on, and on the type of MIDI message selected in this **Type** menu.

Below is a list of all possible MIDI message types to be found in the **Type** menu.

- Control Change: Sends MIDI Control Change messages on a specific MIDI channel set by the Channel parameter (range from 1 to 16, 1 by default). This message changes the value of a specific continuous controller of the MIDI destination - controlling for example some effect's depth in your music application. The continuous controller (CC) number is specified via the Number parameter (range from 0 to 127). The values to be sent for that controller are specified in various ways, depending on the type of the selected control element (see next sections).
- Program Change: Sends MIDI Program Change messages on a specific MIDI channel set by the **Channel** parameter (range from 1 to 16, 1 by default). This message switches to another program (or patch, preset...) of the MIDI destination. The program number to be sent can be specified in various ways, depending on the type of the selected control element (see next sections).
- Note: Sends MIDI Note On/Off messages on a specific MIDI channel set by the Channel parameter (range from 1 to 16, 1 by default). These messages start and stop MIDI notes specified by the Note parameter (range from C-2 to G8), at a velocity set by the Value parameter (range from 0-127).
- Pitchbend: Sends MIDI pitchbend messages on a specific MIDI channel set by the Channel parameter (range from 1 to 16. 1 by default). This message changes the pitch of the MIDI notes sent on the same MIDI channel. Depending on the MIDI destination, it can also be used to control other parameters.
- Off: Deactivates MIDI for the control element. Select this entry to disable the control element or action. The control element/action does not send any MIDI message, hence no parameter is displayed.

10.8.2. Assignments for Knobs

For the knobs, the **Type** menu offers the entries **Control Change** and **Program Change**. Depending on the selected entry, a different set of additional parameters is available:

Туре	Mode	RANGE	Number	Step
Control Change	Absolute	From 0-126 / To 1-127	0-127	
	Relative			-32 to 31
	Relative (Offset)			-32 to 31
Program Change		From 0-126 / To 1-127		

Mode Menu Values for Knobs

For the type Control Change, a **Mode** menu allows you to select between three operating modes:

- Absolute: In this mode the control element sends absolute values. The From, To, and **Resolution** parameters are the same as for the other message types (see above).
- Relative: In this mode the sent message is in a +1/-1 fashion actually 1/127, which is then understood by the target software as +1/-1 in that case. This allows the control element to set the new Control Change value relative to its current value. Two parameters are available:
 - Step: Defines the increment to use. Increase the Step value to trigger greater jumps in the target parameter value. If you choose a negative value for **Step**, the control will be inverted.
 - Resolution: Adjusts the sensitivity of the control element to your actions. At high Resolution values, a little movement of the control element will be enough to trigger the message. At lower Resolution values, you will have to move it more frankly to trigger the message.
- Relative (Offset): This mode is similar to the Relative mode explained above, with the difference that here the values sent for the "+1" and "-1" messages are 65 and 63, respectively - in other terms, they are centered around 64 instead of 0. This is well suited for some particular software implementations. As in Relative mode, a Step parameter defines the increment to use, and a **Resolution** parameter adjusts the sensitivity of the control element to your actions.

10.8.3. Assignments for Buttons

For the buttons, the **Type** menu offers the entries **Control Change**, **Program Change**, and **Note**. Depending on the selected entry, a different set of additional parameters is available:

Туре	Mode	Value	Number	Note
Control Change	Toggle	Off/On 0-127	0-127	
	Trigger	0 - 127		
Program Change	Toggle	Off/On 0-127		
	Trigger	0 - 127		
Note	Toggle	0 - 127		C-2 - G8
	Gate	0 - 127		C-2 - G8

Mode Menu Values for Buttons

For the buttons control elements listed in the above table, and only for some of the MIDI message types available for these control elements, you can choose from different behaviors for the way the data is sent. This is controlled by the **Mode** menu. This menu can have up to four entries, depending on the message type that you have selected in the Type menu. Here is the list of all possible entries:

Toggle: In this mode, the control element has two states, on and off. When you press once, it switches to the on state - when you press again, it switches to the off state. This can be useful for enabling and disabling an effect to check how it affects the original sound. In this mode, there are two **VALUE** settings: **Off** defines the value for the off state (from 0 to 127, 0 by default), and On defines the value for the on state (0 to 127, 127 by default). For the Note message type, since the off state is predefined (it's the MIDI Note Off message), you find instead a single **VALUE** setting defining the velocity of the MIDI Note On message.

- Trigger: In this mode, only one message is sent when you hit the control element. For instance, this can be useful for switching to another program (preset, patch...) or for triggering one-shot samples (e.g., drum sounds or any other envelope-controlled sounds). In this mode, you thus find only one VALUE setting, defining the value to be sent when you hit the control element. It goes from 0 to 127 (127 by default).
- Gate: In this mode, which is only available for the Note message type, the control element sends MIDI Note messages. When you press a control element, it sends a MIDI Note On message - when you release the control element, it sends a MIDI Note Off message. For instance, this can be useful to temporarily enable an effect while playing. Since the off state is predefined (it's the MIDI Note Off message), you find instead a single VALUE setting defining the velocity of the MIDI Note On message.

10.8.4. Assignments for Key Zones

The assignments described here are valid for the Key Zones.

Type

For Key Zones, the **Type** menu offers the following entries: **Note** and **Off**.

- Note: Sends MIDI Note On/Off messages. These messages are sent over a specific MIDI channel set by the Channel parameter. It tells your target to play/stop the note corresponding to the key you press/release on your keyboard.
- Off: Disables a Key Zone including the MIDI assignment. When a Key Zone gets re-enabled the previous MIDI assignment is recalled.

Channel

The selected value in the Channel menu determines the MIDI channel for the selected Key Zone.

- Values range from 1 to 16.
- Value 1 is always set by default.

Color

The Color setting defines which color should be used in the Light Guide (the LEDs above the keys on your keyboard) for the selected Key Zone:

Red, Orange, Light Orange, Warm Yellow, Yellow, Lime, Green, Mint, Turquoise, Cyan, Blue, Plum, Violet, Purple, Magenta, and Fuchsia.

Transpose

The **Transpose** knob lowers or raises MIDI notes of a Key Zone.

- Value range from -127 to 127.
- Value 0 is always set by default.

10.8.5. Assignments for the Touch Strip

For the Touch Strip, the Type menu offers the entries Control Change and Pitchbend. Depending on the selected entry, a different set of additional parameters is available:

Туре	Range	Number	Strength
Control Change	From 0-126/ To 1-127	0-127	
Pitchbend			0-100%



(i) Selecting a **Type** also changes the behavior of Touch Strip. When **Control Change** is selected, the Touch Strip can be used like a fader that retains its position even after you have removed your finger. When Pitchbend is selected, the Touch Strip behaves like a spring that returns to zero position after you have removed your finger.

For **Control Change**, you can set the **Range** of values that is sent when swiping the Touch Strip, and the Number of the Control Change message. For Pitchbend, you can set the Strength of the Touch Strip's spring behavior. As you increase this value, the Touch Strip returns to the zero position more quickly.



The configuration of the Touch Strips and the Pedals are saved globally and not per Template. This means all settings made under TOUCHSTRIP and PEDALS remain the same when switching between Templates.

10.8.6. Assignments for Switch Pedals

For Pedals used as switch, the Type menu offers the entries Control Change and Program **Change**. Depending on the selected entry, a different set of additional parameters is available:

Type Value	Mode Value	Range	Value	Number	Step	Wrap
Control Change	Toggle/ Gate		Off/On 0-127	0-127		
	Trigger		0 - 127	0-127		
	Inc	Min/Max (0-127)			-128 to 127	On/Off
Program Change	Toggle/ Gate		Off/On 0-127			
	Trigger		0 - 127			
	Inc	Min/Max 0-127			-128 to 127	On/Off

Mode Menu Values for Pedals (Switch)

For the button-like control elements listed in the above table, and only for some of the MIDI message types available for these control elements, you can choose from different behaviors for the way the data is sent. This is controlled by the Mode menu. This menu can have up to four entries, depending on the message type that you have selected in the Type menu. Here is the list of all possible entries:

- Toggle: In this mode, the control element has two states, On and Off. If you press once, it switches to the On state - if you press again, it switches to the Off state. This can be useful for example for activating some effect, then deactivating it later. This is usually the default mode. In this mode, you find two numeric fields: Off Value defines the value for the Off state (from 0 to 127, 0 by default), and **On Value** defines the value for the On state (0 to 127, 127 by default). For the Note message type, since the Off state is predefined (it's the MIDI Note Off message), you find instead a single Value parameter defining the velocity of the MIDI Note On message.
- Gate: This mode is equal to Toggle with the difference that the state is active for the time the Pedal is held depressed. In Toggle mode the state is activated until the next time the Pedal is pressed again.
- Trigger: In this mode, only one message is sent when you hit the control element. There are no On or Off states. For example, this can be useful for switching to another program (preset, patch...) or for triggering one-shot samples (e.g., drum sounds or any other envelope-controlled sounds). In this mode, you thus find only one numeric field called Value, defining the value to be sent when you hit the control element. It goes from 0 to 127 (127 by default).
- Inc: In this mode you can configure the press of a pedal to step through a list of values by choosing the size of the jump (e.g., 1-2-3-4-5, 2-4-6-8-10 or 3-6-9-12-15), and whether or not the values wrap around back to the beginning, or stop when they reach their minimum or maximum.

10.8.7. Assignments for Continuous Pedals

For Pedals used as continuous control, the Type menu offers the entries Control Change and Program Change. Depending on the selected entry, a different set of additional parameters is available:

Туре	Mode	Range	Number
Control Change		From 0-126 / To 1-127	0-127
Program Change		From 0-126 / To 1-127	

For **Control Change**, you can set the **Range** of values that is sent when pressing the pedal, and the Number of the Control Change message. For Program Change, you can set the Range of values that is sent when pressing the pedal.

11. Host Integration

When using advanced host integration, the KOMPLETE KONTROL keyboard becomes the centerpiece of your studio setup. You can use it to control not only the Instrument, Sample or Effect loaded in KOMPLETE KONTROL but also core functionality of supported hosts.



Before you can make use of advanced host integration you need to set it up first. For more information, refer to Setting up Host Integration.

Advanced integration of KOMPLETE KONTROL is available in the following hosts:

- MASCHINE 2
- Apple Logic Pro X
- Apple GarageBand
- Ableton Live 10
- Steinberg Cubase Artist 8.5/9/9.5/10
- Steinberg Cubase Pro 8.5/9/9.5/10
- Steinberg Nuendo 7/8/9/10
- PreSonus Studio One 4.5

For more information on the integration of the supported hosts, refer to the section for the respective host:

- Integration with MASCHINE
- Integration with Apple Logic Pro X and GarageBand
- Integration with Ableton Live
- Integration with Steinberg Cubase and Nuendo
- Integration with PreSonus Studio One

11.1. Integration with MASCHINE

If you own MASCHINE, you can control many of MASCHINE's functions directly from the KOMPLETE KONTROL keyboard. Furthermore, the Arrange buttons located at the left of the keyboard's displays give you access to certain modes and views of the MASCHINE software that makes the integration of KOMPLETE KONTROL into MASCHINE straight-forward. This section gives you an overview of the basic controls functions as well as of the advanced integration controls using the Arrange buttons.

Connect to MASCHINE using the Keyboard

- 1. Press **INSTANCE** on the keyboard.
- 2. Select the MASCHINE instance shown in the display.
- 3. Press Button 8 (**SELECT**) to connect the keyboard to MASCHINE.

11.1.1. Basic Control Functions

The available basic control functions of MASCHINE mapped to the keyboard's controls are grouped in the tables below.

You can configure your keyboard to trigger a speech announcement for many actions. To activate Accessibility mode, hold the top left button SHIFT and press the top right button MIXER on the S-Series keyboard.

TRANSPORT Control

Action in MASCHINE	Button on KOMPLETE KONTROL S- Series
Start/stop playback	PLAY
Restart playback at the beginning of the Loop Range	SHIFT + PLAY (RESTART)
Activate/deactivate recording	REC (COUNT-IN)
Record with count-in	SHIFT + REC (COUNT-IN)
Stop playback/recording	STOP
Activate/deactivate the metronome	METRO
Adjust Tempo	TEMPO + Knob 1
Activate/deactivate Loop	LOOP

PERFORM Control

Action in MASCHINE	Button on KOMPLETE KONTROL S- Series
Activate/deactivate Scale engine for selected Group	SCALE (Edit)
Activate/deactivate Arpeggiator for selected Group	ARP (Edit)
Edit Scale engine for selected Group	SHIFT + SCALE (Edit)
Edit Arpeggiator for selected Group	SHIFT + ARP (Edit)
Display quantization settings	QUANTIZE
Activate/deactivate quantization grid	QUANTIZE + Knob 1
Adjust quantization value	QUANTIZE + Knob 2
Activate/deactivate automation	AUTO
Undo action	UNDO (Redo)
Redo action	SHIFT + UNDO (Redo)

Navigation

Action in MASCHINE	Button on KOMPLETE KONTROL S- Series
Select previous Preset file	PRESET Up
Select next Preset file	PRESET Down

Action in MASCHINE	Button on KOMPLETE KONTROL S- Series
Select previous Plug-in page	Page Left
Select next Plug-in page	Page Right

Mode Buttons

Action in MASCHINE	Button on KOMPLETE KONTROL S- Series
Open Browser	BROWSER
Open Plug-in view	PLUG-IN
Open Mix mode	MIXER
Switch between MASCHINE and KOMPLETE KONTROL instances	INSTANCE
Enter MIDI Mode	MIDI
Display hardware serial number and firmware version, and change display brightness	SETUP

11.1.2. Advanced Integration Control Functions

The advanced integration controls using the Arrange buttons located to the left of the KOMPLETE KONTROL keyboard's displays and the **MIXER** button are listed below.

Ideas View

When you press **SCENE** on the KOMPLETE KONTROL S-Series, you are presented with the Ideas view in the displays. This view is identical to the Ideas view of the MASCHINE software and gives you instant control over Scenes and Patterns.



MASCHINE's Ideas view on the KOMPLETE KONTROL keyboard.

In the Ideas view you can perform the following actions:

Action in MASCHINE	Button on KOMPLETE KONTROL S-Series
Select Scene or create new Scene	Button 1-8
Select another Pattern in Scene and select the corresponding Group in touch	Knob 1-8
Insert copy of selected Scene	SHIFT + Button 4 (DUPLICATE)

Action in MASCHINE	Button on KOMPLETE KONTROL S-Series
Insert empty Scene	SHIFT + Button 5 (INSERT)
Delete selected Scene	SHIFT + Button 6 (DELETE)
When enabled, the next Scene that is selected will be forced to play from start	SHIFT + Button 8 (RETRIGGER)
Delete selected Pattern	CLEAR

Pattern View

When you press PATTERN on the keyboard, you are presented with the Pattern view in the displays. The Pattern view is the recommended view for recording.



MASCHINE's Pattern view on the KOMPLETE KONTROL keyboard.

Action in MASCHINE	Button on KOMPLETE KONTROL S-Series
Select Pattern or create new Pattern for the selected Scene	Button 1-8
Select another Sound in Pattern	Knob 1
Select another event (note) in the Pattern	Turn 4-D encoder
Move the selected event up or down	Push 4-D encoder up or down
Move the selected event up or down by octave	SHIFT + push 4-D encoder up or down
Nudge the selected event	Push 4-D encoder left or right
Change length of the selected event	Press and hold + turn the 4-D encoder
Select another Group	Push 4-D encoder to the left or to the right
Double Pattern length	SHIFT + Button 3 (DOUBLE)
Insert copy of selected Pattern	SHIFT + Button 4 (DUPLICATE)
Insert empty Pattern	SHIFT + Button 5 (INSERT)
Delete selected Pattern	SHIFT + Button 6 (DELETE)
Adjust Pattern length	Knob 4
Zoom in or zoom out the Pattern view	Knob 5
Horizontally move visible area in the displays	Knob 6
Vertically move the visible area of the Pattern in the displays, if notes are residing out of the visible area	Knob 7
Delete Pattern content	CLEAR

TRACK View

When you press and hold TRACK on the keyboard, you are presented with the Track view in the displays. The Track view is available from every view and can be used for quickly selecting Groups and Sounds. In other words, it works like a shortcut page. The Track view stays visible as long as the **TRACK** button is depressed.



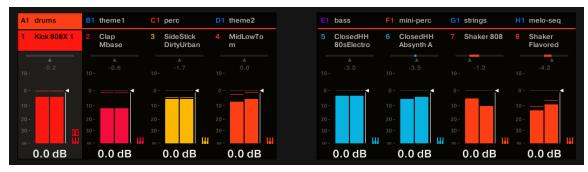
Track view on the KOMPLETE KONTROL keyboard.

In the Track view you can perform the following actions:

Action in MASCHINE	Button on KOMPLETE KONTROL S-Series
Jump to another Group	TRACK + Button 1-8
Select another Sound of that Group	TRACK + Knob 1-8
Select the Group in the previous/next Scene	TRACK + push 4-D encoder to the left or to the right
Browse and select another Sound in selected Group	TRACK + turn 4-D encoder
Delete selected Group	CLEAR

Mix Mode

When you press MIXER on the keyboard, you are presented with the Mix mode in the displays. The Mix mode displays eight of 16 channel strips with Sounds and Groups. The further eight Sounds can be displayed by pressing the Page buttons.



Mix mode on the KOMPLETE KONTROL keyboard.

In Mix mode you can perform the following actions:

Action in MASCHINE	Button on KOMPLETE KONTROL S-Series
Toggle between volume and panorama control for Knob 1–8	Press 4-D encoder
Set Button 1-8 to control Group mode	Push 4-D encoder up
Set Button 1-8 to control Sound mode	Push 4-D encoder down
Jump to another Group in Group mode	Button 1-8
Jump to another Sound in Sound mode	Button 1-8
Coarse adjust output volume of the respective Group or Sound	Knob 1-8
Fine adjust output volume of the respective Group or Sound	SHIFT + Knob 1-8
Select previous or next Sound or another Group	Push 4-D encoder to the left or to the right
Coarse adjust output volume of selected Group or Sound	Turn 4-D encoder
Fine adjust output volume of selected Group or Sound	SHIFT + Turn 4-D encoder

Plug-In View

When you press **PLUG-IN** on the keyboard, you are presented with the Plug-in view in the displays. The Page buttons give access to other pages containing further functions to control the selected Plug-in with the keyboard.



 ${\it Plug-in\ view\ on\ the\ KOMPLETE\ KONTROL\ keyboard.}$

In the Plug-in view you can perform the following actions:

Action in MASCHINE	Button on KOMPLETE KONTROL S-Series
Select MASTER channel	Button 1 (MASTER)
Select GROUP channel	Button 2 (GROUP)
Select SOUND channel	Button 3 (SOUND)
Select next or previous Plug-in in Plug-in chain or in Plug-in Browser	Button 5 and 6
Quick browse Preset files for selected Plug-in	Button 8
Select Preset files in Quick browse	Push 4-D encoder
Select next or previous parameter page	Page Left/Page Right
Adjust parameter values	Knob 1−8

Action in MASCHINE	Button on KOMPLETE KONTROL S-Series
Select another Plug-in in Plug-in chain	Push 4-D encoder left/right
Open Plug-in Browser	Push 4-D encoder
Select Plug-in	Turn 4-D encoder
Insert Plug-in	Push 4-D encoder
Delete Plug-in from Plug-in chain	CLEAR

Key Mode

When you press **KEY MODE** on the keyboard, you are presented with the Key mode in the displays. When the Key mode is active the Keybed and Light Guide reflect the PADs behavior and PADs colors as of the MASCHINE controller.



Key mode on the KOMPLETE KONTROL keyboard.

11.2. Integration with Apple Logic Pro X and GarageBand

If you own Apple Logic Pro X or GarageBand, you can control many of their functions directly from the KOMPLETE KONTROL keyboard. The available functions mapped to the sections of the keyboard are listed below.

For more information on how to set up Host Integration with Apple Logic Pro X or GarageBand, refer to Setting up Apple Logic Pro X and GarageBand.

Transport Control

Action in Logic Pro X and GarageBand	Button on KOMPLETE KONTROL S-Series
Start playback	PLAY (Restart)
Restart playback	SHIFT + PLAY (Restart)
Start recording	REC (Count-In)
Punch out when recording	PLAY (Restart)
Punch in when playing	REC (Count-In)
Stop playback/recording at current position	STOP
Relocate playhead position to song start when stopped	STOP
Scroll playhead position	Turn 4-D encoder
Enable/disable count-in	SHIFT + REC (Count-In)
Enable/disable metronome	METRO

Action in Logic Pro X and GarageBand	Button on KOMPLETE KONTROL S-Series
Enable/disable loop mode	LOOP
Move Loop by its own length	LOOP + turn 4-D encoder
Tap tempo	ТЕМРО

Edit Control

Action in Logic Pro X and GarageBand	Button on KOMPLETE KONTROL S-Series
Undo action	UNDO (Redo)
Redo action	SHIFT + UNDO (Redo)
Quantize to grid value	QUANTIZE
Toggle automation between Read mode and Touch mode	AUTO
Enable/disable Scale engine	SCALE (Edit)
Change Scale engine parameters	SHIFT + SCALE (Edit)
Enable/disable Arpeggiator	ARP (Edit)

Mute and Solo

Action in Logic Pro X and GarageBand	Button on KOMPLETE KONTROL S-Series
Mute/unmute selected Track	M
Solo/unsolo selected Track	S

Track Navigation

Action in Logic Pro X and GarageBand	Button on KOMPLETE KONTROL S-Series
Select previous/next track	Push 4-D encoder left/right
Select previous/next Region	Push 4-D encoder up/down

Mixer Controls

Action in Logic Pro X and GarageBand	Button on KOMPLETE KONTROL S-Series
Mute/unmute track	M + Button 1−8
Solo/unsolo track	S + Button 1-8
Jump to track	Button 1-8
Switch Bank	Page Left/Page Right
Set Knob 1−8 to control panorama	SHIFT + push 4-D encoder up
Set Knob 1−8 to control volume	SHIFT + push 4-D encoder down
Select previous Track	Push 4-D encoder left
Select next Track	Push 4-D encoder right
Coarse adjust panorama/volume for selected track	Knob 1-8

Action in Logic Pro X and GarageBand	Button on KOMPLETE KONTROL S-Series
Fine adjust panorama/volume for selected track	SHIFT + Knob 1-8

11.3. Integration with Ableton Live

If you own Ableton Live, you can control many of its functions directly from the KOMPLETE KONTROL keyboard. The available functions mapped to the sections of the keyboard are listed below.

For more information on how to set up Host Integration with Ableton Live, refer to Setting up Ableton Live or Setting up Ableton Live (Windows).



(i) The following functionality descriptions apply to the default Ableton Live setup. If e.g., different playback settings have been selected the functionality will respect those settings.

Transport Control

Action in Ableton Live	Button on KOMPLETE KONTROL S-Series
Start playback	PLAY (Restart)
Start recording	REC (Count-In)
Restart playback/recording	PLAY (Restart)
Stop playback/recording at current position	STOP
Relocate playhead position to song start when stopped	STOP
Start Arranger recording	SHIFT + REC (Count-In)
Scroll playhead position	Turn 4-D encoder
Enable/disable loop mode	LOOP
Enable/disable metronome	METRO
Tap tempo	ТЕМРО

Edit Control

Action in Ableton Live	Button on KOMPLETE KONTROL S-Series
Undo action	UNDO (Redo)
Redo action	SHIFT + UNDO (Redo)
Quantize to grid value	QUANTIZE
Toggle automation for selected Track on/off	AUTO
Enable/disable Scale engine	SCALE (Edit)
Change Scale engine parameters	SHIFT + SCALE (Edit)
Enable/disable Arpeggiator	ARP (Edit)
Change Arpeggiator parameters	SHIFT + ARP (Edit)

Arranger Control

Action in Ableton Live	Button on KOMPLETE KONTROL S-Series
Select previous/next Track	Push 4-D encoder left/right
Select previous/next Clip Slot in Track	4-D encoder down/up
Start/stop selected Clip	Push 4-D encoder
Mute/unmute selected Track	М
Solo/unsolo selected Track	S

Mixer Control

Action in Ableton Live	Button on KOMPLETE KONTROL S-Series
Mute/unmute Channel	M + Button 1−8
Solo/unsolo Channel	S + Button 1-8
Jump to Track	Button 1-8
Select previous/next Track	Push 4-D encoder left/right
Switch Bank	Page Left/Page Right
Set Knob 1-8 to control panorama	SHIFT + push 4-D encoder up
Set Knob 1–8 to control volume	SHIFT + push 4-D encoder down
Show master output volume channel	SHIFT + Page Left/Page Right button
Coarse adjust panorama/volume of selected Track	Knob 1-8
Fine adjust panorama/volume for selected Track	SHIFT + Knob 1-8

11.4. Integration with Steinberg Cubase and Nuendo

If you own Steinberg Cubase or Nuendo, you can control many of their functions directly from the KOMPLETE KONTROL keyboard. The available functions mapped to the sections of the keyboard are listed below.

For more information on how to set up Host Integration with Cubase/Nuendo, refer to Setting up Steinberg Cubase/Nuendo.

Transport Control

Action in Cubase and Nuendo	Button on KOMPLETE KONTROL S-Series
Start playback	PLAY (Restart)
Start recording	REC (Count-In)
Punch out while recording	PLAY (Restart)
Punch in while playing	REC (Count-In)
Stop playback/recording at current position	STOP
Relocate playhead position to song start when stopped	STOP
Scroll playhead position	Turn 4-D encoder

Action in Cubase and Nuendo	Button on KOMPLETE KONTROL S-Series
Enable/disable count-in	SHIFT + REC (Count-In)
Enable/disable metronome	METRO
Enable/disable loop mode	LOOP
Move loop by its own length	LOOP + Turn 4-D encoder
Tap tempo	ТЕМРО

Editing

Action in Cubase and Nuendo	Button on KOMPLETE KONTROL S-Series
Undo action	UNDO (Redo)
Redo action	SHIFT + UNDO (Redo)
Set quantize to grid value	QUANTIZE
Enable/disable automation write	AUTO
Enable/disable scale engine	SCALE (Edit)
Edit scale engine parameters	SHIFT + SCALE (Edit)
Enable/disable arpeggiator	ARP (Edit)
Edit arpeggiator parameters	SHIFT + ARP (Edit)

Mute and Solo

Action in Cubase and Nuendo	Button on KOMPLETE KONTROL S-Series
Mute/unmute selected track	M
Solo/unsolo selected track	S

Track Navigation

Action in Cubase and Nuendo	Button on KOMPLETE KONTROL S-Series
Select previous/next track	Push 4-D encoder up/down
Select previous/next region	Push 4-D encoder left/right

Mixer control

Action in Cubase and Nuendo	Button on KOMPLETE KONTROL S-Series
Mute/unmute track	(M) + Button 1−8
Solo/unsolo track	(S) + Button 1-8
Jump to track	Button 1-8
Select previous/next track	Push 4-D encoder left/right
Switch bank	>
Set knobs 1–8 to control pan	SHIFT + Push 4-D encoder up
Set knobs 1–8 to control volume	SHIFT + Push 4-D encoder down
Coarse adjust pan/volume	Knobs 1-8

Action in Cubase and Nuendo	Button on KOMPLETE KONTROL S-Series
Fine adjust pan/volume	SHIFT + Knob 1-8

11.5. Integration with PreSonus Studio One

If you own PreSonus Studio One, you can control many of its functions directly from the KOMPLETE KONTROL keyboard. The available functions mapped to the sections of the keyboard are listed below.

For more information on how to set up Host Integration with Studio One, refer to Setting up PreSonus Studio One.

Transport Control

Action in Studio One	Control on KOMPLETE KONTROL S-Series
Start playback	PLAY (Restart)
Start recording	REC (Count-In)
Punch out while recording	PLAY (Restart)
Punch in while playing	REC (Count-In)
Restart playback	SHIFT + PLAY (Restart)
Stop playback/recording at current position	STOP (Clear)
Relocate playhead position to song start when stopped	STOP (Clear)
Enable/disable count-in	SHIFT + REC (Count-In)
Enable/disable metronome	METRO
Enable/disable loop mode	LOOP
Tap tempo	ТЕМРО
Play from loop selection start	Press the 4-D encoder
Set selection as loop area (not in Plugin Mode)	SHIFT + Press the 4-D encoder

Editing

Action in Studio One	Button on KOMPLETE KONTROL S-Series
Undo action	UNDO (Redo)
Redo action	SHIFT + UNDO (Redo)
Set quantize to grid value	QUANTIZE (Auto)
Toggle Automation modes Read and Touch	SHIFT + QUANTIZE (Auto)
Reset selected track volume to 0dB	SHIFT + STOP (Clear)

Track Navigation

Action in Studio One	Control on KOMPLETE KONTROL S-Series
Select previous/next clip	Push 4-D encoder up/down
Select previous/next track	Push 4-D encoder left/right

Action in Studio One	Control on KOMPLETE KONTROL S-Series
Move in timeline (not in Mixer mode)	Turn 4-D encoder left/right
Play from loop section start	Press 4-D encoder
Set selection as loop area (not in Plugin Mode)	SHIFT + Press 4-D encoder

Mixer Mode

Action in Studio One	Button on KOMPLETE KONTROL S-Series
Select track	Button 1-8
Mute/unmute track 1-8	M + Button 1-8
Solo/unsolo track 1-8	S + Button 1-8
Move Mixer bank	>
Select previous/next track	Push 4-D encoder left/right
Set knobs 1–8 to control volume	SHIFT + Push 4-D encoder up
Set knobs 1-8 to control pan	SHIFT + Push 4-D encoder down
Coarse adjust volume/pan for selected track	Knob 1-8
Fine adjust volume/pan for selected track	SHIFT + Knob 1-8

MIDI Mode

Action in Studio One	Control on KOMPLETE KONTROL S-Series
Assign knobs	Turn Knobs 1–16
Assign buttons	Press Buttons 1-8

Plugin Mode

Action in Studio One	
Remote control selected KOMPLETE KONTROL plugin	

11.6. Integration with Hosts using MCU Protocol

You can use the KOMPLETE KONTROL S-Series MK2 in any host which supports the **MCU** (Mackie Control Universal) protocol. In this case, the host integration functionality is limited. Setting up KOMPLETE KONTROL in hosts supporting MCU differs with each host. For more information on setting up controllers with MCU, refer to the documentation of your host.

The following table provides you with the basic transport controls supported with **MCU**:

Action in DAW using MCU	Button on KOMPLETE KONTROL S-Series
Basic Transport	
Start/pause playback	PLAY (RESTART)
Enable/disable recording	REC (COUNT-IN)
Punch in while recording	REC (COUNT-IN)
Punch out while recording	REC (COUNT-IN)

Action in DAW using MCU	Button on KOMPLETE KONTROL S-Series
Stop playback/recording	STOP
Relocate playhead position to start when stopped	STOP
Enable/disable looping	LOOP
Scroll playhead position (if supported by host)	Turn 4-D encoder
Track Navigation	
Select previous/next track (if supported by host)	Move 4-D encoder up/down/left/right
Select previous/next region (if supported by host)	Move 4-D encoder up/down/left/right

Full KOMPLETE KONTROL plug-in control (including Browser, Native Map, Light Guide and the perform features) is available in any host software which supports the available plug-in formats:

- macOS: VST 64-Bit, AU 64-Bit, AAX 64-Bit
- Windows: VST 32 and 64-Bit, AAX 32 and 64-Bit

Automatic Track Focus not Supported with MCU

Automatic track focus ist not supported with MCU. However, you can press the **INSTANCE** button on your KOMPLETE KONTROL keyboard to call up a dialog in the displays to switch between all loaded instances of the plug-in.

12. Browsing the Library

The Browser is where you access your KOMPLETE KONTROL Library with all its Instruments, Loops, One-shots and Effects. You can search, filter, and load Instrument, Loop, One-shot and Effect Preset files as well as add them to your personal Favorites from the KOMPLETE KONTROL software. You can also use your KOMPLETE KONTROL keyboard, or a third-party controller, to access the Browser, enabling you to search for Presets using only the hardware controls.

You can also save Preset files and tag them in KOMPLETE KONTROL to further add to your personal user content and build your personal sound library. They are automatically added to the User section of the KOMPLETE KONTROL **Library** pane. Adding and editing tags can only be done using the software. For more information refer to section Saving Preset Files to the User Library and Editing the Tags and Properties of User Preset Files.

Browsing for Instruments or Effects

Since the same workflows apply to Instruments, Loops, One-shots and Effects, this section refers to all product types as Products. The Browser automatically switches the product type to either Effects or Instruments, Loops, and One-shots, depending on the selected slot in the Plug-in chain. For more information on Product Types and about switching between Product Types, refer to Product Types: Instruments, Loops, One-shots and Effects.

For a detailed overview of the Browser elements, refer to Browser.

12.1. Browser Basics

This section describes general concepts related to the Browser.

12.1.1. Product Types: Instruments, Loops, One-shots and Effects

Although the Library contains Instruments, Loops, One-shots and Effects, it is not possible to browse for these four Product Types at the same time. Depending on the selected Plug-in slot the, Product Type in the Browser switches to "Instrument" or "Effect":

- When you start KOMPLETE KONTROL or when you select the first Plug-in slot in the Plug-in chain, the Product Type is set to Instruments and is represented by the respective icon in the Browser.
- When the first Plug-in Slot is selected, you can choose between Instruments, Loops and Oneshots. The Product Type icon will be highlighted accordingly. Instruments is selected as the default Product Type.
- When you select any other Plug-in slot, the Product Type is set to Effects, which is reflected by the respective icon in the Browser.

For more information on the Plug-in chain and usage, refer to Plug-in Chain Panel and Working with Effects.

12.1.2. Loops and One-shots

The Browser divides samples into Loops and One-Shots. One-shots are typically sampled instruments or vocals, while loops are usually sections of music. Both filetypes can come from existing expansion packs and sounds.com.

When a Loop is selected in the Browser with Prehear turned on, it will begin playing immediately in-sync with the host if transport is running. If a Loop preview begins part-way through, the Loop will play once more in full length to ensure you hear the entire Loop in context with your project.

Loops and One-shots can also be dragged directly from the Browser and dropped onto an audio track within your host DAW.

12.1.3. About the Library and Meta-Information

To organize, find, keep track of, and provide you thousands of Preset files at any time ready for loading, KOMPLETE KONTROL makes use of a **Library**. The Library contains the factory content of your KOMPLETE Instruments, Loops, and One-shots, NKS Instruments, Effects, as well as your own user content.

Tags

To help you find the right Preset file quickly and efficiently, the Library implements various techniques that go far beyond the classic folder structure of your operating system—the usage of tags. For example, each Preset file included in the Library contains tags which describe the Preset file according to following aspects:

- The **content type** of the Preset file, i.e. whether it originates from a Product's factory library or if it was created by a user.
- The **Product** where the Preset file come from—this can include, e.g., a hierarchical structure with a Product category, a particular Product, and possibly a Bank of a Product.
- A variable amount of **tags** used to describe various characteristics of the Preset file, for example, the type of effect, the sonic character, the context in which it is used—in a word, anything that might help you find the file.

Included Preset Files in the Library

The Preset files included in the Library are all KOMPLETE KONTROL-relevant files found in the folders whose paths are listed in the **Library** page of the **Preferences** panel.

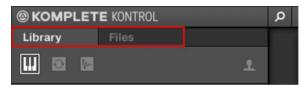
You can also save the sounds you created in KOMPLETE KONTROL to the User content section of the **Library pane**.

12.1.4. Browsing the Library vs. Browsing Your Hard Disks

Besides of browsing KOMPLETE KONTROL Library the Browser also allows you to navigate your file system in a classic way. For each way the Browser provides a single pane with its own tools:

- The **Library** pane allows you to browse the KOMPLETE KONTROL Library. This is the preferred
 way to search for files meeting particular musical requirements. This pane also allows you to
 tag your own Preset files to your liking.
- The **Files** pane allows you to browse your hard disks by using the hierarchical folder structure of your operating system. For example, you can use it to navigate KOMPLETE KONTROL-relevant files that have not been imported into the KOMPLETE KONTROL Library—and you can import them from there.

The **Library** pane and the **Files** pane can be accessed by clicking the corresponding tab at the top of the Browser.



Click the desired tab to show the corresponding pane of the Browser.

(i)

Browsing and loading files from the file system using the KOMPLETE KONTROL keyboard is not possible. The Browser called up from the keyboard can only load files that have already been added to the Library. It is best to always import all your files to the Library and tag them using the software Browser before use.

12.2. Opening the Browser

To open the Browser:

► Click on the Browser button (the magnifier symbol) in the header.



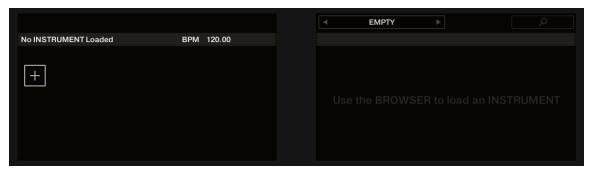
Alternatively you can also open the Browser by selecting **View** > **Browser** in the KOMPLETE KONTROL menu.



In stand-alone mode, you can also open/close the Browser from your computer keyboard via the [B] key.

Calling up the Browser on the Keyboard

On the Plug-in page when the Plug-in chain is entirely empty the displays show **No INSTRUMENT Loaded**.



No Instrument loaded.

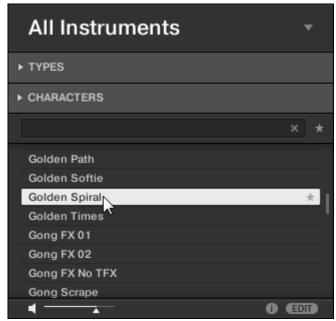
To call up the Browser on the keyboard's displays:

▶ Press the **BROWSE** button.

12.3. Loading Preset Files

When the Browser is open, you can directly load any of the Preset files shown in the Results list. When loading a Preset file the corresponding product automatically opens in the Plug-in area.

▶ To load a Preset file, double click the corresponding entry in the Results list.



→ The Preset file and the corresponding Product opens in the Plug-in area.

Loading a Preset File using the Keyboard

To load a Preset file using the Keyboard:

- 1. Open the Browser by pressing the **BROWSER** button.
- 2. Select a Preset file in the Results list by turning Knob 8 in the Control section or by turning the 4-D encoder.
- 3. Load the selected Preset file by pressing Button 8 in the Control section (**LOAD**) or by pressing the 4-D encoder.
- → The Preset file together with the product is loaded and the keyboard switches to the **PLUG-IN** page, showing the Product parameters in the Control section.

12.4. Choosing Between Factory Content and User Content

As a default setting, Factory content is selected in the Browser. The Content selector shows the User content icon, which is used to switch between Factory and User Libraries. When switching between Factory and User Libraries in the Browser, all tags and product selections will be remembered.



The Content selector.

► Click the User icon to search for User content in the Browser. The User Library is enabled when the icon lights up. To switch back to Factory content, click the User icon again to deselect it.

Choosing Between Factory and User Content on the Keyboard

In order to choose between Factory and User content on the keyboard:

▶ Press Button 4 to choose between Factory content (**USER** off) and User content (**USER** on). By default, the Factory content is selected.



12.5. Filtering Preset Files by Product

The Product selector allows you to filter Preset files according to a certain Product.

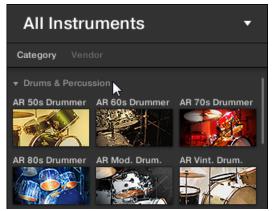
By default the Product selector header displays **All Instruments** or **All Effects**. This means that no certain Product is selected. In order to filter the Preset files in the Results list by a certain Product you need to select that Product in the Product selector:

1. Click on the arrow in Product selector header.

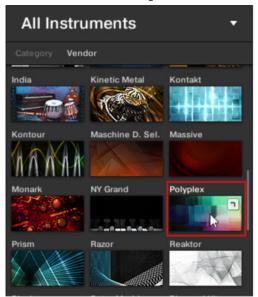


- → The Product selector expands, showing you the Product list with all the Instruments, Loops, One-shots or Effects available in your KOMPLETE KONTROL Library.
- 2. Select either **Category** or **Vendor** in the **Category / Vendor selector** to filter the Products accordingly.

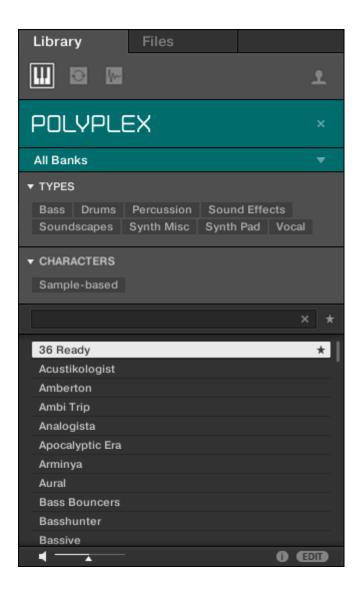
3. Scroll through the Product groups to find the Product you are looking for.



4. Click on the Product image to select it.



→ The Product selector header shows the Product name. You can now browse for all Preset files associated with the selected Product in the Results list.



Loading a Product with its Default Preset File

You can also directly load a Product with its default Preset file:

- 1. Hover the mouse over the Product entry in the Product selector.
- 2. Click on the arrow symbol that appears in the upper right corner of the Product entry.

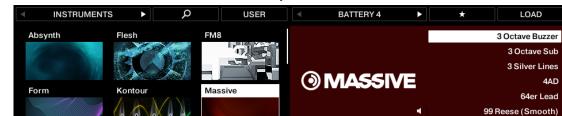


→ The Product with its default Preset file is loaded.

Filtering Preset Files by Product using the Keyboard

In order filter Preset files by Product on the keyboard:

1610 Results

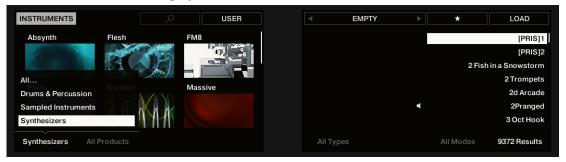


1. Press and hold **SHIFT** to access the secondary Browser functions.

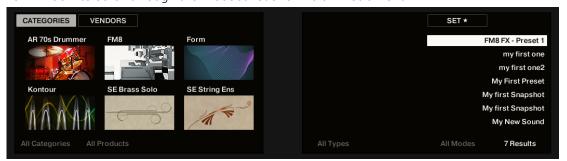
- 2. While holding **SHIFT** press Button 1 for sorting the Product list by **CATEGORY** or press Button 2 for sorting the Product list by **VENDOR**. By default the Product list is showing all Instruments or all Effects.
- 3. Release SHIFT.

Synthesizers

4. Turn Knob 1 to select a category or a vendor.



5. Turn Knob 2 to scroll through the Product list and find an Instrument.

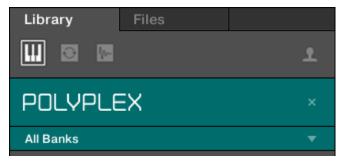


→ You can now browse for all Preset files associated with your selection in the Results list.

12.6. Filtering Preset Files by Bank

Banks can be additional Libraries (for example Expansions), different versions of the original Factory Library, or any other content categorization specific to a particular Product.

When you select specific Products in the Product list, an additional **Bank drop-down menu** appears under the closed Product selector. The Bank drop-down menu allows you to select a particular Bank of Preset files for the selected Product if available.



The Bank menu showing **All Banks** for POLYPLEX

To select a particular Bank of Preset files for the selected Product:

- 1. Click the arrow in the **Banks** menu to expand it.
- 2. Choose a Bank from the available entries.



→ Upon your selection the **Bank** menu closes and displays the selected Bank. The Results list further narrow its content accordingly.

You can remove the selected Bank by clicking the little cross in the closed Bank menu.

Selecting a Bank of Preset Files using the Keyboard

In order to select a particular Preset file Bank of the selected Product:

SFX Bolts

SFX Bouncer

SFX Brain Box

73 Results



Turn Knob 3 to select the desired Bank of the Product.

→ The Results list only displays the associated Preset files.

Polyplex - Oneshot

Polyplex - Snare

Polypl..neshot

Polyplex - Percussion

12.7. Resetting the Product Selection

In order to select another Product, or show Preset files for all Products in your KOMPLETE KONTROL Library, you have to reset the selection.

To reset the selection in the Product selector:

Polyplex

Prism

► Click the little cross at the right of the Product name.



→ The selection is reset. The Product selector displays the generic label All Instruments, All Loops, All One-shots or All Effects. The TYPES and CHARACTERS tags and the Results list below the Product selector now includes Preset files for all Instruments, Loops, One-shots and Effects.



(i) Products are only shown in the Product selector if the Library contains files for them. If a particular Instrument does not show up, make sure it is installed correctly and has been updated to the latest available version.

Resetting the Product Selection on the Keyboard

To reset the Product selection:

▶ Turn Knob 2 counterclockwise until **ALL PRODUCTS** is shown above in the display.

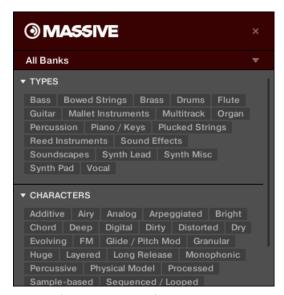


→ The Product selection is reset.

12.8. Types and Characters Tags

The **CHARACTERS** menu is not available when browsing Effects.

The **TYPES** and **CHARACTERS** tags menus enable you to search for Preset files according to particular characteristics of a sound. Recommended but not mandatorily the **TYPES** and **CHARACTERS** tags bring best results in combination with a selected Instrument.



TYPES and CHARACTERS tags for MASSIVE

As soon the desired tags are selected, the search is limited to the Preset files with corresponding tags. Tags can also be deselected to broaden the search.

TYPES

TYPES tags are structured into two hierarchical levels—top-level tags and sub-level tags.

- At first the **TYPES** menu displays the available top-level tags only.
- As soon as a tag in the top level is selected, the second level appears underneath with subtags of the selected top-tag.

 The hierarchical structure means that the sets of sub-tags are specific to each tag of the level above.

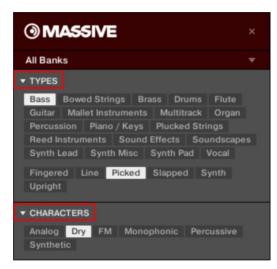
CHARACTERS

The **CHARACTERS** tags provides an additional level that is independent of the **TYPES** levels:

- In general, CHARACTERS tags refer to technical terms (e.g., Arpeggiated, Percussive, Synthetic).
- The **CHARACTERS** tags are always displayed. You can start your search with the **CHARACTERS** menu before, or even without, using the **TYPES** tags.
- However, the list of tags available in the **CHARACTERS** menu will vary depending on the selected **TYPES** tags. If no file contains both the Types and Characters tags that you have selected, the Type tags will prevail and the Characters tags will be deselected.

If you don't select any tag in the **TYPES** or the **CHARACTERS** menus, the Result list will include all available files for the selected Instrument.

Both the Types as well as the Characters tags menus can be collapsed and expanded by clicking on the arrows to allow for a larger Results list display.



Expanded TYPES and CHARACTERS menus.



Collapsed TYPES and CHARACTERS menus.

12.8.1. Filtering Preset Files by Types and Characters



The **CHARACTERS** menu is not available when browsing Effects.

In this tutorial you will learn how to find a bass line Preset file for the MONARK Instrument using the Types tags. To start, select the **MONARK** Instrument in the Product selector. The **TYPES** section currently shows only top-level tags:



The MONARK Instrument is selected in the Product selector.

To find a bass sound:

- 1. Under **TYPES**, select the **Bass** tag.
- → Once selected, the second level of tags will appear underneath with Sub-Types like **Fingered**, **Picked**, etc.



2. Select the Sub-Type matching the desired characteristic for your bass sound. By selecting any of these tags, e.g., **Synth**, you will narrow your search to this particular Sub-Type of bass sounds.



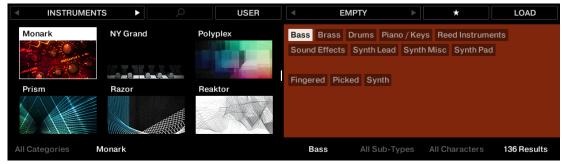
- 3. Select the **Analog** tag from the **CHARACTERS** tags.
- → The Results list is filtered according to the selected Types and Characters tags.

This method allows you to quickly find Preset files for an Instrument with similar characteristics.

Searching for Preset Files by Types and Characters Using the Keyboard

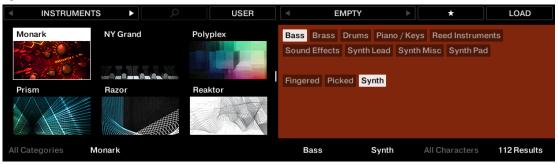
To find a bass sound:

1. Turn Knob 5 (All Types) to select the Bass tag from the Types filter.

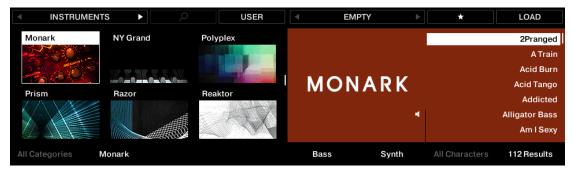


→ Upon your selection the second level of tags appears above Knob 6 displaying **All Sub-Types**.

2. Turn Knob 6 to select the Sub-Type matching the desired characteristic for your bass line, e.g., **Synth**.



→ The Results list is filtered according to the selected Types and Characters tags.



12.8.2. Selecting Multiple Tags from the Same Level

i The CHARA

The **CHARACTERS** menu is not available when browsing Effects.

In both TYPES and CHARACTERS menus, you can select multiple tags from the same level:

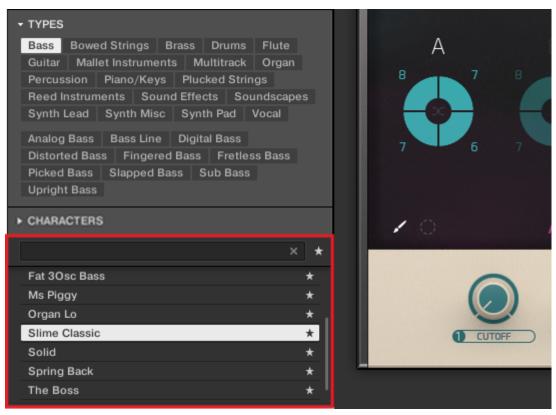
- 1. Hold [Shift] on your computer keyboard and click two tags at a particular level to select these tags and all tags in-between.
- 2. Hold [Ctrl] ([Cmd] on macOS) on your computer keyboard and click any number of tags at a particular level to select these tags.
- → The result list will include all files that correspond to at least one of the selected tags.



Selecting multiple tags from the same level using the keyboard is not possible. Nevertheless, the display on the keyboard will show **(multi)** when multiple tags are selected in the software.

12.9. Working with Favorites

Favorites in the KOMPLETE KONTROL Browser allow you to quickly view and browse your most frequently used Preset files. Any Preset file can be assigned to be a Favorite. The Favorites serve as an additional filter in the Library pane. When activated, the Results list will only show Preset files that have been assigned to be a Favorite, and also match all other selected filters, including the search query entered into the search field.

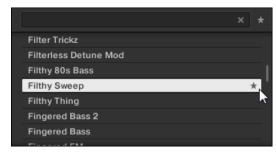


The KOMPLETE KONTROL Browser showing all Favorites tagged with the Type Bass.

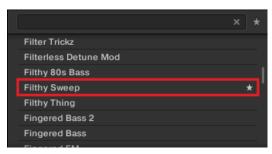
12.9.1. Adding Preset Files to the Favorites

To add a Preset file to the Favorites:

- 1. Place the mouse cursor over any selected or unselected entry in the Results list.
- → The entry is highlighted and the Set Favorite icon on right appears.



- 2. Click on the Set Favorite icon to add the corresponding Preset file to the Favorites.
- → The Preset file is added to the Favorites, indicated by the lit Set Favorite icon next to its name.

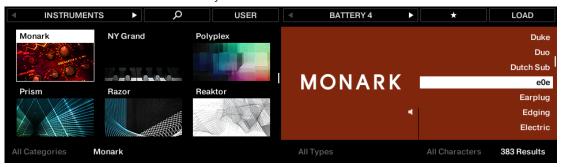


You can add any Preset file in the Results list to the Favorites, no matter if it is selected or not.

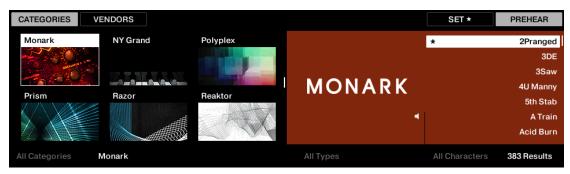
Adding Preset Files to the Favorites on the Keyboard

In order to add a Preset file to the Favorites on the keyboard:

1. Turn Knob 8 to select the Preset file you want to add to the Favorites in the Results list.



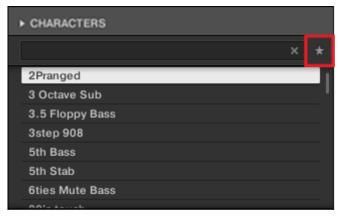
- 2. Press and hold **SHIFT** to access the secondary functions.
- 3. While holding **SHIFT** press Button 7.
- → The Preset file is added to the Favorites, indicated by the lit Set Favorite icon next to its name.



12.9.2. Displaying Favorites in the Results List

To activate the Favorites filter:

Click on the Favorites icon next to the search field to activate the Favorites filter.



→ The Favorites icon is now lit and the Results list shows all favorite Preset files.



Displaying all Favorites in the Results list on the Keyboard

In order to display all Favorites in the Results list on the keyboard:

- ► Press Button 7.
- → The Favorites icon is now highlighted in the display and the Results list shows all favorite Preset files.



12.9.3. Removing Preset Files from the Favorites

To remove a Preset file from the Favorites:

▶ Click on the lit Set Favorite icon to remove the corresponding Preset file from the Favorites.



→ The Preset file is removed from the Favorites, indicated by the hidden Set Favorite icon. The next time you select the Favorites filter, the Preset file will not be shown in the Results list.



You can also remove a Preset file from the Favorites when the Results list is not filtered by Favorites.

Removing Preset Files from the Favorites on the Keyboard

In order to remove a Preset file from the Favorites on the keyboard:

- 1. Select a favorite Preset file.
- 2. Press Button 7 to remove the corresponding Preset file from the Favorites.
- → The Preset file is removed from the Favorites, indicated by the hidden Set Favorite icon.

12.10. Performing a Text Search

In the search field you can enter your search query. The search considers all properties such as Preset file names, Instruments, Banks, Type and Characters tags, directly as you type.



- 1. Click in the search field.
- 2. Type the desired text to limit the Results to files containing this text.
- → As you start typing, the list of matches will start narrowing in the result list below.

You can also limit the search by selecting Types and Characters tags.

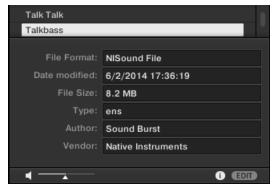
In order to reset both text search tag search, use the **Reset button** (showing a little cross) on the right side of the search field. The Instrument selection is not affected.

12.11. Displaying Preset File Information

► Click the Information button (showing a little "i") next to the **EDIT** button in the right part of the Control bar to display information on the file(s) selected in the result list.



→ A box appears above with various information on the selected file(s): **File Format**, **Date modified**, **File Size**, **Type**, as well as the **Author** and **Manufacturer** properties, if any.



The Information box provides various information on the selected file(s).

If the selected files have different characteristics, the corresponding fields in the Information box will show **multi**.

12.12. Auditioning your Preset Files

When you are browsing Preset files, you can audition Preset files by using the Prehear feature at the bottom of the Browser. For this you need to enable the Prehear feature.



The Prehear controls.

- 1. Click the Prehear button (showing a little speaker icon) to enable/disable Prehear.
- → When Prehear is enabled, you can directly hear Preset files as you select them in the Result list of the **Library** pane or **Files** pane.
- 2. Drag the Prehear Volume slider next to the Prehear button to adjust the volume of the Preset files you are pre-listening to.
- 3. Click on any entry in the Results list.



In order to hear audio of the Prehear feature it is mandatory to configure the audio interface in the Preferences of KOMPLETE KONTROL.

Auditioning Your Preset Files using the Keyboard

You can also enable/disable the Prehear feature on the keyboard:

1. Press and hold **SHIFT**.

- 2. Press Button 8 (**PREHEAR**) to enable/disable the Prehear feature.
- 3. Release SHIFT.
- 4. Turn Knob 8 to select another Preset file in the Results list.
- → Upon selection this Preset file is played back and the previous Preset file stops playing instantly.

When you disable Prehear, the playback of any Preset file still being pre-listened is stopped.

13. Working with Effects

In this section you learn how to work with the Plug-in chain in terms of adding Effects, and organizing the Plug-in chain. Also, this section assumes you are familiar using the Browser and already loaded an Instrument.

For more information on using the Browser, refer to Browsing the Library.

13.1. Opening the Plug-in Chain Panel

In order to work with the Plug-in chain in the KOMPLETE KONTROL software you need to make sure the Plug-in chain panel is displayed.

If this is not the case you can display the Plug-in chain panel by the following action:

► Click on the Plug-in chain panel button in the Header.



→ The Plug-in chain panel and the loaded Instrument are displayed. You can now add Effects to the Plug-in chain.



On the KOMPLETE KONTROL keyboard the Plug-in chain is displayed on the Plug-in page.

13.2. Adding Effects

Once an Instrument, Loop or One-shot has been loaded into the first Plug-in slot, you can then add Effects to the Plug-in chain. To add an Effect to the Plug-in chain:

1. Click on the empty Plug-in slot to select it.

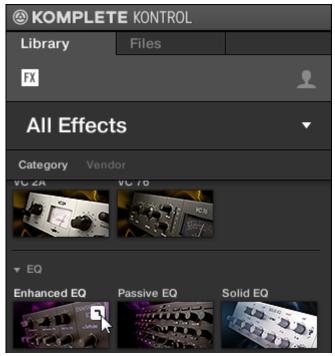


→ The Product Type icon in the Browser changes to Effects.



The Product selector provides you with a list of the available Effects.

2. Browse for an Effect to your liking.



→ The Effect is loaded. Its image (or a generic icon for non-NKS Plug-ins) and name are shown in the second Plug-in slot. To add more Effects to the Plug-in chain, repeat the aforementioned steps.



Adding Effects using the Keyboard

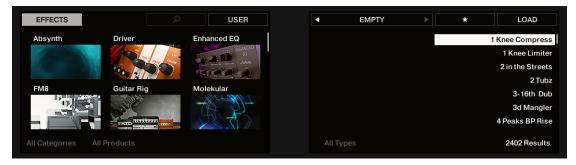
Once an Instrument, Loop or One-shot has been loaded into the first Plug-in slot, you can then add an Effect to the Plug-in chain:

1. Press the **PLUG-IN** button to show the Plug-in page.

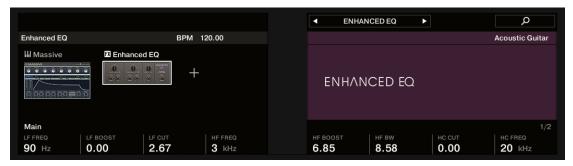
2. Press Button 6 until you select the empty Plug-in slot.



- 3. Press the **BROWSE** button to open the Browser.
- → The label below Button 1 shows the current Product Type **EFFECTS**.



- 4. Select an Effect together with a Preset file.
- 5. Press Button 8 or the 4-D encoder to load the selection.
- → The Effect is added to the second Plug-in slot in the Plug-in chain. To add more Effects to the Plug-in chain, repeat these steps.



13.3. Selecting Plug-in Slots

When you have several Effects added to the Plug-in chain you can directly jump to a Plug-in slot in order for adjusting the included Effect.

In order to jump to another Plug-in slot and display the Effect's controls:

► Click on the Plug-in slot you want to select.

Selecting another Plug-in Slot using the Keyboard

In order to select another Plug-in slot in the Plug-in chain using the keyboard:

1. Press **PLUG-IN** to show the Plug-in page.

- 2. Press Button 5 or Button 6 to select the previous or next Plug-in slot in the Plug-in chain.
- → The Plug-in controls are mapped to the knobs accordingly.



(i)

You can also select another Plug-in Slot using Button 5 and 6 directly in the Browser.

13.4. Reordering Effects

If you want to reorder your Effects in the Plug-in chain you can easily move them by drag and drop. In order to move an Effect in the Plug-in chain:

- 1. Hover the mouse over the Plug-in slot you want to move.
- 2. Click and hold the left mouse button and move the mouse pointer to the desired position in the Plug-in chain.
- → The white line between the borders of the Plug-in slots is the current position for dropping the Plug-in slot.



- 3. Drop the Effect into a new position in the effects chain.
- → The Plug-in slot now sits at another position in the Plug-in chain and the other Plug-in slots have moved accordingly.



Reordering Effects on the Keyboard

In order to move an Effect in the Plug-in chain:

- 1. Press the **PLUG-IN** button.
- 2. Press Button 5 or Button 6 to select the Plug-in slot with the Effect you want to move.

- 3. Press and hold **SHIFT** in order to access additional controls.
- **4.** While holding **SHIFT** press Button 5 or Button 6 to move the selected Effect in the Plug-in chain.

13.5. Scrolling the Plug-in Chain

Theoretically, it is possible to add an unlimited amount of Effects to the Plug-in chain. If the Plug-in chain exceeds the space on the GUI due to numerous Effects loaded, big scroll arrows appear on the left and/or on the right border.



Right scroll arrow.

In order to scroll through the Plug-in chain:

► Click the scroll arrow for the respective direction.

13.6. Bypassing Effects

If you temporarily want to listen to the Instrument without a specific Effect for an A/B comparison but do not want to delete it from the Plug-in chain, you can bypass Effects.

In order to bypass an Effect:

- 1. Hover the mouse over the Plug-in slot containing the Effect you want to bypass.
- → Additional controls are displayed.
- 2. Click the Bypass button at the top left of the Plug-in slot.

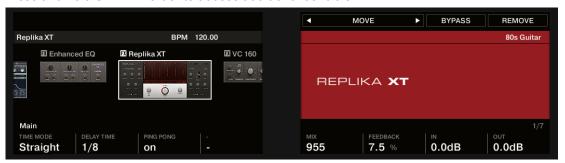


→ The Effect is now bypassed and the image is grayed out.

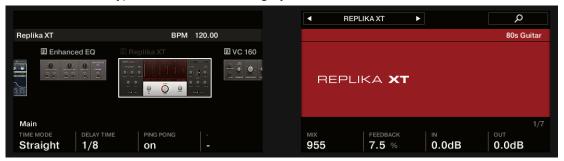


Bypassing Effects using the Keyboard

- 1. Press the **PLUG-IN** button to show the Plug-in page.
- 2. Select the Plug-in slot containing the Effect you want to bypass in the Plug-in chain.
- 3. Press and hold **SHIFT** in order to access additional controls.



- 4. While holding SHIFT press Button 7 (BYPASS).
- 5. The Effect is now bypassed and its name is grayed out.



13.7. Removing Effects

In order to remove an Effect from the Plug-in chain:

- 1. Hover the mouse over the Plug-in slot containing the Effect you want to remove.
- → Additional controls are displayed.
- 2. Click the Remove button at the top right of the Plug-in slot.



→ The Effect is now removed from the Plug-in chain.

Removing Effects from the Plug-in Chain using the Keyboard

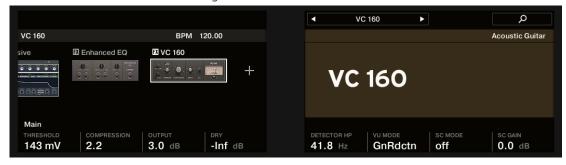
In order to remove an Effect from the Plug-in chain:

1. Press **PLUG-IN** to show the Plug-in page.

2. Press and hold **SHIFT** in order to access additional controls.



- 3. While holding **SHIFT** Press Button 8 (**REMOVE**).
- 4. The Effect is removed from the Plug-in chain.



14. Working with Loops and One-Shot Samples

In KOMPLETE KONTROL you can also work with loops and One-shot samples using the Sampler plug-in or the Audio plug-in. In this section you will learn about the different use cases of the Sampler plug-in and the Audio plug-in, how you load samples, how you open the Sampler plug-in and the Audio plug-in, and how to switch between the Sampler plug-in and the Audio plug-in.

14.1. Sampler Plug-In and Audio Plug-In Use Cases

The Sampler plug-in and the Audio plug-in have different use cases and provide different parameters for adjustments:

- With the Sampler plug-in you can define the start point and end point of the loaded sample, and modify the shape and timing. For more information on the parameters of the Sampler plug-in, refer to Sampler Plug-In.
- The Audio plug-in specializes in keeping audio loops playing in-sync with the sequencer in your host software and has the optional ability to do so without influencing the key of the loop. Furthermore, you can transpose the loop while it plays so that it fits the key of your song. For more information on the parameters of the Audio plug-in, refer to Audio Plug-In.

14.2. Loading One-Shot Samples and Loops

When you load a sample of the content type One-shot from the Browser, the sample will be automatically loaded into the Sampler plug-in. When you load a sample of the content type Loop from the Browser, the sample will be automatically loaded into the Audio plug-in. However, once the Sampler plug-in or the Audio plug-in is opened, you can still load loops and One-shot samples into either of them.

To load a loop or One-shot sample from the Browser:

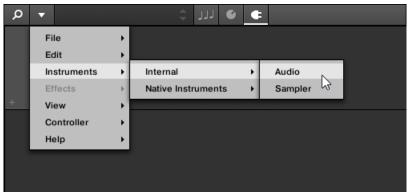
- 1. Select the first Plug-in slot in the Plug-in chain.
- 2. Select the content type Loop or One-shot sample in the Browser.
- 3. Refine your search using **TYPES** and **CHARACTER** tags.
- 4. Drag the loop or One-shot sample from the Results list into the Plug-in area.
- → The loop or One-shot sample is loaded into the corresponding plug-in. You can now play and edit it using the parameters.
 - (i) When the Audio plug-in is opened, loops and samples from the Browser will be loaded into the Audio plug-in. When the Sampler plug-in is opened, loops and samples from the Browser will be loaded into the Sampler plug-in.
 - It is not possible to manually save Presets for the Audio plug-in. The *Save* and *Save As...* entries in the KOMPLETE KONTROL menu are grayed out when the Audio plug-in is opened.

14.3. Opening the Audio Plug-In or Sampler Plug-In

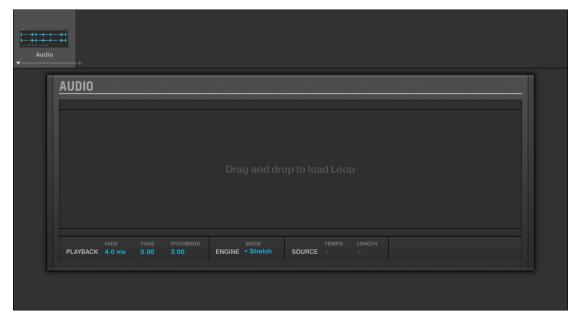
You can open an empty Audio plug-in or Sampler plug-in using the KOMPLETE KONTROL menu in the header. This enables you to load samples of each content type into the Audio plug-in or Sampler plug-in.

To open the Audio plug-in or Sampler empty:

- 1. Open the KOMPLETE KONTROL menu in the header.
- 2. Select *Instruments > Internal > Audio* to open the Audio-plug-in, or select *Instruments > Internal > Sampler* to open the Sampler plug-in.



→ The Audio plug-in or Sampler plug-in has opened. It uses the first Plug-in slot in the Plug-in chain. You can now load loops or One-shot samples from the Browser via drag and drop.

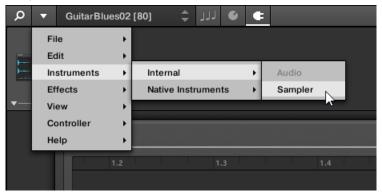


14.4. Switching between the Audio Plug-In and the Sampler Plug-In

When you intend to use the loaded loop in the Audio plug-in with the Sampler plug-in instead, you can switch from Audio plug-in to Sampler plug-in. Switching from Audio plug-in to Sampler plug-in retains the loaded loop and vice versa.

To switch from the Audio plug-in to the Sampler plug-in or vice versa:

- 1. Select the first Plug-in slot in the Plug-in chain.
- 2. Open the KOMPLETE KONTROL menu in the header and select *Instruments > Internal > Sampler*, or *Instruments > Internal > Audio*.



→ The Audio plug-in has switched to Sampler plug-in. The loop retains loaded.

14.5. Playback Behavior of Audio Plug-In in Host Software

When you start playback in your host software, the loop will be triggered and play continuously. However, the loop will only be audible in locations where you placed notes in the host sequencer. Furthermore, when you use the playback engine mode **Stretch**, the pitch of the loop will be transposed based on the pitch of the note used. For example, note C3 will play the sample at its original pitch, while C4 will play the sample at one octave higher.

You can also play loops with the keyboard in your host software:

- When the transport is not running, you can trigger the loop by pressing a key.
- When the transport is running and you press a key, a gate will open at the positions where notes are placed in the host sequencer.

For more information on playback engine mode, refer to Audio Plug-In.

15. Managing the Library

With the Browser you can also organize your own Preset files. In this section you will learn how you save and manage your own Preset files in the User Library and how to import KOMPLETE KONTROL-compatible user files.

The workflows for organizing Instrument, Loops, and One-shots Preset files are identical to the workflows for organizing Effect Preset files. The Product Type cannot be selected in the Browser directly as this is determined by the Plug-in chain. For more information on Product Types and switching between Product Types, refer to Product Types: Instruments, Loops, One-shots and Effects.

For detailed overview of the Browser elements, refer to Browser.

15.1. Saving Preset Files to the User Library

KOMPLETE KONTROL allows you to conveniently save any sound you created with your Instruments and Effects in a new user Preset file. Your saved Preset files are automatically added to the user content section of the Library pane and can be filtered and searched like any other Preset file in the KOMPLETE KONTROL Library. On your hard drive, the user Preset files are saved in the following folder (sorted by Instrument, in corresponding subfolders):

- Windows: C:\Users\<your user name>\Documents\Native Instruments\User Content\
- macOS: Macintosh HD/Users/<your name>/Documents/Native user Instruments/User Content/

The Preset files saved for KOMPLETE Instruments with KOMPLETE KONTROL are compatible with the stand-alone and plug-in versions. This way you can, for example, open a KONTAKT file you saved with KOMPLETE KONTROL in the KONTAKT stand-alone application or the plug-in by opening the file from the user content folder described above.



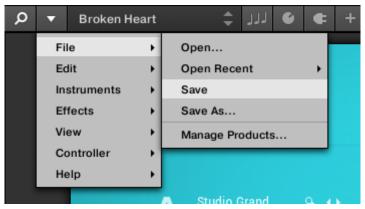
The Preset files you save in KOMPLETE KONTROL are compatible with MASCHINE. To add them to the user content section of MASCHINE's Library pane, click on **Rescan** in the **User** pane of the **Library** page in the MASCHINE Preferences.

Saving a Preset File

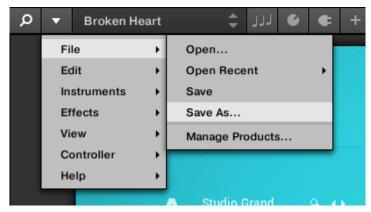
Follow the instructions to save a sound in a new Preset file:

1. Select the Instrument or Effect Plug-in slot for which you wish to save a Preset file.





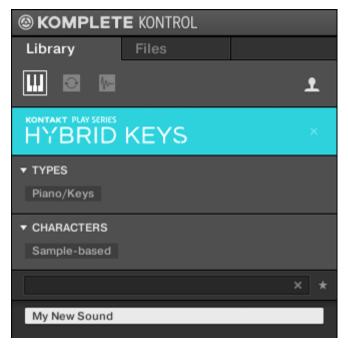
Or, if you want to save a Preset file you are working on with a new name, click on **Save As...** in the **File** submenu of the KOMPLETE KONTROL menu.



3. Enter a name for your new Preset file and click **Save** in the **Save Preset** dialog to save the Preset file.



→ Your new Preset file immediately appears in the user content section of the **Library** pane.



15.2. Deleting User Preset Files from the User Library

You can delete user Preset files directly from the Results list:

- Right-click the desired Preset file and select **Delete** from the context menu. If you want to delete several user Preset files at once, first select them as described above, and right-click any of them.
- → A warning dialog opens to inform you that the Preset file will be not only removed from the KOMPLETE KONTROL Library but also deleted from your hard disk.
- 2. Click **OK** to confirm the deletion (or **Cancel** to keep the file).
- → The Preset file is deleted from the KOMPLETE KONTROL Library and from your hard disk.
 - (i)

When browsing factory content, the **Delete** entry is not available in the context menu.

15.3. Editing the Tags and Properties of User Preset Files

When you save user Preset files in KOMPLETE KONTROL, they are automatically assigned to Instruments and Banks depending on the Instrument you are using. To further define the attributes of your user Preset files, you can edit the Types and Characters tags as well as the general properties of the file. This allows you to organize your user content in a meaningful way and search for your files using the Types and Characters tags in the **Library** pane.



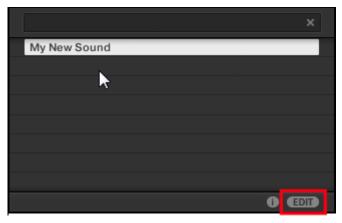
The Types and Characters tags are also recognized by the MASCHINE Browser. This way, you can easily find the user Preset files you saved with KOMPLETE KONTROL in the User content section of MASCHINE's **Library** pane.



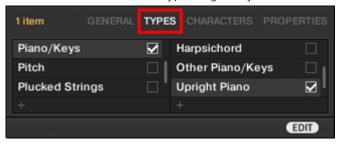
The **CHARACTERS** menu is not available when browsing Effects.

To assign tags to your Preset file and change its properties:

 Select the Preset file in the Results list and click EDIT in the Control bar to open the Attribute Editor.



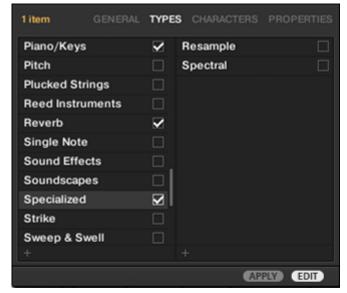
2. Click on **TYPES** to edit the Types tags for your Preset file.



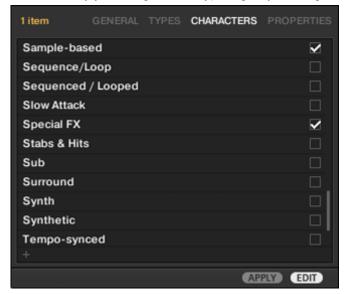
3. Click and drag the upper edge of the Attribute Editor upwards to increase its size. This makes it easier to navigate in the list of available tags.



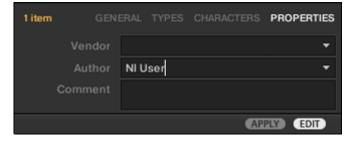
4. Assign the appropriate tags to your Preset file by clicking the checkboxes next to the corresponding name.



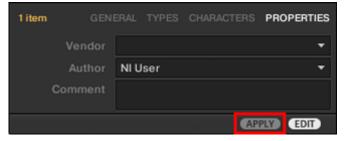
5. Click on **CHARACTERS** to edit the Characters tags for your Preset file. You can assign them in the same way you assigned the Type tags, by clicking on the appropriate checkboxes.



6. Click on **PROPERTIES** to edit additional information included in your Preset file. You can enter your name in the **Author** field, or, in case you intend to share the Preset file, leave a note in the **Comment** field for other users to read.



7. To apply any changes made in the Attribute Editor, click **APPLY**.



→ Your Preset file is now tagged according to your selection of Types and Characters and the properties are saved. Close the Attribute Editor by clicking on **EDIT**.

15.4. Syncing Multiple Instances

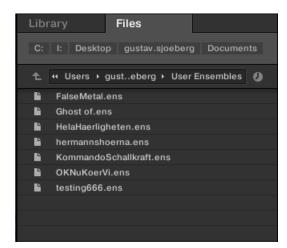
When running multiple instances of KOMPLETE KONTROL, either as Standalone and/or as a plugin, updates to the Library will be synced across all instances. If you delete a sample from your User Library in one instance, the sample will no longer be present in the other instances. Similarly, if you save a Preset in one instance, that Preset will also be available in the other instances.

15.5. Working with the Files Pane

This section details the actions you can perform that help you to browse for files on your hard disks using the **Files** pane. The Results list of the **Files** pane shows the files and folders found in the path selected in the Location bar above.

(i)

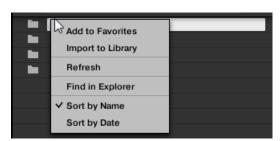
Only KOMPLETE KONTROL-compatible files are shown in the Results list.



The Results list of the Files pane.

15.5.1. Additional Results List Features List in the Files Pane

In the **Files** pane the Results list offers a context menu with additional commands. You can open it with a right-click on the selected entry or entries.



The context menu in the result list of the Files pane.

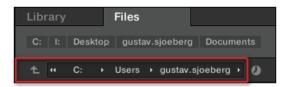
Following commands are available:

Command	Description
Add to Favorites (folders only)	Adds the selected folder to your Favorites.
Import to Library (folders only)	Imports the selected folder(s) into the Library.
Refresh	Refreshes the display of the list, in case items have been modified in that folder.
Find in Explorer / Find in Finder	Opens an Explorer/Finder window pointing to the selected folder.
Sort by Name	Sorts the Result list according to the item names.

Command	Description	
Sort by Date	Sorts the Result list according to the item dates.	

15.5.2. Navigating to File Locations with the Location Bar

The Location bar shows and lets you modify the selected path. At any time the Results list will display the content of the path shown here.



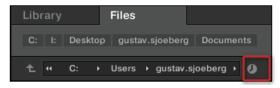
The Location bar

The Location bar provides following tools:

- **Up arrow**: Use the Up arrow on the left to go one level up in your file system.
- Selected path: Within the path displayed, you can:
 - Click any folder name to jump to that folder.
 - Click any **right-pointing arrow** after a folder name to open a list of its subfolders, and select any entry in the list to jump to that folder.
 - If all the levels cannot be displayed in the path, click the **double left-pointing arrow** left of the path to display the remaining upper levels (up to the Workspace, representing the highest level in your file system), and select any entry in the list to jump to that location.

15.5.3. Navigating to Recent File Locations

The Recent Locations button shows a clock icon at the right of the Location bar:



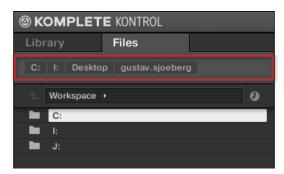
The Recent Location button.

The last 10 locations you have visited are stored by KOMPLETE KONTROL and available here:

- ▶ Click the Recent Location button and select any recently visited location from the list.
- → This location is loaded in the Location bar and its content displayed in the result list.

15.5.4. Working with File Location Favorites

Located at the top of the **Files** pane, the favorite bar displays all your favorite folders. **Favorite folders** are shortcuts to specific locations in your file system.



The Favorite bar, at the top of the **Files** pane.

Favorite folders can be useful if you often return to the same location while browsing your file system in the **Files** pane. The default favorite folders are the roots of each of your hard disks, your desktop folder, and your user folder.

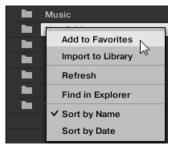
Jumping to Favorite Folders

- ► Click any favorite folder in the Favorite bar to jump to that location.
- → The selected location is loaded in the Location bar and its content appears in the Results list.

Adding and Removing Favorite Folders

You can add your own favorite folders to the Favorites bar. This is done in the Results list:

- 1. Navigate to the parent folder containing the folder you want to use as a favorite so that this folder appears in the Results list.
- 2. In the Results list, right-click the desired folder and select **Add to Favorites** from the context menu.



You can also remove any Favorite from the Favorite bar:

▶ To remove a favorite folder, right-click it in the Favorite bar and select **Remove from Favorites**.

15.6. Loading VST Plug-ins

KOMPLETE Instruments and VST plug-ins supporting the Native Kontrol Standard (NKS) are automatically loaded when you call up a Preset file from the KOMPLETE KONTROL Library.

However, you can also load plug-ins directly, allowing you to integrate any VST plug-in in KOMPLETE KONTROL. This way you can play your VST plug-ins using the Smart Play features, map their parameters to the controls on the keyboard, and save Preset files for them in your KOMPLETE KONTROL User Library.

To load a VST plug-in in KOMPLETE KONTROL:

Select the plug-in you want to load in the **Plug-ins** submenu of the KOMPLETE KONTROL menu.



(i) If your VST plug-ins do not show up in the **Plug-ins** submenu, check if the VST plug-in folders on your hard drive are correctly added to the Locations pane on the Preferences' Plug-ins page.

15.7. Installing NKS Instruments

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

The Native Kontrol Standard includes:

- Seamless integration into the KOMPLETE KONTROL Browser for a unified browsing experience.
- Full parameter mapping for instant hands-on control.
- Support of KOMPLETE KONTROL features such as the Light Guide.

NKS Instruments can be found in the KOMPLETE KONTROL Browser next to your KOMPLETE Instruments. All of their Preset files are fully tagged, so filtering in the Browser gives you matching results from both KOMPLETE Instruments and NKS Instruments. And when you load a Preset file from an NKS Instrument, its parameters are automatically mapped to the controls on the keyboard.

Installing VST Plug-ins with NKS Support

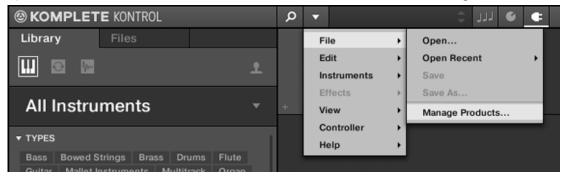
VST plug-ins with NKS support are automatically added to your Library when you start KOMPLETE KONTROL for the first time after completing their installation. The folders containing the Preset files for NKS support can be managed in the Factory pane on the Library page of the Preferences. For more information, refer to Preferences – Library Page.

Installing KONTAKT and REAKTOR Instruments with NKS Support

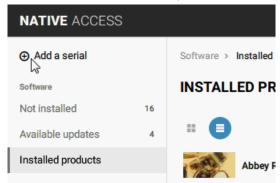
Third-party developers of KONTAKT and REAKTOR Instruments provide you with a folder that contains all Instrument files, including Preset files and samples. Instead of running an installer, this folder needs to be stored on the hard drive. The Instrument can then be activated with Native Access, which also adds it to the KOMPLETE KONTROL Library. If you are using KONTAKT or REAKTOR, the Instrument is automatically added to their respective Browser.

To activate your KONTAKT Instrument with NKS support and add it to the KOMPLETE KONTROL Library, follow the steps below:

- 1. Start the stand-alone version of the KOMPLETE KONTROL software.
- 2. Open the File sub-menu in the KOMPLETE KONTROL menu and click on Manage Products...



- → Native Access opens, showing all installed products.
- 3. Click on Add a serial in the top-left corner of Native Access.



4. Enter the serial number of the Instrument and click ADD SERIAL.

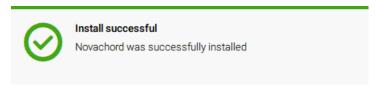


- → Native Access asks you to browse to the folder containing the Instrument files. Before you do this, ensure that you have copied the folder to its final location on your computer.
- 5. Click **BROWSE** and open the folder containing the Instrument files in the file dialog.

6. Click on **INSTALL** to add the Instrument to your KOMPLETE KONTROL Library.



→ The Instrument is installed. KOMPLETE KONTROL automatically scans for the new content and adds it to the KOMPLETE KONTROL Browser.



The KOMPLETE KONTROL Library and the KONTAKT Browser reference the Instrument files contained in the folder. It is recommended to not delete or move the folder afterwards, otherwise KOMPLETE KONTROL and KONTAKT will not be able to find the Instrument files. If an Instrument cannot be found, use the **Rescan** function on the Preferences' Library page to update the Library with the correct folder location.

15.8. Importing KOMPLETE KONTROL-Compatible User Files

Apart from the huge KOMPLETE factory library, you might want to use, e.g., your own REAKTOR ensembles or KONTAKT Instrument files you received from other users.

You can load them directly from the **Files** pane, but you won't be able to find and load them from the keyboard's on-screen Browser nor from the **Library** pane.

For this you will have to import the files into the Library first. Importing files does not mean they will be moved from the directory they currently reside in, they will only be referenced by the Browser. That's why whenever you move files, make sure to update the paths to their respective directories in the **Library** page of the **Preferences** panel.

The **Files** pane allows you to import whole folders. All KOMPLETE KONTROL-compatible files found in the selected folder(s) will be imported.

Procedure

To import a folder, do the following:

- 1. In the **Files** pane, navigate to the folder containing the files you want to import.
- 2. Select the desired folder.

- 3. Click the **IMPORT** button at the bottom right of the Browser.
- → You will be presented with the Attribute Editor.
- 4. In the Attribute Editor, tag the files you are about to import to the Library.
- 5. Click **OK** at the bottom right of the Browser to import the files to the Library.
- → All KOMPLETE KONTROL-compatible files found in the selected folder(s) are imported to your Library. They are added as user content. Furthermore, the paths of the imported folders are added to the list of user libraries in the **User** pane of the **Library** page in the **Preferences** panel.



You can also apply/remove tags at any time after they are imported. However, it may be best to tag files upon import, since it will make it easier to find them later.

16. Controlling Instrument, Loop, Oneshot and Effect Parameters

This section introduces you to controlling Instrument, Loop, One-shot and Effect parameters using the KOMPLETE KONTROL keyboard and explains how to customize parameter mappings.

16.1. About Pre-Mapped Instruments, Loops, One-shots and Effects

All KOMPLETE and NKS Instruments are pre-mapped, which means that the keyboard's knobs are automatically assigned to key parameters as soon as you load an Instrument in KOMPLETE KONTROL. You do not have to manually configure a mapping or assign knobs via MIDI learn.



You can customize the parameter mapping for each Preset file in the Plug-in Panel of the KOMPLETE KONTROL software. For more information, refer to Customizing Parameter Mappings using the Plug-in Panel

16.2. Adjusting Parameters

Once you have loaded an Instrument or Effect, the eight knobs on the keyboard are automatically assigned to eight Instrument parameters. Whenever you turn a knob on the KOMPLETE KONTROL keyboard, the mapped parameter visually reflects the movement in the KOMPLETE KONTROL software.

To adjust an Instrument parameter, turn the corresponding knob on the keyboard. The mapping of each knob is indicated by the displays.

16.3. Switching Parameter Pages

Many Instruments and Effects are equipped with much more than eight parameters. To provide quick access to additional parameters, the Page buttons (left and right arrows) to the left of the Control section let you skip through parameter pages. This remaps the knobs to a different set of Instrument parameters.

- ▶ To skip to another parameter page and remap the eight knobs to a new set of controls, press the Page buttons left or right.
- → The number at the bottom right of the right display indicates the current parameter page and the total number of available pages for the loaded Instrument.

16.4. Customizing Parameter Mappings using the Plug-in **Panel**

You can customize the parameter mapping for an Instrument's Preset file by enabling Edit mode in the Plug-in panel.

➤ To enable or disable the Plug-in panel's Edit mode, click on the Edit mode button in the upper right corner.



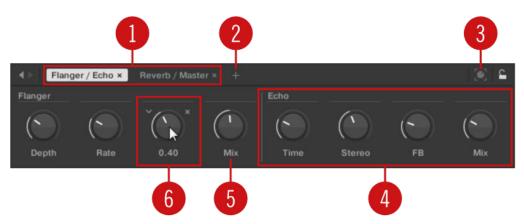
The Edit mode allows you to:

- Add, delete, and replace parameters in the mapping.
- · Learn parameters to controls.
- · Rename controls.
- Add pages to the Control section, or delete existing pages.
- Add and rename sections on the pages to group controls.



To make your changes permanent, save the Preset file to the KOMPLETE KONTROL User Library. For more information, refer to Saving Preset Files to the User Library.

Plug-in Panel Edit Mode



The Edit mode of the Plug-in panel.

Each page (1) of the Control section on the KOMPLETE KONTROL keyboard shows up as a label at the top of the Plug-in panel.

- 1. Click on a label to view and edit the controls on this page. The current page is highlighted.
- 2. To delete a page, click on the cross icon next to its label.

The Add Page button (2) allows you to add more pages to the Control section for the current Preset file, while the Learn button (3) enables Learn mode for the Plug-in panel.

► In Learn mode, select a control in the Plug-in panel and move any parameter on the Instrument's panel to learn this parameter to the selected control (highlighted in blue).

Controls can be grouped to sections (4) to show related parameters in a coherent manner.

- 1. Double-click on the empty space above a parameter, enter a name, and then press [enter] or click elsewhere to create a new section starting with the chosen parameter.
- 2. To rename an existing section, double-click on it and enter a new name. Press [enter] or click elsewhere to confirm the changes.

The name of each control is shown below the corresponding knob in the Plug-in panel (5).

➤ To change the name of a control, double-click on it and enter a new name. Press [enter] or click elsewhere to confirm the changes.

If you place the mouse over a control (6) in Edit mode, additional options allow for changing the parameter mapping of this control.

- 1. Click on the arrow icon at the left of the control's knob and select a parameter from the drop-down menu to map it to this control.
- 2. Click on the cross icon at the right of the control's knob to delete this control from the current page.

17. Smart Play – Playing and Editing Scales and Chords

KOMPLETE KONTROL's Scale engine comes equipped with a vast amount of scales that you can select and use to play your Instruments. This opens up possibilities to play an Instrument such as a piano according to, e.g., the minor pentatonic scale without hitting a "false" note. In Chord mode you can use the provided scales to combine individual note harmonies into chords. Combined with the Arpeggiator, you can even play scales automatically simply by pressing down a key on the KOMPLETE KONTROL keyboard or receiving an incoming MIDI note.

When you select a scale in the Perform panel and switch the Scale engine on, the scale gets mapped onto the keyboard and is reflected by the Light Guide. This means that regardless of what keys you actually press down on the keyboard—or what MIDI notes you send from the host—the notes that are being played back are always mapped onto the closest notes contained in the scale that you selected.

17.1. A Note about Music Theory

KOMPLETE KONTROL has built-in scales and harmonies that you can use to play your Instruments, Loops and One-shots with chords and arpeggiator sequences.

Scales

Traditionally music is built by combining elements of rhythm and harmony. There are many exceptions to this, but to understand the concepts of scales, chords and arpeggiator sequences let's start from there.

All notes and keys correspond to a pitch—or tone frequency. On a keyboard, each key typically represents a semitone, meaning that it is a "half step" higher or lower in pitch than the next key (though other tunings exist as well). To play melodies or chords that sound good together, notes are usually grouped together in scales. In the Western music tradition, a scale typically covers seven white keys and five black keys on a keyboard or piano: an octave. It is called so because the eighth key that follows the seventh contiguous white key plays the same note as the first of the seven. That key is called the root note. A scale then, is a certain combination of white and black keys (each representing a semitone) within an octave. By playing only the keys belonging to some scale, you are certain to stay "in key" within that scale. Important to note though, is that scales are not made up by absolute note values, but rather consist of relative changes in pitch—or steps along the scale. For example, the major scale consists of "whole step—whole step—half step," which means that you can transpose the scale up and down a keyboard; choose any root note you want and play the scale from there.

Chords

Polyphonic Instruments let you play multiple notes simultaneously—in other words chords. As an example, let's see how to build up a chord by selecting individual notes from a scale and playing them simultaneously. In this case, we'll use the C major scale. As we saw above, the major scale starts with two whole steps, followed by a half step, and then three more whole steps until it ends with another half step. We can use this knowledge to play a C major chord by pressing the root note C, then pressing another key two whole steps above C (the E note) and then yet another key a half step and a whole step further up the keyboard (the G note) all simultaneously. This C major chord corresponds to a root note (C), a third (E) and a fifth (G), which is the note interval of a major triad. By playing a triad chord you have just learned the concept of musical harmony, where notes are stacked together into chords and played simultaneously.

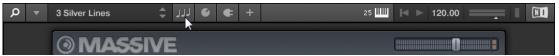
Arpeggiator Sequences

In above section you read about the combination of notes and playing them together as chords. You can also play them like diachronic note sequences, quite like playing the harp—or arpeggiator sequence. If chords have to do with adding harmony to a note, then arpeggiator sequences add time and rhythm. Instead of playing a chord consisting of three notes simultaneously, you can play the same three notes as a sequence in a given order (e.g., top-down) and at a certain rate (e.g., 1/16 notes). This is also a way for monophonic Instruments to play "chords."

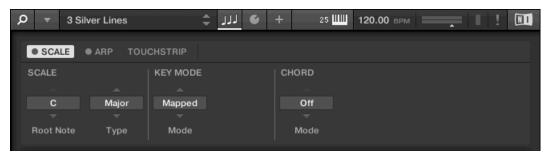
17.2. Activating the Scale Engine

In order to activate the Scale engine:

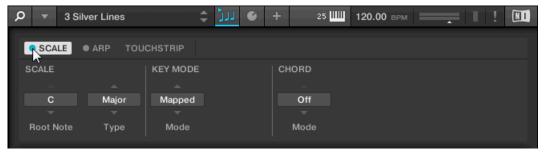
Click the Perform panel button in the Header to show the Perform panel.



→ The Perform panel appears.



2. To switch on the Scale engine, click the check box next to **SCALE** in the Perform section so it is filled blue.



Activating the Scale Engine on the Keyboard

➤ To switch on the Scale engine, press SCALE (Edit) in the Perform and Edit section on the keyboard.

17.3. Selecting and Playing a Scale

To select and play a scale on the KOMPLETE KONTROL keyboard, follow these instructions:

- 1. Press **SHIFT** + **SCALE** (**Edit**) to map the displays and knobs of the Control section to the Scale engine parameters.
- 2. To select a scale, turn Knob 2 (**BANK**, by default set to **MAIN**) and Knob 3 (**TYPE**, by default set to **MAJOR**) until you find a scale you like.
- 3. To play the scale you selected, ensure that the **SCALE** (**Edit**) button lights up.
- → The keys on the keyboard are now mapped to the notes in the selected scale. The mapping is reflected visually by the Light Guide. Pressing any unlit key automatically activates the nearest lit key so that only notes belonging to the selected scales are being played back.
- **4.** To map the knobs and displays to Instrument parameters again, press **PLUG-IN**. The Scale engine remains switched on.



If you selected Scale Type **CHROM**, all keys are mapped.

17.4. Playing Chords

You can play chords in the usual way by pressing any number of keys simultaneously (or send multiple MIDI notes simultaneously from the host), but KOMPLETE KONTROL also lets you create and play chords by using Smart Play.



To play multiple notes in a chord simultaneously, the loaded Instrument must be able to handle polyphony.

To play a chord by only pressing a single key on the keyboard, follow these instructions:

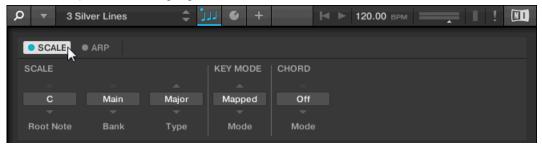
- 1. Press **SHIFT** + **SCALE** (**Edit**) to map the displays and knobs of the Control section to the Scale engine parameters.
- 2. To activate Chord mode, set **MODE** to **HARM** by turning Knob 5 (by default set to **OFF**).
- 3. Define the intervals of your chord with the **TYPE** parameter by turning Knob 6 (by default set to **1-3-5**).
- 4. To enable playing full chords, ensure that the SCALE (Edit) button is lit.
- → Chord mode is activated and set to **Harmonizer**. Pressing any key automatically activates and plays back the nearest lit key according to the mapping by selected scale. It also plays back the **third** and the **fifth** note above the pressed key in the selected scale, in accordance with the interval value set by Knob 6 (1-3-5, meaning the first, third, and fifth note of a chord). All played back notes are indicated by the Light Guide.

5. To map the knobs and displays to Instrument parameters again, press **PLUG-IN**. The Scale engine remains switched on.

17.5. Editing Scales and Chords

You have the possibility to tailor the scales and chords to your needs using the Scale engine parameters.

➤ To edit the Scale engine parameters in the KOMPLETE KONTROL software, click on **SCALE** in the Perform panel so it is highlighted.



- ► To enable Scale Edit mode and map the Scale engine parameters to the keyboard's Control section, press **SHIFT** + **SCALE** (**Edit**).
- → You can now edit the Scale engine parameters on the keyboard's Control section.

Available SCALE Parameters

- To select the scale to be mapped to the keys of the keyboard and set its root note, use the **SCALE** parameters **Root Note**, **Bank**, and **Type**.
- To define how the selected scale is mapped to the keys of the keyboard, use the KEY MODE parameter.
- To automatically generate custom chords while playing on the keyboard, use the CHORD parameters Mode, Type, and Position.

17.6. Setting the SCALE Parameters

The **SCALE** parameters **Root Note**, **Bank**, and **Type** allow you to select the scale to be mapped to the keys of the keyboard and set its root note.



The SCALE parameters Root Note, Bank, and Type.

17.6.1. SCALE Root Note

The first **SCALE** parameter is **Root Note**. On the keyboard, it is mapped to Knob 1 of the Control section in Scale Edit mode. Setting the root note of a scale means deciding what key the scale will begin with. The following notes of the scale depend on which scale pattern you select with the **SCALEType** parameter (see below). You can transpose any scale pattern up or down by selecting a different **Root Note**.



The Light Guide indicates the selected **Root Note** via fully lit LEDs, while other active keys are half-lit.

The **Root Note** setting includes the following values:

C, C#, D, D#, E, F, F#, G, G#, A, A#, B

17.6.2. SCALE Bank and Type

The second and third **SCALE** parameters from the left are **Bank** and **Type**. On the keyboard, they are mapped to Knob 2 and Knob 3 of the Control section in Scale Edit mode. Use them to decide the scale pattern according to which the notes will be mapped onto the keys of the KOMPLETE KONTROL keyboard. Each **Bank** consists of 15 thematically related scales, which can be selected by using the **Type** control.

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

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



The Light Guide indicates the active keys in the selected **Type** via lit LEDs, while inactive keys are unlit.

The following scales are available:

Main Scales

Scale	Bank	Туре	Degree Formula
Chromatic	Main	Chrom	1 62 2 63 3 4 65 5 66 6 67 7
Major	Main	Major	1234567
Minor	Main	Minor	1 2 63 4 5 66 67
Harm Min	Main	Harm Min	1 2 63 4 5 6 7
Maj Pent	Main	Maj Pent	12356

Scale	Bank	Туре	Degree Formula
Min Pent	Main	Min Pent	1 63 4 5 67
Blues	Main	Blues	1 63 4 #4 5 67
Japanese	Main	Japanese	1 2 63 5 66
Freygish	Main	Freygish	1 62 3 4 5 66 67
Gypsy	Main	Gypsy	1 2 63 #4 5 66 7
Arabic	Main	Arabic	1 62 3 4 5 6 7
Altered	Main	Altered	1 62 #2 3 #4 66 67
Whole Tone	Main	WH Tone	1 2 3 #4 #5 67
H-W Dim	Main	H-W Dim	1 b2 #2 3 #4 5 6 b7
W-H Dim	Main	W-H Dim	1 2 63 4 #4 #5 6 7

Modes Scales:

Scale	Bank	Туре	Degree Formula
Ionian	Modes	Ionian	1234567
Dorian	Modes	Dorian	1 2 63 4 5 6 67
Phrygian	Modes	Phrygian	1 62 63 4 5 66 67
Lydian	Modes	Lydian	123#4567
Mixolydian	Modes	Mixolyd	123456 67
Aeolian	Modes	Aeolian	1 2 63 4 5 66 67
Locrian	Modes	Locrian	1 62 63 4 65 66 67
Ionian b2	Modes	lon b2	1 62 3 4 5 6 7
Dorian b5	Modes	Dor b5	1 2 63 4 65 6 67
Harm Phryg	Modes	Har Phry	1 62 63 4 5 66 7
Phryg Major	Modes	Phry Maj	1 62 63 4 5 6 7
Lydian b3	Modes	Lyd b3	1 2 63 #4 5 6 7
Major Locrian	Modes	Maj Loc	1 2 3 4 65 66 67
Minor Locrian	Modes	Min Loc	1 2 63 4 65 66 67
Super Locrian	Modes	Sup Loc	1 62 63 64 65 66 67

Jazz Scales

Scale	Bank	Туре	Degree Formula
Lydian 67	Jazz	Lyd ♭7	1 2 3 #4 5 6 67
Altered	Jazz	Altered	1 62 #2 3 #4 66 67
Diminished	Jazz	Diminshd	1 62 #2 3 #4 5 6 67
Mixo b13	Jazz	Mix b13	1 2 3 4 5 66 67
Mixo b9 b13	Jazz	Mixb9b13	1 62 3 4 5 66 67
Lydian 67 b2	Jazz	Lyd ♭7b2	1 62 3 #4 5 6 67
Bebop	Jazz	Bebop	123456 677

Scale	Bank	Туре	Degree Formula
Whole Tone	Jazz	Whole Tn	1 2 3 #4 #5 67
Blues Maj	Jazz	Blues Ma	12 63 3 5 6
Blues Min	Jazz	Blues Mi	1 63 4 #4 5 67
Blues Combined	Jazz	BluesCmb	1 2 63 3 4 #4 5 6 67
Lydian #5	Jazz	Lyd #5	1 2 3 #4 #5 6 7
Jazz Minor	Jazz	Jazz Mi	12634567
Half Dim	Jazz	Half Dim	1 2 63 4 65 66 67
Augmented	Jazz	Augmentd	1 63 3 5 #5 7

World Scales

Scale	Bank	Туре	Degree Formula
Hungarian Min	World	Hung Min	1 2 63 #4 5 66 7
Hungarian Maj	World	Hung Maj	1 #2 3 #4 5 6 67
Neapolitan	World	Neapoltn	1 62 63 4 5 66 7
Spanish	World	Spanish	1 62 63 3 4 5 66 67
Greek	World	Greek	1 2 63 64 5 66 67
Jewish 1	World	Jewish 1	1 62 3 4 5 66 67
Jewish 2	World	Jewish 2	1 2 63 #4 5 6 67
Indian 1	World	Indian 1	1 62 63 #4 5 66 7
Indian 2	World	Indian 2	1 2 63 #4 5 6 7
Indian 3	World	Indian 3	1 62 2 4 5 66 6
Indian 4	World	Indian 4	1 #2 3 4 5 #6 7
Mid East 1	World	M East 1	1 62 3 4 5 6 7
Mid East 2	World	M East 2	1 62 3 4 65 66 7
Mid East 3	World	M East 3	1 62 63 4 65 6 67
Mid East 4	World	M East 4	1 62 3 4 65 6 67

5-Tone Scales

Scale	Bank	Туре	Degree Formula
Penta I	5-Tone	Pent I	12356
Penta II	5-Tone	Pent II	124567
Penta III	5-Tone	Pent III	1 63 4 66 67
Penta IV	5-Tone	Pent IV	12456
Penta V	5-Tone	Pent V	1 63 4 5 67
Hirajoshi	5-Tone	Hira	1 2 63 5 66
Insen	5-Tone	Insen	1 62 4 5 67
Kokin Joshi	5-Tone	Kokin	124566
Akebono	5-Tone	Akebono	1 2 63 5 6

Scale	Bank	Туре	Degree Formula
Ryukuan	5-Tone	Ryukuan	13457
Abhogi	5-Tone	Abhogi	1 2 63 4 6
Bhupkali	5-Tone	Bhupkali	1235 6
Hindolam	5-Tone	Hindolam	1 63 4 66 67
Bhupalam	5-Tone	Bhupalam	1 62 63 5 66
Amritavarshini	5-Tone	Amrita	13#457

Modern Scales

Scale	Bank	Туре	Degree Formula
Octatonic	Modern	Octatonc	1 2 63 4 #4 #5 6 7
Acoustic	Modern	Acoustic	123#456b7
Augmented	Modern	Augmentd	1 63 3 5 #5 7
Tritone	Modern	Tritone	1 62 3 65 5 67
Leading Wh Tone	Modern	Lead Wh	1 2 3 #4 #5 #6 7
Enigmatic	Modern	Enigmatc	1 62 3 #4 #5 #6 7
Scriabin	Modern	Scriabin	1 2 3 #4 6 67
Tcherepnin	Modern	Tcherepn	1 #1 #2 3 4 5 #5 6 7
Messiaen I	Modern	Mes I	1 2 3 #4 #5 #6
Messiaen II	Modern	Mes II	1 62 #2 3 #4 5 6 67
Messiaen III	Modern	Mes III	1 2 63 3 #4 5 66 67 7
Messiaen IV	Modern	Mes IV	1 62 2 4 #4 5 6 7
Messiaen V	Modern	Mes V	1 62 4 #4 5 7
Messiaen VI	Modern	Mes VI	1 2 3 4 #4 #5 #6 7
Messiaen VII	Modern	Mes VII	1 62 2 63 4 #4 5 66 6 7

Major Scales

Scale	Bank	Туре	Degree Formula
Natural	Major	Natural	1234567
Lydian	Major	Lydian	123#4567
Mixolydian	Major	Mixolyd	12345667
Major Minor	Major	Maj Min	1 2 3 4 5 6 6 67
Harmonic Major	Major	Har Maj	1234567
Dbl Har Major	Major	Dbl Maj	1 62 3 4 5 6 7
Neapolitan Maj	Major	Nea Maj	1 62 3 4 5 6 7
Major Locrian	Major	Maj Loc	1 2 3 4 65 66 67
Blues Major	Major	Blues Ma	12 63 3 5 6
Bebop Major	Major	Bebop Ma	12345#567
Hexa 1	Major	Hexa 1	123567

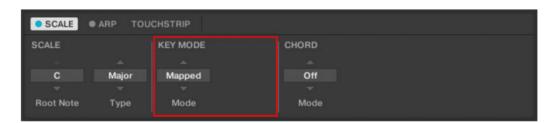
Scale	Bank	Туре	Degree Formula
Hexa 2	Major	Hexa 2	123456
Penta 1	Major	Penta 1	12356
Penta 2	Major	Penta 2	13457
Penta 3	Major	Penta 3	13567

Minor Scales

Scale	Bank	Туре	Degree Formula
Natural	Minor	Natural	1 2 63 4 5 66 67
Dorian	Minor	Dorian	1 2 63 4 5 6 67
Phrygian	Minor	Phrygian	1 62 63 4 5 66 67
Minor Major	Minor	Min Maj	12634567
Harmonic Minor	Minor	Har Min	1 2 63 4 5 6 7
Dbl Har Minor	Minor	Dbl Min	1 2 63 #4 5 6 7
Neapolitan Min	Minor	Nea Min	1 62 63 4 5 66 7
Minor Locrian	Minor	Min Loc	1 2 63 4 65 66 67
Blues Min	Minor	Blues Mi	1 63 4 #4 5 67
Bebop Minor	Minor	Bebop Mi	1 2 63 4 5 66 67 7
Hexa 1	Minor	Hexa 1	1 2 63 5 66 67
Hexa 2	Minor	Hexa 2	1 2 63 4 5 66
Penta 1	Minor	Penta 1	1 2 63 5 66
Penta 2	Minor	Penta 2	1 63 4 5 67
Penta 3	Minor	Penta 3	1 63 5 66 67

17.7. Setting the KEY MODE Parameter

The only **KEY MODE** parameter is **Mode**. On the keyboard, it is mapped to Knob 3 of the Control section in Scale Edit mode. It defines how the selected is mapped to the keys of the keyboard. This is also reflected by the Light Guide.



The **KEY MODE** parameter **Mode**.

The **KEY MODE** menu consists of the following three modes, which are described in detail below:

- · Guide
- Mapped (default value)
- Easy

Mapped Mode (Default)

In Mapped mode, the notes are mapped to the keyboard according to the selected scale. Notes outside of the selected scale are not active. Pressing the corresponding keys will trigger the next available note in the selected scale. The Light Guide highlights the active keys via lit LEDs. The Root Note is indicated by a brighter lit LED.



Both sections Root Note and Scale Type describe the use of Scale on the assumption that the **KEY MODE** is set to its default value Mapped.

Guide Mode

In **Guide** mode, the notes are mapped to the keyboard in the same way as in **Mapped** mode, however notes outside of the selected scale remain active. The mapping only affects the representation of the scale by means of the Light Guide.

Easy Mode

In Easy mode, the notes of the selected scale are mapped to the keyboard so that any scale can be played using the white keys of the keyboard only. The black keys are inactive and pressing them will not trigger any other notes.



Selecting the 12-step Chromatic scale in KEY MODE Easy maps the keys in the same way as in the **Mapped** mode.

The Root Note is always mapped to the middle C key (commonly called C3). If the selected scale consists of seven notes, it matches the seven white keys of a single octave on the keyboard. In this case, the Root Note coincides with the key C across all octaves of the keyboard. If instead the selected scale consists of more or less than seven notes, it does not match the seven white keys of a single octave on the keyboard and the Root Note is shifted throughout adjacent octaves accordingly.

The Light Guide highlights all white keys of the keyboard. The Root Note is indicated by a brighter lit LED.

For two examples of the **Easy** mode mappings in **Major** and **Minor**, see below.

Scale Type	Mapping in Key Mode: Easy						
White Keys	C3	D3	E3	F3	G3	А3	В3
Major							
Corresponding Mapping	R	2	3	4	5	6	7
Example with Root Note : C	С	D	Е	F	G	А	В
Minor							
Corresponding Mapping	R	2	b3	4	5	6	b7
Example with Root Note : C	С	D	ЕЬ	F	G	АЬ	ВЬ

17.8. Setting the CHORD Parameters

17.8.1. CHORD Mode

The first **CHORD** parameter is **Mode**. On the keyboard, it is mapped to Knob 5 of the Control section in Scale Edit mode. Use it to generate chords from single notes, either from the KOMPLETE KONTROL keyboard or from incoming MIDI notes from the host.



The **CHORD** parameter **Mode**.



The Light Guide indicates the keys being played back in a chord via fully lit LEDs, while active keys are half-lit and inactive keys are unlit.

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

- Off
- Harm
- · Chd Set

Harm

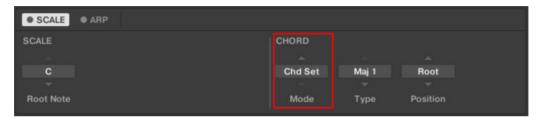
If **CHORD Mode** is set to **Harm**, the **CHORD Type** menu allows you to specify the interval of notes in the selected **SCALE Type** that will constitute the chord: E.g., a triad in the form of the root note, the third note, and the fifth note (**CHORD Type** value **1-3-5**).



The CHORD parameter Mode, set value Harm.

Chd Set

If **CHORD Mode** is set to **Chd Set**, the **CHORD Type** menu allows you to choose from a selection of major and minor chords depending on the current **Root Note**.



The CHORD parameter Mode, set value Chd Set.



The **SCALE Type** and **KEY MODE** parameters are not available when **CHORD Mode** is set to **Chd Set**.

17.8.2. CHORD Type

The second **CHORD** parameter is Type. On the keyboard, it is mapped to Knob 6 of the Control section in Scale Edit mode. Use it to define a chord that will be generated from a single note used as input.



The CHORD parameter Type.



The Light Guide indicates the keys being played back in a chord via fully lit LEDs, while active keys are half-lit and inactive keys are unlit.

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

CHORD Type, CHORD Mode Set to Harmonizer



The CHORD parameter Type, set value 1-3-5 (Mode set to Harm).

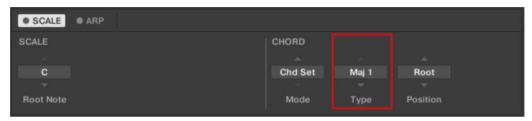
If **CHORDMode** is set to **Harm**, then **CHORDType** will offer you a selection of individual notes present in the selected **SCALEType**. This means that for all scales except the 12-tone **Chrom** scale (see further below), you can select the interval of notes that will make up your chord.

The note interval is added onto the key of an incoming MIDI note, either from the KOMPLETE KONTROL keyboard or from the host. For example, you can select to play a C minor triad by setting **Root Note** to **C**, **SCALEType** to **Minor**, **CHORDMode** to **Harm**, and **CHORDType** to **1-3-5**. If all of this seems complex, try setting a random value and use the keyboard's Light Guide to see what keys are active, inactive, and played back.

When **CHORDMode** is set to **Harm**, the **CHORDType** setting includes the following values:

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

CHORD Type, CHORD Mode Set to Chd Set



The CHORD parameter Type, set value Maj 1 (Mode set to Chd Set).

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

When **CHORDMode** is set to **Chd Set**, the **CHORDType** setting includes the following values:

Maj 1, Maj 2, Maj 3, Maj 4, Maj 5, Maj 6, Maj 7, Maj 8, Min 1, Min 2, Min 3, Min 4, Min 5, Min 6, Min 7, Min 8

CHORD Type and the Chromatic Scale

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

Chord Type	Semitones Added above Played Note
Octave	12
Perf 4 (Perfect 4)	5
Perf 5 (Perfect 5)	7
Major	4 and 7
Minor	3 and 7

Chord Type	Semitones Added above Played Note
Sus 4 (Suspended 4)	5 and 7
Maj 7 (Major 7)	4, 7 and 11
Min 7 (Minor 7)	3, 7 and 10
Dom 7 (Dominant 7)	4, 7 and 10
Dom 79(Dominant 9)	4, 7, 10 and 14
Min 7 b5 (Minor 7 b5)	3, 6 and 10
Dim 7 (Diminished 7)	3, 6 and 9
Aug (Augumented)	4 and 8
Quartal	5, 10 and 15
Trichord	5 and 11

17.8.3. CHORD Position

The third **CHORD** parameter is **Position**. On the keyboard, it is mapped to Knob 7 of the Control section in Scale Edit mode. Use it to spread the notes of a chord generated from a single note and to aid a more musical transition between chords.



The **CHORD** parameter **Position**.

The **Position** parameter is available when **CHORDType** is set to **Harm** or **Chd Set** and includes the following values:

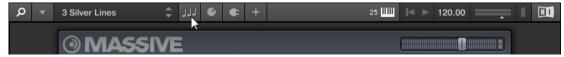
Position	Description
Root	The root position of the selected chord is always played.
-1 to -8	Decreasing Position with negative values moves the highest note of the current chord down by an octave, this inverts the chord to a lower position in the selected scale.
+1 to +8	Increasing Position with positive values moves the lowest note of the current chord up by an octave, this inverts the chord to a higher position in the selected scale.
Auto	This provides a more human feel in the transition from one chord to another. The notes used to form each chord are automatically selected to provide the best inversion.

18. Smart Play – Playing and Editing Arpeggiator Sequences

Smart Play features a flexible and versatile Arpeggiator that lets you play your Instruments, Loops and One-shots in note sequences according to the keys you press on the keyboard. You can also use the Arpeggiator in combination with the scales and chords created with the Scale engine. To play an arpeggiated note sequence you only need to press any key on the KOMPLETE KONTROL keyboard or receive an incoming MIDI note from the host.

Activating the Arpeggiator in the KOMPLETE KONTROL Software

▶ Click the Perform panel button in the Header to show the Perform panel.



→ The Perform panel appears in KOMPLETE KONTROL.



➤ To switch on the Arpeggiator, click the blue check box next to **ARP** in the Perform panel so it is filled.



Activating the Arpeggiator on the Keyboard

➤ To switch on the Arpeggiator, press **ARP** (**Edit**) in the Perform and Edit section on the keyboard.

18.1. Playing Arpeggiator Sequences

KOMPLETE KONTROL lets you create and play complex arpeggiator sequences using Smart Play.

Playing Arpeggiator Sequences

- 1. Switch on the Arpeggiator by pressing the **ARP** (**Edit**) button on the keyboard.
- 2. Press a number of keys to start the Arpeggiator.
- 3. The Arpeggiator automatically plays back the notes corresponding to the pressed keys as a sequence, rather than simultaneously.

Editing Arpeggiator Parameters

You can also edit the Arpeggiator parameters in the Control section for further tweaking of the sequence:

- 1. Press **SHIFT** + **ARP** (**Edit**) to map the displays and knobs of the Control section to the Arpeggiator parameters.
- 2. To change the direction of the sequence to e.g., **UP-DOWN**, turn Knob 2 (**TYPE**, by default set to **UP**).
- 3. To adjust the **OCTAVES** reach of the Arpeggiator, turn Knob 6 (by default set to 1) to e.g., 4.
- → The notes corresponding to any keys you press are played back as a sequence, up and then down again over four octaves.
- **4.** To map the knobs and displays to Instrument parameters again, press **PLUG-IN**. The Arpeggiator will still be switched on.

18.2. Using a Sustain Pedal to Control the Arpeggiator

You can use a sustain pedal to control the Arpeggiator.

- Pressing the sustain pedal while keys are held and then releasing those keys continues the arpeggiator sequence. This way the footswitch behaves as a trigger for the Arpeggiator. When a new key is pressed, the new note is added to the current sequence.
- Releasing the sustain pedal with no keys pressed stops the sequence and all playing notes.
 Releasing the sustain pedal with keys still pressed removes all notes from the sequence except those corresponding to the pressed keys. The sequence continues with the pressed keys only.

18.3. Using Arpeggiator Snapshots on the Keyboard

The Arpeggiator snapshots let you quickly recall four sets of Arpeggiator settings. This way you can compare settings, or quickly switch between them during a performance. On the keyboard, the snapshots are mapped to Button 5–8 on the Control section in Arp Edit mode. In the displays, they are labeled with their respective settings for the **RATE** parameter (e.g., **1/8**, **1/16**, **1/16 T**, etc.).

- ▶ To select a snapshot, press its corresponding button on the keyboard's Control section.
- → All settings associated with this snapshot are instantly recalled.
- ▶ To change the settings associated with a snapshot, select it and adjust the parameters.
- → The new settings are saved automatically, and you can switch forth and back between snapshots to recall them.



Arpeggiator snapshots in the Control section.

18.4. Editing the Arpeggiator

The Arpeggiator's parameters give you many possibilities to shape your own note sequences.

► To edit the Arpeggiator parameters in the KOMPLETE KONTROL software, click on **ARP** in the Perform panel so it is highlighted.



- ► To enable Arpeggiator Edit mode and map the Arpeggiator parameters to the keyboard's Control section, press **SHIFT** + **ARP** (**Edit**).
- → You can now edit the Arpeggiator parameters on the keyboard's Control section. Note that the Arpeggiator Edit mode consists of two pages.

Available Arpeggiator Parameters

- To switch between **Arp** and **Note Repeat** mode and change the playback direction of the arpeggiator sequence, use the **MAIN** parameters **Mode** and **Type**.
- To create interesting rhythms for the arpeggiator sequence, use the **RHYTHM** parameters **Rate**, **Sequence**, and **Swing**.
- To change the range of available notes for the arpeggiator sequence, as well as their velocity and length, use the **OTHER** parameters **Octaves**, **Dynamic**, and **Gate**.
- To explore alternative versions of the same arpeggiator sequence, use the ADVANCED parameters Retrigger, Repeat, Offset, and Inversion.
- To change the range of keys that trigger the arpeggiator sequence, use the **RANGE** parameters **Min. Key** and **Max. Key**.
- To latch the playback of the arpeggiator sequence, use the **HOLD** parameter.

18.5. MAIN Parameters

The **MAIN** parameters **Mode** and **Type** allow you to switch between **Arp** and **Note Repeat** mode and change the playback direction of the arpeggiator sequence.



The MAIN parameters Mode and Type.

18.5.1. MAIN Mode

The first **MAIN** parameter is **Mode**. On the keyboard, it is mapped to Knob 1 of the Control section in Arp Edit mode. It lets you select either **Arp** or **Note Repeat**. Depending on your selection, a different set of Arpeggiator parameters will be available for further editing.

The **Mode** setting consists of the following two modes:

- Arp mode, which generates arpeggiator sequences based on chords you play on the keyboard, or the output of the Scale engine. With ARP switched on and Mode set to Arp, any chord you created using the Scale engine will play as an arpeggiated note sequence. In this case, you only need to press one key on the keyboard to hear the arpeggiated notes play out according to the selected scale.
- Note Repeat mode, which deactivates the Arpeggiator and instead repeats whichever note is
 input until KOMPLETE KONTROL receives a MIDI note-off message. Use the parameters Rate,
 Swing, and Gate to change the rhythm of the repeats.

18.5.2. MAIN Type

The second **MAIN** parameter, **Type**, is only available in **Arp** mode. On the keyboard, it is mapped to Knob 2 of the Control section in Arp Edit mode. It sets the sequential order of the arpeggiated notes. Choose whether your arpeggiated chord should be played from the root note and up, the other way around, or even simultaneously. Selecting **Order Played** will play back the notes in the order you pressed down the corresponding keys on the KOMPLETE KONTROL keyboard. Automating the **Type** parameter in the host can create interesting variations and textures.

The **Type** setting includes the following values:

Up, Down, Up & Down (UP-DOWN on the keyboard), Order Played (PLAYED on the keyboard),
 Chord

18.6. RHYTHM Parameters

The **RHYTHM** parameters **Rate**, **Sequence**, and **Swing** allow you to create interesting rhythms for the arpeggiator sequence.



The RHYTHM parameters Rate, Sequence, and Swing.

18.6.1. RHYTHM Rate

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

The **Rate** setting includes the following values:

- · 1/1
- 1/2 Dotted (1/2 D)
- 1/1 Triplet (1/1 T)
- · 1/2
- 1/4 Dotted (1/4 D)
- 1/2 Triplet (1/2 T)
- · 1/4
- 1/8 Dotted (1/8 D)
- 1/4 Triplet (1/4 T)
- · 1/8
- 1/16 Dotted (1/16 D)
- 1/8 Triplet (1/8 T)
- · 1/16
- 1/32 Dotted (1/32 D)
- 1/16 Triplet (1/16 T)
- · 1/32
- 1/64 Dotted (1/64 D)
- 1/32 Triplet (1/32 T)
- · 1/64
- · 1/128 Dotted (1/128 D)
- 1/64 Triplet (1/64 T)
- · 1/128

18.6.2. RHYTHM Sequence

The second **RHYTHM** parameter, **Sequence**, is only available in **Arp** mode. On the keyboard, it is mapped to Knob 4 of the Control section in Arp Edit mode. It gives you a way of adding interesting rhythms to your arpeggiated notes. Select one of eight different sequences and apply it to the arpeggiator sequence you are playing. Combine **Sequence** with the **Rate** parameter to create a huge variety of rhythms at different tempos. If **Rate** is set to a basic or dotted value, then **Sequence** applies a 16-step sequencer to the notes. If **Rate** is instead set to a triplet value, then **Sequence** applies a 12-step sequencer to the notes.

You can switch sequences in real time during playback. For example, if sequence **1** is running and you instead select sequence **2** after the fourth MIDI note in a pattern has been played back, then sequence **2** starts when the fifth MIDI note in the pattern is played back.

The **Sequence** setting includes the following values:

Off, 1, 2, 3, 4, 5, 6, 7, 8



To display the set value of the **SEQUENCE** parameter, tap Knob 4.

18.6.3. RHYTHM Swing

The third RHYTHM parameter, Swing, is available in both Arp and Note Repeat mode. On the keyboard, it is mapped to Knob 5 of the Control section in Arp Edit mode. Adding Swing to your note sequence can make it feel less quantized and sound more natural. Swing works by introducing a delay to every second note in a sequence. Doing so often adds a certain groove to the music.

Swing is a drag control that lets you select a value between 0% and 100%:

- 1. Set a value of **0%** to play the note sequence without swing.
- 2. Increase the **Swing** value to add swing by delaying every second note. The delay length is a percentage of the current step size.



To display the set value of the **SWING** parameter, tap Knob 5.

Using **Swing** in combination with the **Gate** parameter adds further variations in note duration. For example, if Gate is set to 100%, KOMPLETE KONTROL sends a MIDI note-off message before each note and plays back the sequence legato. If **Gate** is set to values larger or smaller than **100%**, then notes will be scaled after the value of the Swing parameter has been applied, leaving the groove intact.

18.7. OTHER Parameters

The OTHER parameters Octaves, Dynamic, and Gate allow you to change the range of available notes for the arpeggiator sequence, as well as their velocity and length.



The OTHER parameters Octaves, Dynamic, and Gate.

18.7.1. OTHER Octaves

The first OTHER parameter, Octaves, is only available in Arp mode. On the keyboard, it is mapped to Knob 6 of the Control section in Arp Edit mode. It lets you decide the range of the arpeggiator sequence. You can choose to play back your sequence within the octave of only the keys you pressed on the KOMPLETE KONTROL keyboard, or you can select up to eight octaves and let the corresponding notes of your chord or scale be played back in as many octaves.

Depending on the settings you have made to the **Type** parameter, the octaves played back can be above (e.g., Up), below (e.g., Down) or both above and below (Up & Down) the pressed keys.

The **Octaves** setting includes the following values:

1, 2, 3, 4, 5, 6, 7, 8



To display the set value of the **OCTAVES** parameter, tap Knob 6.

18.7.2. OTHER Dynamic

The second OTHER parameter, Dynamic, is only available in Arp mode. On the keyboard it is mapped to Knob 7 of the Control section in Arp Edit mode. It reads the velocity of the input-e.g., a key you pressed on the KOMPLETE KONTROL keyboard or an incoming MIDI note from the host and scales it by the factor you set with the **Dynamic** parameter. The scaling is applied per note. The velocity of each played note is taken and multiplied by the value set with the Dynamic parameter.

Dynamic is a drag control that lets you set a value between **1.0%** and **200.0%**.



To display the set value of the **DYNAMIC** parameter, tap Knob 7.

18.7.3. OTHER Gate

The third OTHER Parameter, Gate, is available in both Arp and Note Repeat mode. On the keyboard, it is mapped to Knob 8 of the Control section in Arp Edit mode. It lets you decide the length of the notes in your sequence. Setting a value between 1% and 99% makes the duration of the notes shorter than they otherwise would be. Setting a value between 101% and 200% instead elongates the duration of the notes by the selected value.

Gate is a drag control that lets you set a value between 1.0% and 200.0%.

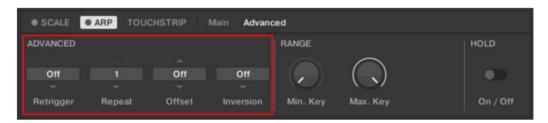
The GATE RESET function, mapped to Button 4 of the Control section lets you reset the GATE parameter to its default value of 100% at any time.



To display the set value of the **GATE** parameter, tap Knob 8.

18.8. ADVANCED Parameters

The ADVANCED parameters Retrigger, Repeat, Offset, and Inversion allow you to explore alternative versions of the same arpeggiator sequence.



The ADVANCED parameters Retrigger, Repeat, Offset, and Inversion.

18.8.1. ADVANCED Retrigger

The first **ADVANCED** parameter, **Retrigger**, is only available in **Arp** mode. On the keyboard, it is mapped to Knob 1 of the Control section when page 2 is selected in Arp Edit mode. Retrigger sets a number of steps in the arpeggiator sequence after which the sequence restarts its cycle, regardless of the number of pitches in the sequence.

For example:

- If the arpeggiator sequence consists of a 5 note cycle (1 2 3 4 5) and **Retrigger** is set to **3**, the Arpeggiator output is 1 2 3 repeat.
- If the arpeggiator sequence consists of a 5 note cycle (1 2 3 4 5) and **Retrigger** is set to **8**, the Arpeggiator output is 1 2 3 4 5 1 2 3 repeat.

Rests in a **Sequence** are treated as steps:

• If the arpeggiator sequence consists of 6 pitches, the **Sequence** is 1 - 2 - 3 - rest - 4 - 5 - 6 - rest, and **Retrigger** is set to **5**, the Arpeggiator output is 1 - 2 - 3 - rest - 4 - repeat.

18.8.2. ADVANCED Repeat

The second **ADVANCED** parameter, **Repeat**, is only available in **Arp** mode. On the keyboard, it is mapped to Knob 2 of the Control section when page 2 is selected in Arp Edit mode. **Repeat** sets a number by which each step in the arpeggiator sequence is repeated.

For example:

• If the arpeggiator sequence consists of a 3 note cycle (1 - 2 - 3) and **Repeat** is set to **3**, the Arpeggiator output is 1 - 1 - 1 - 2 - 2 - 2 - 3 - 3 - repeat.

18.8.3. ADVANCED Offset

The third **ADVANCED** parameter, **Offset**, is only available in **Arp** mode. On the keyboard, it is mapped to Knob 3 of the Control section when page 2 is selected in Arp Edit mode. **Offset** sets a number by which the steps in the arpeggiator sequence are shifted in the cycle.

For example:

- If the arpeggiator sequence consists of a 5 note cycle (1 2 3 4 5) and **Offset** is set to **0**, the Arpeggiator output is 1 2 3 4 5 repeat.
- If the arpeggiator sequence consists of a 5 note cycle (1 2 3 4 5) and **Offset** is set to **+1**, the Arpeggiator output is 2 3 4 5 1 repeat.
- If the arpeggiator sequence consists of a 5 note cycle (1 2 3 4 5) and **Offset** is set to **-1**, the Arpeggiator output is 5 1 2 3 4 repeat.

18.8.4. ADVANCED Inversion

The fourth ADVANCED parameter, Inversion, is only available in Arp mode. On the keyboard, it is mapped to Knob 4 of the Control section when page 2 is selected in Arp Edit mode. Inversion adds inverted alternations of the arpeggiator sequence to the cycle.

For example:

- If the arpeggiator sequence consists of a 3 note cycle (1 2 3), **Type** is set to **Up**, and **Inversion** is set to **0**, the Arpeggiator output is 1 - 2 - 3 - repeat.
- If the arpeggiator sequence consists of a 3 note cycle (1 2 3), **Type** is set to **Up**, and **Inversion** is set to **1**, the Arpeggiator output is 1 - 2 - 3 - 2 - 3 - repeat.
- If the arpeggiator sequence consists of a 3 note cycle (1 2 3), **Type** is set to **Up**, and Inversion is set to 2, the Arpeggiator output is 1 - 2 - 3 - (2 - 3 - 1 octave up) - (3 - 1 - 2 octave up) - repeat.

18.9. RANGE Parameters

The **RANGE** parameters **Min. Key** and **Max. Key** allow you to change the range of keys that trigger the arpeggiator sequence.



The RANGE parameters Min. Key and Max. Key.

18.9.1. RANGE Min. Key

The first **RANGE** parameter, **Min. Key**, is only available in **Arp** mode. On the keyboard, it is mapped to Knob 5 of the Control section when page 2 is selected in Arp Edit mode. Min. Key sets the lowest key that can be used as an input for the arpeggiator sequence.



The Arpeggiator can still generate pitches below the **Min. Key** setting.

18.9.2. RANGE Max. Key

The second RANGE parameter, Max. Key, is only available in Arp mode. On the keyboard, it is mapped to Knob 6 of the Control section when page 2 is selected in Arp Edit mode. Max. Key sets the highest key that can be used as an input for the arpeggiator sequence.



The Arpeggiator can still generate pitches above the Max. Key setting.

18.10. HOLD Parameter

The HOLD parameter On/Off is available in both Arp and Note Repeat mode. On the keyboard, it is mapped to Button 3 of the Control section in Arp Edit mode. The HOLD function allows you to latch the notes played by the Arpeggiator. When set to \mathbf{On} , the Arpeggiator will continuously play a sequence according to the last pressed keys on the keyboard.



The **HOLD** parameter **On / Off**.

HOLDOn/Off is a switch control that lets you select the values **On** and **Off**.

- 1. Pressing any key while **HOLD** is **On** will set a new sequence.
- 2. To stop the Arpeggiator playback, set the HOLD parameter to Off.



Alternatively, you can switch the Arpeggiator completely off to stop playback by pressing ARP (Edit) in the keyboard's PERFORM section. When you switch the Arpeggiator back on, HOLD will still be active and you can continue to play latched note sequences with the Arpeggiator.

19. Envelopes

An envelope allows you to modify the shape and timing of your sample, so you can create more expressive and dynamic sounds. There are three Envelope types available in the Sampler plug-in; **One Shot, AHD** and **ADSR**. Each Envelope will affect the playback and behavior of the sample.

One-shot

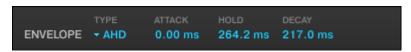
One-shot operates like a typical vintage drum machine; the sample is played in its entirety from beginning to end, with no envelope. When this type is selected, no parameters are displayed.



The One-shot Envelope.

AHD

AHD disables the Sustain and Release controls of the ADSR envelope and replaces them with the Hold parameter. AHD mode is ideal for triggering a sample for a certain amount of time, regardless of how long the pad is held.



The AHD Envelope.

ATTACK: Attack determines how quickly the sample reaches full volume after being triggered.

HOLD: Hold determines how long the envelope will stay at its maximum level.

DECAY: Decay is used to adjust how fast the sample takes to fade to out.

ADSR

The ADSR Envelope is generally used for longer, sustained samples that require complex dynamic control.



The ADSR Envelope.

ATTACK: Attack determines how quickly the sample reaches full volume after being triggered.

DECAY: Decay determines how fast the envelope drops to the Sustain level.

SUSTAIN: Sustain determines the constant level being kept after Decay until the note ends.

RELEASE: Release determines how long the sound takes to fade out after the note has ended.