stepic

Quick Start

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Introduction

Stepic is a step and modulation sequencer that can be run as a plugin in various digital audio workstations. Besides the polyphonic note sequencer, there are 8 modulation sequencers for parameter automation, which can be configured completely independently. Stepic uses MIDI CC (Controller Change) messages to control parameters. For this to work properly, the host (DAW) must pass these messages to the device to be controlled (e.g. synthesizer or effect device) via the internal bus. Unfortunately, this is currently not the case with all DAWs. A list of all currently supported DAWs can be found in the chapter "Supported Hosts". Stepic's note sequencer, on the other hand, works in any DAW with VST3/AU.

System requirements

- Microsoft Windows or Apple macOS
-
-

Stepic requires only few resources and can therefore be run without problems even on older or less powerful computers.

Supported Hosts

- Cubase by Steinberg
- Logic Pro by Apple
- Bitwig Studio by Bitwig
- Studio One by PreSonus
- Cakewalk by BandLab
- Reaper by Cockos

Regarding Ableton Live support

Stepic can only be run with limited functionality in Ableton Live. Unfortunately, Live does not pass all Stepic's MIDI CC messages to target devices. But there is good news for Ableton Live users. Stepic's older brother, Stepic for Live is available as a Max for Live & VST3/AU hybrid exclusively for Ableton Live. And because Stepic for Live is a Max for Live device, you can automate not only the parameters of other software plugins or hardware devices, but also any (automatable) parameter within Live itself, such as the parameters of all Live devices, channel values, master values and many more.

You can find more information about Stepic for Live here: https://devicemeister.com/stepicforlive.

Regarding FL Studio support

Stepic can be loaded into FL Studio, but only its note sequencer works. This is because FL Studio does not route Stepic's MIDI CC data of the modulation sequencers through the internal bus.

Sad :-(

Regarding support for other, not mentioned hosts

Do you miss your host in the list above? We probably haven't had the chance to test Stepic with it, yet. Please contact us at contact@devicemeister.com and file a Host Support Request. Devicemeister is always interested in expanding the list of officially supported hosts.

Audio Units vs. VST3 – what macOS users should know

This chapter only applies to macOS users.

Stepic is shipped as VST3 and AU (Audio Units) version. The AU version is a MIDI effect and is provided specifically for use in Logic Pro. This allows Stepic to be loaded directly into an Instrument track and to operate as MIDI FX. For all other hosts Devicemeister recommends the use of the VST3 version.

Installation

General

Before you copy Stepic to the destination directory, make sure that the host software is not running.

Windows

Copy Stepic.vst3 from the Windows directory of the zip file to the current VST3 directory of the Windows installation in use. The directory can be found under this path by default: “C:\Program Files\Common Files\VST3”.

If you are working with a custom path for VST3 plugins, then determine this path from the host software settings and copy Stepic .vst3 there.

macOS

Copy Stepic.vst3 to: “~/Library/Audio/Plug-ins/VST3”.

Copy Stepic_MidiFx.component to: “~/Library/Audio/Plug-ins/Components”.

Loading Stepic

Launch the host software and navigate to the location where you usually find your audio plugins. There you will find Stepic either by its plugin name (Stepic) or under its company name (Devicemeister) and below that by its plugin name. Load the plugin as it is intended by the host software, e.g. by double-clicking on the plugin entry or dragging and dropping it onto the desired MIDI track.

Product Activation

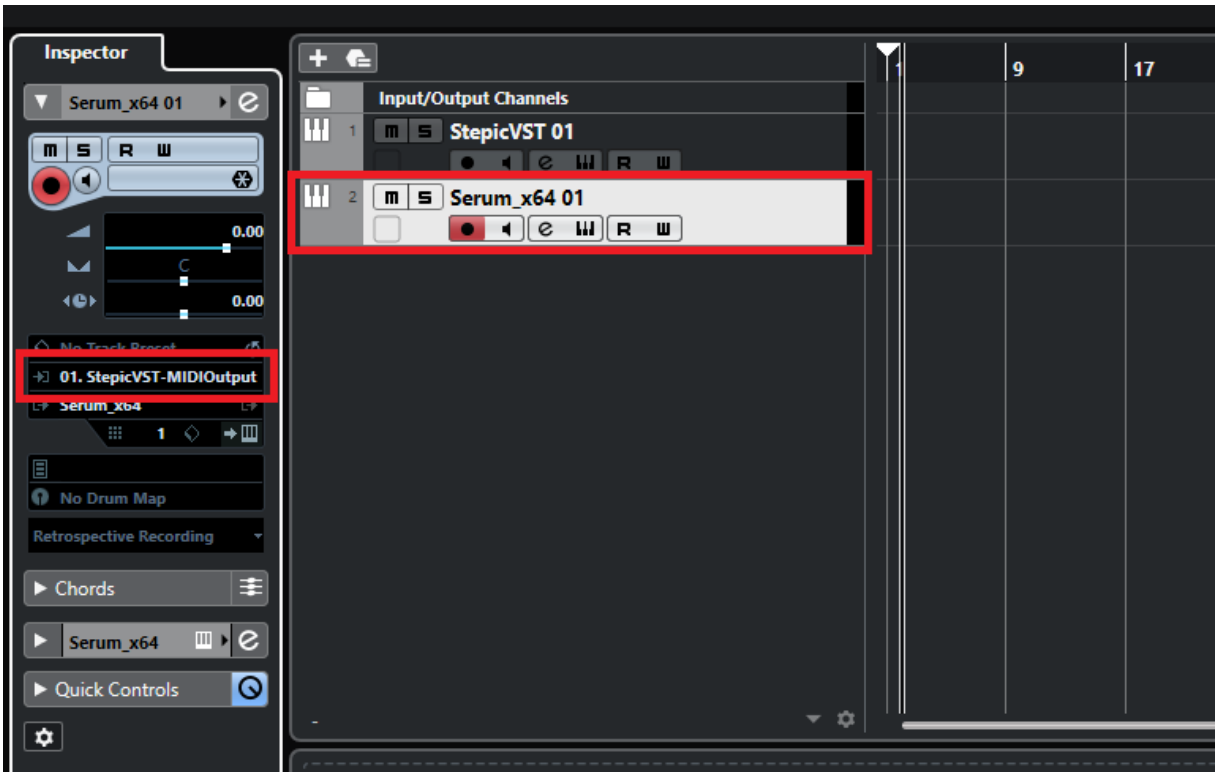
Load Stepic and open the user interface. Click on the red label "no output - click to activate" in the upper left corner of the window. Enter the serial number into the text field in the dialog that opens and click on "activate workstation". Close the dialog. Stepic is now ready to use.

Important information: The validation of the entered license key takes place on the Devicemeister license server. For this Stepic must have access to the internet during the activation process.

Setting up Stepic within your Host/DAW

Cubase by Steinberg

1. Create a new Instrument track and load Stepic from Media/VST Instruments location into it.
2. Create a new Instrument track and load the desired synth plug-in into it or alternatively create a new MIDI track and route it to your desired external MIDI device.
3. Open the channel settings of the target device in the Inspector panel and select "Stepic - MIDI Output" as MIDI input source.



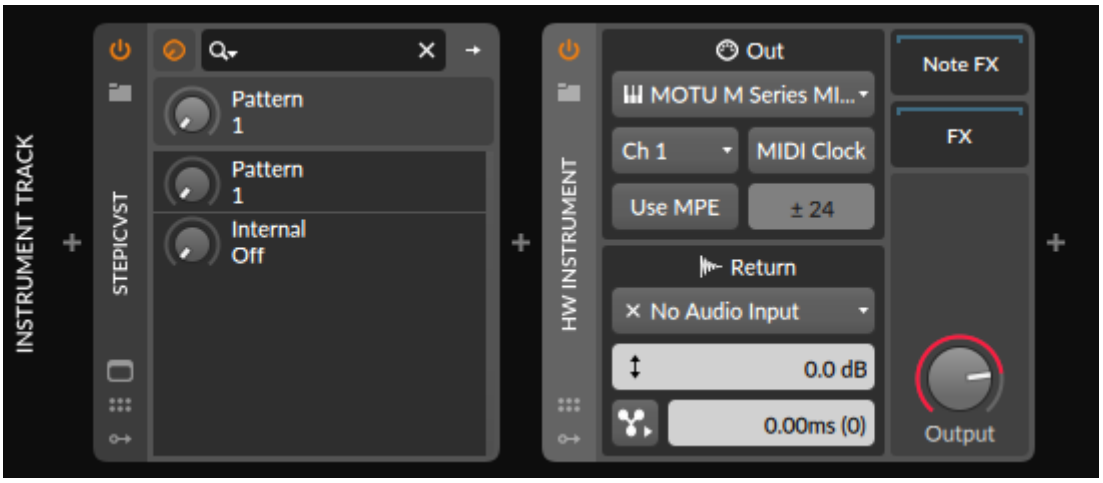
Bitwig Studio by Bitwig

Speak to a software synthesizer plug-in.

1. Create a new Instrument track.
2. Load Stepic into the Instrument track via Device Explorer.
3. Load the desired software synthesizer plug-In right behind Stepic into the same Instrument track.

Speak to external hardware

1. Create a new Instrument track.
2. Load Stepic into the Instrument track via Device Explorer.
3. Load an instance of HW Instrument right behind Stepic into the same Instrument track.
4. Connect HW Instrument with the desired hardware device by selecting the right MIDI output device and MIDI channel.

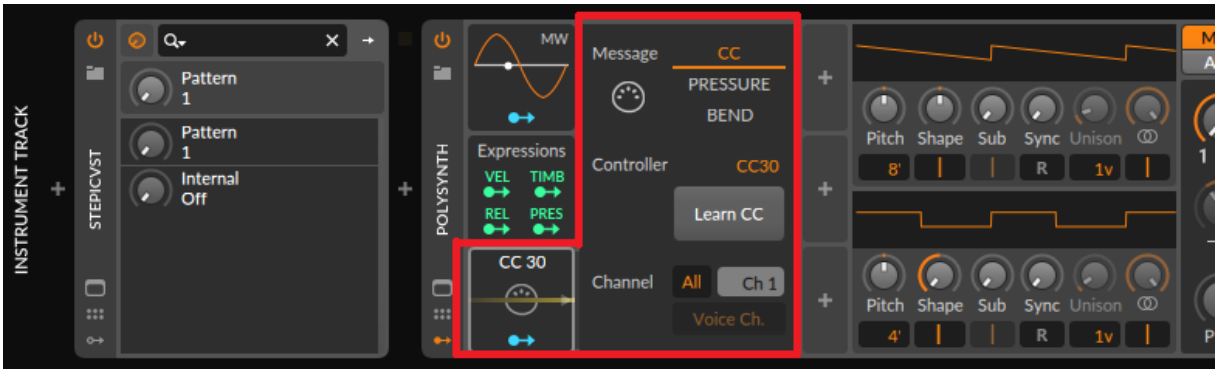


Speak to an internal Bitwig device

1. Create a new Instrument track.
2. Load Stepic into the Instrument track via Device Explorer.
3. Load desired Bitwig Device behind Stepic into the same Instrument track.

Modulate Bitwig Parameters

1. Load an instance of a MIDI modulator into a free Modulator slot.
2. Assign the controller number of one of Stepic's Modulation Sequencers or use MIDI Learn together with Stepic's Ping function to grab it.
3. Assign the MIDI modulator to one or more device parameters of the Bitwig Device.



Studio One by PreSonus

1. Create a new Instrument Track and load Stepic into it.
2. Create a new Instrument Track and load the desired software synthesizer plug-in into it or connect it to the desired external hardware device.
3. Open the direct input panel of the target device and select Stepic as input device.

Logic Pro by Apple

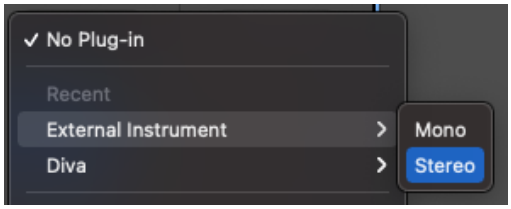
Speak to a software synthesizer plug-in

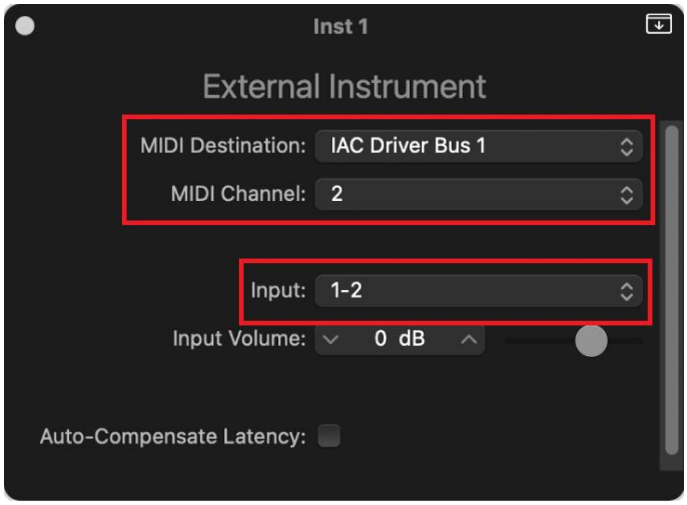
1. Create a new Software Instrument track.
2. Click on MIDI FX in the Track Inspector and select "Audio Units/Devicemeister/Stepic" from the list.
3. Click Instrument in the Track Inspector and select the desired software plug-in from the list.

Speak to external hardware

1. Create a new Software Instrument track.
2. Click on MIDI FX in the Track Inspector and select "Audio Units/Devicemeister/Stepic" from the list.
3. Click on Instrument in the Track Inspector and select External Instrument from the list, then choose whether you want a mono or stereo return channel.

4. Set the desired MIDI device, channel and audio input in the External Instruments dialog.

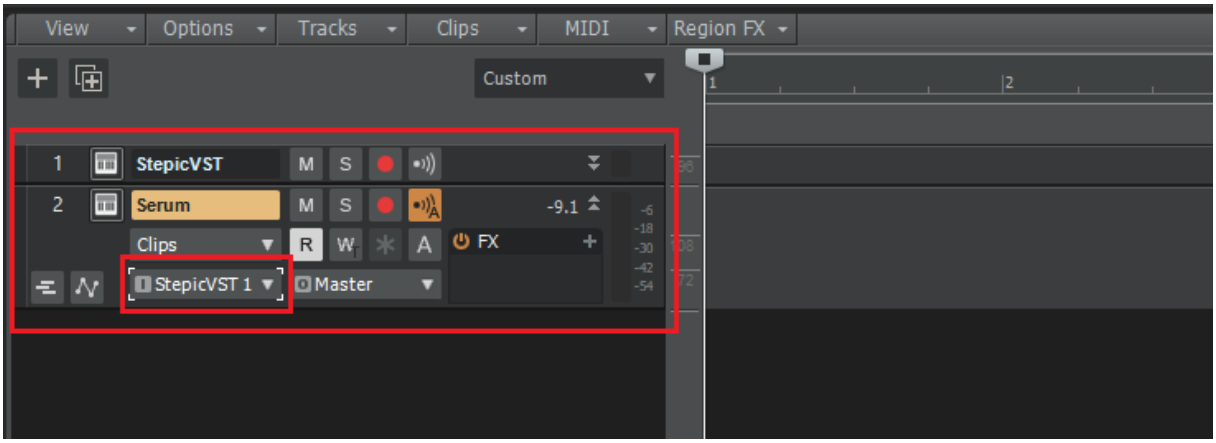




Cakewalk by BandLab

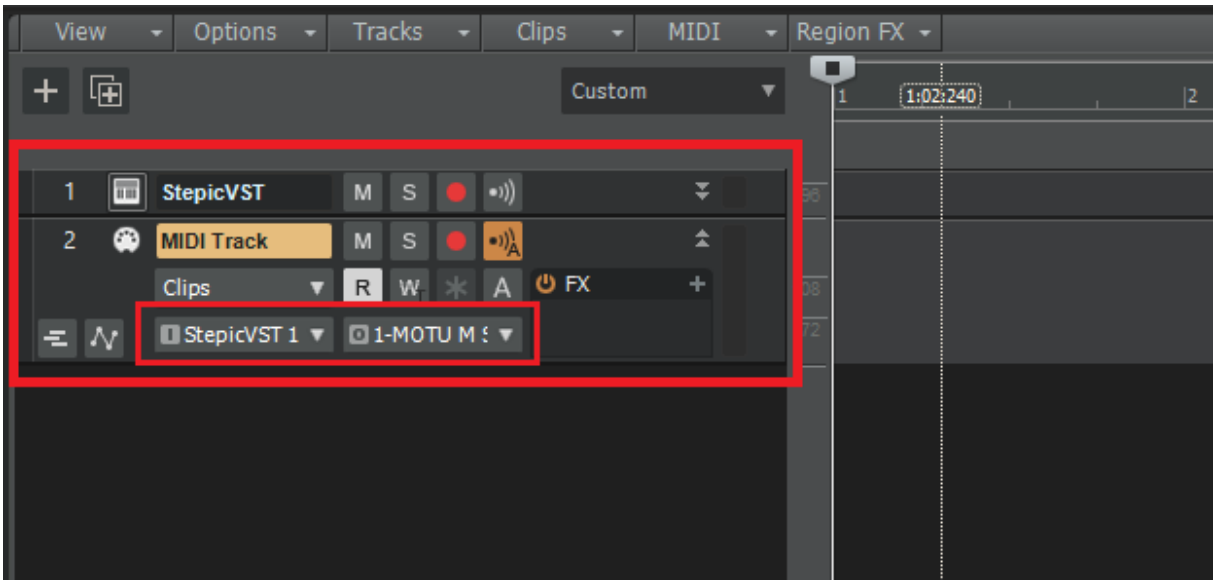
Speak to a software synthesizer plug-in

1. Create a new Instrument track and load Stepic from the Plugins explorer into it.
2. Create a new Instrument track and load the desired target device from the Plugins explorer into it.
3. Select Stepic as MIDI input source on the target track.



Speak to external hardware

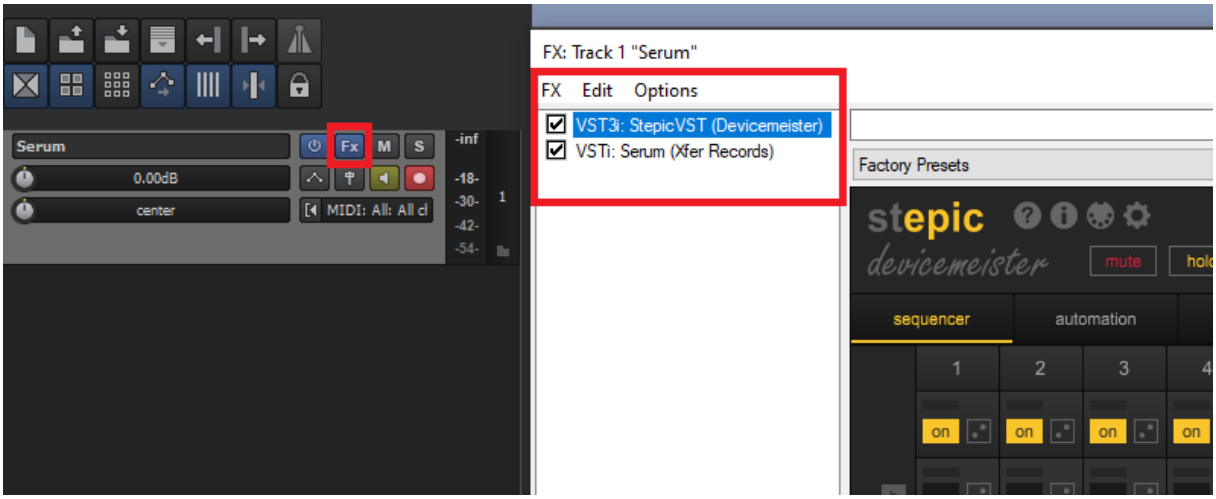
1. Create a new MIDI Instrument track and load Stepic from the Plugins explorer into it.
2. Create a new MIDI track and connect it to the desired hardware device my selecting the right output device and MIDI channel.
3. Select Stepic as MIDI input source on the target track.



Reaper by Cockos

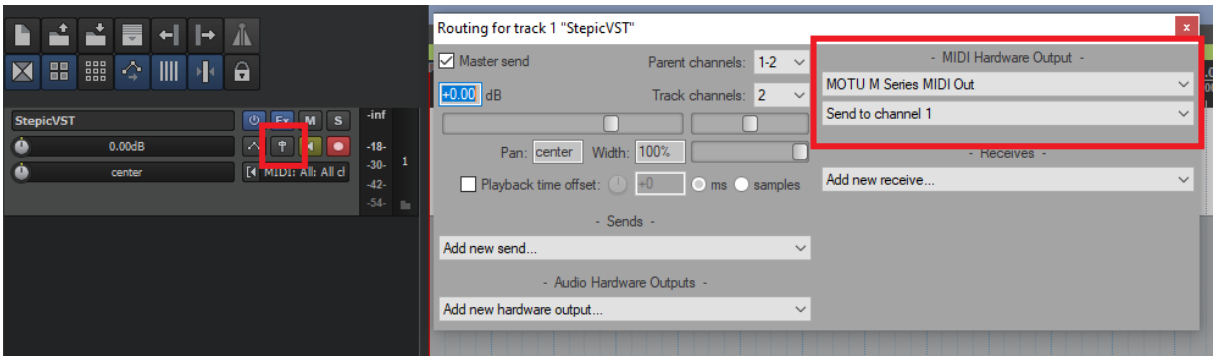
Speak to a software synthesizer plug-in

1. Create a new Virtual Instrument track and load the desired device from the plug-ins list into it.
2. In the instrument window, click on “FX” and select “Add FX”.
3. Select Stepic (Devicemeister) from the device list.
4. In the Instrument window, move Stepic to the first position in the list using Drag&Drop.



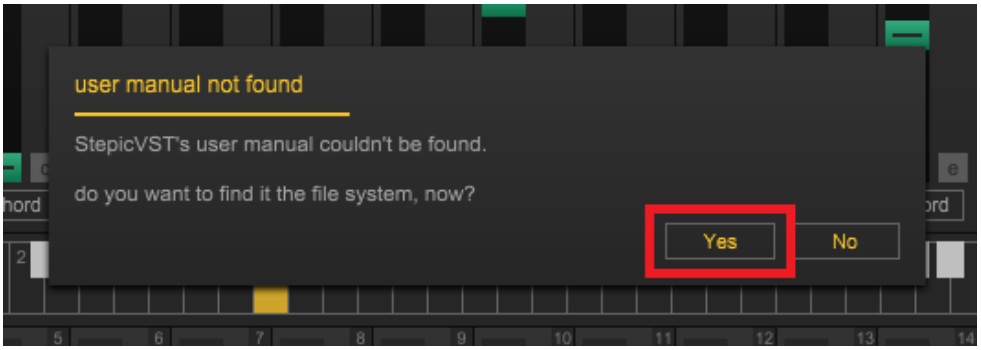
Speak to external hardware

1. Create a new Virtual Instrument track and load Stepic from the plug-ins list into it.
2. Open the output routing dialog of track.
3. Under MIDI Hardware Output, select the right device and channel.



Access this quick start guide from within Stepic

Open Stepic's user interface and click on the question mark in the upper left area. Select "Yes" in the message box that appears asking you if you want to find the user manual in the file system. Navigate to the current location of this document and select it.



Important Functions

Context Help

At the bottom of the editor window is Stepic's status bar. The status bar is used to display contextual information. This makes it easier to get started and helps to learn the individual functions better. The context help is activated by keeping the mouse pointer for a short moment over the element you want to learn more about.

Pattern Storage

The note and modulation sequencer settings can be stored in up to 16 patterns. Saving and deleting patterns is done in two steps. First, the desired mode is activated by pressing the store or delete switch. An active mode is indicated by a colored frame around the pattern field. In the second step the pattern is selected. The selection of the pattern also ends the active mode.

How to switch patterns

Manually

Patterns are switched manually by simply selecting one of the pattern numbers switches while neither of the store or delete modes are active.

Automatically

An automatic pattern switch is done by using the next pattern option. Available modes:

Next

Next pattern will be the next filled pattern behind the current pattern.

Random

Next pattern will be a randomly determined filled one.

Pattern 1 – 16

Next pattern will be the set pattern, no matter if it is filled.

Pattern Change Mode

Two modes are available:

Freerun

Stepic tries to keep the current step positions during a pattern change.

Retrigger

After changing, the new pattern is played from step one.

Sequence Lengths

The main sequence length is adjusted with the “steps” potentiometer in the top area. Individual sequence lengths can be defined for each section. However, they do not affect the main sequence length set from the top area.

Bar count & Pattern Length

The length of a pattern is determined by its main sequence length and its bar count. The bar count determines the number of sequence cycles that are run through until the pattern reaches its end.

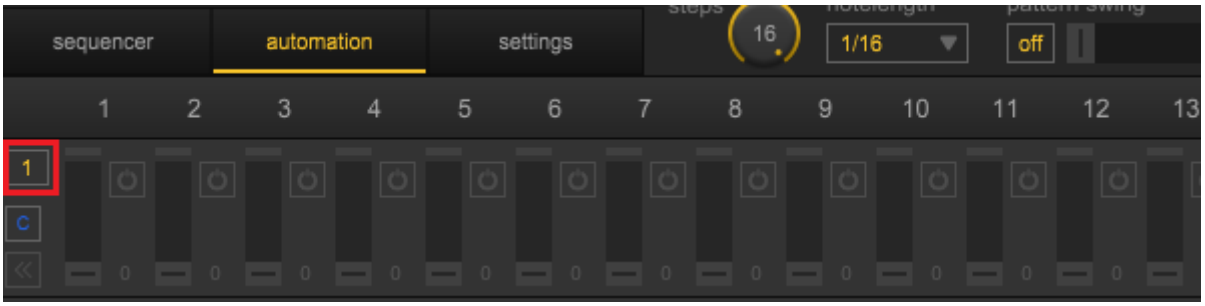
Parameter Modulation

Stepic's 8 modulation sequencers can be used to modulate any parameters of other devices that are in the same MIDI track. It doesn't matter whether Stepic is used to control software plug-ins or hardware devices. The only requirement is that parameter control via MIDI CC is supported by the target device. This is the case with most software plug-ins and hardware devices today. If your device supports parameter control via MIDI CC, you can find out in the user manual or directly from the manufacturer (e.g. on their homepage).

Hint: It is possible to control the same midi parameter with different modulation tracks. Experiment with different sequence and note lengths to create interesting polyrhythmic effects!

Modulating parameters

Switch to the automation page of Stepic. Then activate one of the modulation sequencers via its number switch on the left side.



Now enter the MIDI CC number of the parameter you want to control into the MIDI CC value field of Stepic. For example, if you want to control the filter cutoff of your synthesizer and the MIDI CC number of that parameter is 33, enter 33 in the field.

Now enter some modulation values and start the transport of your host.

Turning on/off a modulation track

Use the number switch on the left edge of each modulation track to switch modulation on or off.

What does the entry "seq." in Note Length drop-down stand for?

"seq." means that the speed of the modulation sequencer is linked to the speed of the note sequencer. If you change the speed of the note sequencer, the modulation sequencer will always adapt to it.

What does the switch “ping” do?

Many software plugins offer a MIDI learn function for their device parameters. When MIDI Learn is activated, the parameter on the device is automatically mapped to the incoming MIDI CC. To use this function in conjunction with Stepic, there is the Ping function. When “Ping” is activated, the MIDI CC value output of all other modulation sequencers is temporarily disabled, so there will be no conflicts during the mapping process with other modulation sequencers. Once “Ping” is activated, Stepic will send out ping values on the set MIDI CC number of this modulation sequencer. Now the target device can pick up the ping and map the parameter to its MIDI CC.

In short: "Ping" temporarily deactivates the MIDI CC output of all other modulation sequencers to then exclusively send the ping for its own MIDI CC. This way the target device knows exactly to which CC the parameter is to be mapped and doesn’t get confused.

An active ping can be switched off at any time by clicking the “Ping”-switch again. An active ping automatically turns itself off after 20 seconds.

Quick Copy

The previous clipboard function is replaced with Quick Copy. Quick Copy allows to copy values from sections or whole patterns to other patterns or from other patterns to the current one via dedicated copy dialogs.

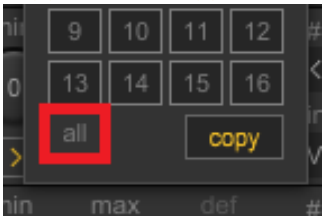
Quick Copy is available for these sections and values: patterns, note sequencer (whole and single sections), steps (note sequencer), automation tracks, automation default values.

Copy To / Copy From

Each Quick Copy dialog has two option buttons labeled “to” and “from”. "to" copies values from the current to a chosen location. "from" copies value from a chosen location to the current one. For “copy to” multiple targets can be selected. For “copy from” a single click on a number button triggers the copy process and closes the dialog. For “copy to” the copy process can be triggered by either double-clicking on a number button (single selection) or by using the “copy” button below the number field. For “copy to” an “all” option is available to toggle all number buttons between on & off simultaneously. “Copy to” is the default/preselected option when opening a copy dialog.

Copy “To” & “From” Selectors

Copy To “All” Toggle Button



Filled Indicator

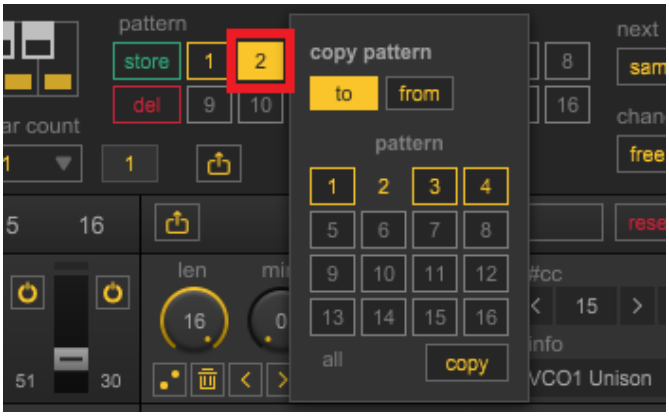
Populated targets or sources are highlighted in yellow.

Populated Example (Pattern Copy)

Quick Copy Functions

Pattern

Quick Copy for patterns is accessed by right-clicking on a pattern number button. Yellow buttons indicate already populated patterns.



Steps (Note Sequencer)

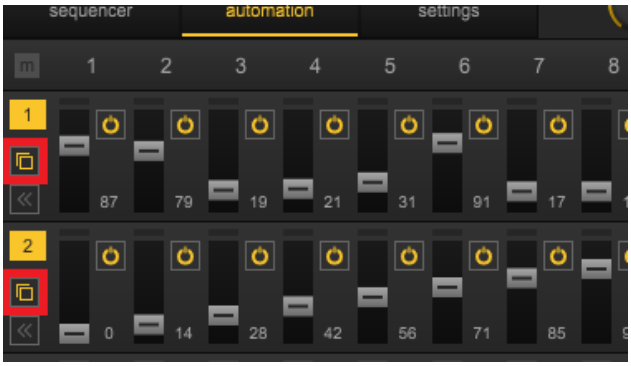
Quick Copy for steps is accessed by right-clicking on the header number field (1 to 16) of a step.

Note Sequencer (Whole & Sections)

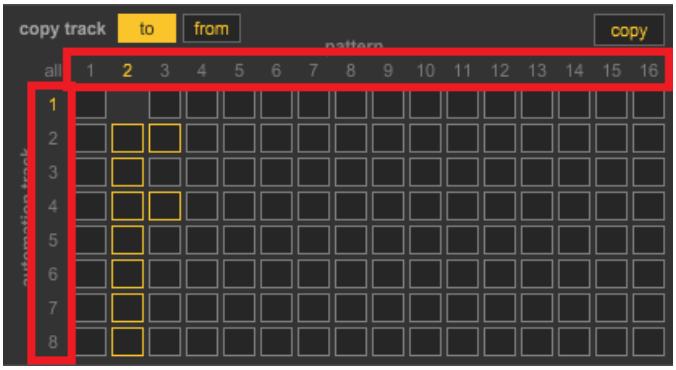
Quick Copy for the whole note sequencer or single sections is access by the dedicated copy button of each section. Values are copied to or from other patterns. Values are always copied within the same section (Pitch, Octave, etc.). Right-clicking a copy button preselects “copy from” instead of “copy to”.

Automation Tracks

Quick Copy for automation tracks is access by the dedicated copy buttons. Values are copied to or from other patterns or automation tracks. Right-clicking a copy button preselects “copy from” instead of “copy to”. In “copy to” mode header buttons (far left and top row) can be used to toggle on/off whole rows of patterns or automation tracks to copy them. Right-clicking a copy button preselects “copy from” instead of “copy to”.

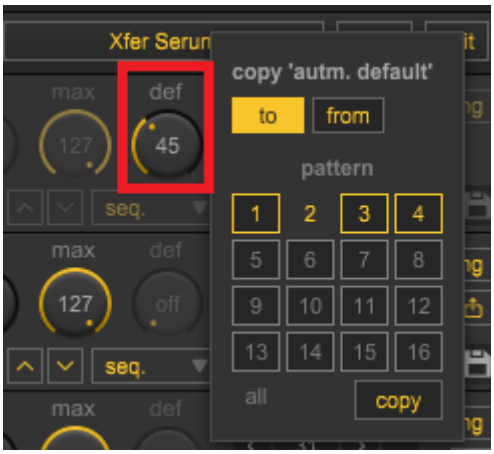


Copy Automation Tracks: Clickable Headers in “Copy To” Mode



Automation Track Default MIDI CC Value

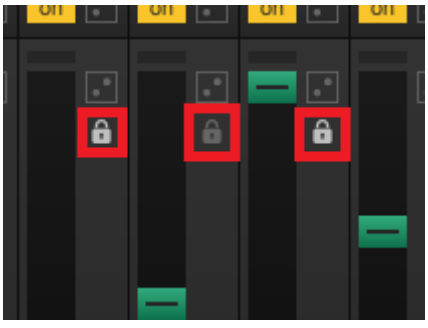
Quick Copy for the MIDI CC default value is access by right-clicking the pot.



Value Lock

An activated "Lock" prevents values from being diced. Previously it was only possible to dice all values of a section. By "Lock" you can now keep values you already like and thus get faster to desired results. “Lock” is displayed when you move the mouse over the region of a value or the step header number field. A right-click on a lock icon toggles all values of a section simultaneously. With the lock symbol in the step header number field all values of a step can be locked or unlocked simultaneously. An activated Lock also prevents values by being changed through On-the-fly mouse selection mode.

Section Value Lock

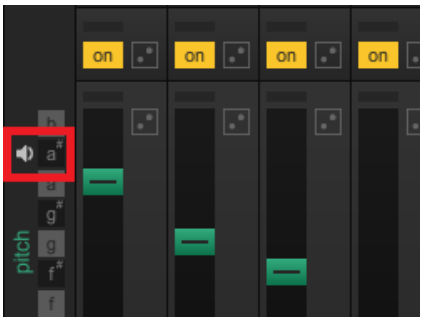


Step Lock (Header Number Field)

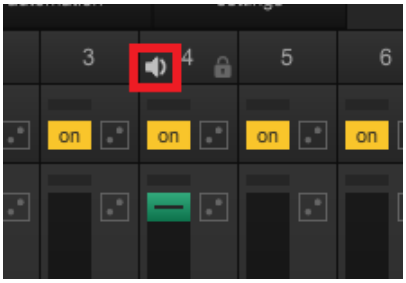
Note Preview

Notes of steps or pitches can be previewed by clicking on a speaker icon in a step header number field or on the pitch notes scale located at the left side of the pitch section.

Note Preview Pitch



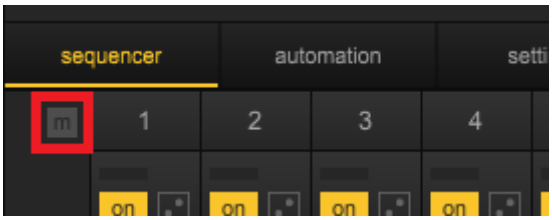
Note Preview Step



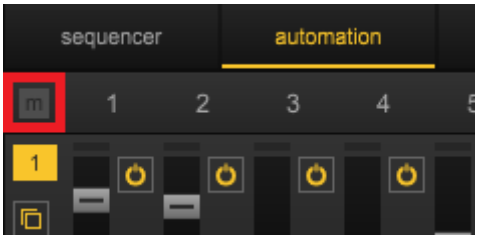
Tab Mute

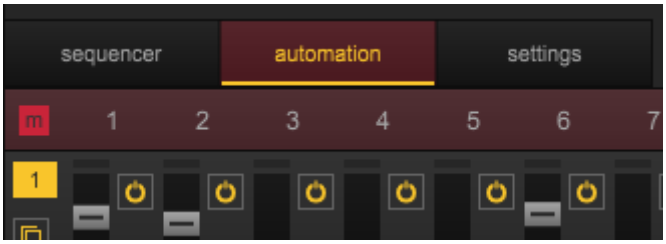
The note sequencer and automation section can be muted individually. Muting the note sequencers while automations remain active can make sense, if you use Stepic just for modulating other devices. Muting the automation section while the note sequencer remains active can be useful if you want to make changes to the note sequencer without having the modulation sequencers interfering with the sound. “Tab Mute” isn’t tied to pattern but the whole instance of Stepic. If activated, all patterns are affected by it and changing patterns won’t change the state of a mute section. Tab mutes are stored with the project and restored after reloading. Tab Mute will tint the tab and the header of the muted section red.

Note Sequencer Mute



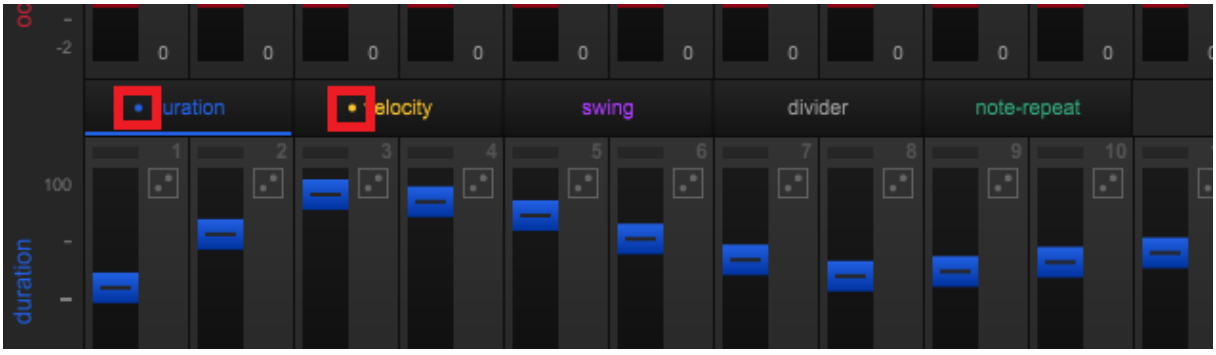
Automation Section Mute





Section Filled Indicator

Sequencer sections filled with values can be detected by the dot indicator in front of the tab captions.



Keyboard & Mouse Functions

Set All

Set All sets all values of a sequence of a section (pitch, octave, etc.) to the currently value. Set All can be used in two ways - with the right mouse button or the left mouse button while holding Alt (Win)/Option (Mac).

Set All is available for the following elements: Step On, Step Connect, Pitch, Randomize Pitch, Octave, Randomize Octave, Duration, Randomize Duration, Velocity, Randomize Velocity, Step Swing, Randomize Step Swing, Divider, Randomize Divider, Automation Value, Randomize Automation Value

Secondary Function (Right Click)

Some buttons have a secondary function. Use them by clicking on them with the right mouse button. These buttons support secondary functions:

Fine Tuning

Fine tuning reduces the interval of some faders and potis by holding Ctrl (Win)/Cmd (Mac). Fine tuning is supported by these elements: Duration Fader, Velocity Fader, Automation Value Poti

On-the-Fly Mode

The On-The-Fly mode allows you to enter values for faders by simply moving the mouse pointer over them. On-The-Fly is activated by holding down shift key. Releasing shift deactivates the mode again. On-The-Fly is available for the following faders: Pitch, Octave, Duration, Velocity, Step Swing, Divider.

Swipe Click

Swipe Click is activated by clicking and holding left mouse on specific toggle switches. Swiping left or right copies the value from the initial element to the elements of the same kind under the mouse pointer. Swipe Click is available for Step On, Step Connect, Randomize Pitch, Randomize Octave, Randomize Duration, Randomize Velocity, Randomize Step Swing, Randomize Divider, Randomize

MIDI Export

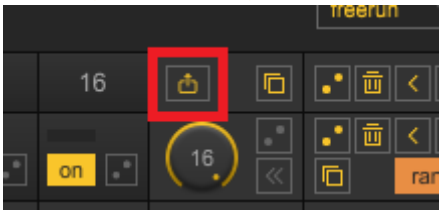
All MIDI data from the note and the modulation sequencers can be easily and quickly exported to the host by using drag & drop. MIDI export is available for entire patterns or individually for the note sequencer, all or individual modulation sequencers. To Export MIDI data, click & hold the left mouse button on a MIDI export button, move the mouse pointer over a MIDI capable area of the host and drop it there by lifting the left mouse button. MIDI capable areas of the host are e.g., MIDI instrument tracks.

Export Length

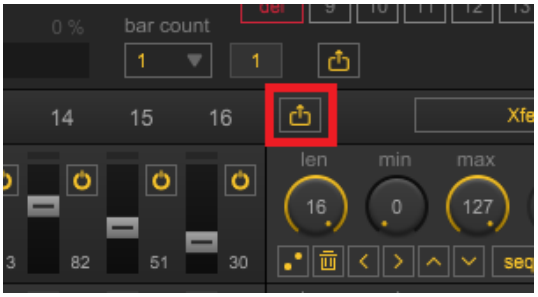
The bar count of the MIDI export matches the set bar count of the current pattern.

MIDI Export Pattern

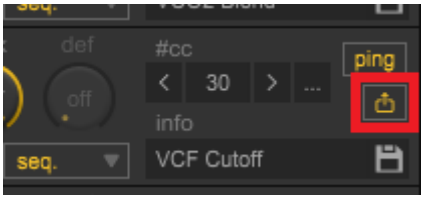
MIDI Export Note Sequencer Only



MIDI Export All Automations



MIDI Export Individual Automation Track

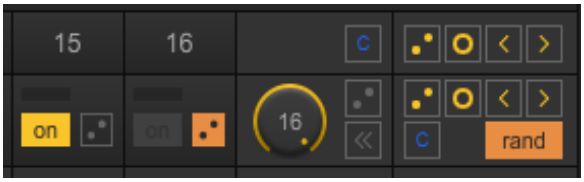


Probability (Step On/Off)

3 different probability modes can be applied to the On/Off section: Randomize (default), Percent (%), Fix. A toggle switch on the right edge of the On/Off section is used to switch between the different modes.

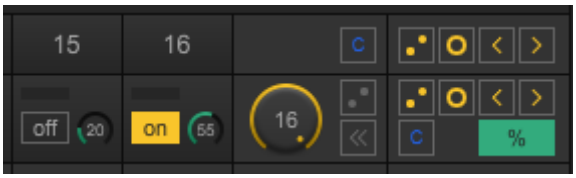
Modes

Randomize (default)



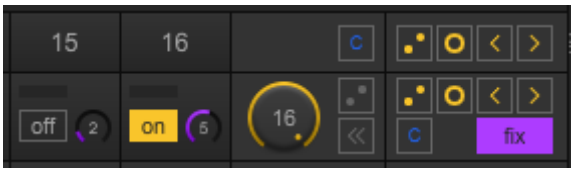
This mode corresponds to the way Stepic has worked so far. Next to each On/Off/Con switch, a dice is available to activate value randomization for this step.

Percent (%)



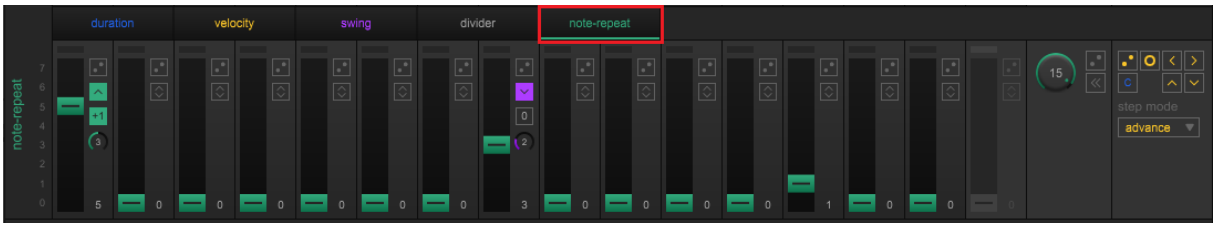
If percent mode is selected, a pot with a value range from 0 to 95 (%) is available next to each On/Off/Con toggle. Pots are only available for On and Off. If a step is set to On, the pot value determines the probability (in percent) with which the step will be processed with Off. If a step is set to Off, the pot value determines the probability (in percent) with which the step will be processed with On each time it is reached. Values are recalculated on each cycle.

Fix



If a step is switched to On, the set value of the pot determines after how many cycles the step is processed with Off. If a step is switched to Off, the set value of the pot determines after how many cycles the step is processed with On.

Note-Repeat



If the sequence reaches a step with set Note-Repeat greater zero, the note of the current step will be repeated in the following steps according to the set value. Each subsequent step counts as a repeat, and regardless of whether is set to on, off, or connect. Strictly speaking, Note-Repeat overwrites the note information (Pitch & Octave) of the following steps in number of the set value. Particularly interesting effects can be achieved by setting the sequence length of Note-Repeat to differ from Pitch and Octave, creating rolling effects where notes are hit at different positions on each cycle. The value range goes from 0 (off) to 7 repeats.

Step Mode

Step mode determines how the step positions of the pitch, octave and note repeat sequences are processed while note repeat is active and notes are repeated. Two possible options are available:

Hold

Holds the current positions of Pitch, Octave and Note-Repeat. When Note-Repeat is finished, the sequences continue at the next step position within their sequences.

Advance

Advance transports the step positions internally during the active repeat. When Note-Repeat is finished, the sequences of Pitch, Octave and Note-Repeat are continued at the positions where they would have been without repeating.

Transpose

Transpose not only repeats notes in subsequent steps, but also transposes them with each repetition. 3 options are available: Off, Up (green), Down (purple).

Note-Range

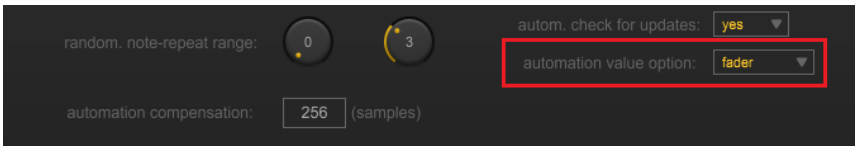
Defines the transpose range for in semitone steps. Value range: 1 to 5 (semitones).

Transpose-Offset

Determines after how many repeated steps transposition begins. If values greater than zero are set, notes are repeated at the same pitch until the offset is reached.

Fader-Option for Modulation Values

In addition to pots, faders are now available as an option for entering modulation values. It offers a better visual representation of values and enables faster and more intuitive value input. To change between input modes, an option “Automation Value Option” is available in the Global Settings dialog:



On-The-Fly Input

Like faders in the note sequencer, faders of the modulation sequencer offer on-the-fly input. To activate on-the-fly, hold down Shift on the keyboard and move the mouse pointer over the faders.

Chord Copy

To offer a faster and more comfortable input of chords, the functions Copy To and Copy From are available in the Chord Editor.

Copy To

Copy To copies the chord notes of the current step to other steps. A selection of several steps is possible.

Copy From

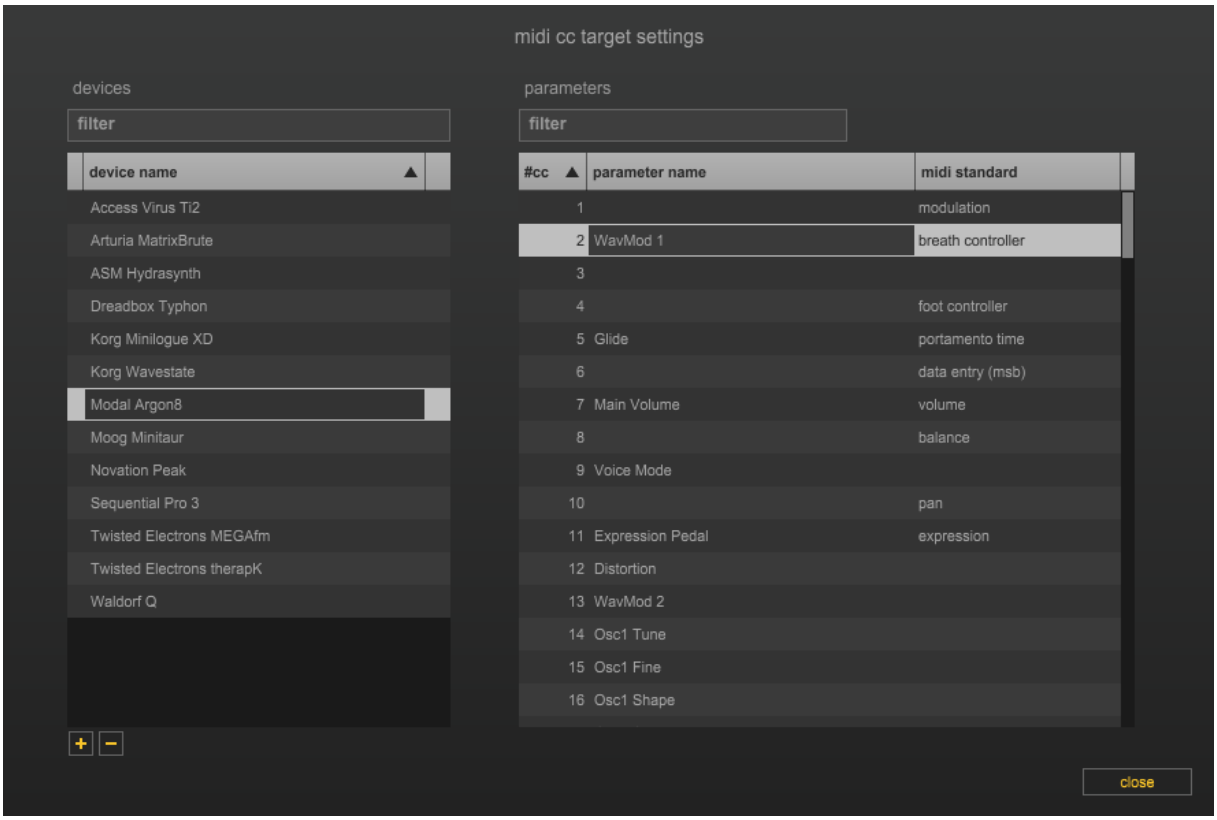
Copies the chord notes of another step to the current one. This option is only available if chords have already been entered in other steps.

Chord Cycle

Chord Cycle allows cycling through existing chords of the current pattern. Each click on the button loads the next chord. This option is only available if chords have already been entered in other steps.

MIDI Device Manager

MIDI maps of your MIDI CC capable devices can be stored in the MIDI Device Manager. If MIDI is selected as modulation target in a modulation sequencer, the desired device can be selected and its CC parameters can be accessed easily and quickly.



Accessing the MIDI Device Manager

The MIDI Device Manager is called up either via the MIDI menu icon or via the Edit button. The Edit button is located next to the selected MIDI device in the automation area.

Menu Symbol Access

Edit Button Access

Workflow

General Information

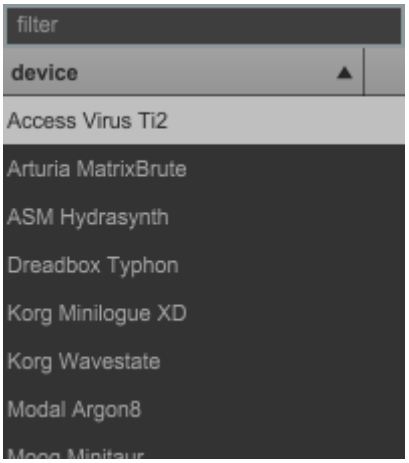
The workflow described below is optional. It is used to simplify the assignment/selection of MIDI parameters. By storing MIDI maps, you don't have to remember all parameter numbers of all of your devices. Once created in the Device Manager, they can be conveniently accessed in the modulation sequencers using filterable selection lists. However, MIDI modulation destinations can still be assigned in the traditional way by entering controller numbers directly into the MIDI CC fields.

Select MIDI target device & parameter

First set one of the modulation sequencers to MIDI mode.

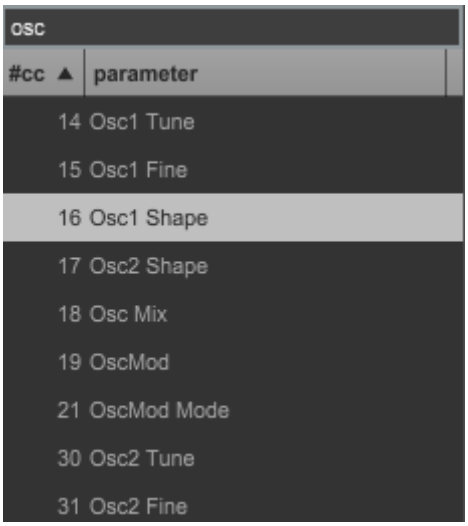
Then select the desired target device via the MIDI device button.

Use mouse scroll or the filter textbox to find the device.



Now choose the Controller Change parameter by clicking the parameter selector button.

Use mouse scroll or the filter textbox to find the parameter.



View with parameter assigned:

Storing parameters to the device manager

Use the disk icon in the info field to edit, add or delete parameters. When the info field is cleared, clicking on the disk will delete an existing parameter in the device manager.

Note: The disk is available only with a target device previously selected and a MIDI CC value greater zero entered.

Resetting the currently selected MIDI target device

To reset the currently selected targe device simply use the reset button right next to the device button.

Note: "reset" resets only the currently selected device. Controller change numbers (#cc) entered into the modulation sequencers remain.

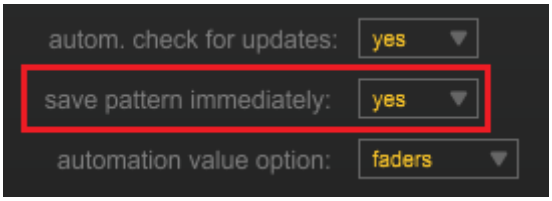
Changing the currently selected MIDI destination device.

To switch the current targe device simply click the device button and select the new device from the list.

Instant Pattern Save

If Instant Pattern Save is activated, changes made in Stepic are immediately applied to the currently selected pattern. Explicit saving after changes is therefore no longer necessary. However, the Store function can still be used, e.g. to copy the current pattern to another slot.

Instant Pattern Save can be enabled or disabled in the "Global Settings" by setting the option “Save Pattern Immediately”.



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