

# Stepic Release Note 1.5

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## MIDI Mapping

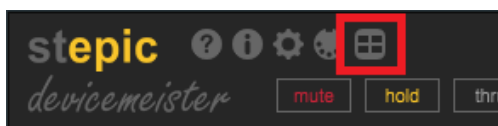
MIDI mapping allows you to execute functions in Stepic using MIDI notes or MIDI Controller Change (CC) that are sent to Stepic. It doesn't matter which device or software sends the MIDI messages. They can come from a master keyboard, MIDI controller, or the host software, for example, from the piano roll. Configured mappings are saved for each loaded Stepic instance with the host project. However, there is the possibility to globally save a set of mappings as defaults. The default mappings are loaded with each new Stepic instance. Thus, they serve as pre-settings and can then be modified when needed.

### Prioritizing Incoming Notes

When Stepic functions are bound to MIDI notes, this mapping takes precedence over Stepic's MIDI-Play mode. For example, if you have assigned the note C2 to switch to Pattern 1, this note can no longer be used to control the arpeggiator or the transpose function. So, make sure you only bind Stepic functions to notes that you do not need for the MIDI-Play mode. Particularly high or low notes are suitable for this.

### Mapping Manager

The Mapping Manager is the central hub for managing your MIDI mappings in Stepic. You can access it by clicking the grid icon in the upper left corner of the window.



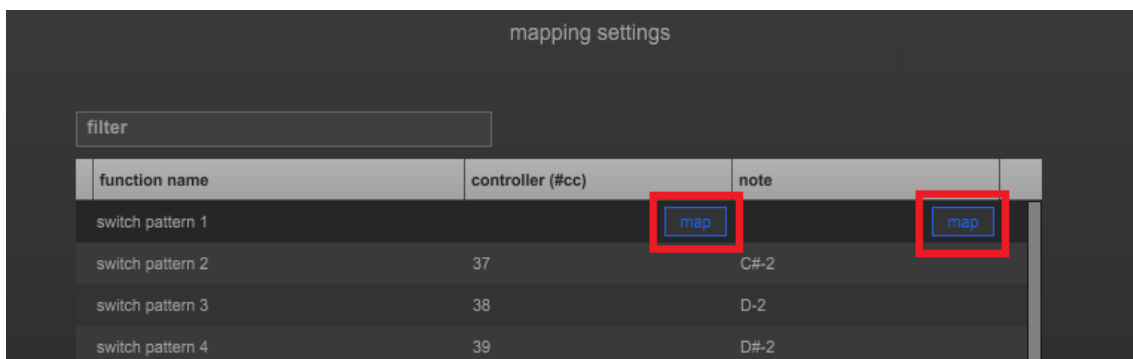
### Mapping Functions

You can control the following functions in Stepic via MIDI notes or CC messages:

- Switch to Pattern 1 to 16
- Release Latch (resets notes held by Stepic)

### MIDI Note and CC Mapping

To bind Stepic functions to notes or CC messages, activate the mapping mode. Look for the desired entry in the list and move the mouse over the appropriate cell you want to map. Activate the mapping mode by clicking the "map" button. Now send the note or CC message to Stepic that you want to map. The function will then be bound to the first incoming note or CC message, depending on which source you selected in mapping mode.



### Active Mapping Mode

The active mapping mode is indicated by the blue highlighted cell and a running timer.

function name	controller (#cc)	note
switch pattern 1		18s
switch pattern 2	37	C#-2

## Ending the Active Mapping Mode

There are several ways to end the active mapping mode:

1. Send a note or CC message to Stepic. Stepic recognizes the incoming MIDI message and binds it to the selected function.
2. End mapping mode prematurely by clicking the "Map" button again.
3. Wait until the mapping timer has expired.
4. Press the Escape key on your keyboard while the Stepic window is active.

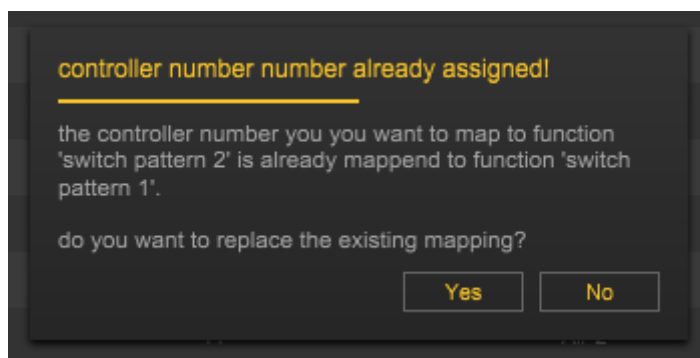
## Deleting a Mapping

To delete an existing mapping, navigate to the desired entry in the list and move the mouse over the appropriate cell. Click the red "delete" button to remove the mapping.

switch pattern 3	38		D-2	
switch pattern 4	39	delete	map	D#-2
switch pattern 5	40			E-2
switch pattern 6	41			F-2

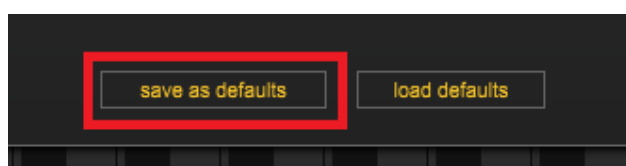
## Handling Duplicates

Stepic does not allow different functions to be bound to the same note or CC message. For example, the note C3 can only be assigned to one function in Stepic. If you try to assign a note or CC message twice, you will receive a notification from Stepic. In this notification, you will be asked whether you want to overwrite the existing mapping with the new assignment. If you confirm the dialog with "yes", the new function will be assigned and the old mapping will be deleted. If you choose "no", the existing mapping will remain unchanged.



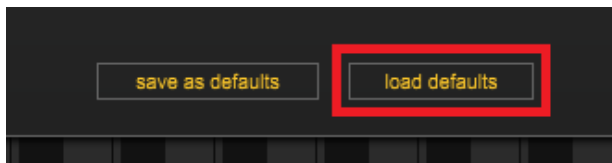
## Save as defaults

The current mappings of the Mapping Manager are saved as global default settings. The next time a new Stepic instance is loaded, they serve as pre-settings.



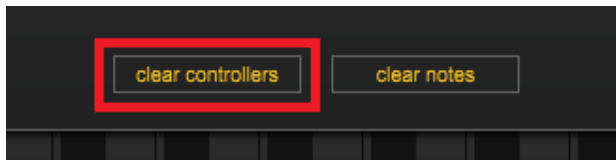
## Load Defaults

The settings of the Mapping Manager will be reset to the default settings.



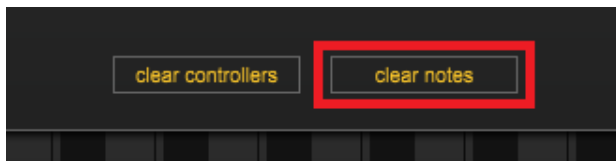
## Clear Controllers

Deletes all current MIDI CC mappings in the Mapping-Manager.



## Clear Notes

Deletes all current MIDI note mappings in the Mapping-Manager.



## Song Mode

By strategically placing notes in the DAW arrangement, you can easily implement a song mode with Stepic. To do this, simply insert the notes at the desired locations in the note arrangement that you have set up in Stepic for the pattern change. A brief playing of a note designated for the pattern change is sufficient.

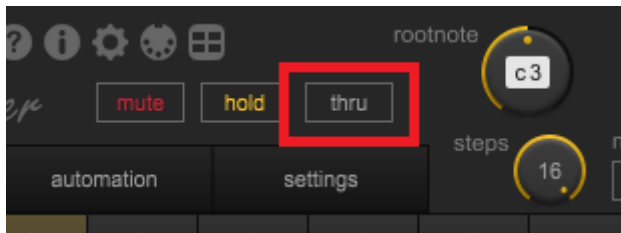
## MIDI Thru

Via MIDI Thru, incoming MIDI messages can be forwarded to Stepic's MIDI output. This makes it possible to pass on MIDI messages to devices that are located downstream of Stepic in the signal chain, such as a synthesizer. MIDI Thru can be set independently for notes, aftertouch, mod wheel, pitch bend, controller change, and program change. The MIDI Thru settings are saved with the current host project.



## Opening MIDI Thru Settings

Click the thru button to enter the MIDI Thru settings.

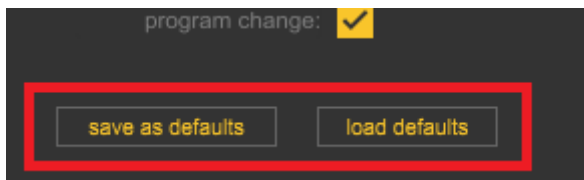


## Closing the MIDI Thru Settings

Close the MIDI Thru settings by clicking in an area outside of the settings dialog in Stepic's UI window.

## Save & Load Defaults

You can easily set the current MIDI-Thru settings as default. All you need to do is click on the "save as defaults" button. Every time you start a new instance of Stepic, these last saved default settings will be automatically loaded. If you want to load these settings at a later time, you can use the "load defaults" button.



## Special Case with Assigned MIDI Notes

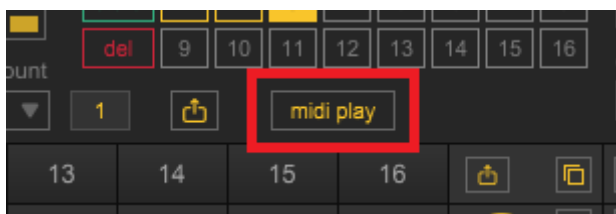
When MIDI notes are used to control Stepic functions, such as changing patterns, these notes are not available to control MIDI Play functions (Arpeggiator, Transpose, Chord-Play). Therefore, it is best to use very high or low notes to control Stepic functions, which you are unlikely to use for MIDI-Play. This rule is in place to avoid conflicts between Stepic functions and MIDI-Play.

## MIDI-Play

In the MIDI-Play settings, you define how Stepic reacts to incoming MIDI notes or pitch-bend messages. Notes can, for example, be used to control the transport. This allows you to control the Stepic transport independently of the host transport by playing MIDI notes.

## Opening the MIDI-Play Settings

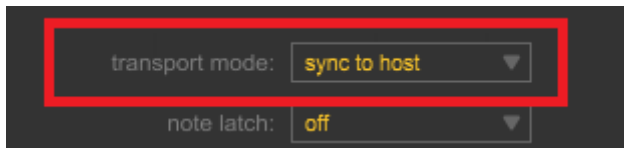
To get to the MIDI-Play dialog, simply click on "MIDI-Play".



## Closing the MIDI-Play Settings

You can close the MIDI-Play settings by clicking in an area outside the dialog window of Stepic's user interface.

## Transport Mode



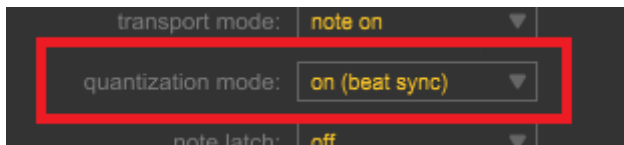
### Sync to Host

Stepic's transport is controlled by the host (i.e., the DAW). When the host transport starts, Stepic's transport also starts. When the host transport stops, Stepic's transport also stops.

### Note-On

The Stepic's transport is controlled independently of the host transport by incoming MIDI notes.

## Quantization Mode



The quantization mode is only available for the "Note-On" transport mode.

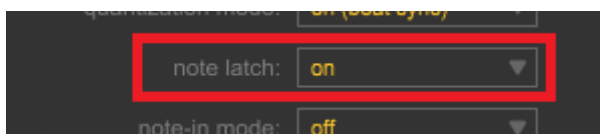
### Off

No transport quantization takes place. The notes from Stepic are output immediately and not aligned with the host transport.

### On (Beat-Sync)

The note output of Stepic is aligned with the host transport. The quantization happens at the beat level. If the transport of Stepic is started between two beats, the output of notes begins with the start of the next beat.

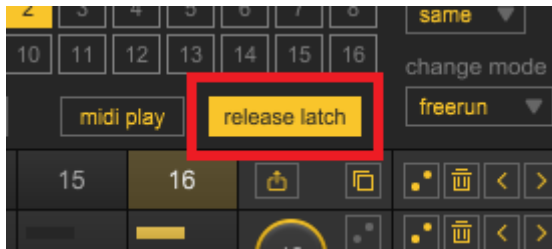
## Note Latch



"Note Latch" allows you to play individual notes continuously without having to constantly press them on your keyboard. When "Note Latch" is active, the last notes sent to Stepic are "locked" and played continuously, even after you take your hands off the keyboard. If you send a new set of notes to Stepic while previous notes are still being played, these replace the old ones. To end the continuous note playback, use "Release Latch".

### Release Latch

"Release Latch" allows you to release the "locked" notes and stop the continuous note playback. You can trigger "Release Latch" by clicking the yellow "Release Latch" button or stopping the DAW transport.

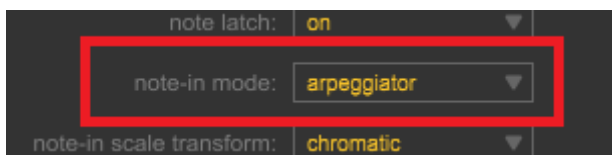


"Release Latch" is also available as a function in the MIDI Mapping Manager and can thus be bound to a MIDI note and CC controller button.



## Note-In Mode (MIDI-Play Mode)

The Note-In mode determines how Stepic reacts to incoming notes.



### Off

No play mode is activated. If the transport mode is set to "Note-On", incoming notes are used solely to control Stepic's transport.

### Transpose

Incoming notes are used to transpose Stepic's note output. If incoming notes are above Stepic's root note, the transposition is upward. Notes below the root note lead to a downward transposition.

### Arpeggiator

By sending chords, you can play Stepic like an arpeggiator. Various arpeggiator modes are available. The unique feature here is that the arpeggiator takes into account the notes from Stepic's sequencer. The arpeggiator essentially uses Stepic's notes as a transposition source. This means if you have all notes in Stepic's sequencer set to C, it now works like a standard arpeggiator. If you enter notes in the Pitch and Octave sections, these notes transpose the arpeggiator at each step of the sequencer relative to the set pitch. This allows for extremely varied sequences to be played with Stepic.

### Chord-Play

Chord-Play transforms a mono sequence into a polyphonic sequence. While Chord-Play is active, a chord sent to Stepic is reproduced with the same structure (in half-tone intervals) as it was input, however, the pitch setting of each step influences the pitch of the output chord.

Pitch values that are above the set root note lead to an increase in the pitch of the chord. Conversely, pitch values that are below the root note lead to a decrease in the pitch of the chord. Pitch values below the root note can be achieved by setting octave values below 0. This means you can dynamically change the pitch of a chord by manipulating both the pitch and octave settings of the step, thus giving you a great deal of flexibility in designing your sequences.

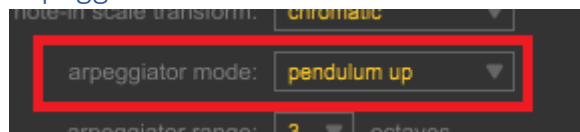
*This means that the focus in Chord-Play mode is entirely on the chords you play live, giving you immediate and direct control over the polyphonic sequences in Stepic. This dynamic allows you to adjust and manipulate the sequences in real time, depending on which chords you send to Stepic via the DAW.*

note-in mode: **arpeggiator**

Highest

Latest

## Arpeggiator Mode



Up



Up-Down


### Down-Up


*Note: There is a downward octave movement when the Arpeggiator Range > 1 (see Arpeggiator Range description).*

### Pendulum-Up


### Pendulum-Down


*Note: There is a downward octave movement when the Arpeggiator Range > 1 (see Arpeggiator Range description).*

### Random

A random note from the played chord is determined for each step. In this mode, the same note may be selected several times in a row.

### Random Skip

A random note from the played chord is determined for each step. However, in this mode, consecutive notes from the played chord are avoided.

### Random Each

The order of the determined notes is random, but it is ensured that each note from the played chord is played at least once. Therefore, each note from the played chord can only be selected once per note cycle. With the start of a new arpeggiator run, a new random note order is determined.

Here is an example of how to note order could be determined with the played chord C3, E3, G3:

Run 1: E3, C3, G3

Run 2: G3, E3, C3

Run 3: C3, E3, G3

And so on...

*(Each note exactly once per run in random order)*

### Play Order

The notes of the played chord are played in the order they reached Stepic.

Arpeggiator Range

arpeggiator mode: pendulum up

arpeggiator range: 3 octaves

note octave movment: octave up spiral

Here you set the octave range of the arpeggiator. The octave range can be set from 1 (default) to 4. By default, Stepic moves upwards through the octaves. An exception are the arpeggiator modes that start with a downward note progression. In these arpeggiator modes, Stepic moves downward through the octaves. Arpeggiator modes with downward octave movement are: Down, Down-Up, Pendulum-Down.

### Note-In Scale Transform

note-in mode: arpeggiator ▼

note-in scale transform: to nearest ▼

arpeggiator mode: pendulum up ▼

Here you can specify how Stepic treats incoming notes that are not present in the set scale.

### Chromatic

All notes of the chromatic scale are accepted, regardless of the scale currently set in Stepic. This allows for transposing or playing chords that are not present in the set scale.

### To nearest

Notes that are not present in the current scale are transformed to the nearest note within the set scale. With this option, you ensure that all notes are played within the set scale. Proximity is determined in semitones of the chromatic scale. If the nearest lower and higher note have the same distance (in semitones) from the played note, it will transform to the lower note.

*Example: The incoming note D#3 is transformed to D3 in the case of a C major scale setting.*

### Ignore Off-Scale

Incoming notes that fall outside the set scale are ignored by Stepic. With this option, you ensure that only notes within the set scale are played. Unlike the "To nearest" option, incoming notes that fall outside the set scale are not transformed and are not taken into account in the played chord.

*Example: The played chord C3, D#3, G3 becomes C3, G3 when the C major scale is set. The D#3 note is ignored because it is outside the scale.*

note octave movment: **full range**

Here you can determine how the arpeggiator moves through the octaves when an arpeggiator range greater than 1 is set. The octave shift option is only available in arpeggiator mode.

Full Range

The notes of the played chord are combined into a cycle across octaves.

The notes of the played chord are combined into a cycle across octaves.

Example Arpeggiator Mode: Up-Down, Arpeggiator Range: 2 octaves:

Octave 2										
----------	--	--	--	--	--	--	--	--	--	--



### Transpose Chromatic

Stepic's note output is transposed up or down by the pitch-bend value independently of the set scale in semitone steps according to the chromatic scale.

### Transpose Chord

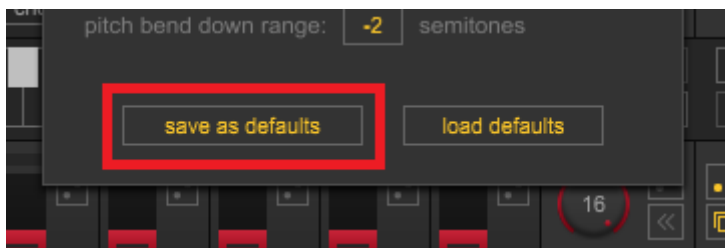
Transposes the currently played chord up or down by the pitch-bend value. The currently set scale is taken into account when transposing.

### Pitch-Bend-Range Up/Down



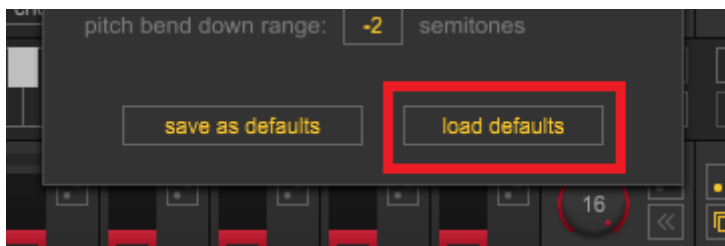
Sets the value ranges in semitones for the pitch-bend movements up and down. The value ranges go from -24 to -1 and 1 to 24. Both positive and negative values can be set for Up and Down. For example, +5 can be set for Up and +7 for Down. All combinations within the value ranges are allowed.

### Save as Defaults



MIDI Play settings are saved with the project. With the "Save as Defaults" function, you save the current settings in the "MIDI Play" dialog as new, global default settings. The next time you load a new instance of Stepic, the last saved default settings are loaded.

### Load Defaults



"Load Defaults" can be used to reset the settings of MIDI Play back to their defaults.

*Important to know: "Load Defaults" overwrites the current settings in MIDI Play with the default settings.*

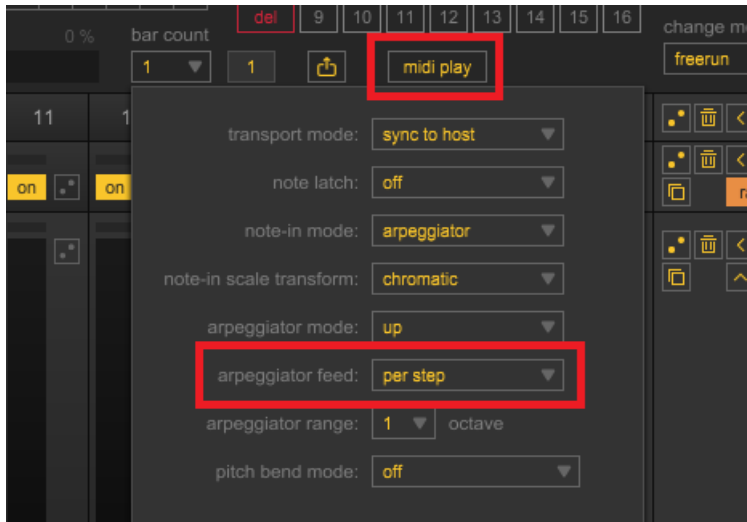
### Drag & Drop MIDI Export & MIDI Play

A powerful feature is to take Stepic's MIDI Play into account when doing a Drag & Drop MIDI Export. This gives you the opportunity to export all MIDI information exactly as Stepic is playing it with the current MIDI Play settings. To activate MIDI Play during MIDI Export, hold down the chord or the key (if you are in transpose mode) while performing the drag & drop export. Now you are exporting the data exactly as Stepic is playing it!

## Update 1.5.10

### Arpeggiator Feed

In the MIDI Play options, you can now set the timing of the arpeggiator's note advancement through the 'Arpeggiator Feed' feature. These options allow for various rhythmic patterns and effects.



#### Per Step Feed

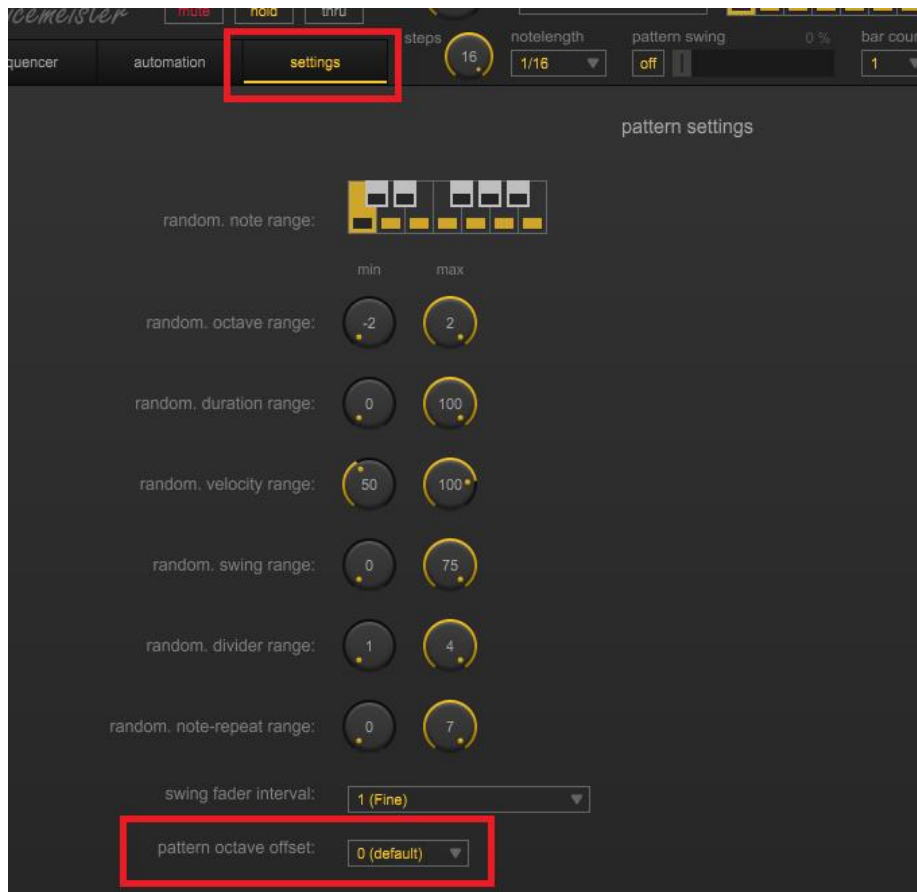
With each step of the sequencer, the arpeggiator moves to the next note in its note pool, regardless of whether the step is set to 'on', 'off', or 'con'. Use this option for achieving a more linear sound.

#### Per Note Feed

The transition to the next note in the arpeggiator occurs with each note played by Stepic. If sequencer steps are muted, the advancement will occur at the next played note. Setting a divider in a step causes the advancement with each division note. For example, a division of 3 means the arpeggiator advances three times within that step.

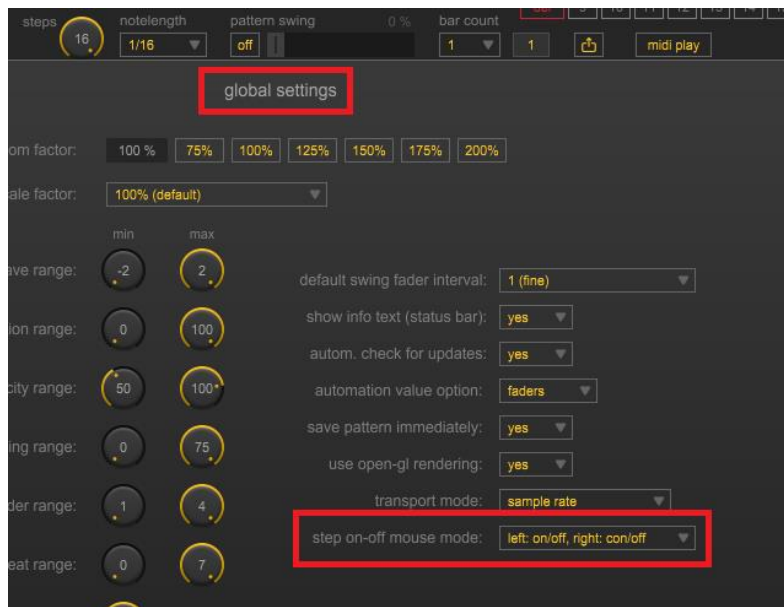
#### Pattern Octave Offset

The 'Pattern Octave Offset' function allows setting an octave offset from -1 to +1 for a pattern. This enables an adjustment of Stepic's octave range in addition to the root note, either one octave up or down.



### Step On/Off/Con Mouse Mode

In the Global Settings, two different mouse modes can now be selected.



### Cycle On/Con/Off (Default)

Left and right clicks function identically. Clicking on the switch sets it to the next value. This is the standard operation as it has been used before.

### Left On/Off, Right Con/Off

Left and right clicks have different functions. A left click toggles between 'On' and 'Off', while a right click toggles between 'Con' and 'Off'. This option enhances workflow efficiency by allowing each desired value to be set with just a single click.