

# Stairway v1.0 by NOISS COKO



Stairway is a simple but versatile audio/MIDI effect that offers a different approach to randomness as a source for expression and control. It generates patterns from a limited group of values, used to produce real time modulations over external devices and parameters inside Live. From a maximum of eight possible values to choose from, Stairway creates unpredictable combinations depending on a set of parameters that will add more or less variations to the sequence.

## MAIN SECTION

### Step Values

Each one of these eight number boxes or steps define a specific group of values that will be triggered at random. The resulting pattern shapes a control source that is then applied to external instruments and parameters inside Live.

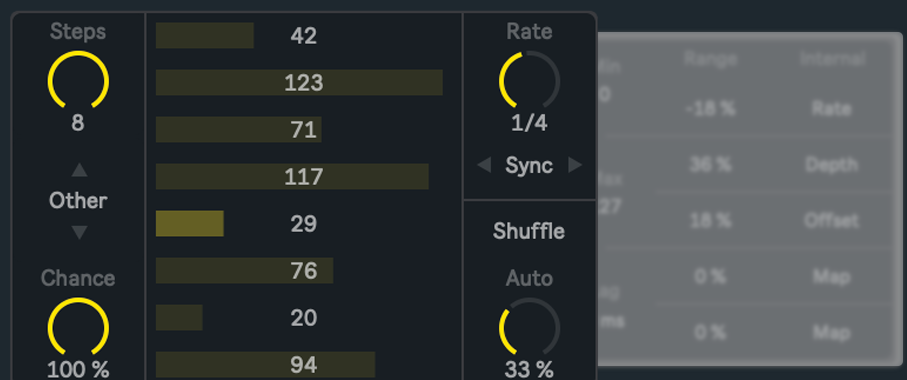
### Steps

Stairway creates random sequences from a limited set of values, then used to control external instruments, as well as parameters inside Live. From a minimum of two and a maximum of eight, this dial determines how many steps may be part of the sequence.

### Behavior

These options limit how future patterns will behave. Both arrows help to navigate between three different modes:

- If **Any** is chosen, every active step could be the next to be output, even if it means to repeat the last selection.
- The **Other** mode does not allow consecutive repetitions, unless the end and beginning of two series share the same value. Once a step is selected it will not be featured until all others were included in one cycle.



- The **Drunk** mode avoids big leaps between the current selection and the next. If the Steps dial is set to eight and step four was the last one to be output, only number two, three, five or six may follow.

### Chance

Determines the chances for the next message to be triggered or not. When Chance is set to 100%, all selections will be performed, but no values will be output if the amount falls to its minimum. Other alternatives within this range produce more or less unpredictable patterns depending on Chance's current percentage.

### Rate

Sets the speed or frequency at which all control values get randomly selected. The Rate Mode left and right arrows switch between three different styles that are available for this parameter (Free, Sync and Track).

## Rate Mode

The Rate dial behavior changes based on three alternative modes:

- **Sync** uses beat divisions to define time intervals between one selection and the next. The rate stays synchronized with Live's global bpm and Stairway will not trigger values until Live's transport starts running.
- **Free** uses milliseconds to define time intervals between one selection and the next. The rate remains unlinked from Live's transport and its current bpm.
- When **Track** is chosen, the Rate dial gets momentarily disabled and selections will only be triggered by incoming MIDI Note On messages.

## Shuffle

Randomly assigns new values to the steps that are currently active. **It is very important to notice that all changes caused by this feature will be stored in Live's undo/redo history. Use the Shuffle function being aware of this behavior!**

## Auto

This parameter works as a complement for the Shuffle function by increasingly randomizing Stairways' current values according to Auto's own percentage. Its amount also defines a specific range between the original value and others that might replace it. At 100%, random selections will cover the whole spectrum, while these slowly get back to their original positions as the amount starts decreasing.

## OUTPUT SECTION

### Minimum and Maximum

Before it is used as a control source, the Min and Max parameters scale Stairways' global output and restrict its selected values within a certain range.

### Lag

Produces a smooth transition between one value and the next. How long the transition takes is defined by this parameter.


### Range

Negative amounts will shrink the control source towards its lower spectrum, pushing down the original values while keeping some relative difference between steps. The positive side will do exactly the opposite by leaning all control values towards Stairways' maximum range.

## MIDI

Depending on what instrument or device is receiving the information, the control source can be formatted as:

- **CC** or Control Change. This type of message always feature two different yet simple elements. These are used by the receiver to identify what specific parameter is now being controlled (CC Number) and what is that parameter's new state or position after the message is received (CC Value). In this case, values are defined by the incoming source and the number is determined by the CC X box that is displayed when this format is chosen.



Min	Range	MIDI	Internal
0	-14 %	◀ Off ▶	S Length
Max	72 %	◀ Off ▶	Filter Freq
112	0 %	◀ Off ▶	Ve Decay
Lag	23 %	◀ CC 8 ▶	Map
150 ms	-69 %	◀ AT ▶	Map

- **PB** or Pitch Bend. Generally used to bend an instrument's pitch up and down, but its effect ultimately depends on how the receiver is configured to interpret this specific type of message.

- **MW** or Modulation Wheel.

- **FC** or Foot Control.

- **AT** or Aftertouch.

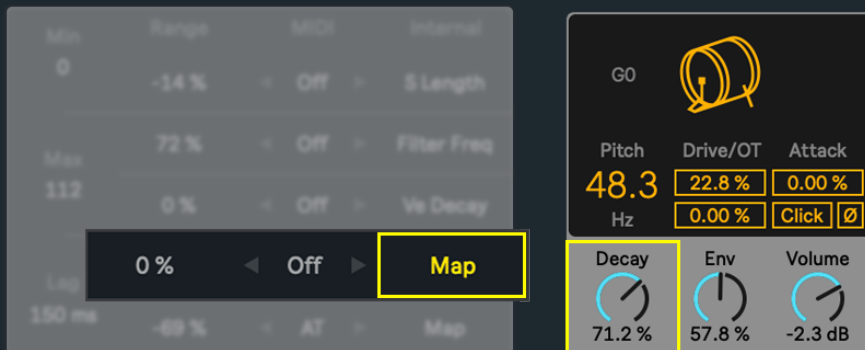
- **Off** prevents a row's MIDI information from being output. Its Map function still remains independent.

These formats are particularly useful when working with instruments like Sampler, Operator or even Wavetable, all of which offer a versatile modulation section for very specific parameters that otherwise would not support MIDI mapping nor clip automation.

## Map

Stairway allows to map and control parameters inside Live. Click on a Map button, and while it is blinking, select the parameter that is going to be linked. Its name will then be displayed as the new button caption.

To undo these steps, click on a Map button and hold until the previous selection is cleared or press the Internal title in order to clear all of them at once. Buttons' default state will then be restored.



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## ABOUT DEVICES

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Stairway v1.0

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