

# MiniSteps v2.0 by NOISS COKO

MiniSteps features a pair of simple MIDI and audio devices, mainly designed as control sources for Ableton Live

Chance 85 %	Shuffle	41	0	92	54	70	115	15	2	Right
	Skip									1/16
Source	Shuffle	96	70	113	13	92	121	23	51	Left
	Skip									1/8
Mute 12 %	Shuffle	23	109	13	3	81	116	32	44	Pong
	Mute									Track

parameters and external instruments or effects. All control values are set from three independent sequencers and distributed at will across five output layers. Parameters are then assigned by individual Map buttons, or linked to other devices using any of the available MIDI message formats.

Easily target any parameter within a Live set, then use MiniSteps to add expression, precise control and degrees

of randomness that result in more interesting sounds and dynamic patterns.

## SOURCE SECTION

### Control Values

Each one of the three MiniSteps' sequencers is integrated by eight number boxes, all ranging between 0 and 127. These ultimately define the specific group of values that will set the target's position as the sequence evolves. Live parameters are simply selected by clicking over the different Map buttons, while externals are connected using any of the available MIDI message formats.

### Mute-Skip

Displays one of two different set of buttons that are available for each sequencer:

- **Skip** buttons enable/disable individual steps. If disabled, a control value is no longer part of the sequence, hence its length will be reduced by precisely one step. This function could also be used to simply establish the first and last step of a sequence.
- **Mute** buttons mute/unmute individual steps. If muted, a step is still part of a sequence but no value will be updated until the next step is triggered.

### Shuffle

All control values within a specific sequence could be randomised using this single button. **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!**

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### Playback Mode

Four different playback modes are available for each individual sequence:

- **Right** plays the sequence forward.
- **Left** plays the sequence backwards.
- **Pong** plays the sequence back-and-forth.
- **Other** plays the sequence at random.

## Rate

Controls the sequence playback speed. Rate values are displayed as beat divisions, representing a specific fraction of Live's global tempo. When **Track** is chosen instead (Rate's last position), values will only be triggered by incoming MIDI Note On messages.

Chance 85 %

Sequence	Shuffle	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Right	41	0	92	54	70	115	15	2									
Left	96	70	113	13	92	121	23	51									
Pong	23	109	13	3	81	116	32	44									

Source

Mute 12 %

## Chance

This amount determines the odds for each step to be triggered or not. If Chance is set to 100%, active steps will always be triggered, while they will only be half of the time if the amount is set to 50%. Any other value between ranges of 0% and 100% results in more or less unpredictable variations within the three sequences.

## Mute

Depending on this amount, steps will get randomly muted/unmuted while the sequences are being played. This function takes each step's current state into account (mute or unmute), then defines the odds for them to be different or not.

## OUTPUT SECTION

MiniSteps is actually composed by two versions of the same device. Depending on the task, either the MIDI or the audio effect could feel more useful or appropriate. Nonetheless, both present the same characteristics, with the only exception being that no MIDI column is included in the audio effect outputs. A set of Amount values is offered instead.

## Jitter

Sets more or less random variations between all steps' original values and others that might be used instead. In this case, the amount also defines a specific range between their current position and those selected at random. If Jitter equals 100%, random selections will cover the whole range, while these start getting back near their set position as the amount decreases.

## Switch Windows

Displays one of the two different sets of parameters available for MiniSteps' main interface. The first window features the Source/Sequencers section, while the second reshapes these values and defines what Live or external parameters are controlled by MiniSteps.

Jitter 15 %

Route

Lag 36 ms

Source	Min	Max	Offset	MIDI	Internal
A	16 %	91 %	-18 %	PB	Point
B	80 %	16 %	10 %	Off	Density
None	0 %	100 %	0 %	CC 25	Speed
A	29 %	59 %	38 %	FC	Map
None	0 %	100 %	0 %	Off	Map

## Lag

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

## Source

For every individual output, it is possible to choose one of the three available sources, shaped by the three main sequencers integrated in this device. This allows a unique set of values to be used as a control signal for different external parameters or others within the Live set.

## Minimum and Maximum

Before they are used as control sources, the Min and Max parameters rescale the sequencers outputs, restrict their values and force them to stay within a specific range.

## Offset

Shifts the currently selected source towards its high or low end. As the source starts falling outside any of both extremes, their values will simply bounce back and be forced to stay within the range.

## MIDI

Depending on what instrument or device is receiving the information, control sources 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.

	Source	Min	Max	Offset	MIDI	Internal
Jitter 15 %	◀ A ▶	16 %	91 %	-18 %	◀ PB ▶	Point
A	◀ B ▶	80 %	16 %	10 %	◀ Off ▶	Density
Route	◀ None ▶	0 %	100 %	0 %	◀ CC 25 ▶	Speed
Lag 36 ms	◀ A ▶	29 %	59 %	38 %	◀ FC ▶	Map
	◀ None ▶	0 %	100 %	0 %	◀ Off ▶	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.

## Amount

Controls the selected source overall range.

## Map

MiniSteps 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.

	Source	Min	Max	Offset	MIDI	Internal
Jitter 15 %	◀ A ▶	16 %	91 %	-18 %	◀ PB ▶	Point
A	◀ B ▶	80 %	16 %	10 %	◀ Off ▶	Density
Route	◀ None ▶	0 %	100 %	0 %	◀ CC 25 ▶	Speed
Lag 36 ms	◀ A ▶	29 %	59 %	38 %	◀ FC ▶	Map
	◀ None ▶	0 %	100 %	0 %	◀ Off ▶	Map

GO 

Pitch **48.3** Hz

Drive/OT **22.8 %**    Attack **0.00 %**

Decay **71.2 %**    Env **57.8 %**    Volume **-2.3 dB**

Click

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# ABOUT DEVICES

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MiniSteps v2.0

Developed by Javier Salthú aka NOISS COKO

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