

CC Random v1.1 by NOISS COKO

DESCRIPTION

CC Random is a simple but versatile MIDI effect that offers a new and different approach to randomness. It generates patterns from a limited group of values, used to produce real time modulations over external devices or any parameter inside Live. From a maximum of eight possible values to choose from, CC Random creates aleatory combinations depending on a set of parameters that add more or less variations to the sequence.



Do you know what a MIDI Control Change message is? This specific type of message is used by CC Manager to remotely control parameters from other instruments and effects. Most of the time these messages are received by external devices, but in some cases they could also be applied over parameters from virtual instruments inside Live. For every case, it's recommended to read the user

manual from the specific device you are trying to control, in order to know what Control Change number is assigned to each single parameter.

FEATURES AND FUNCTIONS

Main Section

Range

CC Random creates random sequences from a set of predetermined control values, used not only to modulate external parameters through MIDI Control Change messages, but also any other parameter inside Live. From a minimum of two and a maximum of eight alternative values, Range determines the number of possibilities that could be part of the sequence. For instance, if Range is set to five, only the first five values could be included while the others are ignored. If set to two, the sequence will randomly alternate between this pair of values.

Mode

This dial switches between three different modes that are available for CC Random, which directly affect how its pattern behaves. Each one determines within the current range, a specific group of possible values to be selected next.

- **Any:** If this mode is chosen, every value inside the range is a possible value to be selected next, including the last one. This allows consecutive repetition.
- **Other:** This mode doesn't allow any consecutive repetition, unless the end of one part and the beginning of the next share the same number. Otherwise, once a value is selected it can't be part of the sequence until every other value was already sent.
- **Drunk:** This mode limits the number of values that can be selected, avoiding big steps from one value to the other. For instance, if Range is set to eight and the last selected value was number four, only number two, three, five or six could be selected next. This means that just the two contiguous values, above and under the current value (a maximum of four possibilities), could be selected afterwards. Like Other mode, Drunk doesn't allow consecutive repetitions.



Chance

Determines the chances for each random selection to be executed or not. For instance, if Chance is set to its maximum there is 100% chances for a new control value to be selected and immediately sent, therefore, all selections will be performed in this case. Otherwise, when Chance is set to its minimum every potential selection will be ignored, because

there is 0% chances for the next control value to be sent. Any other alternative within that range is possible and will produce an unpredictable sequence depending on the current percentage. Every time a message is ignored, the last value will remain until a new selection is randomly made.

Rate

This dial determines the speed or frequency at which all control values are randomly selected.

Rate Mode

Rate different behaviours could be defined according to the next three alternatives:

- **Sync:** Time between one value and the next is determined by beat divisions, synchronized with Live's global transport. In this case, CC Random won't start unless Live's transport is running.
- **Free:** Time between one value and the next is determined by milliseconds, not synchronised with Live's global transport.
- **Track:** When this mode is chosen, the Rate dial is disabled and selections are only triggered by every incoming MIDI Note On message. Each note triggers a new selection.

Random

Randomly assigns CC Values each time it's selected. Only those values within the current range will be changed when the button is pressed. This principle also applies to the Auto function, which disables the Random button while Auto is set to On. Random can't be manually selected unless the Auto function is turned off.

Auto

This parameter works as a complement for the Random button. Instead of assigning values by pressing its button, all values within the current range will be automatically changed every time a new message is sent. The frequency at which this happens is determined by the Rate parameter. While this function is active, the Random button is disabled. Two modes are available for Auto:

- **Off:** All CC Values within the range could be individually changed either manually or randomly assigned using the Random button.
- **On:** New random values are automatically assigned to each single number box at a speed determined by the Rate parameter.

It is very important to consider that in Ableton Live almost every single parameter variation is saved in the history. Therefore, every time a new set of values is randomly selected, all changes involved will be stored in the Undo/Redo History. Please use this feature being aware of this behavior!

CC Value

Every MIDI Control Change message integrates two different kind of values, used by the receiving device to identify which specific parameter has to be changed (CC Number) and what's the value that this parameter must adopt once the message is received (CC Value).

Each one of the eight individual values available on CC Random assigns a particular Control Change value to each message, which will actually modulate the parameter associated with its Control Change number. Between a range of two and eight alternative values, one will be randomly chosen and sent after the other at a speed determined by Rate. The number of possible values is determined by the Range dial.

Range Section



CC Number	100
Min Value	25
Max Value	89
Lag Time	213 ms

CC Number

This value assigns a unique and exclusive Control Change Number to the message. It will not determine the parameter's modulation, but it will be used to associate a specific Control Change message with the external parameter that wants to be modulated. With this control number, the receiver knows that this and no other parameter has to be changed.

Minimum Value

Control values could be scaled and limited before being sent in order to fit a certain range. This parameter is used to set the minimum value for the output range. By default this value is 0.

Maximum Value

This parameter is used to set the maximum value for the output range. By default this value is 127.

Lag

Every time a new modulation value is defined, Lag produces a smooth transition between this value and the previous one. How long the transition takes is determined by this parameter.

Map Section

MIDI Thru

Turn this on in order to output all incoming MIDI signals from previous devices and effects placed before CC Random. No message will pass through the device while MIDI Thru is off. This could be specially helpful if various copies of this same device are placed inside a MIDI Effect Rack.

Out as CC/PB

Patterns created by CC Random could be sent as Control Change but also as Pitch Bend messages. Both alternatives are possible, depending on what kind of instrument is receiving the information. According to what type of parameter and the specific context in which wants to be modulated, one kind of message could be more useful than the other.

MIDI Out

Turn on this button in order to output all MIDI signals produced by CC Random. When it's off, all MIDI messages coming from this device will be stopped.

Map Out

Turn on this button in order to output all control signals produced by CC Random, assigned through the Map function. When it's off, all random values produced by this device will stop having effect over the selected parameter.

Monitor

Displays all control values being sent. This is only for monitoring the signal, therefore, it can't be modified manually nor automated.

Map

Besides controlling external devices, CC Random allows to map and modulate any parameter inside Live. In order to assign a new parameter, click over Map, and while the button is blinking, select the parameter that wants to be controlled by CC Random. When this action is done, the button will show the name of the recently selected parameter.

To undo this action click over Map once again and wait five seconds without making any other selection. After this time the previous parameter will be cleared and the Map button default state restored. The current parameter will also be displaced and released every time a new one is assigned.



CREDITS

ABOUT

DEVICES

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