

CC RANDOM v1.0

BY NOISS COKO

II USER MANUAL II



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 Random to remotely control parameters from other instruments and effects. Most of the time this is referred to external devices, but in some cases it could be applied over parameters from 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

CC VALUE

Every MIDI Control Change message integrates two different kind of values at the same time, used by the receiving device to identify which specific parameter must be changed (CC Number) and what value corresponds to this modulation (CC Value).

Each one of the eight individual values available on CC Random assign a particular Control Change value to every message being sent. It will actually modulate the external parameter associated with its Control Change Number.

Between a range of two and eight alternative values that can be set, 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

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 will be 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 from above and the next two 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 note values, 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 Random is pressed. This principle also applies to the Auto function, which disables the Random button while Auto is set to On or Morph. Random can't be manually selected unless the Auto function is turned off.

AUTO

This parameter works as a complement for Random. 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. Three 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.
- **Morph:** Similar to the previous one but producing a smooth transition between values. The transition time changes according to the Rate parameter, therefore being automatically set. This establish a direct relation between the current rate and the transition time, where transitions will get shorter as rate speed increases, and on the contrary will get longer as rate speed decreases. In other words this means that the last target value will always be reached and immediately redirected to the new selection, thus generating a continuous transition. Time is fixed to 250 milliseconds only while Rate is set to Track mode.

CC NUMBER

Remember that, as it was already explained before, every MIDI Control Change message integrates two different kind of values at the same time, 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 after the message is received (CC Value).

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 receiving device knows that this and no other parameter has to be changed.



CC Number	95
Min Value	28
Max Value	75
Lag Time	809 ms

MIN 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.

MAX VALUE

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

LAG TIME

Produces a smooth transition between one value and the next. How long the transition takes from one point to the other is determined by the Lag time.



MIDI THRU

Turn this on 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.

MIDI OUT

Turn this on to output all MIDI signals produced by CC Random. When off, all messages coming from this device will be ignored.

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.

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.

INFO

Information about this device, its developer and links to other devices.

CONTACT - CREDITS

ABOUT

DEVICES

DEVELOPED BY JAVIER SALTHU AKA NOISS COKO

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