

MIDI MOD MANUAL

Changelog

v1.0 Initial Release



MIDI MOD is a MIDI Instrument that has 4 LFO style sequencers that uses interpolation to achieve an adjustable smooth shape from the sequencer steps. They can also operate as 1 shots acting more like an envelope and the last step can either fade around to the first step like an LFO or pause the last step enabling an attack/stab to be achieved.

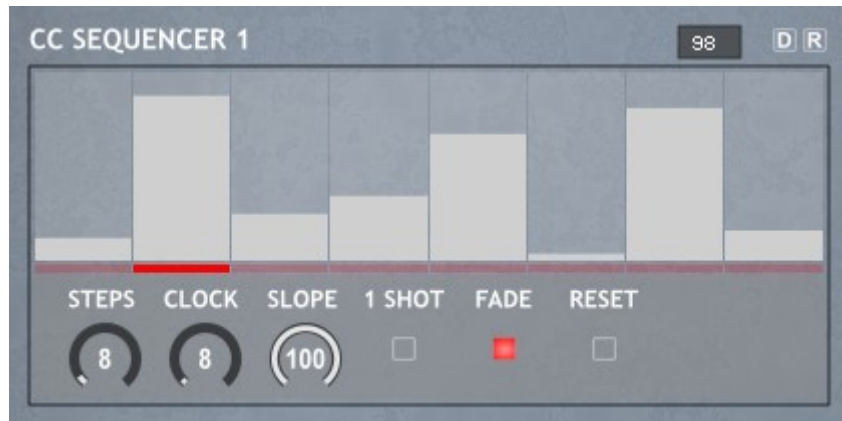
Each has it's own clock divider which can slow down to 256x for very long sequences, each has an independent step size up to 128 steps and each can also reset with each new note. The normal behaviour is legato style so the sequencers reset on a first note but not again until all keys are lifted.

It has a Modulation matrix which allows any combination of sources to be sent to up to 6 assignable Control Changes with both positive and negative offsets. As well as the Sequencers there is also a Random value generator with clock speed, a Pulse generator with clock speed which acts as a square wave, and finally Aftertouch and Mod Wheel can also be applied.

It also has 12 Patterns which are switchable in real-time via the red Trigger Keys, each Pattern contains unique sequence and parameter data including the Mod Matrix so they can be totally unique. The only parameters which are not included are the CC IDs.

The instrument also contains a MIDI CC Profile manager for creating profiles which can be loaded. If the profiles contain empty fields these are hidden in the menus so that you only see relevant CCs.

Sequencer



Each Sequencer can have up to 128 steps and depending on the clock speed steps in between are interpolated so that constant values are sent for LFO type behaviour. This means you can basically draw LFO shapes.

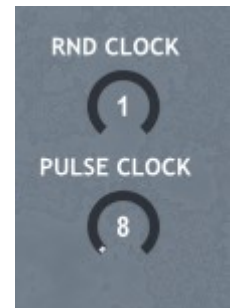
- **STEPS** - The amount of steps used/visible
- **CLOCK** - The clock is divided between 1 and 256
- **SLOPE** - This changes how the interpolation behaves, 100% will give a smooth linear slope between each step whereas 2 will have instant changes
- **1 SHOT** - This means the Sequencer will behave like an Envelope and only play through once.
- **FADE** - This decides whether the last step will fade into the first step seamlessly or whether the last step will hold instead which means the start will have an attack/stab instead
- **RESET** - The Sequencer will restart with each new key played. The normal behaviour is that the sequence resets with the first Key played and as long as notes are held, the Sequencers will loop
- **DISPLAY** - Top right display shows the values passing through in real time.
- **DEFAULT** - Resets the Sequencer to its default state determined by the Default file (Use 'Save Default' to save your own).
- **RANDOM** - Randomizes the sequencer. Holding SHIFT whilst clicking will randomize all parameters as well as the Sequencer.

Modulation Matrix

SEQ1	SEQ2	SEQ3	SEQ4	RND	PULSE	AFT	MW	SCALE%	BASE	CONTROL CHANGE ID	PING
21	0	0	0	0	0	0	0	100	64	29-Cutoff Frequency	72 P
0	0	0	16	0	0	0	0	100	64	79-Filter Resonance	66 P
0	26	0	0	19	39	30	0	100	64	24-OSC2 Mixer	127 P
0	0	0	0	0	0	0	0	100	64	OFF	P
0	0	0	0	0	0	0	0	100	64	OFF	P
0	0	0	0	0	0	0	0	100	64	OFF	P

The Modulation Matrix is where values are sent to Control Changes. Amount Knobs are bi-directional so that both positive and negative amounts can be applied.

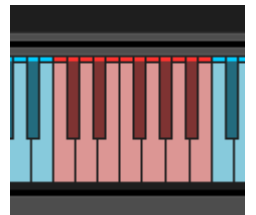
- **SEQ1/2/3/4** - This is the main 4 Sequencer outputs.
- **RND** - A Random Value is generated for each Destination. The RND Clock knob determines the speed that the values are generated.
- **PULSE** - Basically acts as a tempo clocked Square wave generating zero and a high value, the speed is determined by the Pulse Clock knob.
- **AFT** - Keyboard Channel Pressure.
- **MW** - The Modulation Wheel.
- **SCALE** - This is a master Level for the entire sum of the Modulation Row.
- **BASE** - This is basically the master control for the CC Value, all Modulation is added/subtracted to the this level.
- **CONTROL CHANGE ID** - This selects the destination and shows a list of options defined by the loaded CC Profile. When set to OFF no data is processed or sent.
- **DISPLAY** - This shows the actual values which are being sent to the CC in real-time.
- **PING** - This is for using with MIDI Learn on the target instrument, once it is waiting for a knob movement etc, ping will send a single value. Make sure that playback is stopped before MIDI learning so you can be sure it's the only CC being sent.



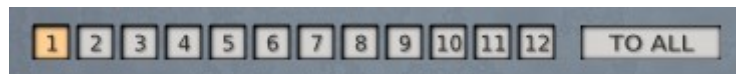
Options



- **SHADE** - Choose a background colour
- **TRIGS** - Defines which octave will be used for the Pattern Triggers shown in red on the Kontakt Midi Keyboard display.
- **CLOCK** - Master Clock setting that affects all other clocks base speed.
- **QUANTIZE** - Helps when playing live to start sequencer in sync with the DAW clock. Once you have recorded its best disabled as Kontakt's clock can be unpredictable and be slightly before or after the beat.



Patterns



There are 12 Patterns switched with either these buttons or the Red Key octave. Each Pattern contains unique Sequencer and Parameter settings with the exception of the Control Change IDs which are global.

TO ALL - This will copy the current Pattern to all other Patterns.

MIDI CC Profile Editor

MIDI CC PROFILE EDITOR

PROFILE NAME

- Fill General Names.nka
- Common.nka
- Novation Peak.nka
- Waldorf Blofeld.nka

CLEAR ALL

1		33		65	OSC3 Range	97	MOD ENV2 Release
2		34	OSC1 Sync	66		98	
3	OSC1 Range	35		67		99	
4		36	Filter Post Drive	68		100	
5	Glide Time	37	OSC2 Range	69		101	
6		38		70		102	
7		39	OSC2 Shape	71	OSC3 Shape	103	
8		40		72		104	Distortion Level
9		41		73		105	
10		42	OSC2 Sync	74		106	
11		43		75	Filter Key	107	Chorus Feedback
12	OSC1 Shape	44	OSC4 Sync	76		108	Delay Level
13		45		77		109	Delay Time
14		46		78		110	Delay Feedback
15	OSC1 Fine	47		79	Filter Resonance	111	
16		48		80	Filter Overdrive	112	Reverb Level
17	OSC2 Course	49		81	LFO1 Sync Rate	113	Reverb Time
18	OSC2 Fine	50		82	LFO1 Fade	114	Animate 1
19		51		83	LFO2 Range	115	Animate 2
20	OSC3 Course	52		84	LFO2 Sync Rate	116	
21	OSC3 Fine	53		85	LFO2 Fade	117	
22		54		86	AMP Attack	118	Chorus Rate
23	OSC1 Mixer	55		87	AMP Decay	119	
24	OSC2 Mixer	56		88	AMP Sustain	120	
25	OSC3 Mixer	57		89	AMP Release	121	
26	Ring Mod	58		90	MOD ENV1 Attack	122	
27	Noise Level	59		91	MOD ENV1 Decay	123	
28		60		92	MOD ENV1 Sustain	124	
29	Cutoff Frequency	61		93	MOD ENV1 Release	125	
30	LFO1 Rate	62		94	MOD ENV2 Attack	126	
31	LFO2 Rate	63		95	MOD ENV2 Decay	127	
32		64		96	MOD ENV2 Sustain		

You must always save your changes to a profile and then load that profile in the main instrument to use it. When saving a profile, save inside the CC Profiles folder..

MIDI MOD
MIDI PROFILE EDITOR
MIDI RECORDER

This allows saving MIDI CC Profiles to build customised Instrument specific sets of names to make life easier. Only filled Items will be visible so remove text from ones you do not want visible. The best practice is to use the Clear All button which will delete everything.

Don't forget to give the template a name and save it to the CC Profiles folder.

When back in MIDI MOD you must reload the template to see any changes, the Profile editor is a completely separate application.

Again Don't forget to save your template when you have finished editing!

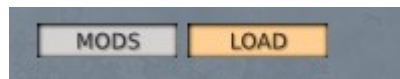
Kontakt now has a way of refreshing the browsers and so this is automatically refreshed after saving a profile.

File Browsers



The File Browsers allow loading either Midi CC templates created with the CC Profile editor or presets which stores all of the Sequencing/Mod data. Double click to load a file.

Note that after saving a Preset the File Browsers are refreshed. They are also refreshed when clicking on the Panel buttons in case you need to refresh the profiles browser manually.



- **LOADED** - Shows the loaded CC profile name.
- **SAVE** - Saves a template, be sure to choose the 'Presets' Folder.
- **SAVE DEF** - Saves the Default File which is used for the 'D' Default Buttons to restore the init state.
- **< >** - Previous/Next Preset. One must be selected first for this to work.

Recorder



The recorder will record all Midi throughput once the DAW is playing back. Drag the MIDI file once finished. Note that the buffer is wiped every-time play is pressed in your host.

