CATALYST 2
MultiMode Filter

[RACK EXTENSION]
MANUAL / 2021

Re
Rack Extension

PRODUCT OF
TURN2ON

FX device by Turn2on Software
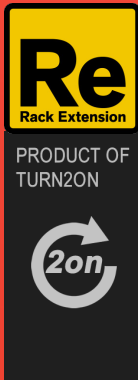
CATALYST 2, a new version of the hybrid multi-filter. The main function of the device is centered on the "LP/HP Morphing Filter" section. Here you can customize the LowPass and HighPass filter parameters individually, using the LP / HP filter morphing with Cutoff. The available independent settings of the LP / HP filter parameters are Resonance, Frequency, and Boost Shelf-filters.

CATALYST 2 include Envelope Follower, that help to create by the Amp level of external signal new modulation curve that affect to the selected filter parameter.
Catalyst 2 is a newer redesigned version of multifilter.

Additional MultiMode filter includes 6 filter types (LP12, LP24, LP BW, BP6, HP12, HP BW). It has an option to be used in PRE / POST / SUM positions around the "Main LP / HP Morphing filter". In other words, you have a flexible second filter with pre and post-routing.

To change the parameters of the incoming signal, you can use the Swap Channel and Phase Invert functions. CURVE is a Transient Shaper section with Attack and Decay settings. EQ-KILL is a 3-Band function for removing (isolate) Low/Mid/High frequencies

Need a flexible filter? Try it now!

CATALYST MORPHING FILTER

LOWPASS FILTER	
LOW RESO	Resonance of Lowpass filter
RESO TRACK	Resonance Track (adjustment of low versus high cutoffs)
LOW BOOST	Booster (psycho-acoustic low shelf-filter)
LOW FREQUENCY	Frequency (adjust the frequency of the low boost)

HIGHPASS FILTER	
HIGH RESO	Resonance of Highpass filter
RESO TRACK	Resonance Track (adjustment of high versus low cutoffs)
HIGH BOOST	Booster (psycho-acoustic high shelf-filter)
HIGH FREQUENCY	Frequency (adjust the frequency of the high boost)

MAIN HYBRID HP/LP MORPHING SETTINGS

CUTOFF	Morphing around LP and HP filters. Lowpass and Highpass filters include individual settings
ACTIVE	Bypass for Hybrid HP/LP Morphing filter
HP/LP sections	Settings of HP/LP filters
PRE GAIN	Amp gain of the dry input level (unprocessed input signal)
POST GAIN	Amp gain of the wet input level (processed input signal)

# MULTIMODE FILTER

PARAMETER	
ACTIVITY	BYPASS: module is bypassed PRE: module acts as a PRE for MAIN HYBRID module POST: module acts as a POST for MAIN HYBRID module SUM: module acts as a Sum of the PRE and POST for MAIN HYBRID module
MODE	- LP12: 12dB/oct lowpass
	- LP24: 24dB/oct lowpass
	- LP BW: Brickwall lowpass (Resonance not active)
	- BP6: 6 dB/oct Bandpass roll-offs
	- HP12: 12dB/oct highpass
	- HP BW: Brickwall highpass (Resonance not active)
FREQ	Cutoff frequency
RESO	Resonant peak at cutoff frequency

ENVELOPE FOLLOWER

ENV FOLLOWER PARAMETERS

ATTACK	Rise time when the audio level increases
RELEASE	Fall time when the audio level decreases
TRESHOLD	Audio level for modulation
AMOUNT	Amount of the curve affected to the main signal from incoming Env. Follower signal

LFO
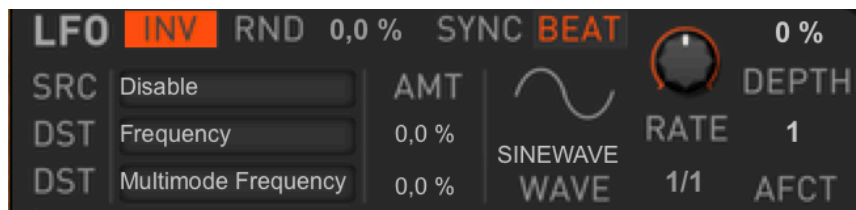
LFO PARAMETERS

LFO SRC	Select modulation source for LFO:
	CONSTANT: Source is only from the LFO section
	Automata A1 / A2 / A3: CV input sources from the Automata* placed on the rear panel
AMOUNT	Modulation levels from LFO or Automata CV sources
DEST 1	Destination parameter selects what will be modulated by the effect: MAIN HP/LP Morphing Filter: Cutoff / Resonance / Boost / Frequency
DEST 2	Destination parameter selects what will be modulated by the effect: MULTIMODE Filter: Cutoff / Resonance
INV	Invert LFO modulation waveform
LFO RATE	Adjust the LFO rate per step
LFO SYNC	Select mode of the LFO Rate: FREE seconds mode or tempo synced quarternote BEATS
LFO RANDOM	Randomize the scale steps
LFO WAVE	LFO waveform: SINE / TRIANGLE / SAWTOOTH / SQUARE / PULSE / TANGENT / RISE UP / TRAPEZOID
RATE AFFECT	Additionaly change basic LFO Rate parameter size
DEPTH MODE	Set how much the source value affects to the LFO modulation

DRY/WET
Global mix parameter, Crossfading dry incoming signal with processed signal by MAIN HYBRID and MULTI-MODE filters.

CURVE
BYP | PRE | POST | SUM

0,0 dB	0,0 %
ATTACK	HOLD

TRANSIENT SHAPER

ATTACK	Boost or Cut the attack transients
DECAY	Length of the attack boost/cut
ACTIVITY	BYPASS: module is bypassed PRE: module acts as a PRE for MAIN HYBRID module POST: module acts as a POST for MAIN HYBRID module SUM: module acts as a Sum of the PRE and POST

Curve is a Transient effect.
Accentuate or reduce the level of
transients, independent of audio level

SWAP

OFF	OFF
CHANNEL	PHASE INV

SWAP CHANNELS

SWAP CH	Swap Left and Right inputs (click and drag to change)
PH. INV	Invert the phase of channels (click and drag to change)

EQ-KILLA

100 %	100 %	100 %
LOW	MID	HIGH

EQ KILLA

LOW	Cut Low frequencies
MID	Cut Mid frequencies
HIGH	Cut High frequencies
ACTIVITY	BYPASS: module is bypassed PRE: module acts as a PRE for MAIN HYBRID module POST: module acts as a POST for MAIN HYBRID module SUM: module acts as a Sum of the PRE and POST for MAIN HYBRID module

Byp
On
Off
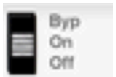
BYPASS - disable effect
ON - enable effect
OFF - mute incoming signal

BACK SIDE PANEL
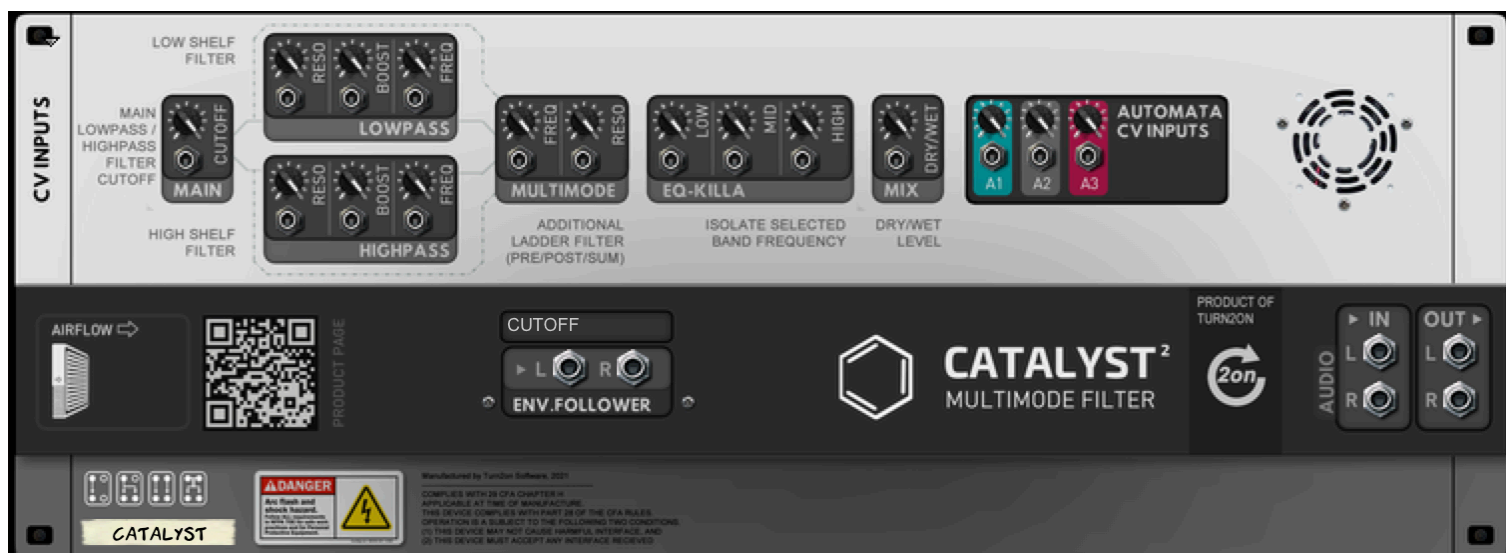
AUDIO INPUT/OUTPUT:
Mono or Stereo connections for audio signals.

ENV. FOLLOWER:
Audio Input: External audio signal input that create modulation curve by repeating amp-activity of incoming signal. Env. Follower curve affect to the selected filter parameter.
Destination: Cutoff / Low Resonance / High Resonance / Low Reso Track / High Reso Track / Low Frequency / High Frequency / Low Bosst and High Boost shelf filters

CV INPUTS
Use these CV inputs to control the main parameters by external CV source curves

AUTOMATA CV
Use these CV inputs as modulation sources with or without an LFO. You can select A1/A2/A3 CV inputs in the modulation section on the front panel (Modulation section "SRC" parameter). Automata CV inputs can be used (one CV input at a time) via modulation source selection on the front panel (just switch A1/A2/A3 selection)

CATALYST 2
MULTIMODE HYBRID FILTER

Re Rack Extension

Avaliable in the

Reason Studios Add-on Shop

Thanks to all beta-testers,
special thanks to Kirk Markarian, Challis (RT forum user) and xcott (bes RT forum user), Leigh Christopher

PRODUCT OF
TURN2ON

Turn2on

Rack Extension Developer

contacts: https://turn2on.com/
support@turn2on.com