

HY-Filter3 ver 1.0.0



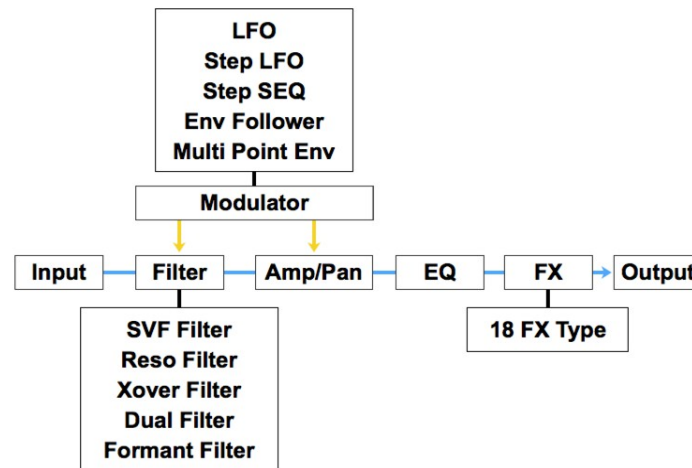
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Overview



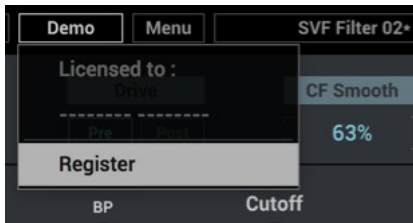
5 filter engine(SVF, Reso, Xover, Dual, Formant)

2 Modulator units and 5 modulation engine(LFO, Step LFO, Step SEQ, EnvF, Multi-Point Env)

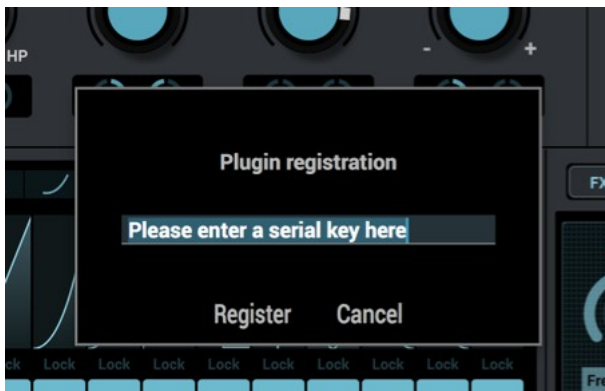
2 FX units and 18 FX type



Registration

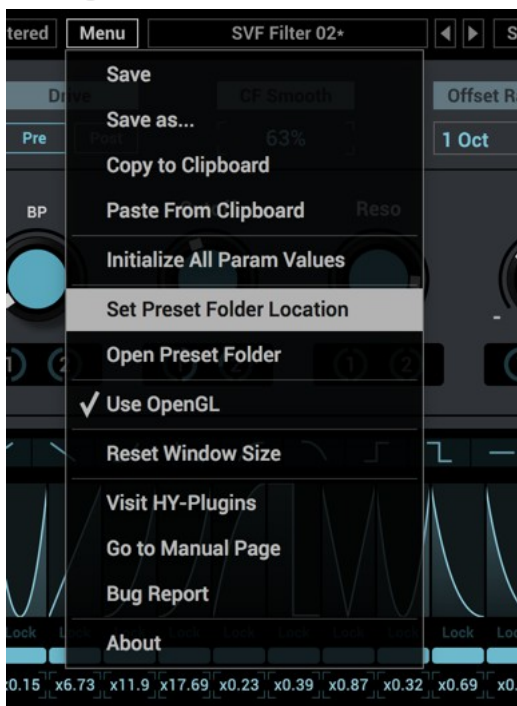


Clicking “**Demo**” button > select “**Register**” > Copy&Paste serial key > Press “**Register**”



Once HY-Filter3 is registered, “**Demo**” text will be changed “**Registered**”.

Plugin Menu



Save : overwrites current loaded preset file

Save as : creates a new preset file

Initialize All Param Values : initializes all parameter values

Set Preset Folder :

if you want to change preset folder location, you need to set new location with this function

Open Preset Folder : opens preset folder

Use OpenGL : if OpenGL is available on your computer, this option will show up

Reset Window Size : resets window size

Visit HY-Plugins : jumps to our homepage

Go to Manual Page : jumps to the manual page

Preset



You can load a stored preset file with clicking preset button or arrow button.

Default Preset Folder Location:

Mac : *Library/Audio/Presets/HY-Plugins/HY-Filter3*

Win : *C:\Users\user name\Documents\HY-Plugins\HY-Filter3*

Resizing Plugin Window



You can change plugin window size freely.

Color Picker



You can change the base color.

- 1, click the button next to HY-Plugins logo
- 2, pick a color

Filter Section



Modulation Depth Control



You can copntrol modulation depth with these small knobs.
Range is +/- 100 %.

Reseting Knob Value

You can reset knob value to default with double clicking.

Filter Engines

SVF



State variable filter.

Parameters:

Drive Pre/Post : switch drive process pre or post filter process

Drive : sets the drive level

“LP BP HP” : control the filter output balance

Cutoff : controls the filter cutoff

CF Smooth : controls the smoothness of the filter cutoff change

Reso : sets the resonance at the cutoff frequency

Offset : controls the cutoff freq offset between left and right

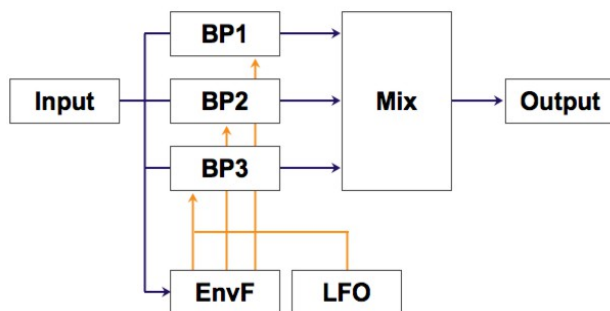
Offset Range : sets the max range of cutoff freq offset (1 to 3 oct)

Reso



The filter engine is inspired by MAM RS3 Resonator.

<http://www.midiwall.com/gear/rs3.html>



Mode1 :

LFO1(+)>BP1, LFO1(+)>BP2, LFO3(+)>BP3

Mode2:

LFO1(+)>BP1, LFO2(+/-)>BP2, LFO1(-)>BP3

Mode3:

LFO1(+)>BP1, LFO1(-)>BP2, LFO2(+/-)>BP3

Parameters:

LFO - Wave : selects the waveform of internal lfo

LFO - Rate : controls lfo speed

LFO - Phase : sets the start phase position of the lfo

EnvF - Attack : sets attack time of the internal env follower

EnvF - Release : sets release time of the internal env follower

EnvF - Gain : sets gain level of the internal env follower

Reso : sets the resonance at the cutoff frequency

Spread : spreads filter output

"BP1 BP2 BP3" : controls the cutoff freq of bandpass filters

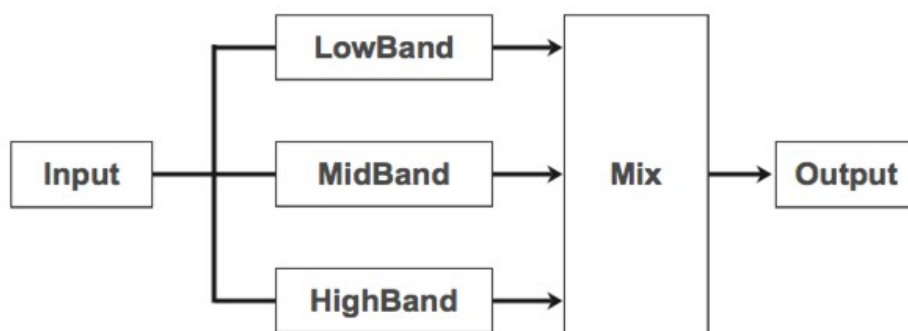
"Mode1 Mode2 Mode3" : set the filter mode

CF Smooth : controls the smoothness of the filter cutoff change

LFO : controls the lfo modulation depth

EnvF : controls the env follower modulation depth

Xover



Input signal is divided into 3 frequency bands and processed independently.

Parameters:

Low/Mid : sets the low/mid crossover frequency

Mid/High : sets the mid/high crossover frequency

Width : controls stereo width(0 to 200 %, 0 = mono, 100 = center)

Pan : sets the panning position

Drive : sets the drive level

Dry/Wet : control the dry/wet balance

Level : sets the output level

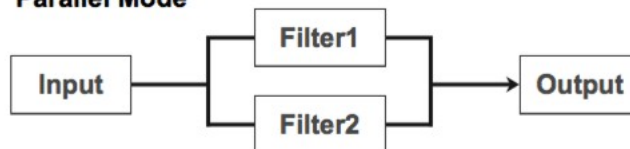
Dual



Serial Mode



Parallel Mode



Parameters:

“**Serial Parallel**” : filter process routing

Balance : sets the mix balance between filter1 and filter2(only for parallel mode)

Power Button : toggles the filter unit on/off state

“**2Pole/4Pole**” : switches the filter slope

“**LP/HP**” : switches the filter type (lowpass / highpass)

Cutoff : controls the filter cutoff

CF Smooth : controls the smoothness of the filter cutoff change

Reso : sets the resonance at the cutoff frequency

Offset : controls the cutoff freq offset between left and right

Offset Range : sets the max range of cutoff freq offset (1 to 3 oct)

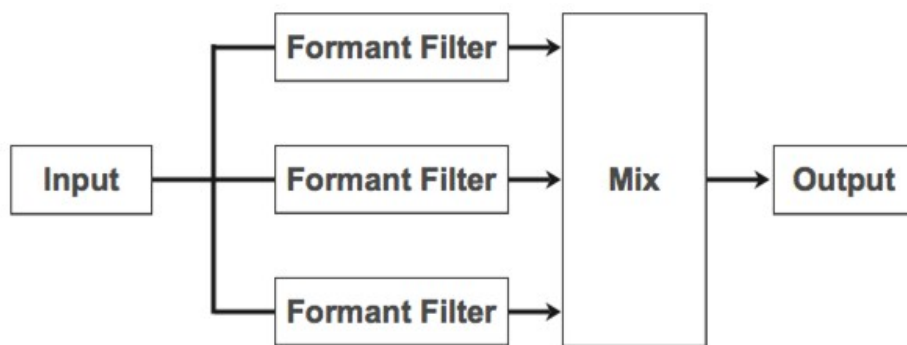
Pan : sets the panning position

Drive : sets the drive level

Dry/Wet : control the dry/wet balance

Level : sets the output level

Formant



Parameters:

Character: changes formant character

Vowel : sets the vowel

Smooth : controls the smoothness of the vowel freq change

Reso : sets the resonance

Pan : sets the panning position

Level : sets the output level

Amp/Pan



Parameters:

Amp: set the amp level

Pan : sets the panning position

3 Band EQ



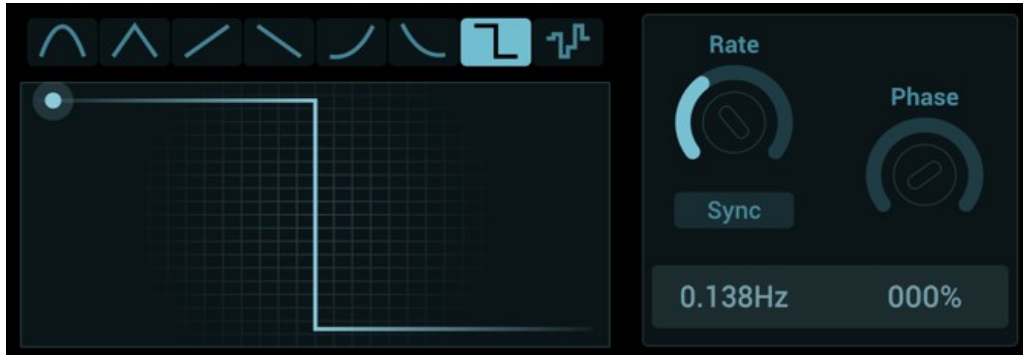
Parameters:

Gain : set the gain for low/mid/high frequency

Freq : sets the center/shelf frequency

Modulator Section

LFO



Low frequency oscillator that can produce 8 different waveform

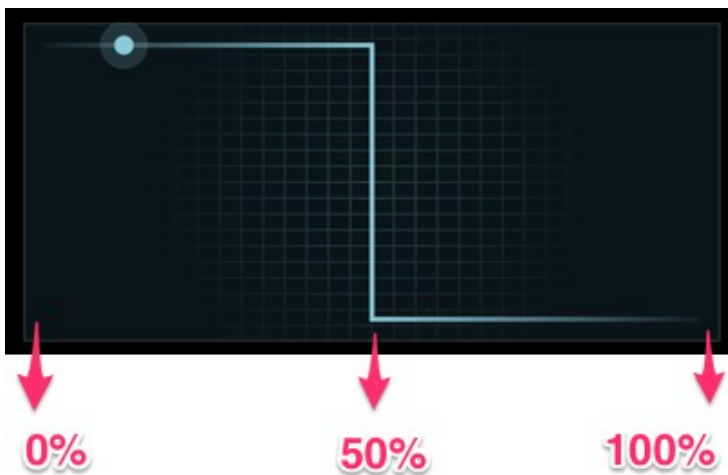
Parameters:

Rate : controls the lfo speed

Sync : toggles the bpm synced state

Phase : sets the start phase position

Phase Position



Step LFO/SEQ

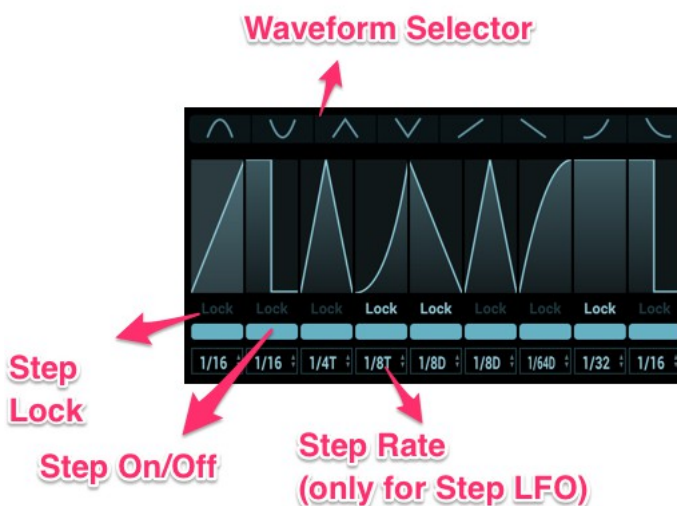


Step LFO and Step SEQ are similar, but there are few differences.

Differences between Step SEQ nad Step SEQ :

- 1, You can set lfo speed per step(Step LFO)
- 2, You can control running direction(Step SEQ)

Step LFO/SEQ Control



Waveform Selector :

Pick a waveform then click a step slider, you can change step waveform.

You can also change step waveform with right-right menu

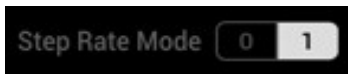
Step Lock : toggles the lock state on/off
if lock is on, that step will ignore waveform change or randomize

Step On/Off : toggles the step on/off state

Step Rate : sets the lfo speed of a step

Step Rate

There are 2 step rate modes.



Mode1:



In this mode, step rate is independent from the sequencer speed of the step lfo. (except slave sate)

In the picture left, step rate of first step is "Slave".

This case sequencer speed is "1/8", so step rate of the first step is "1/8".

Step rate value of the second step is "1/16", so 2 periods waveform will be triggered at this step.

Mode2:



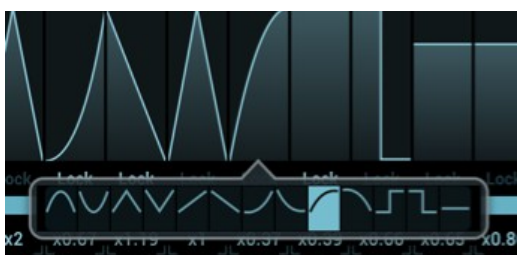
In this mode, step rate is relative to the sequencer speed of a step lfo.

In the picture left, step rate value of the first step is "x1". This meas "sequencer speed of step lfo x1". So actuall speed of this step is "1/8".

Step value of the second step is "0.5", so in this case actual step rate is half speed of

the sequencer speed of the step lfo.

Right-click Waveform Select



You can change a waveform of each step with right-click menu.

Envelope Follower



Parameters:

HP : sets the cutoff frequency of the highpass filter

LP : sets the cutoff frequency of the lowpass filter

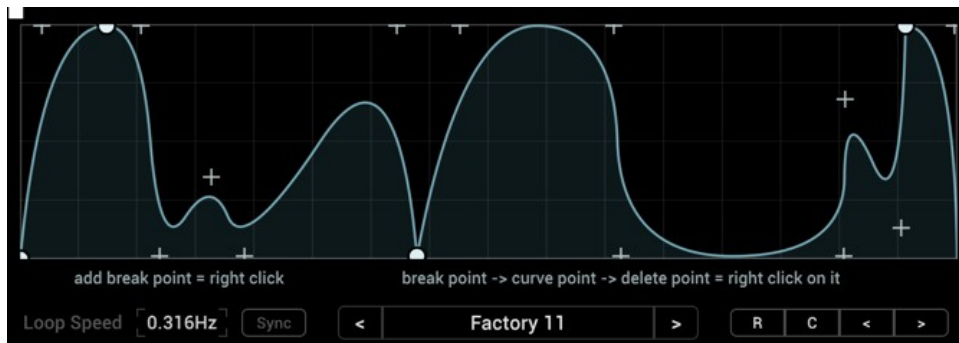
Attack : sets the attack time of envelope follower

Release : sets the release time of the envelope follower

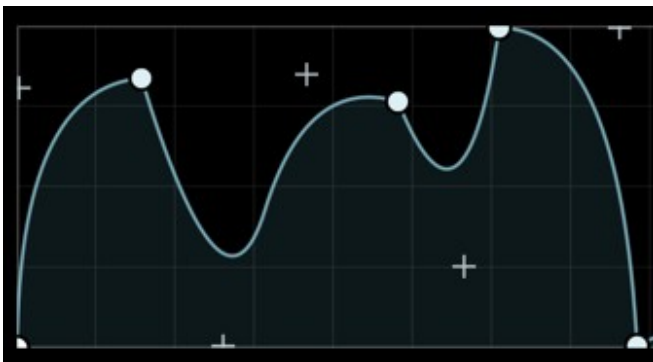
Gain : sets the gain of the envelope follower input

Level : sets the output level of the envelope follower

Multi-Point Envelope



You can make simple/complex envelope shapes with this module.



Circle : break point

Cross : curve point

You can make your own shape using with those break and curve points.

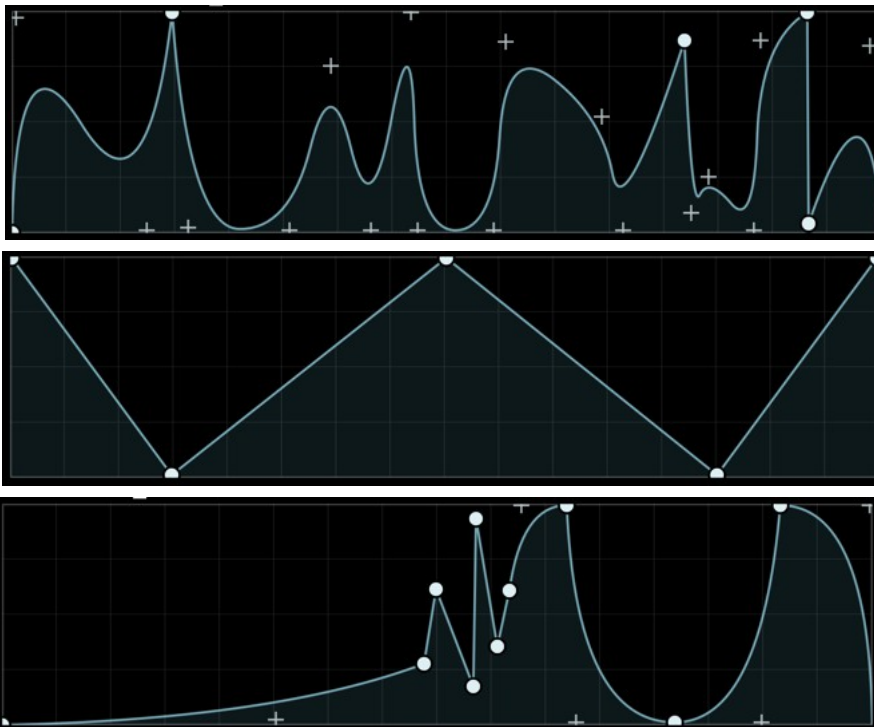
Right-click on blank space :

adding a break point

Right-click on a break point : break point > curve point

Right-click on a curve point : curve point > delete

Examples:



FX Section



2 fx units and 18 fx types available

“FX1, FX2” :

switches the fx1/fx2 panels

“FX1 > FX2, FX2 > FX1” :

changes the order of effect process

Power Button : fx unit on/off

Menu Box : changes a fx type

Mix(Dry/Wet) Slider : controls the mix(dry/wet) balance

FX Types

Simple Delay

Time : sets the delay time

Free/Sync : toggles the delay time bpm sync state

FB : sets the feedback level

Cutoff : sets the filter cutoff freq

LP/HP : switches the filter type lowpass ↔ highpass

PingPong Delay

Ping : sets the delay time of the right delay unit

Pong : sets the delay time of the left delay unit

Free/Sync : toggles the delay time bpm sync state

FB : sets the feedback level

BP CF : sets the bandpass filter cutoff freq

OFF/ON : toggles the bandpass filter on/off

Reverse Delay

Time : sets the delay time

Free/Sync : toggles the delay time bpm sync state

L-R Offset : sets the delay time offset between left and right

FB : sets the feedback level

Cutoff : sets the filter cutoff freq

LP/HP : switches the filter type lowpass ↔ highpass

M-Tap Delay

Time : sets the delay time

Free/Sync : toggles the delay time bpm sync state

Mode: changes the delay modes

Sprd : spreads the delay lines output

FB : sets the feedback level

Cutoff : sets the filter cutoff freq

LP/HP : switches the filter type lowpass ↔ highpass

Chorus

Rate : sets the modulation speed

Depth : sets the modulation depth

Width : inverts modulation signal for the right chorus unit

LowGain : sets the gain for low frequency

HiGain : sets the gain for hi frequency

Flanger

Rate : sets the modulation speed

Depth : sets the modulation depth

Width : inverts modulation signal for the right chorus unit

FB : sets the feedback level

Cutoff : sets the filter cutoff freq

LP/HP : switches the filter type lowpass ↔ highpass

Comb

Rate : sets the modulation speed

Depth : sets the modulation depth

Width : inverts modulation signal for the right chorus unit

FB : sets the feedback level

Delay : sets the delay time

Phaser

Rate : sets the modulation speed

Depth : sets the modulation depth

Width : inverts modulation signal for the right chorus unit

FB : sets the feedback level

Gain : sets the output gain

Formant

Vowel : selects the vowel

Reso : sets the resonance

Char : changes the vowel character

Gain : sets the output gain

Tremolo/Pan

Wave : selects the modulation waveform

Rate : sets the modulation speed

Width : turn this knob clockwise, effect becomes panner

Gain : sets the output gain

Freq Shifter

Shift : sets the shift value

FB : sets the feedback level

Gain : sets the output gain

Reverb

Pre : sets the pre-delay time

Decay : sets the decay time

HiDamp : dampens high frequency content

Gain : sets the output gain

Compressor

Threshold : sets the threshold level

Attack : sets the attack time

Release : sets the release time

Gain : sets the output gain

Gate

Threshold : sets the threshold level

Attack : sets the attack time

Release : sets the release time

Gain : sets the output gain

EnvShaper

Attack = emphasize/de-emphasize attack portion

+ / - = "+" emphasize, "-" de-emphasize

Sustain = emphasize/de-emphasize sustain level

+ / - = "+" emphasize, "-" de-emphasize

Gain = sets the output gain

Overdrive

Drive : sets the drive level

HP : sets the highpass cutoff freq

LP : sets the lowpass cutoff freq

Level : sets the output level

Bit Crusher

Mode : selects the quantize modes

Bit Depth : sets the bit depth

Drive : sets the drive level

Cutoff : sets the filter cutoff freq

LP/HP : switches the filter type lowpass ↔ highpass

Clipper

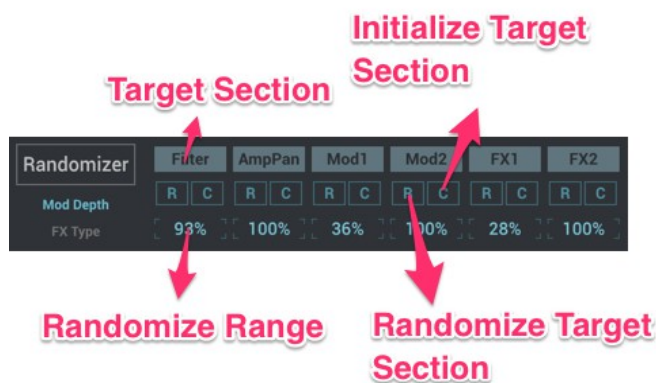
Clip : sets the clip level

HP : sets the highpass cutoff freq

LP : sets the lowpass cutoff freq

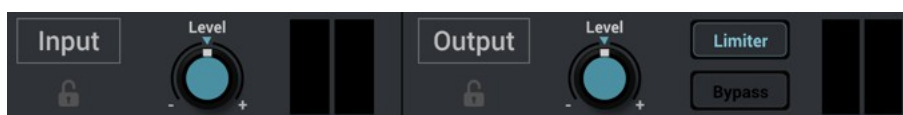
Level : sets the output level

Randomizer



You can randomize/initialize parameter values of the target section.

Input/Output Section



Level : sets the in/out level

Limiter : toggles the limiter on/off state

Bypass : toggles the bypass on/off state

Lock : toggles the lock on/off state

If lock is on , param values will not be affected by preset change.

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