HY-POLY by HY-Plugins 2020

HY-POLY



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Registration

There are 2 ways to register the HY-POLY.

1, Drag and drop

Drag and drop your **keyfile** onto the plugin window directly.

2, Copy&Paste

- 1. Open your **keyfile** with a text editor and copy all strings
- 2. Click "Demo" button > select "Register" > paste it > press "Register"



Once the plugin is registered, the "Demo" text will be replaced with "Registered".

Please enter your serial key	here
Register	Cancel

Plugin Menu



Initialize All Param Values: Initializes all parameter values

Set Preset Folder:

If you want to change the plugin preset folder location, you need to set the new location with this function

Open Preset Folder: Opens the preset folder

Use Corner Resizer: Turn on/off the corner resizer

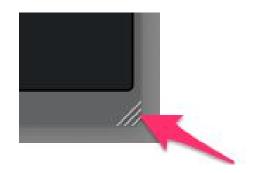
Resize: You can resize the plugin window with this menu instead of using the corner resizer

Reset Window Size: Resets the window size

Visit HY-Plugins: Jumps to the HY Plugins homepage

Go to Manual Page : Jumps to the manual page

Resizing Plugin Window



You can change the plugin size with this corner resizer.

<u>Preset</u>

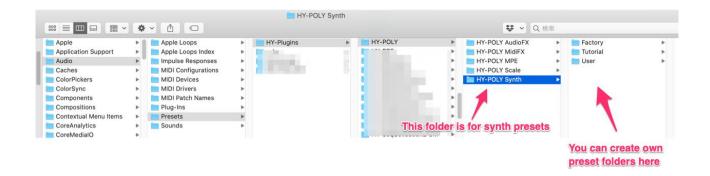


You can load a stored preset file by clicking the preset button or by clicking the arrow buttons using your mouse.

Save: Overwrites the currently active preset **Save as**: Save the current settings as a new preset

Default Preset Folder Location:

Mac : Library/Audio/Presets/HY-Plugins/HY-POLY/HY-POLY Synth Win : C:\Users\user name\Documents\HY-Plugins\HY-POLY\HY-POLY Synth



Preset Browser

					Browser open button
HY-Poly DBG	ver 0.9.997 De	mo 🗮	Tute-FM FB	🔇 🗲 Save Save as 🛔	C A Browser HY-Plugins
Folder					
All	All	All	All	Tute-FM	1
Factory	Arp	HY-Plugins	****	Tute-FM FB	
Tutorial	Bass	NoName	★★★★☆	Tute-Harmonizer	
User	Brass	Test	★★★☆☆	Tute-NoteEcho 01	
	Drums	Test User	★★☆☆☆	Tute-OSC PWM	Preset mete Info
	Guitars	User2	★☆☆☆☆	Tute-Osc Ring	edit butten
	Leads	XtremeSounds		Tute-Osc Sync 01	
	Mallets			Tute-Osc Sync 02	
	Organs			Tute-Random Pan	
	Pads			Tute-Unison 01	
	Rhythmic			Tute-Unison 02	
	SFX			Tute-Vibrato	
	Soundscapes				
	Strings				
	Synths				
	Vocals				
	Winds				
Browser re	efresh button				
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_ P	reset Name		\neg	You can edit preset
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(Cancel	Updat	e	ĺ.

<u>Midi Learn</u>

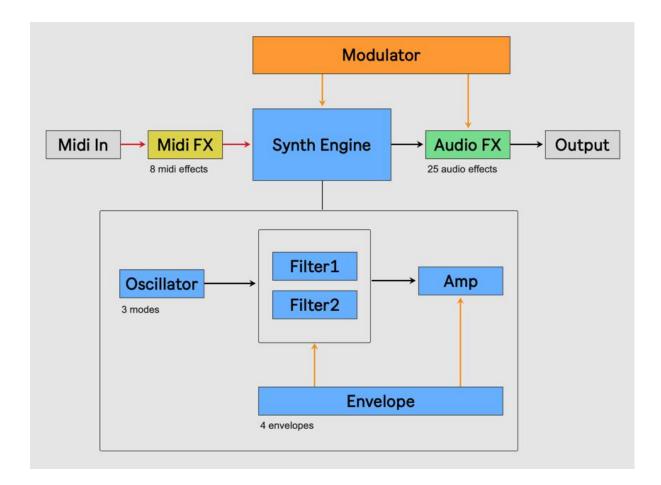


Right-click the parameter you want to control via midi cc.

Then clicks "Start Midi Learn" and moves the controller.

If you want to remove a midi assignment, right-click the target parameter and clicks "**Delete Midi Assign**" button.

Signal Flow



Midi FX

8 midi fx units are available. You can process/generates midi messages with them.

Audio FX

25 audio fx units are available. You can process signals from the synth engine.

Modulator

23 modulation source units are available. You can modulate synth/audio fx parameters with them.

Synth Panel



You can control the parameter of the synth engine here.

Oscillator Panel

3 oscillator modes are available(2Osc+Sub, 3Osc, ModOsc)

<u> 20sc + Sub</u>



In this mode, 2 saw-pulse morphable oscillators and 1 sub oscillator are available.



Octave

Sets the fundamental octave of osc

Waveform Slider

Morphs the waveform between saw and pulse



Waveform

Sets the waveform of sub osc

Octave

Sets the fundamental octave of sub osc

Master

Set the master osc of the sub osc

Fox example, when Master is Osc1 and Octave is -1, the fundamental octave of the sub osc will be the fundamental octave of osc1 -1 octave.

Sync



Turn on this button, the phase of the osc2 will be synced to osc1. This means the phase of osc2 will be reset by osc1.

oscillator range of +/- 12 semitones

<u>30sc</u>



Each oscillator has unison feature.

Waveform	Waveform
O OSCI	4(saw, pulse, triangle, sine) waveforms are available
Octave	Octave
-2 -1 0 +1	Sets the fundamental octave
0 st 0 cent	Tune
	Adjusts the pitch of oscillator range of +/- 12 semitor
Tune 4 Fine 4	Fine
200 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Adjusts the pitch of oscillator range of +/- 50 cents
number	PW
Detune Width	Adjusts the with of the pulse wave

Unison

Sets the number of stacking oscillators

Detune

Detunes stacking oscillators

Width

Controls the stereo width of stacking oscillators

Mod Osc



2 oscillators + sub

In this mode, oscillator2 can be modulate with multiple ways (Sync, Ring, FM, Feedback FM)

Edge

Adjusts the edge of the waveform Turning this knob full anticlockwise(= edge 0), selected waveform will become sine shape.



Mode

Selects the mode of oscillator modulation (Sync, Ring, FM, Feedback FM)

	Mode	
	Sync	÷
	Sync Mode	ŝ
	OSC1>OSC	2
Ī	OSC2 Self	

Mode: Sync Osc1 > Osc2

In this mode, the phase of osc2 is synced to osc1.

Mode: Sync Osc2 Self

In this mode, the phase of slave osc is synced to master osc in osc2. Osc2 master > Osc2 slave



Sync Pitch

Adjust the pitch of slave osc.

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Mode: Ring Osc1 > Osc2

Mode: Ring Osc2 Self

In this mode, the outputs of osc2 will be osc1*osc2

RingMode Dep

Controls the depth of ring modulation



Ring Pitch Adjusts the pitch of osc2 slave oscillator



Mode: FM Osc1 > Osc2 In this mode, the frequency of osc2 is modulated by the outs of osc1

In this mode, the outputs of osc2 will be osc2 master*osc2 slave



FM Depth Sets the modulation depth

Mode FB FM (1>2) ‡ FM Depth FM Depth Feedback

Mode: Feedback FM Osc1 > Osc2 In this mode, the frequency of osc2 is modulated by the outs of osc1

FM Depth Sets the modulation depth

Feedback

Sets the feedback level

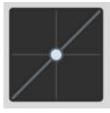
PD Osc



Phase distortion synthesis oscillator

You can create different waveforms by applying a nonlinear phase angle to a sine wave.

Linear phase



Generating sine wave with this phase shape(linear), the result will be normal sine wave shape



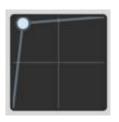
Non-linear phase1



In this case, the x value of the discontinuity point is set to 0.8, and the result will become more like a sawtooth like waveform



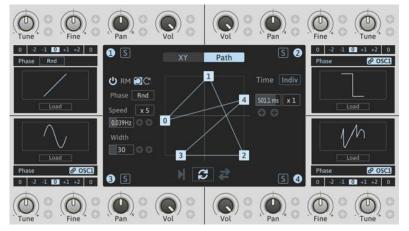
Non-linear phase2



In this case, the x and y values of the discontinuity point is set to 0.1 and 0.8, and the result will be like the image on the right



Vec Osc



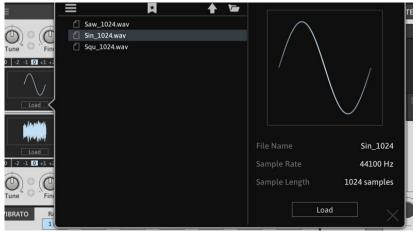
It's a vector oscillator.

You can load 64~2048 length single cycle waveform per oscillator.(preferred size is 2048)

And you can mix 4 oscillator outputs with the center control panel.

There are 2 types of mixing way (XY and Path).

Loading Waveform



When clicking "Load" button, the file browser will be show up as above.

You can load a waveform file with double clicking a file name or pressing "Load" button.

The oscillator support 64~2048 sample length files, the preferred size is 2048.

When shorter file is loaded, it will be stretched out to 2048 size.

File Browser Control



From the left end:

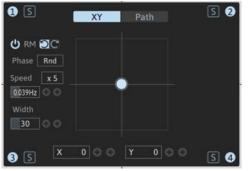
Menu.....Selects/deletes bookmarks

Bookmark.....Adds current active folder to your bookmark

Move to parent......Moves to parent directory

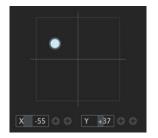
Open new folder....Opens new folder

Center Panel



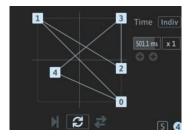
You can control the mixing ration of 4 oscillator outputs here. There are 2 mixing types (XY, Path).

XY Control



The circle position represents the mixing ratio of the oscillators. You can control the circle position with the X/Y parameters.

Path



You can create the moving path for the mixing position. There are 3 moving behavior types.(Once, Loop, Fore/Back)

Time

The mixing point will take this time to move from one path point to the next.

If "Indiv" button is active, you can set the time per the section.

Rotary Motion



If "**RM(Rotary Motion)**" is active, the control point will start rotating around itself.

Arrow Button You can set the rotating direction.

Phase

Set the phase start position

Speed

Set the rotate speed

Width

Set the rotary width

Pluck Oscillator



Pluck Pos

This affects the sound character

Body

Emphasizes the fundamental frequency

Decay

Controls the decay time

*The Vibrato and PitchBend will not work for the oscillator 1 & 2 of Pluck Oscillator.

This is a oscillator based on the Karplus-Strong synthesis method.

AMP Env

If this button is active, the amplitude of the oscillator unit is controlled by the Amp envelope(Env1).

Vel

Controls the velocity depth

Treble

Controls the high frequency portion of the signal

Vibrator

VIBRATO	Rate	Delay 🕐	Fade (Osc1 Dep	Osc2 Dep
	1 Hz	0 ms	0 ms	24 %	50 %

The pitches of osc1 and 2 can be modulated by vibrator LFO.

Rate

Sets the speed of vibrator LFO

Delay

Sets the timing delay of vibrator LFO re-triggering

Fade

Sets the fade-in time

Osc1 Dep/Osc2 Dep

Sets the depth of pitch modulation

Filter Panel



There are two independent filter units available.

Those can be routed in serial or parallel.

Serial/Parallel

In ---

When in serial mode, incoming signal will be processed by filter1 and then processed by filter2.

When in parallel mode, incoming signals will be processed by filter 1 and 2 independently.

mix ---- out

--- Filter1 ---

--- Filter2 ---

Filter Type

–(Bypass)	.Do nothing
LP(Lowpass)	Attenuates high frequency components.
BP(Bandpass)	Attenuates high/low frequency components.
HP(Highpass)	Attenuates low frequency components

Filter Input(OSC1, OSC", OSC3, NOIZ)

Selects input signal.

e.g.

If turn off OSC1, outputs signal of osc1 will not be routed to the filter unit.

Cutoff

Sets the cutoff frequency

Reso(Resonance)

Sets the resonance level. Emphasizes the signal at the cutoff.

Drive

Sets the drive level. Boosts the incoming signal.

Key(KeyTrack)

Sets the level of keytrack amount. Filter cutoff will be modulated by midi note pitch.

EnvDep(Envelope Depth)

Sets the modulation depth from the envelope generator.

Envelope Select(Env1, Env2, Env3, Env4)

Selects the modulation source of the envelope generators

CF 1+2

Controls the cutoff parameter of both filter units at the same time



Envelope

Four envelope generators are available. Envelope1 is hard-wired to the amp section.

Display Selector(1, 2, All)

1....Displays env controls of unit 1 and 2

2....Displays env controls of unit 3 and 4

All..Displays env controls of all units

ADSR

- A(Attack).....Sets the attack time
- D(Decay).....Sets the decay time
- S(Sustain).....Sets the sustain level
- R(Release)..... Sets the release time

Vel

Sets the level of the velocity modulation. If 0, the envelope signal will not be affected by midi input velocity

AS(Attack Shape)

Adjusts the envelope shape of the attack stage

DRS(Decay/Release Shape)

Adjusts the envelope shape of the decay/release stage

<u>Master</u>



Tune

Adjusts the master pitch. -24 to +24 semitones

Fine

Adjusts the master pitch. -50 to +50 cents

Mode(Poly, Mono, Legato)

Selects the voice mode

Voice

Sets the number of voice used in poly mode

Volume

Sets the volume level of the master output

Limit

Toggles master limit on/off

Boost

Boost the output signal by 6dB

Modulation Sources

There are 23 modulation sources available.

Modulation Assignment



To make a modulation assignment, you can drag and drop the source name label to the cross icon under the target parameter. Most parameters have 2 modulation slots (filter cutoff has 3).

You can also make a modulation assignment by right-clicking .



Right-clicking the target cross icon, and selects the source.

Polarity



There are two types of modulation signal.(Unipolar/Bipolar) **Unipolar** Value range of this type is 0~1. **Bipolar** Value range of this type is +/-1 Some modulation sources can generate both unipolar and bipolar signal.

E.g. LFO, Step SEQ, MPEnv

Bipolar Modulation Source Assignment

There are 2 types of bipolar modulation source assignment.



The brighter color area represents the modulation area of positive portion of the modulation signal. And the darker color area represents the modulation area of negative portion of the modulation signal.

Type1

Moves the mouse pointer to upward, the type of bipolar modulation becomes type1.

Type2

Moves the mouse pointer to downward, the type of bipolar modulation becomes type2.

Midi Sources

PitchBend ModWheel C-Pressure Velocity KeyTrk Alternate Random

Pitch Bend/Mod Wheel/Channel Pressure/Velocity

Converts these midi messages to modulation signal

KeyTrk(KeyTrack)

Converts midi note inputs to modulation signal (-1 to +1)

Alternate

Outputs -1/+1 signal alternately along with a midi note trigger

Random

Generates a random value (-1 to +1) in response to each midi note input.

Double-click to toggle on/off switch



You can toggle the power button of LFO, SAH, StepSEQ/MPEnve units by double clicking unit name label.

LF01/2



There are 2 LFO units available. **Waveform** Selects a waveform shape **Mode(Poly/Mono)** Poly.....Each voice use own LFO unit Mono....All voices share the same LFO unit

Retrig

The phase position is reset by midi note input

Bipolar

When this button is active, output value range will become -1 to +1

One Shot

When this button is active, the LFO will stop after single cycle period

Sync Mode

Free.....0.01 to 20Hz

Note.....16/1 to 1/64

Triplet......16/1T to 1/64T

Dotted......16/1D to 1/64D

Invert Button

Inverts the LFO outputs

X2 Button

Squares the LFO outputs

Saturate Button

Saturates the LFO outputs

Rate

Sets the speed of the LFO unit

Phase

Sets the start phase position of the LFO unit

Offset

Sets the offset level

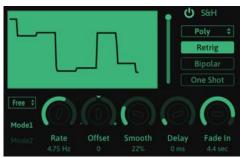
Delay

Sets the delay time. The LFO will start after the delay time.

Fade In

Sets the fade in time.

Sample & Hold



Sample and hold unit.

Mode

Mode1.....No interpolation between values Mode2.....Linear interpolation between values

<u>StepSEQ / MPEnv</u>

There are 3 StepSEQ/MPEnv units available.

<u>StepSEQ</u>



Start/End positions

You can set start/end positions with the top slider

Running Directions

- >.....Forward direction
- <.....Backward direction
- ><1...Forward /Backward direction1. e.g. 1 > 2 > 3 > 4 > 3 > 2 and so on...
- ><2...Forward /Backward direction2. e.g. 1 > 2 > 3 > 4 > 4 > 3 > 2 and so on...
- R1.....Random direction1. Same step can be triggered multiple times. e.g. 3 > 2 > 2 > 6 > 1 > 1
- R2....Random direction2. Same step will not be repeated. e.g. 5 > 1 > 2 > 4 > 3 > 5 > 3...

Shuffle

Sets the shuffle amount level

Smooth

Sets the smoothness of the output signal

Dice Button

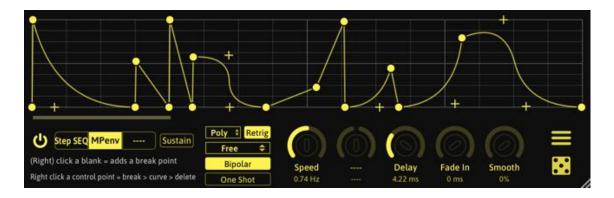
Left Click.....Randomize step values

Right Click...Resets step values

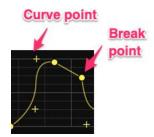
Arrow Buttons

Shifts the step values

MPEnv



You can create own envelope shape with this mode. Right-clicking on a blank, you can add new envelope point. Right-clicking a break point, that point will be changed to a curve point. Right-clicking a curve point, that point will be deleted.



<u>Math</u>



There are 2 Math units available.

Math generates modulation signal using with two modulation sources.

Source 1/2

Selects the modulation sources for the math generator

Process Type(X, +, -)

- X.....Multiplies source1 and 2, outputs the result
- +.....Adds source1 and 2, outputs the result
- -.....Subtracts source2 from 1, outputs the result

<u>Macro</u>



There are 2 macro knobs and buttons available.

Macro Knob

Sets the output value (-1 to +1)

Macro Button

If button is off, outputs value of 0. If on, outputs value of 1.

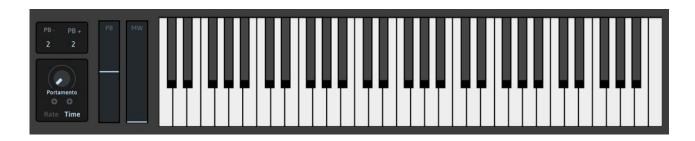


Macro button has two modes. You can change the button mode by right-clicking.

Momentary.....As long as being pressed, it will output signal value 1, otherwise 0.

Toggle.....Every time a button is pressed, its state changes.

Keyboard Panel



Pitch Bend Range(PB-, PB+)

Sets the up/down range of pitch bend control (-48 to +48)

Portamento

Sets the portamento time. When you play a note, the previous played note will change to current one gradually.

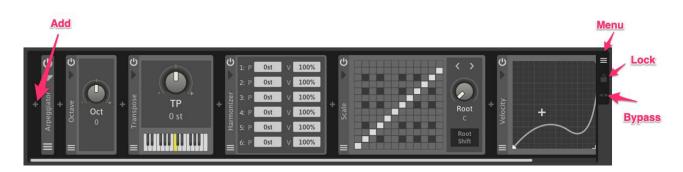
Rate/Time

Selects the portamento mode.

Rate.....Portamento time will be defined by pitch intervals.

Time.....Portamento time will not be affected by pitch intervals

Midi FX



There are 8 midi fx units available.

You can generate/process midi messages with them.

An effect chain order sometimes affects to the result.

For example, if you insert a Transpose FX before the Scale FX, the incoming midi notes will be

transposed first then scaled. This means processed midi notes will always be in scale in this order.

On the other hand, inserting the Scale FX before the Transpose FX, will cause the incoming midi notes to be scaled first, then transposed. Therefore, the output midi notes can be out of a scale.

Add Button

Adds the midi fx unit to the chain

Menu Button

Opens the menu of the midi fx rack

Preset	Loads a preset
Save	Overwrites the current preset
Save as	Creates a new preset
Open Preset Folder	Opens the preset folder for the midi fx
Set Preset Folder	Sets the preset folder for the midi fx
Minimize All FX Panels	Minimizes all FX panels
Maximize All FX Panels	Maximizes all FX panels
Delete All	Deletes all Midi FX units

Lock Button

When this button is on, midi fx units will ignore preset changes.

Bypass Button

When this button is on, midi fx chain will be bypassed.

Change the order

You can change the chain order

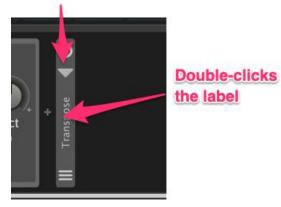
- 1, Click and hold the side panel of the fx unit
- 2, Drag and drop it onto target unit



Minimize/Maximize the unit panel

Minimize/Maximize the unit panel

Clicks the arrow button



There are 2 ways to minimize/maximize the unit panel.

Way1

Clicks the arrow button

Way2

Double-clicks the label

<u>Octave</u>



Octave shift effect.

The incoming midi notes can be shifted in +/- 2 octave range.

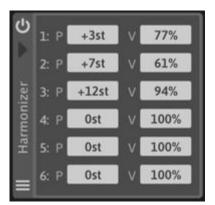
Transpose



Transpose effect

The incoming midi notes can be shifted in +/- 12 semitone range.

<u>Harmonizer</u>



Harmonizer effect

Pitch shifted midi notes will be added to the incoming midi notes.

Ρ

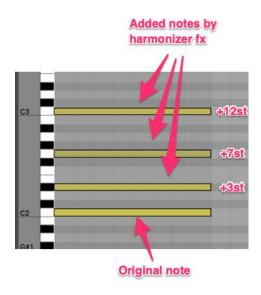
If this values is other than 0st, pitch shifted note will be added to the incoming notes. The range is +/- 36 semitones

V

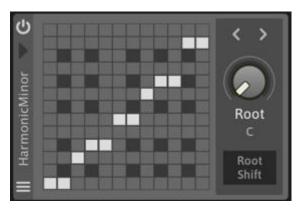
Sets the level for append note. This value is relative to the original velocity level. The range is 0 to 200%.

Example:

If you set like the picture above, the result will be like below.



<u>Scale</u>



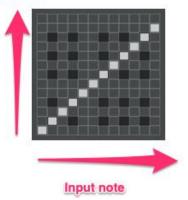
Scale effect.

The incoming midi notes will be modified by scale map table.

You can create a own scale map with the scale map editor.

You can change a scale preset with the arrow buttons next to Root display.

Output note

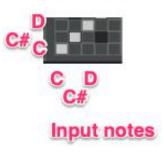


Scale Map Editor

Each grid of x-axis represents input note and corresponding grid on y-axis represents output note.

In the picture right, C is mapped to C, C# is mapped to C# and D is mapped to D, so no incoming notes will be changed. This is the defalut setting.





Scale Example

C Major

This is a C Major scale map setting.

In this case C is mapped to C, so not changed.

On the other hand, C# is mapped to C, so incoming C# will be changed to C.

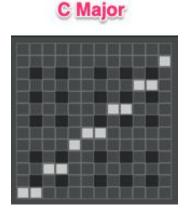
In the way, F# is mapped to F, so incoming F# will be changed to F.

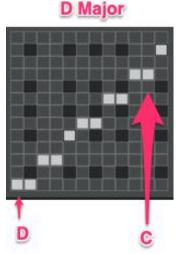
This is how the scale effect work.

And if a grid is off, corresponding note will be off.

Root and Root shift

You can change root note of a scale map.

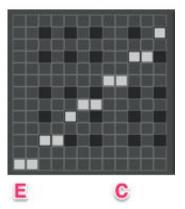




If you change C Major to D Major, the map editor change like this.

If "**Root shift**" is active, the incoming notes will be shifted by root value and then scaled. For example, now these notes {C, C#, F#, G} are coming and root and scale is E Major.

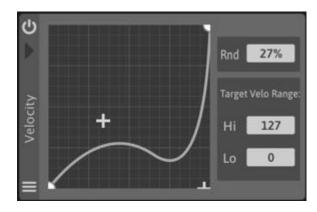
E Major



So in this case, incoming notes will be scaled like this. {C, C#, F#, G} > scale > {B, C#, F#, F#}

Now root shift is turn on and the result will be changed to like this. {C, C#, F#, G} > 4 semitone up > {E, F, A, B} > scale > {E, E, A, B}

Velocity



Velocity effect.

You can create own velocity curve with the curve editor.

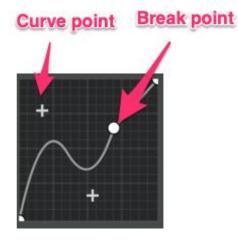
Rnd

Randomize level, adding to random value to the incoming note velocity

Target Range

Velocity value in this range will be processed by this effect, out range value will go through

Curve Editor



Circle point represents a break point and cross point represents a curve point.

Add/Delete Control Points

- Right-click on blank space: Adds a break point
- Right-click on a break point: Changes to a curve point
- Right-click on a curve point: Deletes it

Note Chance



Note chance effect.

This effect controls the incoming note will be triggered or not based on "Chance" value.

If you set this value 100%, all the incoming note will be triggered.

If you set this 0%, the incoming midi notes will never been triggered.

Target Pitch Range

You can set target note range with Hi/Lo values. Out range notes will be go through this effect.

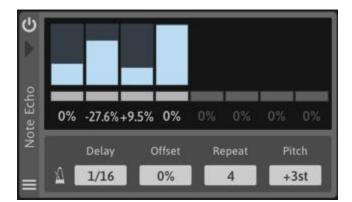
Target keys

You can set target keys with keyboard buttons.



If you set like this, only E and G keys will be the target of this effect.

Note Echo FX



Note echo effect.

The incoming midi notes will be copied and output after the delay time.

Delay Sets the delay time

Offset

Sets the delay time offset

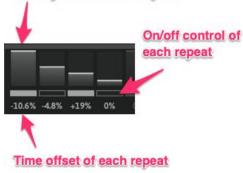
Repeat

Sets the number of repeats

Pitch

Sets the pitch shift of the delayed notes

Velocity level of each repeat



You can set velocity level, on/off state and time offset per repeat.

velocity level of repeat note is 0~100% of original note.

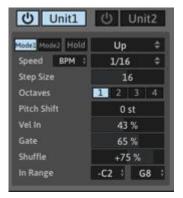
Arpeggiator

Unit1	ර Unit2		<u> </u>			
Model Mode2 Hold	Up ¢		. 9		19	
Speed BPM :	1/16 \$		- 	5	+7 +2	
Step Size	16				-10	-8
Octaves	1 2 3 4				-10	
Pitch Shift	0 st					
Vel In	0%					
	65 % Velo					
Shuffle	0 % Gate	Vel Vel	Vel Vel	Vel Vel	Vel Vel Vel Vel	Vel Vel Vel 90 90 90
In Range	-C2 : G8 : Oct Prob	90 73	90 - 25	90 57	43 90 32 90	90 90 90

There are 2 arpeggiator units available.

You can use 2 arpeggiator units at the same time.

Control Panel



Power Button

Toggles arp unit on/off Unit1/Unit2 Selects the arp unit panel Mode1/Mode2 Selects arp mode

Hold

When this button is active, the arp will continue to play the pattern after pressed midi note keys are released. Turn off this button, the arp will stop playing.

Arp Pattern Menu

Selects the arp play pattern

Sync Mode menu

Free.....Arp will not synced to neither host BPM nor host song position

BPM.....Arp speed will be synced to the BPM

Host......Arp speed will be synced to host BPM and host song position

Arp Speed

Sets the speed of arp playing

Step Size

Sets the step size $(2 \sim 32)$

Octaves

Selects the octave range of arp pattern

Vel In (Velocity Input)

Determines how much midi note velocity will affect to the velocity of arp outputs

Gate

Sets the global gate time

Shuffle

Sets the shuffle amount (-100 \sim +100%)

In Range

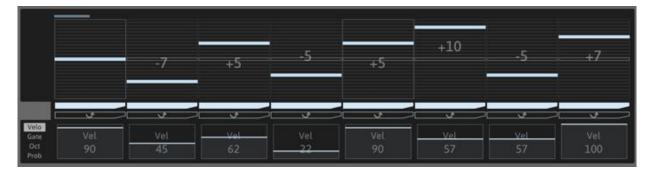
Sets the midi note range for the arp input. When incoming note is out of this range, the arp will ignore that note.

Arpeggiator Mode

There are 2 arpeggiator modes available.

You can set velocity, gate time and probability per step. So it's like a arpeggiator + step sequencer.

Mode1



In this mode arp pattern is defined by arp pattern menu. You can set pitch shift value per step. Pitch shift range is +/- 12.

Mode2



mode, incoming notes are filtered by the grids. Max 4 notes are triggered at the same time.

Step Parameters



Step On/Off

Toggles the step on/off

Step Tie/Slur

If this button is active, the step note will be connected to next note.

Step Velocity

Sets the velocity level of each step

Step Gate

Sets the gate time of each step(0~100%)

Step Oct

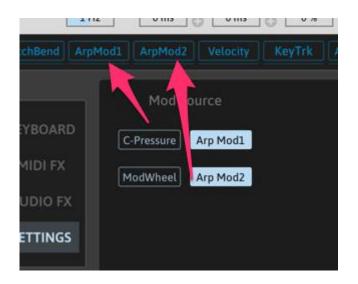
Sets the octave of each step(+/- 2 octaves)

Step Probability

Sets the trigger probability of each step

Step Modulation

Sets the modulation value of each step. These values are used as a modulation signal.



You can make arp's modulation sources active in the **Setting** panel.



Step Shift

You can shift step parameter values by clicking the shift arrow buttons.

<u>Audio FX</u>



There are 25 audio fx units available. You can add and chain them here.

Simple Delay

₽	Delay 1/4	Offs	et: -34%
Delay	Note ‡ Time 1/4	PPong L-R Offset -34%	FB 77 %
Ď	0 0 HP	0 0 LP	O O Dry/Wet
=	57.42 Hz	920.3 Hz	65 / 35 O O

Simple Delay effect Sync Menu(Free, Note, Triple, Dotted) Selects the delay time mode PPong(Ping Pong) When this button is active, the delay becomes ping pong mode. XFB(Cross Feedback) Toggles cross feedback mode

Time

Sets the delay time

L-R Offset

Sets the offset between left and right delay time (+/- 33%)

FB(Feedback)

Sets the feedback level

ΗP

Sets the cutoff frequency of the highpass filter in the feedback path

LP

Sets the cutoff frequency of the lowpass filter in the feedback path

Dry/Wet

<u>Reverse Delay</u>

Ċ	Reverse Delay					
Þ	1/8D	Offse	Offset: +20%			
ay	Dot ‡	PPong	XFB			
Dela	Time	L-R Offset	FB			
1000	1/8D	+20%	59 %			
Reverse	00	00	00			
ev		LP	Dry/Wet			
~	19.99 Hz	5.69 kHz	75 / 25			
≡	00	0 0	00			

Reverse delay effect

Delayed signal will be reversed.

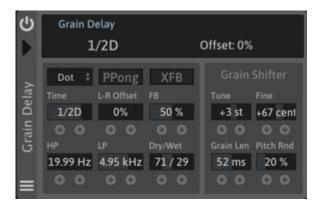
Please refer to the simple delay section for the parameter descriptions.

Mod Delay

5	Mod Del	ay			
3	1/4	D	Offset: +28%		
	Dot ‡	PPong	XFB	Tri ÷	
neidy	Time	L-R Offset	FB	Mod Rate	
ž	1/4D	+28%	61 %	27 %	
MINI	00	00	00	00	
N.	HP	LP	Dry/Wet	Mod Depth	
	19.99 Hz	6.11 kHz	75/25	54 %	
	00	00	00	00	

Modulation delay effect The delay time can be modulated by internal LFO signal. **Modulation Waveform** Selects the waveform of modulation signal **Mod Rate** Sets the modulation speed **Mod Depth** Sets the modulation depth

Grain Delay



Grain Pitch Shift Delay

Delayed signal can be pitch shifted by granular base pitch shifter

Tune

Sets the pitch shift value +/- 12 semitones

Fine

Sets the pitch shift value +/- 100 cents

Grain Length

Sets the grain length

Pitch Rnd

Sets the randomness level of pitch shift

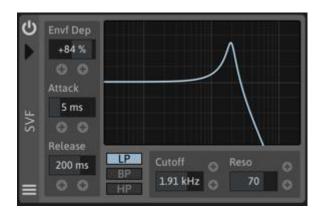
Lofi Delay

С	Lofi Dela		0//	01/	
2	1/8	0	Offset: 0%		
	Dot ‡	PPong	XFB	Model ‡	
ay	Time	L-R Offset	FB	Bit Depth	
Lofi Delay	1/8D	0%	78 %	8 Bit	
-u	00	00	00	00	
3		LP	Dry/Wet	LP	
	19.99 Hz	8 kHz	68/32	5.95 kHz	
=	00	00	00	00	

Lofi Delay effect Delayed signal can be bit crushed Lofi Mode Selects the lofi mode Bit Depth Sets the bit depth LP

Sets the cutoff frequency of lowpass filter.

This LP is located after the bit crusher.



Attack

SVF

Sets the attack time of the envelope follower

Release

Sets the release time of the envelope follower

LP/BP/HP

Selects the filter type

State Variable Filter effect

The filter has 3 types(LP, BP, HP) and has own envelope filter unit. The envelope follower will be used for modulation the cutoff modulation.

Envf Depth

Sets the modulation depth of envelope follower > filter cutoff

Cutoff

Sets the cutoff frequency

Reso

Sets the resonance level

Formant Filter



Formant Filter effect **Formant Character(1, 2, 3)** Selects the formant character **Vowel** Sets the vowel(A, E, I, O, U) **Smooth** Sets the smoothness of vowel changes

Gain

Sets the gain level

Dry/Wet

Sets the dry/wet balance

3Band EQ



Gain

Sets the gain level of each band

3 Band EQ effect

HP

Sets the cutoff frequency of the highpass filter **LP**

Sets the cutoff frequency of the lowpass filter

Freq

Sets the frequency of each band

Comb Filter



Comb Filter effect **Mod Rate** Sets the modulation speed of internal LFO **Mod Depth** Sets the modulation depth **Delay** Sets the delay time

Feedback

Sets the feedback level

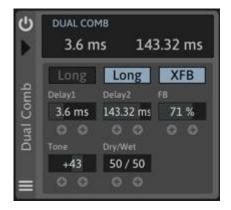
Stereo

Controls the stereo width

Mix

Controls the stereo width

Dual Comb Filter



2 comb filters are chained in series

Long

If this button is active, delay time of comb filter will become longer

XFB(Cross Feedback)

Toggles cross feed back on/off

Delay1/2

Sets the delay time of comb filter unit1/2

Feedback

Sets the feedback level

Tone

Controls the tone control filter

Dry/Wet

<u>Chorus</u>



Chorus effect

Rate

Sets the modulation speed

Depth

Sets the modulation depth

L-R Mix

Sets the mix level of left and right signal. This value will affect of stereo width.

Mix

Sets the mix level

Flanger



Flanger effect **Mod Rate** Sets the modulation speed **Mod Depth** Sets the modulation depth **Mod Offset** Sets the offset of modulation

FB

Sets the feedback level

Stereo

Controls the stereo width

Mix

Sets the mix level

<u>Phaser</u>



Phaser effect

Mod Rate

Sets the modulation speed

Center

Sets the center frequency of the notch filters

Mod Depth

Sets the modulation depth

Feedback

Sets the feedback level

Stereo

Controls the stereo width

Mix

Sets the mix level

Tremolo/Panner



Tremolo/Auto Pan effect **Mod Waveform(Sine, Tri, Saw)** Selects the modulation waveform **Sync Mode(Free, Note, Triplet, Dotted)** Selects the sync mode for modulation speed **Mod Rate** Sets the modulation speed

Mod Depth

Sets the modulation depth

Phase

Controls the phase offset between left and right modulation signal. When this value is 50%, the effect will become auto panner.

Shape

Controls the shape of modulation signal

Start Position

Adjust the start position of the modulation signal

Frequency Shifter

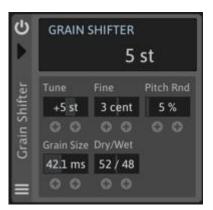


Frequency shifter effect
Freq
Sets the frequency shift amount
NSB
Controls the mix level of the negative side-band signal
Gain
Sets the gain level

Dry/Wet

Adjusts the dry/wet balance

Grain Shifter



Granular base pitch shifter **Tune** Sets the pitch shift value +/- 12 semitones **Fine** Sets the pitch shift value +/- 100 cents **Pitch Rnd** Adds the randomness to the pitch shifter

Grain Length

Sets the grain length

Dry/Wet

<u>Lofi</u>



Lofi effect (Bit Crusher + Re-sampler) **Mode(1, 2, 3)** Selects the mode of bit crusher **Sample Rate** Sets the sampling rate of re-sampler **Bit Depth** Sets the bit depth of bit crusher

Quality

Sets the sound quality of bit crusher

ΗP

Sets the cutoff frequency of highpass filter

LP

Sets the cutoff frequency of lowpass filter

<u>Clipper</u>



Clipping effect

Туре

Selects the clipping type (Hard, Soft, Cubic, Sine)

Threshold

Sets the threshold level. Signal above this level will be clipped

Out Gain

Sets the output gain level

Dry/Wet

OD/Dist(Over Drive/ Distortion)



Over Drive/Distortion effect

OD/Dist

Selects the mode

Drive

Sets the drive level

Pre Filter

Controls the pre filter

Post Filter

Controls the post filter

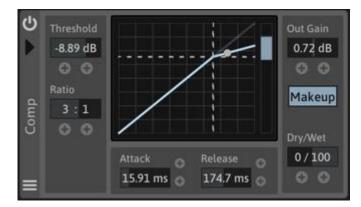
Out Gain

Sets the output gain level

Dry/Wet

Adjusts the dry/wet balance

Compressor



Compressor effect.

Threshold

Sets the threshold level. Signal above this level will be compressed

Ratio

Sets the compression ratio. Incoming signal will be compressed according to this value.

Out Gain

Sets the output gain

Makeup

If this button is active, lost gain level will be corrected

Attack

Sets the attack time

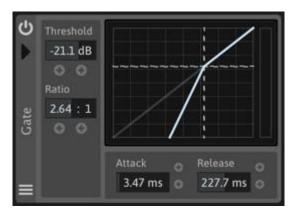
Release

Sets the release time

Dry/Wet

Adjusts the dry/wet balance

<u>Gate</u>



Gate effect

Threshold

Sets the threshold level. Signal above this level will be suppressed.

Ratio

Sets the suppression ratio. Incoming signal will be suppressed according to this value.

Attack

Sets the attack time

Release

Sets the release time

Env Shaper



Envelope Shaper effect.

Attack

(De)Emphasize attack portion of the signal

Sustain

(De)Emphasize sustain portion of the signal

Dry/Wet

<u>Reverb</u>



Reverb effect. **Decay** Sets the decay time **Decay** Sets the time of pre delay **Mod Rate** Sets the modulation speed

Mod Dep

Sets the modulation depth

ΗP

Sets the cutoff frequency of highpass filter

LP

Sets the cutoff frequency of lowpass filter

Gain

Sets the gain level

Dry/Wet

Adjusts the dry/wet balance

<u>Utility</u>



Utility effect

Gain

Sets the gain level

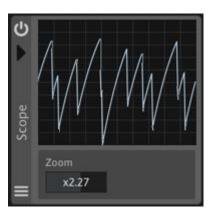
Pan

Controls the stereo position

Width

Controls the stereo width

<u>Oscilloscope</u>



Oscilloscope effect

Zoom Sets the zoom rate

Setting Panel

Mod Source		
C-Pressure Arp Mod1		
ModWheel Arp Mod2		

Mod Source

C-Pressure/Arp Mod Unit1

You can select Channel Pressure or Arpeggiator Mod Unit1 to use for a modulation source

Mod Wheel/Arp Mod Unit2

You can select Mod Wheel or Arpeggiator Mod Unit2 to use for a modulation source



Default Author Name for Preset

You can set default author name which will be used when saving a preset.

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