

HY-RPE2



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Plugin Format

VST2, VST3 and AUv3 for Windows and macOS

*AUv3 is only for Logic user

*Mac version is 64bit only

System Requirements

Win : Windows7 or higher

Mac : OSX 10.9 or higher

Registration

There are 2 ways to register the HY-RPE2.

1, Drag and drop

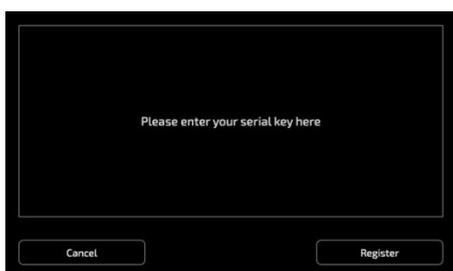
Drag and drop your **keyfile** onto the plugin window directly.

2, Copy&Paste

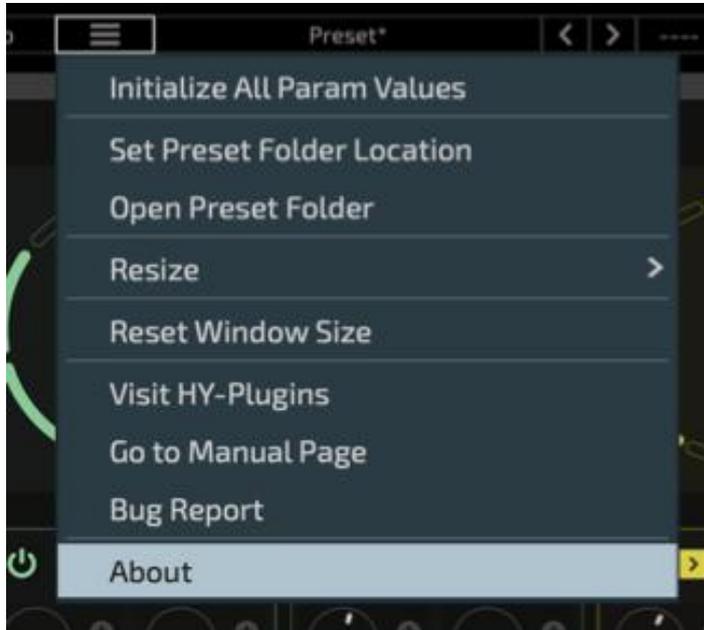
1. Open your **keyfile** with a text editor and copy all strings
2. Click "**Demo**" button > select "**Register**" > paste it > press "**Register**"



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



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

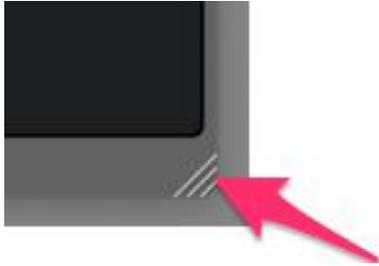
Resize: You can resize the plugin window with this menu instead of using the corner resizer

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.

Preset



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-RPE2 Preset*

Win : *C:\Users\user name\Documents\HY-Plugins\HY-RPE2 Preset*

MIDI Learn



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

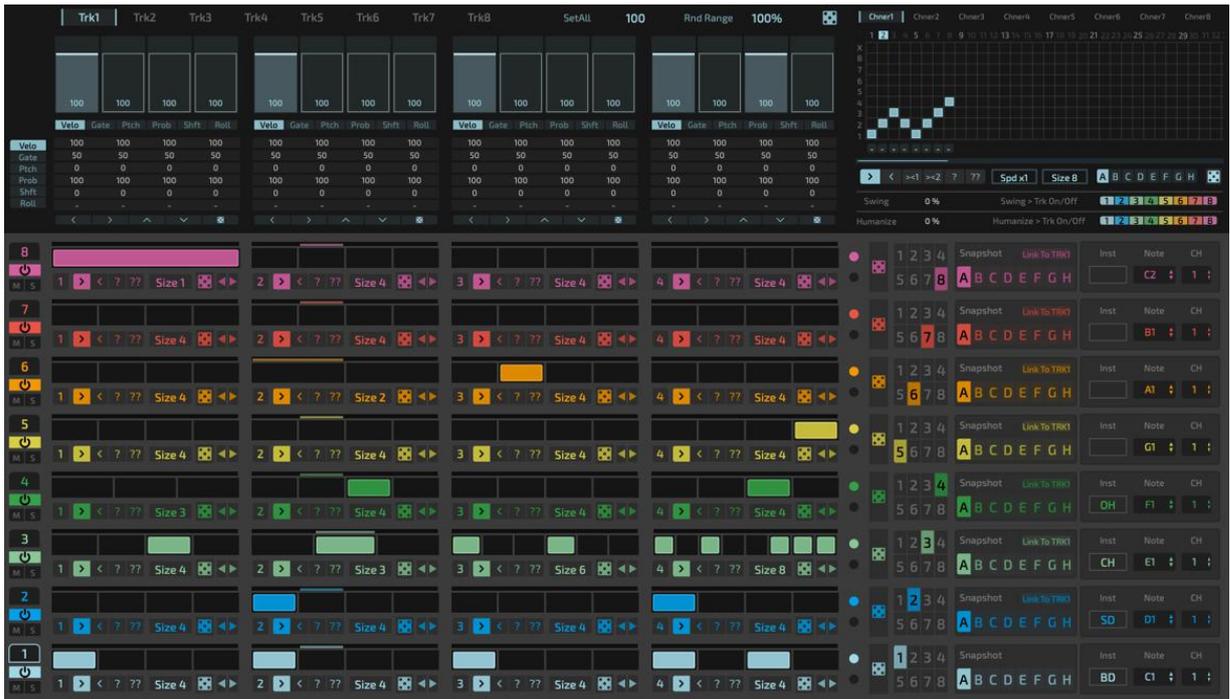
Then click "**Start MIDI Learn**" and move the controller.

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

Sequencer Engine

RPE2 has 2 different sequencer engines, Grid and Euclidean.

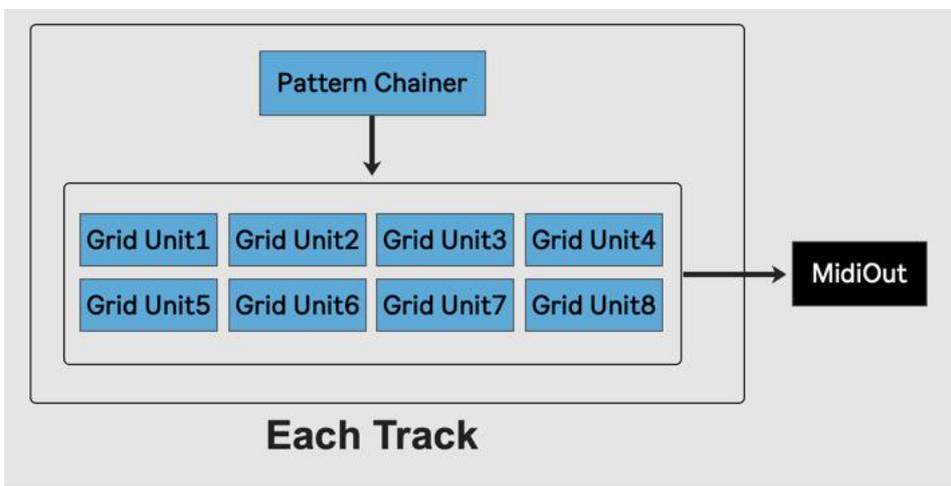
Grid Sequencer



This is an 8 track Grid Sequencer. Each track contains 8 grid blocks.

Playback order of the grid blocks will be controlled by the block chainer unit.

Signal Path



Track Section



Each track consists of 8 grid block units.

Track On/Off

If Track is off, MIDI note outputted of this track will be muted.

Playback Direction

- >: Forward, e.g. 1 > 2 > 3 > 4...
- <: Backward, e.g. 4 > 3 > 2 > 1....
- ? : Random, e.g. 2 > 1 > 1 > 3... (same step can be triggered multiple times)
- ?? : Random2, e.g. 3 > 1 > 2 > 4... (every step will be triggered once in random order)

Step Size

Sets the step size of each grid block (1~8)

Dice Button

Left click = Randomizes the step on/off states, Right click = initializes the step states

Arrow Button

Shifts the grid states left/right

Page Button

Changes the page (grid block 1-4 / 5-8)

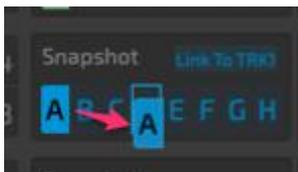
Master Chainer

Selects the master chainer unit for this track

Pattern Snapshot

You can create 8 pattern snapshots per track.

You can copy a snapshot via drag and drop to another snapshot button as illustrated below.



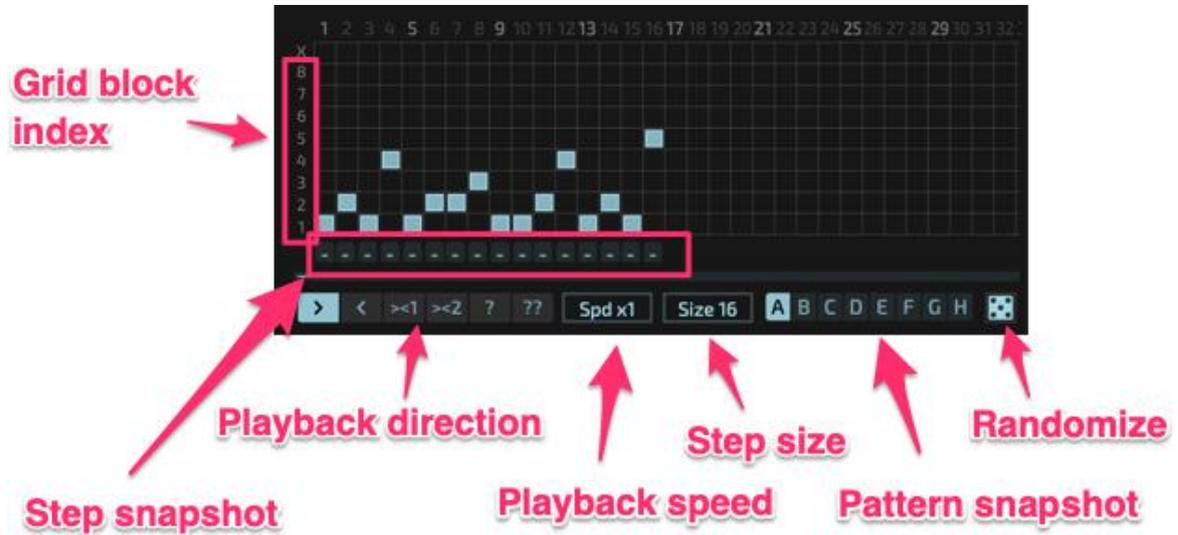
Track MIDI Note

Output MIDI notes of this track

Track MIDI Channel

Output MIDI channel for this track

Block Chainer



Block chainer is a sequencer for controlling the playback chain order of grid blocks.

There are 8 block chainer units available.

Playback Direction

- >: Forward, e.g. 1 > 2 > 3 > 4...
- <: Backward, e.g. 4 > 3 > 2 > 1....
- ><1: For/Back1, e.g. 1 > 2 > 3 > 4 > 3 > 2 > 1 > 2...
- ><2: For/Back2, e.g. 1 > 2 > 3 > 4 > 4 > 3 > 2 > 1 > 1 > 2...
- ?: Random, e.g. 2 > 1 > 1 > 3... (same step can be triggered multiple times)
- ??: Random2, e.g. 3 > 1 > 2 > 4... (every step will be triggered once in random order)

Playback Speed

/4 ~ x4

Step Size

Sets the step size of the chainer unit (2~128)

Pattern Snapshot

You can create 8 pattern snapshots per track.

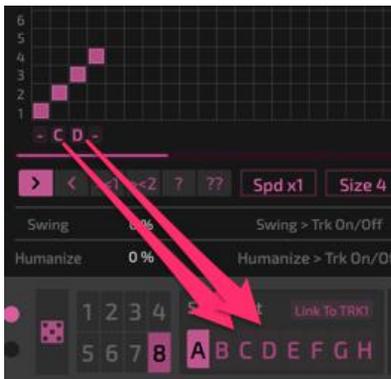
Randomize Step states

You can create 8 pattern snapshots per track.

Step Snapshot

You can set a different track snapshot per step.

E.g.

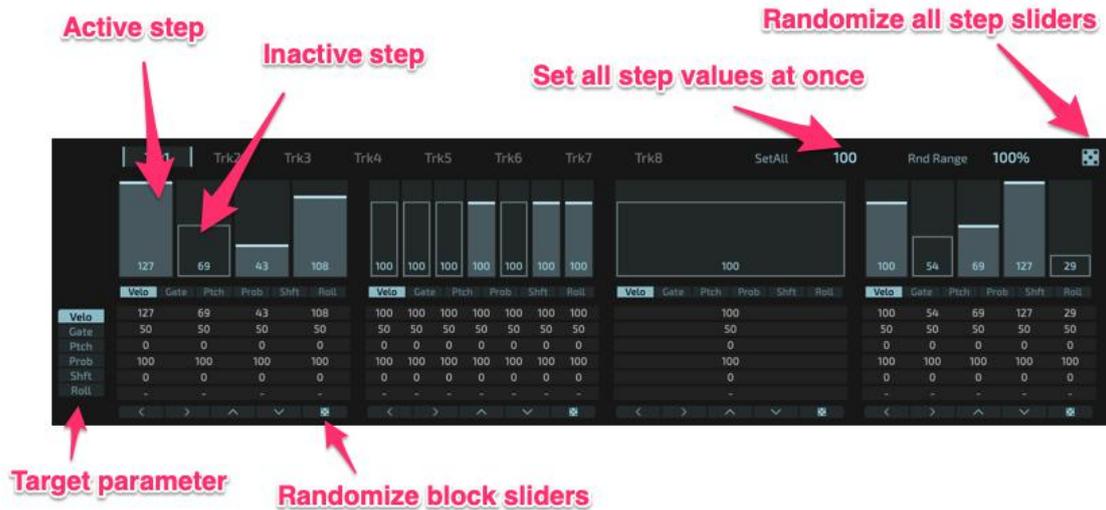


If you set the chainer as illustrated above, the grid blocks will be triggered as such:

Block1(snapshot A) > Block2(snapshot C) > Block3(snapshot D) > Block4(snapshot A)

If a step snapshot is not specified for a certain block, the current active step will be triggered for that step, in this case, the step snapshot of step 1 and 4 are not specified, thus snapshot A will be triggered for steps 1 and 4. The step snapshot for step 3 and 4 are specified, so the corresponding snapshot will be triggered for that step.

Step Slider



You can set velocity, gate, probability, timing shift and roll count per step.

- Velocity: Velocity level (0 ~ 127)
- Gate: Gate factor (0 ~ 100%)
- Pitch: Pitch shift (+/- 24st)
- Probability: Trigger probability (0 ~ 100%)
- Shift: Timing shift
- Roll: Step roll count (0 ~ 8)

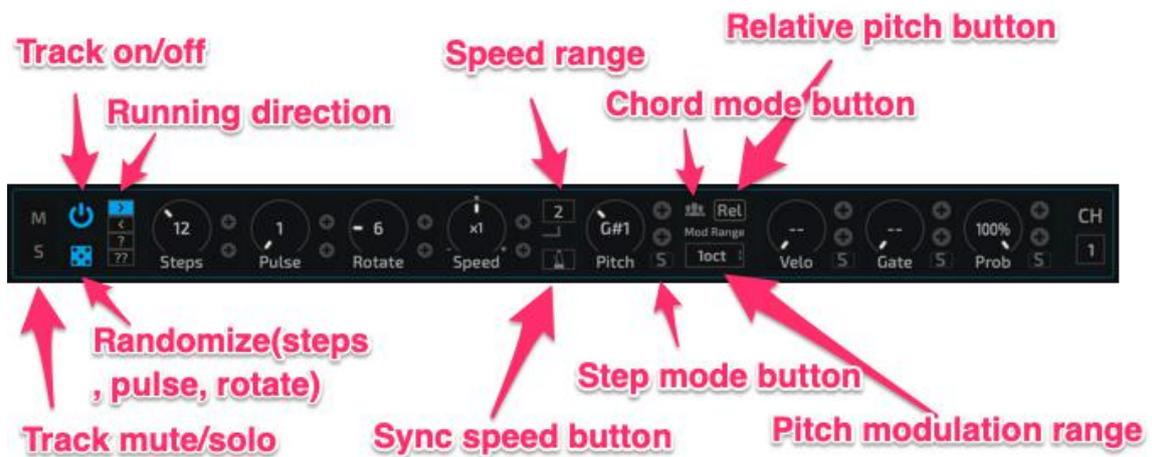
You can toggle grid on/off by right clicking each slider.

Euclidean Sequencer



This is an 8-track Euclidean Sequencer. You can set the step size, pulse, rotation, running speed, velocity, gate, and probability per sequencer unit. And you also can modulate these parameters by LFO/Sample&Hold and Macro controllers.

Unit Panel



Steps, Pulse and Rotate



In the case to the left picture, step size is 4, pulse count is 1 and rotation is 0.

Steps: total number of steps in the circle

Pulse: number of active step in the circle

Rotate: rotates the euclidean pattern

E.g.

In this case trigger pattern is like this

ON > OFF > OFF > OFF

If we set the Rotate parameter to 1, the pattern be as follows:

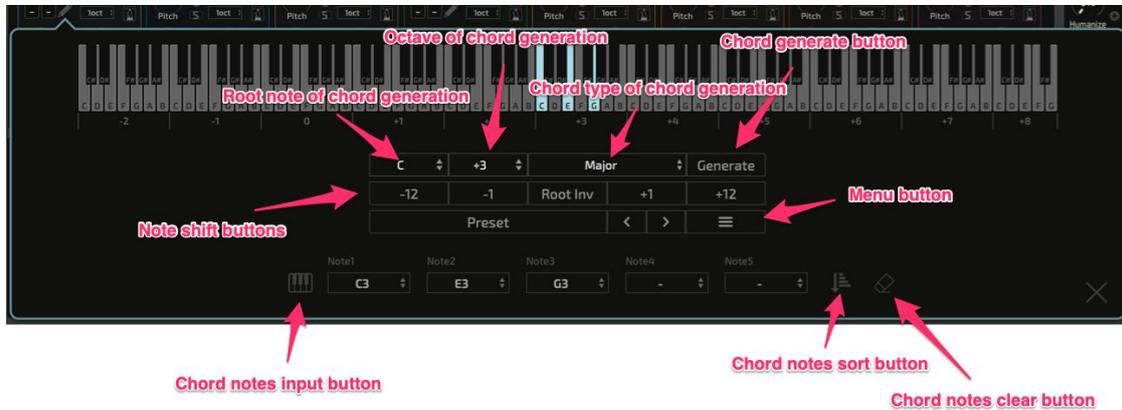
OFF > ON > OFF > OFF

Chord Mode



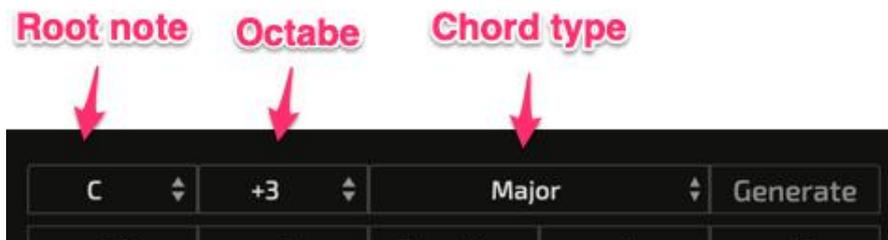
When turning on the Chord Mode button for a specific track, the track will enter Chord Mode. In this mode, you can trigger a max of 5 notes at one time.

Chord Edit Panel



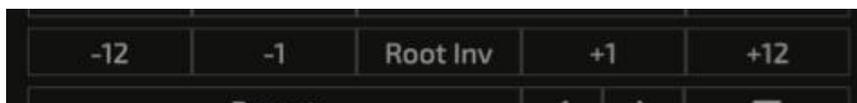
You can edit chord notes using the Chord Edit Panel.

Chord Generator



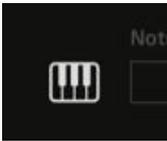
You can also generate chord notes by pressing "Generate" button.

Chord Note Shift Buttons



- -12: Shifts the current chord notes minus one octave
- -1: Shifts the current chord notes minus one semitone
- Root Inv: Makes the current root note one octave higher
- +1: Shifts the current chord notes up one semitone
- +12: Shifts the current chord notes up one octave

Chord Notes Input



You can set chord notes using a MIDI keyboard.

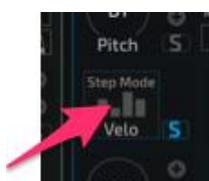
When turning the keyboard button ON as picture above, you can then press your MIDI keyboard keys to generate notes.

Step Mode



The Pitch, Velocity, Gate, Probability parameters also have “S” function button. When this is set to ON, these parameters will enter Step Mode. With this mode, you can set parameter values for each step.

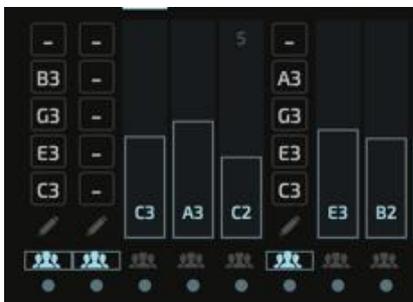
Edit Panel



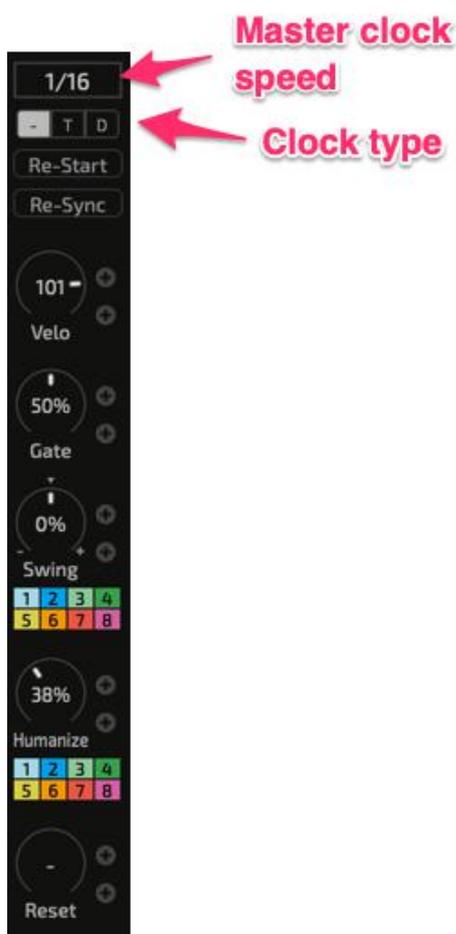
When the Step Mode is engaged, you can also click the Step Mode icon as pictured to the left. The Step Edit panel will now appear at the bottom of the plugin window.



In Step Mode, you can set different parameter values for step. Thus you can create a melody pattern like the one below.



Control Section



Master Clock

Sets the Master Clock speed. Each euclidean sequencer unit has it's own clock generator, so they can run independent of the Master Clock or Local Clock.

Clock Type

- : Normal note (1/4, 1/8, 1/16...)
- T : Triplet note (1/4T, 1/8T, 1/16T...)
- D : Dotted note (1/4D, 1/8D, 1/16D...)

Re-Start

Force re-starts the sequencer's clocks

Re-Sync

Locks the sequencer's clocks to the Host's (DAW's) song position.

Master Velocity and Gate

Each euclidean unit has own velocity and gate controls, so they can use either the master value or local value

Swing

Swing amount (-100 ~ +100%)

You can set the Swing amount here. You also have control over which Euclidean units are influenced by the swing amount by toggling the small colored numbers representing each unit On/Off.

Humanize

Humanize amount (0 ~ 100%)

This adds a small randomness to the Velocity, Gate and Trigger timing values.

You also have control over which Euclidean units are influenced by the Humanize amount by toggling the small colored numbers representing each unit On/Off.

Reset

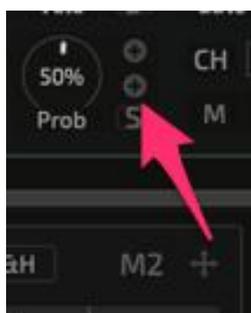
This sets the time before the sequencer restarts the sequence from the first step.

Modulation Source



There are 4 LFO/Sample&Hold units, 4 Macro knobs and 4 Macro buttons are available. These are used for the parameter modulation.

Modulation Assign



Modulatable parameters have small circle icons beside each parameter. Each modulation source has own cross icon which can be drag and dropped to a destination parameter as indicated by the small circle icons.

Once you make a modulation assignment, the small circle will appear as follows:

**Modulation
source**



**Modulation
depth**

The number indicates the modulation source for this assignment. You can hold the left mouse button down and move the mouse to assign the modulation depth. This is indicated by the white line filling part of the circle. You can also create or clear a modulation assignment by right-clicking the small circle icon and selecting "Clear".

LFO/Sample&Hold

LFO



Sync Mode

- Free: 0.01 to 20Hz
- Note: 16/1 to 1/64
- Triplet: 16/1T to 1/64
- Dotted: 16/1D to 1/64D

Buttons

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

Invert: Inverts the LFO outputs

Square: Squares the LFO outputs

Saturate: Saturates the LFO outputs

Knobs

Rate: Sets the speed of the LFO unit

Phase: Sets the start phase position of the LFO unit

Offset: Sets the offset level

Jitter: Mixing white noise into LFO outputs

Level: Sets the output level

Sample&Hold



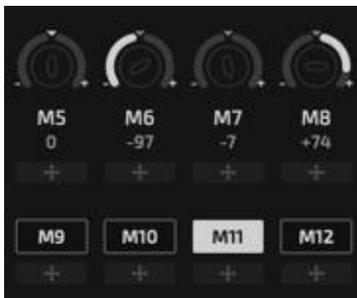
Sample&Hold unit has an internal noise generator.
It captures the noise value and outputs holding values.
The capturing interval is defined by the Rate knob.

Mode1/Mode2

- Mode1: No interpolation between the captured values
- Mode2: Linear interpolation between the captured values

Smooth: Sets the smoothness of the output signal

Macro



There are 4 macro knobs and macro buttons available.

The output signal of macro knob is -1 ~ +1.

The output signal of macro button is 0 or 1.

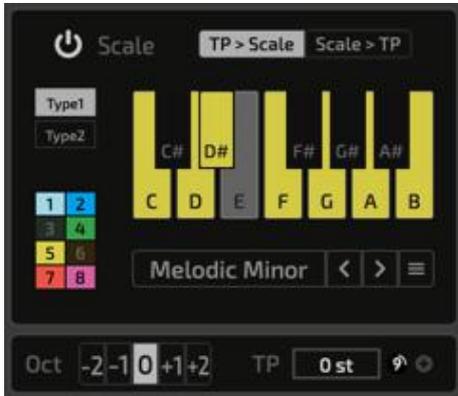
Macro Button

Macro buttons have two modes. You can change the mode by Right-Clicking their text.

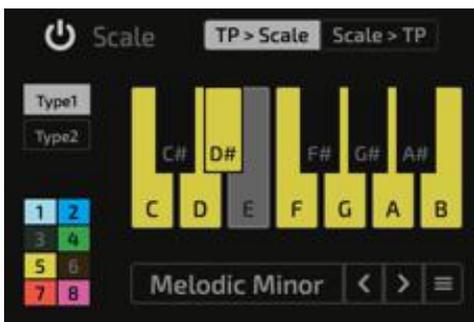


- Momentary: As long as this is pressed down, it will output signal value 1, otherwise 0.
- Toggle: Every time the button is pressed, its state changes.

Scale FX, Global Octave and Transpose



Scale FX



If the Scale FX is active, the incoming MIDI notes can be re-mapped based on the FX setting. There are 2 types of Scale FX available.

Power Button

Turns the Scale FX On/Off

“TP > Scale” / “Scale > TP”

Processes the order of Scale FX and Transpose function.

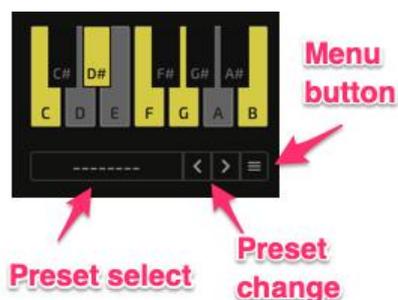
If the Transpose is set to precede the Scale FX, then the result will always be in scale.

On the other hand, If the transpose is set to follow the Scale FX, the result can be outside the scale notes.

Scale FX Type1 / Type2

You can change the Scale FX to Type1/Type2 with this button.

Type1



In Scale Type1, the incoming MIDI notes will be re-mapped to the nearest active note. For example in the case to the left, the MIDI note C# will be mapped to C, D will be mapped to D#, E will be mapped to F and so on...

Type2



In Scale Type2, the incoming MIDI notes will be replaced based on the FX note setting. In the case to the left, MIDI note C will be replaced by G, C# will be muted, D will be replaced by F, E will be replaced with B and so on...

Global Octave and Transpose



Oct

Increases or decreases the octave of the MIDI notes +/- 2 octaves.

TP

Transpose the MIDI notes +/- 24 semitones

MIDI Recorder

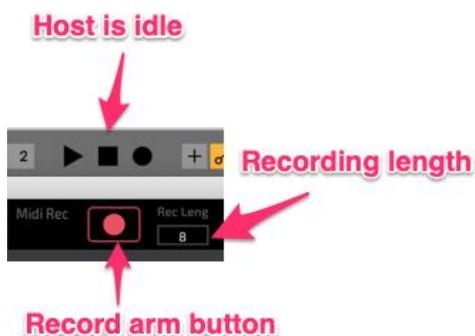


You can record the sequencer output and create MIDI files with the MIDI recorder.

After recording, you can drag & drop the resulting MIDI file to your host MIDI/instrument track.

This recorder captures multi-track recordings, so it captures both the master MIDI output(CH1) and each track output(CH2~9).

Recording Preparation



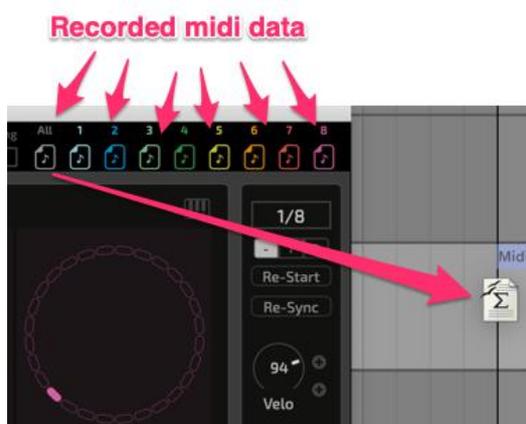
1, Make sure the host sequencer is idle

2, Sets the recording bar length

3, Activate the Arm Recording button

The recording will start as soon as the host clock is started.

Recorded File



After the recording is complete, file icons will appear as pictured to the left. These icons represent recorded midi data.

You can drag & drop them to your host's MIDI/instrument track as individual MIDI files.

Control Commands for Euclidean Sequencer

- **Track Mute:** Mutes the corresponding track output
- **Track Solo:** Mutes all track output except this track

Global Mute and Thru



Mute

When turning the mute button On, the plugin's output will be muted

MIDI Thru

When turning this On, the incoming MIDI input will be mixed with the plugin's MIDI output.

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HY-RPE2

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