

R_MEM USER GUIDE

Version 1.0

www.ineardisplay.com

contact : support@ineardisplay.com



Thank you for using R_Mem. This basic overview should help you to get familiar with all its functions.

R_Mem is a granulator effect with ring-modulation, multimode filter and delay added to the signal path to help you shape a completely different sound out of an input signal. To provide more sound mangling options, it comes with a state morpher with randomizers as well as a modulation matrix driven by 4 LFOs.

PARAMETERS :

Grain Density :



This parameter, located at the top of the interface, sets the grain density for the current slot. To select a density just click on the display and select the desired setting in the popup menu.

2x8 corresponds to 8 grains per stereo channel (so a total of 16 grains). A larger number of grains will result in more interesting texture at the expense of cpu usage. You can set a different grain density for each state slot. This setting is not affected by the randomizers.

Base Controls :



Size : grain size in milliseconds (10 to 200 ms)

Ratio : playback frequency of the grains (0 to 2). 1 is the normal playback frequency. 2 will play the grains at twice the base frequency (1 octave higher). At 0.5, the grains will play at half speed. A setting of 0 will stop the playback of the grains.

Repeats : the number of times the current sampled grain is repeated (1 to 128)

Level Jitter / Size Jitter / Ratio Jitter : these control the amount of random values sent to the level, size and ratio of the grains. Unlike the LFOs, it affects each individual grain. The random values are relative to the current base value. The new values are applied at each grain start.

Jitter Rate : this parameter controls the rate at which jitter values are generated (0 Hz to 440 Hz)

Window : the shape of the amplitude envelope applied to each grain (None, Triangular, Hanning)

Frequency : the frequency of the ring-modulator oscillator (1 to 3000 Hz)

Ring Amount : ring-modulation depth

Time : delay time (1 to 1000 Ms)

Feedback : delay feedback

Delay Mix : the amount of delayed signal

Cutoff : filter cutoff frequency (20 to 11000 Hz)

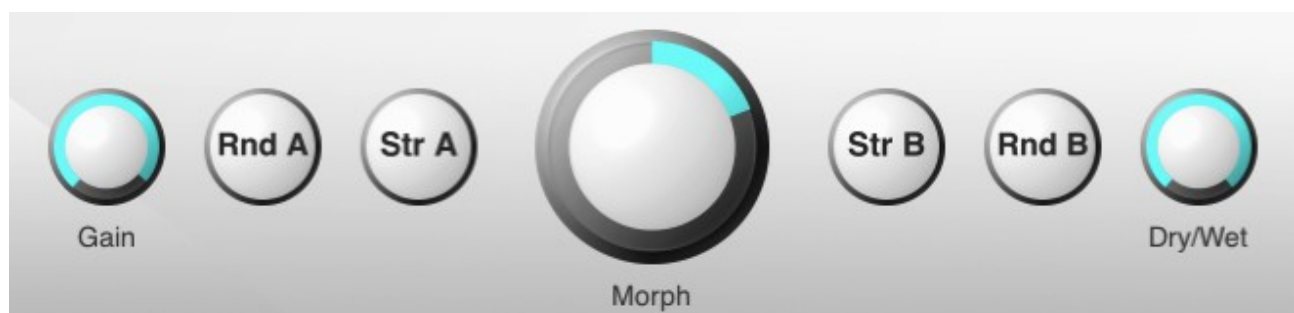
Resonance : filter resonance

Filter : the filter type (no filter, lowpass, highpass, bandpass, notch)

Freeze : switch to keep looping the current buffered signal



Morph Section :



Gain : global gain of the grains (-70 to +6 dB)

Dry/Wet : processed and input signal mix

Morph : morph between the state stored in slot A and the state stored in slot B

Str A / Str B : store the current state into slot A or B

Rnd A / Rnd B : set slot A or B state to random values (this erases the currently stored state)

Notes about the Morphing system :

- *Moving the morph knob will retrigger the last stored values in each slot, so if you want to keep the current state, remember to store it in one of the slots before moving the knob.*
- *Clicking on Str A / Str B will write the state of all parameters to the desired slot, but clicking on Rnd A / Rnd B will not affect some parameters : grain density, gain, dry/wet and freeze parameters will be set to their last stored state.*
- *Randomizing one slot will automatically trigger the morphing to recalculate the new interpolated values, so if you randomize a slot, it will also recall the last stored state for the other slot, and the current settings will be lost if not stored before randomizing.*

LFO section :



The following applies for all 4 LFOs :

LFO Wave : set the LFO waveform type (Sine, Square, Saw Up, Saw Down, Triangle, Sample and Hold)

LFO Rate : the frequency of the LFO (0 to 40 Hz)

Modulation Matrix :

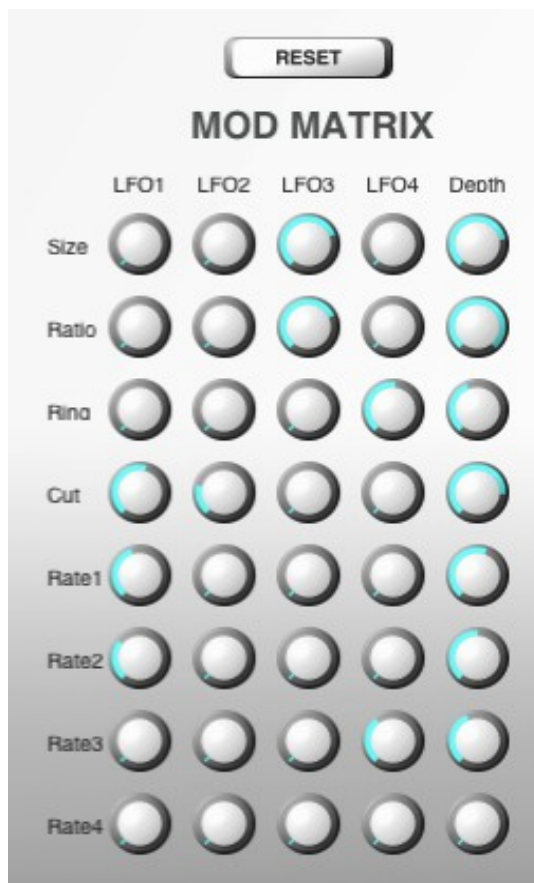
Reset : set all modulation matrix knobs to 0

Modulation destinations :

grain size, grain ratio, ring-modulation frequency, filter cutoff, LFO1 rate, LFO2 rate, LFO3 rate, LFO4 rate

How it works :

The depth knob controls the overall modulation depth : if set to 0, the LFOs will have no impact even if their depths are up. The outputs of each LFO are added together according to their respective depth. To prevent values from going out of their boundaries, when more than one LFO is in use, the global output is divided by the number of active LFOs, so you may need to turn the depths up to reach the desired modulation.



MIDI FUNCTIONS :

R_Mem can respond to MIDI program changes and MIDI CCs. Note that it receives MIDI messages from any channel.

To assign a MIDI CC to a parameter, right click on the desired knob/button. A menu will pop-up : select “MIDI learn”, move the control you want to attach on your MIDI interface, and that's it. The parameter will now react to the assigned CC messages. To remove MIDI mapping for a parameter, right click again on that parameter, and in the pop-up menu choose “MIDI unlearn”.

Note that CC mappings will be saved with the plugin state/preset. That way, when you'll recall your project, your previous mappings will still be active.

If the effect is on an audio track, you may need to send MIDI to that track for the previous functions to work : please refer to your DAW documentation.

PRESETS :

You can switch between presets of the currently loaded bank directly from the bottom of the interface. Meanwhile, preset management (renaming/storing/importing/exporting) is currently delegated to the host using standard VST fxp and fxb format or AU preset format : please refer to your DAW documentation.