

multi FX collection

User Manual version 1.0.5

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Rama FX Suite is a powerful and versatile effects collection. Built around flexibility, modularity, and ease of use, it offers a complete toolbox of 16 high-quality effects — from modulation and filtering to distortion, dynamics, and spacious time-based processing.

The three effect slots* are freely interchangeable. When you switch an effect to another type, its individual modulation settings are preserved, making it easy to compare or reorganize effect chains.

Modulation is a core design element: every effect includes dedicated modulation controls.

The integrated Control Pad allows you to shape two independent parameters in real time, as well as keep an eye on the values of the CV inputs coming from the rear panel.

*"the Ramans do everything in threes." - Arthur C. Clarke

Included Effects

Modulation

- Chorus
- Phaser
- Flanger
- Pitch Shifter
- Frequency Shifter
- Tremolo / Pan

Filter & EQ

- Filter (10 types)
- Parametric EQ
- Isolator EQ

Distortion & Dynamics

- Compressor
- Saturation
- Distortion
- Overdrive (3 types)
- BitCrush

Time-Based

- Delay
- Reverb (21 types)



Panel overview



The Rama FX Suite front panel contains the following sections:

- 1. Patch Selector for loading and saving patches
- 2. Control Pad
- 3. FX Panels / FX Modulations
- 4. Master

Loading and saving patches

Loading and saving patches is done in the same way as with any other internal Reason device. See the "Sounds and Patches" chapter in the Reason/Reason Rack Plugin Operation Manual pdf for details.

As with all Rack Extensions, you can find the included patches by clicking "Rack Extensions" in the Reason browser, navigating to the "Rama FX Suite" folder and opening it.



Control Pad

The Control Pad is an XY pad on which you can draw complex modulations with the mouse in two dimensions. These movements can be automated.

Important: if you want to record your movement on Control Pad, you need to create a track for it in the sequencer (Edit menu or right-click and choose "create track")!



You can define three control pads (controller pairs), and easily switch among them with **P1**, **P2**, **P3** radio buttons.

Please note that the modulator values are always summed with the CV input values coming from the back panel. The actual real (merged) values are shown as a dim little ball on the Pad screen.





Spring switches: there is a small spring switch to the left of each controller field. If you turn it on, the controller will spring back to the O position when you release the mouse (similar to how the pitch bend controller works).



FX Panels

The order of the effects can be freely changed. To rearrange them, click on the effect ID (FX1, FX2, FX3), drag the mouse to the field of the other effect, then release and that's it: all parameters are swapped. To copy the settings instead of swapping them, Shift- or Alt-click.



Chorus

Stereo effect for creating a thicker, fatter and wider sound. It adds richness, depth, shimmer, and width to the audio signal.



Rate: modulation rate in Hz

Depth: depth of delay (pitch) modulation

Voices: number of chorus voices. Value range is 1 to 4

Mod: LFO waveform, square or sine

Amount: mix between dry and wet signal

Phaser

Vintage phaser effect with 4 poles



Rate: modulation rate in Hz

Depth: depth of center frequency modulation.

Feedback: add resonant peaks between the notches

Phase: phase offset between left and right modulation

Spread: offset between left and right center frequencies

Center: center frequency

Amount: mix between dry and wet signal



Flanger

Flanger effect based on a modulated short delay line



Rate: modulation rate in Hz

Depth: delay modulation depth

Feedback: add resonant peaks

Phase: phase offset between left and right modulation

Delay: minimum delay

Amount: mix between dry and wet signal

Pitch Shifter

Pitch shifter is a classic pitch modulation device, great for octave or harmonizer effects.

The left and right channels can be adjusted independently, in semitone and fine tune (1/100 semitone) steps.

The numeric field is not just a display. If you click on it and move the mouse up and down, you can change the pitch in



semitone steps. If you hold down the shift key while clicking, you can change the value in fine tune steps.

Latency: can be fast, medium or slow. Here you determine how accurate the pitch analysis should be. The analysis is made continuously on dynamic snippets of the input audio. The more complex the input audio, the longer the snippets have to be for a correct pitch analysis. The detection time of these audio snippets is selected with this switch.

Mix: dry / wet mix

Frequency Shifter

Bode frequency shifter: It shifts all frequencies in an input signal by the same frequency amount rather than preserving harmonic ratios like a pitch shifter. This results in unique, rich, and complex harmonic changes.



Range: frequency shift in Hertz. Low values result in barber's pole phasing when Mix is set to 50%.

Depth: linear scaling of shift amount, can also be inverted. Useful as a mod destination.

Feedback: add feedback to add overtones or increase depth of phasing

Balance: fade between + direction (100%) to the opposite direction through ring modulation (0%).

Mix: dry / wet mix

Mode: shift direction for left and right channels. Values: up, down, up/down, down/up.



Tremolo / Pan

The tremolo effect is a rhythmic volume change in audio, making the sound swell and fade up and down. Auto-pan is similar, but the sound moves periodically between the left and right speakers.



Rate: modulation rate in Hz

Depth: adjust the amplitude modulation depth

Spread: adjust the phase of the right channel relative to the left, to create auto-pan effects

Attack: adjust the attack length as a percentage of the 'on' time

Release: adjust the release length as a percentage of the 'off' time

Symmetry: adjust the release length as a percentage of the 'off' time

Filter

A filter effect similar to the per-voice filter modules of synthesizers, with the following 10 types:

LP12: 12 dB/oct lowpass

LP24: 24 dB/oct lowpass

LP+: Brickwall lowpass (no resonance)

BP6: Bandpass with 6 dB/oct

HP12: 12 dB/oct highpass

HP+: Brickwall highpass (no resonance)

Comb+: Comb filter

Comb-: Comb filter with inverted polarity

SVF: State Variable filter

Wah: Wah-wah pedal



Cutoff: cutoff frequency.

Resonance: strength of resonant peak at cutoff frequency

SVF LP-HP: fade between lowpass and highpass response in SVF filter mode

Smooth: limit speed of cutoff changes for a smoother sound



Parametric EQ

Baxandall type equalizer with parametric middle band



Low Gain: boosts or cuts low frequencies, low shelf is at 160 Hz

Mid Gain: middle frequency boost or cut.

Mid Freq: middle center frequency

Mid Width: middle bell bandwidth

High Gain: boosts or cuts high frequencies, high shelf is at 4 kHz

Output: level trim to compensate for any gain change due to equalization

Isolator EQ

DJ-style equalizer that can be used to eliminate the low mid or high frequencies.



Low: level of low frequencies

Mid: level of mid frequencies

High: level of high frequencies

Low Freq: crossover frequency between low and mid bands

High Freq: crossover frequency between mid and high bands

Compressor

Punchy compressor effect for controlling dynamic range and shaping transients.



Threshold: audio level above which compression is applied

Attack: time it takes for gain reduction to increase when the signal level rises.

Release: time it takes for gain reduction to decrease when the signal level falls

Gain: adjust the output volume to compensate for any loss in level due to compression

Ratio: amount of gain reduction to apply

Dry Mix: mixes compressor output with input signal

Detector modes:

- Punch: follow envelope below threshold, which increases attack punch as the envelope has further to come back up
- Fast: normal envelope detection with fast attack and release
- Smooth: release slows down as signal falls below threshold



Saturation

Gradual distortion of the signal.



Drive: increases the input level resulting in more saturation and more level

Low Drive: increase the distortion of low frequencies

High Drive: increase the distortion of high frequencies

High Bypass: crossover to allow high frequencies through unprocessed

Distortion

Stereo distortion and overdrive effect.



Drive: input gain to the distortion

Rectify: degree to which negative signal peaks are converted to positive

High Cut: lowpass filter before distortion

Low Cut: highpass filter before distortion

Wet: level of the effected signal

Dry: level of the unprocessed input signal sent to the output

Tube mode: soft clipping with DC bias

Transistor mode: hard clipping

Overdrive

Stereo overdrive effect with algorithms taken from the Scream 4 device in Reason.



Drive: increase input gain to add distortion

Tone: adjust tone (result depends on selected mode)

Presence: adjust high frequencies (result depends on selected mode)

Mode: choose from Overdrive, Scream or Fuzz emulations



BitCrush

Sample rate and bit depth reduction.



Sample Rate: downsampling rate.

Bit Depth: bit reduction

Jitter: random modulation of downsampling rate

Bias: offset to adjust the quietest audio that jumps from one bit level to the next

Amount: dry / wet mix

Delay

Stereo delay effect with adjustable feedback routing and left/right spread.



Time: Delay time

Sync: sets time parameter to absolute (0.01 - 4 sec) or quaternote beats.

Feedback: feedback from delay output to input to create multiple repeats

Ratio: negative values reduce the left channel delay, positive values reduce the right

channel delay

Damp: lowpass filter for progressive damping of each delay repeat

Amount: dry / wet mix

Feedback Mode: Stereo (normal mode), Cross (delay LR is swapped) and Ping-Pong (wide stereo)

Reverb

Algorithmic reverb with a range of types.



Time: length of reverb tail

Pre Delay: initial delay before reverb

Size: scale the size of the room

High Damp: progressive loss of high frequencies in reverb tail

Pitch Mod: pitch modulation within the reverb for a richer sound

Amount: dry / wet mix



Selectable reverb types:

- Gated
- Left to Right
- Vintage 80s I
- Vintage 80s II
- Small Room
- Medium Room
- Large Room
- Dense Room
- Garage
- Theater
- Hall
- Large Hall
- Dense Hall
- Chamber
- Stadium
- Taj Mahal
- Big Cave
- Space
- Plate
- Plate Fat
- Plate Reso

FX modulation

Each effect has three modulation options, with source, amount, and destination parameters. Click on the "FX MOD" button* to display the modulation view.



Each FX slot (FX1, FX2, FX3) has its own LFO that serves as a modulation source.

* Tip: shift- or alt-clicking on the switch will toggle the FX MOD switch on all three effects simultaneously.



Back Panel

Important: please keep in mind that CV connections are not stored in the patches! If you want to store CV connections between devices, put them in a Combinator device and save the Combi patch.

The back panel contains three sections: CV outputs, CV inputs and Audio.



1. Mod out

Macro outputs 1-4 are available here if you want to use the Control Pad with other devices. Please note that while Macro 1 and 2 are unipolar, Macro 3 and 4 are bipolar.

2. Modulation in

These inputs can receive external CV messages from other Reason devices. The values of these CVs are merged with the incoming MIDI CC values that the device receives.

3. Audio

These are the main stereo audio inputs and outputs.

Input L+R: if your input signal is in mono, connect only to the L (left) input.

Output L+R: stereo output of the device.



Credits

Andras Haasz: concept and UX design, programming, patch design

PinkNoise Studio: GUI design

Additional patch design:

Loque (LQ)

Tonicmint (TM)

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RAMA webpage:

https://www.reasonbanks.com/re_ramafx.html

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