

# FALMA

Designers note:

*FALMA is a random modulation pedal offering both tremolo and vibrato. To me unpredictable systems often appear more lifelike as the mind struggles to find patterns in their behavior. Random modulation therefor creates different associations and changes how we perceive its effect on audio. FALMA is not intended to replace your cyclical tremolo/vibrato but rather to be a tool for utilizing these concepts to produce different associations. This project was born from a desire to further investigate methods for random waveform generation. I've experimented with linear interpolation, accumulation and recursion to shape noise into what I think are pleasant modulation sources. Though the parameter names are the same, the waveforms of the modulators are different from those found in the DRAUME reverb pedal. Enjoy!*

## PARAMETERS

**CLK:** Digital signal processor system clock frequency. Sets the sampling rate and the modulation speed of the AM and FM functions. Low clock settings will produce background noise on the wet signal path that can be removed with the TONE parameter.

**TONE:** Low pass filter. Flat response at max down to a cut off frequency of 700 Hz at minimum.

**AM:** Random amplitude modulation/tremolo depth. The modulation source is a linearly interpolated noise stream which means that the system linearly fades between all random values. The knob offers two general speed options. By either turning the knob counterclockwise or clockwise a slow or fast modulation effect is applied. Zero depth at noon.

**FM:** Random frequency modulation/vibrato depth. The modulation source is a linearly interpolated noise stream which means that the system linearly fades between all random values. The knob offers two speed options. By either turning the knob counterclockwise or clockwise a slow or fast modulation is applied. Zero depth at noon.

**Footswitch:** This is your bypass switch. Holding the switch longer than 500 ms will only momentarily change its status.

## TECHNICAL SPECIFICATIONS

Input Impedance	1M $\Omega$
Output Impedance	<1k $\Omega$
Power supply	9 VDC center negative (normal BOSS/Ibanez/1Spot power supply) Does not support battery operation
Current Draw	100 mA
Dimensions	126 x 60 x 67 mm
Weight	290 g