

STEREO FALMA / BLOMAR

STEREO FALMA / BLOMAR is two pedals in one. FALMA is a random vibrato, tremolo and panning effect. BLOMAR is an octave and pitch shifting effect. Get either to get both. Only difference is the faceplate, either emphasizing the functionality of one or the other.

STEREO FALMA is an exploration of random modulation as a way to add life, context or history to a sound. Effects that may give impressions of instability, contamination or old age. Stereo expands the concept by allowing asynchronous modulation between the channels. Thus FALMA is now also a tool for adding stereo width.

STEREO BLOMAR is an exploration of pitch and ways to blend between different poles. Volumes vs probability vs interpolation. The pitch shifting effects are achieved through low latency granular synthesis. Every method of pitch shifting adds it's own kind of character. A granular approach can often sound metallic. This is counteracted through grain size and rate randomization which makes the effect more fluid and complex.

General functions:

EQ: Tone control. Low vs high frequency emphasis at min vs max. Flat response at noon. EQ is *not* regenerated with the FEED parameter (of BLOMAR).

VOL: Master volume. Unity gain at noon. Max gain is +16dB.

FM.HF: Fast random vibrato parameter. Can sound similar to tape warble at moderate settings or more synthetic, plasticity and fluttery when cranked. This parameter is unipolar, increasing in intensity from min to max.

FLM / BLMR: Chose between FALMA and BLOMAR. Only one of them is active at a time. Their specific functions are detailed further down.

II / Y: Toggle switch for input/output routing. For mono-to-mono and stereo-to-stereo operation the **II** mode should be used. **II** means that *left* input is routed to *left* output, and *right* input is routed to *right* output. For mono-to-stereo operation the **Y** mode should be used. **Y** means that *left* input is routed to both the *left* and *right* outputs. In the **Y** mode the input impedance is reduced to 500kΩ.

Foot switch: Relay based true bypass. Hold the switch for more than 500ms for momentary actuation.

Input/Output: The pedal is fitted with stereo (TRS) jacks for both input and output.

FALMA functions:

FM.LF: Slow random vibrato depth parameter. Imparts slow tonal drifting dipping into de-tuning when cranked. Turn ccw from noon for synchronous modulation of L/R channels. Turn cw from noon for asynchronous modulation. Asynchronous modulation can be used to add stereo width to your sound.

DEPTH: Random tremolo/panning depth. Turn ccw from noon for synchronous modulation of L/R channels. Turn cw from noon for asynchronous modulation. Asynchronous modulation can be used to add stereo width to your sound.

RATE: Random tremolo/panning speed. This parameter is unipolar, increasing in intensity from min to max. Ranges are: AM : [1.25 to 50 Hz] , PAN : [0 to 16 Hz] , SQ : [1.25 to 50 Hz]

AM / PAN / SQ: Select between 3 different tremolo algorithms. **AM** is a standard linear random tremolo function. **PAN** is a random linear panning function. **SQ** is a square wave random tremolo function.

In FALMA the vibrato effect is applied before the tremolo effect. This means that if you combine panning with asynchronous FM you will get flanging/chorus-like effects. Additionally the panning function can be stopped in its track by setting the RATE knob to minimum.

BLOMAR functions:

FEED: Octave/pitch shifter recursive feedback amount. Regenerating pitch shifting can widen, or add movement to the sound. Depending on the pitch setting you are able to produce runaway feedback at maximum. FEED does not regenerate the EQ parameter. When the pedal is in bypass the FEED parameter is minimized.

TIME: Octave/pitch shifter recursive feedback latency. Only adds latency to the feedback audio path. Ranges are: MX : [0 to 250ms] , PB : [0 to 250 ms] , PR [0 to 300 ms]. Note that the pitch shifting effect are time based thus there will always be some latency to the feedback path. The ranges indicate the amount of *additionally added* latency.

PITCH: Octave/pitch shifting parameter. The function depends on the selected algorithm. See below.

MX / PB / PS: Select between 3 different pitch algorithms. In all cases grain size and rate are randomized with average sizes and rates of 100 ms and 20Hz:

MX lets you mix/blend between different octaves with the PITCH parameter:

UPPER [x] ↔ LOWER [-] ↔ REGULAR [o] ↔ UPPER [+]

The way the parameter is set up you have any *two* octaves available at a time. MX uses two simultaneous grains per octave (4 total per channel).

PB is a probabilistic octave mixer. For each audio grain an octave is selected according to the PITCH parameter. E.g. halfway between DOWN and REGULAR gives a 50% chance to get either of those octaves for any grain. The selectable octaves are positioned the same way as for the MX function. The two channels have independent random values for the probability functions. Meaning that the probability is the same for both channels but the probability outcomes will differ. PB uses two simultaneous grains per channel.

PS is a pitch shifter. The range goes from tape stop [x] to +1 octave [+]. The pitch shifting amount is statically set for each grain on grain initialization (20Hz). Combined with the FEED function spectral staircasing effects can be made with this algorithm. PS uses two simultaneous grains per channel.

TECHNICAL SPECIFICATIONS

Input Impedance	1M Ω
Output Impedance	<1k Ω
Input/Output	Stereo (TRS)
Voltage	9 VDC center negative (normal BOSS/Ibanez/1Spot power supply) Does not support battery operation
Current Draw	200 mA
Dimensions	125 x 66 x 60 mm
Weight	340 g