



# AM MODULE v1.0

BY NOISS COKO

II USER MANUAL II

## DESCRIPTION

AM Module is a versatile and useful device that can be used to create auto panning, tremolo or amplitude modulation effects. It offers four different modulation waveforms and several ways to determine its frequency, covering a wide range that goes from 0.01 Hz to 12.500 Hz.

Medium-high rate values will add overtones and harmonic richness to the signal, creating a classic AM effect that could be applied to percussions, synths, or any desired instrument.

While working on sync mode, rate values will be synchronized with Live's global tempo, allowing to generate rhythmic modulation patterns from pad or string sounds. A chain of two, three or more modules with different configurations, could be used to create polyrhythmic patterns and more complex results.

## FEATURES AND FUNCTIONS



### RATE

Determines the speed, or frequency of the amplitude modulation. Three different modes are available.

Low rates will produce the classic tremolo effect, while higher values will generate overtones, resulting from the amplitude modulation process.

### FREQ

Works only as a monitor that displays, depending on the mode that is currently selected, the actual modulation frequency according to the Rate parameter.

### RATE MODE

This tab determines the unit style that will be used to express rate values, according to different needs.

- **Note:** rate values will be represented by musical notes. In most of the cases, this will produce a clear tone over the signal. For instance, for "A" notes, rate values will correspond to 220 Hz, 440 Hz, 880 Hz and so on.
- **Sync:** rate values will be selected by fractions, representing different note durations, synchronized with Live's global tempo.
- **Free:** rate values will be set within a range that goes from 0.01 to 127. Frequencies corresponding to each one of this numbers will depend on the Free Mode currently selected.

## FREE MODE

This tab determines the frequency range, only while the Free rate mode is selected. Otherwise it has no effect over the Rate parameter.

- **Slow:** goes from 0.01 Hz to 32 Hz
- **Normal:** goes from 32 Hz to 1.000 Hz
- **Fast:** goes from 1.000 Hz to 12.500 Hz

## LAG

Applied to the modulation frequency, produces a smooth transition between one rate value and the next one. How long the transition takes from one point to the other, is determined by the lag time.

## L – R OFFSET

Allows to offset by a certain degree the modulation waveform's phase for the left and right channel independently. In that case, the amplitude will be affected differently on each side, creating a stereo signal.

Setting different values on each side will create auto panning effects.

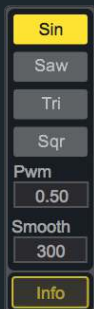
## AMOUNT

Sets the intensity of the modulation that is affecting the amplitude of the output signal. This parameter determines the gain of the oscillator that works as a modulation source.

A value of 0% will generate no amplitude modulation, having no effect at all over the signal. Higher values will proportionally increment the way in which the main signal is affected by the oscillator.

## WAVE

Selects the oscillator's waveform that will modulate the amplitude of the incoming audio signal. Four waveforms are available: Sine, Sawtooth, Triangle and Square.



### PWM

Modulates the pulse width of the square waveform, creating different relations between the only two possible states of the signal.

### SMOOTH

Smooths out the waveform that modulates the amplitude of the incoming signal. This allows to avoid clicks, specially when using sawtooth or square waveforms. High values will create soft transitions, while low numbers will produce percussive results.

### INFO

Information about this device, its developer and links to other devices.

## CONTACT - CREDITS

### ABOUT

### DEVICES

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