# LFO

# Interpolating LFO



LFO is a voltage controlled, low frequency oscillator. 8 waveforms are available with smooth morphing between each, allowing for complex and unique patterns. In addition to sine, triangle, sawtooth, and square waveforms, four alternate waveforms are accessible. The alternate waveforms have been designed with modulation in mind and provide an innovative voltage source to use on filters, VCOs, and anything else.

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To install, locate 2 HP of space in your Eurorack case and confirm the positive 12 volts and negative 12 volts sides of the power distribution lines.

Plug the connector into the power distribution board of your case, keeping in mind that the red band corresponds to negative 12 volts.

In most systems the negative 12 volt supply line is at the bottom.

The power cable should be connected to the LFO with the red band facing the bottom of the module.

#### **Specifications**

Format: 2 HP Eurorack module

Depth: 34mm (Skiff Friendly)

Max Current: +12V = 43mA -12V = 16mA



#### 1. NRM/ALT:

Toggle that switches the output between standard, and alternate waveforms. (See **4. WAVE** for a list of waveform shapes)

#### 2. RESET INPUT:

Gate input that will reset the phase of the LFO to 0

Threshold: 2.5V

#### 3. RATE:

Rate control of the LFO

If the Rate control is far left, the rate of the LFO will be as slow as possible

If the Rate control is far right, the rate of the LFO will be as fast as possible

#### 4. WAVE:

Waveform control of the LFO

The WAVE control smoothly interpolates between Sine, Triangle, Sawtooth, and Square waveforms when the NRM/ALT toggle is in the left position

The WAVE control smoothly interpolates between FM Sines, Stepped Triangle, Ramp, and Moustache waveforms when the NRM/ALT toggle is in the right position

All waveforms are unipolar positive

#### 5. RATE CV:

Control voltage input for the rate of the LFO

Range: 0V – 8V

Control voltage is added to the pot position

### 6. LED:

LED that illuminates at the rate of the LFO

#### 7. GATE OUT:

Output that emits gate signals at the rate of the LFO

#### 8. LFO OUT:

Output of the currently selected LFO waveform

Slowest LFO rate = 0.096 Hz Fastest LFO rate = 10.75 Hz

Range: 0V – 5V

# **NRM Waveforms**

#### Sine



# Triangle



# Sawtooth



# Square



# **ALT Waveforms**

## **FM Sines**



# Stepped Triangle



# Ramp



# Moustache

