



## Lighthouse Wave Machine

### Introduction:

The Lighthouse features an all analog signal path, and is capable of a wide range of tremolo, harmonic tremolo, and even univibe-like sounds. This is made possible by its uniquely tuned “harmonic” mode, two different waveforms, and an innovative “tilt” control, that allows you to sculpt and distort the wave shape to your taste. The tap tempo footswitch allows you to match the tempo of any song, and the LED will pulsate along to the tempo to help you out!

### Features:

**Speed:** Controls the speed of the tremolo. Turn it down for slower modulation, turn it up for faster modulation.

**Depth:** Controls the intensity of the modulation. Turn it down for a subtler effect, turn it up for a deeper, more pronounced effect.

**Tilt:** This knob distorts the tremolo’s waveform. Set to noon (pointing straight up), the wave form will be unaffected. But, as you deviate from the centre position, the wave will distort, and become asymmetric. This is particularly interesting in the harmonic mode, as it allows you to accentuate the bass or treble frequencies as desired.

**Harmonic Switch:** This switch toggles between regular amplitude modulating tremolo, and harmonic tremolo. In harmonic mode, the bass and treble frequencies of your guitar signal are separated and modulated out of phase in a “push pull” fashion. This gives an interesting phasing effect, along with the tremolo effect.

**Waveform Selector Switch:** This switch toggles between the Lighthouses’ two waveforms: a classic sine wave, and a negative slope ramp. While the sine wave is the more traditional and familiar wave, the ramp provides an interesting chopiness that’s worth experimenting with!

**Tap Tempo:** The tap tempo footswitch allows you to match the tempo of a song on the fly. Simply tap the footswitch twice to set the tempo. The Lighthouse is configured for quarter notes, so the tempo will correspond 1:1 with what you tap!

**Volume:** The Lighthouse has an internal trimpot for volume adjustment. By default, the volume will be set to approximately unity, but can be increased to achieve a slight boost when the Lighthouse is turned on. It is accessible by removing the 4 screws holding on the back plate and can be adjusted with a #1 Philips head screwdriver. **BE CAREFUL to not touch or disrupt any of the other components inside the pedal!**

### Power:

The Lighthouse must be powered by a standard, 9VDC, 2.1mm barrel, centre-negative power supply. The Lighthouse does not have room inside to accommodate a battery. For best results, always power the Lighthouse with an isolated, regulated power supply. **Use of an improper power supply will void warranty.**