



Congratulations on your purchase of the Stereo Pulsar, a variable shape tremolo and panner pedal.

Connected as a mono pedal, the Stereo Pulsar is exactly the same as the Electro-Harmonix Pulsar that we currently manufactur: a tremolo pedal that allows significant control over the shape of modulating waveform. Hook up the Stereo Pulsar in stereo (each output to a separate amp/mixer channel) and you have a panner pedal that will send your instrument back and forth between two amps with the same control over waveform shape. So while one amp is fading up in volume, the other will be fading down in volume or even more dramatic: while one amp is on, the other is off.

## - CONTROLS -

**SHAPE Switch** – Selects between Triangle Wave and Square Wave Modes.

**SHAPE Knob** – Changes the shape of the waveform that modulates the Tremolo.

**Triangle Wave Mode** – In this mode the LFO creates a Triangle Wave oscillation, resulting in a smooth modulation. As the SHAPE knob is turned from the Counter-Clockwise (minimum) position to the Center (middle) position, the waveform starts as a rising Sawtooth changing into a Triangle. From the Center position to the Clockwise (maximum) position, the wave changes from a Triangle to a falling Sawtooth.

**Square Wave Mode** – In this mode, the LFO creates a Square Wave, resulting in a sharp, on/off modulation. As the SHAPE knob is turned from the Counter-Clockwise (minimum) position to the Center (middle) position, the wave starts as a Small Pulse Width Wave changing into a Square Wave. From the Center position to the Clockwise (maximum) position, the wave changes from a Square Wave to a Large Pulse Width Wave.

**DEPTH Knob** – Adjusts the amount of Tremolo that will be applied to your signal. As the DEPTH knob is turned from the Counter-Clockwise (minimum) position to the Clockwise (maximum) position, the amount of the effect will increase. Maximum tremolo occurs when the DEPTH knob is set to approximately 2 o'clock. As the DEPTH knob is turned above 2 o'clock, the tremolo begins to warp by modulating between positive and negative phase with a rhythmic pattern. To obtain maximum pan when using the Stereo Pulsar in stereo, the optimum setting for the DEPTH knob is at approximately 2 o'clock.

**RATE Knob** – Adjusts the speed of the tremolo or pan effect. As the RATE knob is turned from the Counter-Clockwise (minimum) position to the Clockwise (maximum) position, the modulation rate increases.

**RATE/STATUS LED** – If the effect is engaged, the LED will blink at the same rate that the effect modulates. In bypass mode, the LED is off. The footswitch engages/disengages the effect.

**INPUT Jack** – Connect your instrument's output to this ¼" mono jack. The input impedance presented at this jack is 1 Mohm. Plugging a cable into the INPUT jack, when running the Stereo Pulsar off of a 9V battery, turns the Stereo Pulsar on and drains the battery.

**MAIN OUT Jack** – Connect this ½" mono jack to your amplifier's input. The output impedance presented at this jack is 1 kohm. When using the Stereo Pulsar as a mono device we recommend you use the MAIN OUT jack so that the parameter labels of the SHAPE knob correspond to what your hear.

STEREO OUT Jack – Connect this ½" mono jack to your second amplifier's input. The output impedance presented at this jack is 1 kohm. When using the Stereo Pulsar as a stereo device use the STEREO OUT jack for your second channel. You can connect only the STEREO OUT jack if you want; the tremolo effect will be the same as from the MAIN OUT jack but the SHAPE knob labels will be reversed. For example, when the SHAPE knob is set to its clockwise position, the tremolo will have a falling sawtooth modulating it.

**9V Power Jack** – The Stereo Pulsar can run off of a 9V battery or you can connect a 9VDC battery eliminator capable of delivering at least 100mA to the 9V power jack. The optional 9V power supply from Electro-Harmonix is **US9.6DC-200BI** (same as

used by  $Boss^{TM}$  &  $Ibanez^{TM}$ ) 9.6 volts/DC 200mA. The battery eliminator must have a barrel connector with center negative. The battery may be left in or taken out when using an eliminator.

## - POWER -

Power from the internal 9-volt battery is activated by plugging into the INPUT jack. The input cable should be removed when the unit is not in use to avoid running down the battery. If a battery eliminator is used, the Stereo Pulsar will be powered as long as a wall-wart is plugged into the wall.

To change the 9-volt battery, you must remove the 4 screws on the bottom of the Stereo Pulsar. Once the screws are removed, you can take off the bottom plate and change the battery. Please do not touch the circuit board while the bottom plate is off or you risk damaging a component.

