

# TREMOLO

INSTRUCTIONS



Thank you for purchasing the wood version of the Tremolo pedal. It is housed in a locally felled oak enclosure that has been laser engraved and carbon shielded.

The Tremolo pedal is a unique amplitude modulation device with 8 wave shapes, customised by MAFX and unique to this pedal. It features a shuffle control for editing of the wave shape and a wide ranging LFO, the rate of which can be controlled by a two button tap tempo.

Every effort has been made to make sure that it makes use of the ultra-fast LFO, whilst maintaining silent and click free operation. The use of a low noise NE5532 opamp VCA at the heart of the circuit means that the tone is unchanged when the effect is on.

This version includes a Clock in and CV out for interacting with other units.

The effect is true bypassed as normal by the latching footswitch at the front of the pedal. This bypass is done by a mechanical connection and the bypassed signal does not run through any buffers or circuitry.

There are 3 potentiometer controls for adjusting the effect.

#### DEPTH

Controls the extent to which the LFO effects the input signal.

#### SHUFFLE

Edits the LFO wave shape in different ways depending on the selected waveform. In a central position the all waves are unaffected.

Turning the control changes the waveshape by condensing it to either side. In Square wave mode this varies the duty cycle, whilst in Ramp and Sine wave modes it effects the shape and response of the wave. When editing this control on rhythmic settings it is possible to change the swing of the effect.

## RATE

Controls the speed of the Tremolo, the extent of which can be varied using the left push button switch marked Range. This control is over ridden when the Tap Tempo button is in use but comes back into effect when it is adjusted.

## RANGE

Pressing this button cycles through various multiplications of the Rate. In turn, this effects the way that the Tap Tempo responds. At power on, the rate is x1 the speed and travels one cycle per tap. By pressing the button it moves to the next multiplier in this sequence: x1.5, x2, x3, x4, x0.5.

This means that you are able to produce a range of tuplets from the tap or clock signal.

## TAP

When this button is pressed twice it measures the length of time between taps and applies it to the Rate of the Tremolo. This measurement is then multiplied by the status of the Range switch. When the Clock input is present this switch is over ridden.

## CV OUT

Outputs a control voltage of up to 5v for the control of exterior instruments such as synth modules, drum machines or other guitar effects.

The voltage that it sends out is a representation of the wave shape that is selected.

## CLOCK IN

Provides an input to control the Tremolo rate. It uses the same input as the Tap Tempo setting and will override the use of this button. When a signal of 0.5 - 20v is put into this socket the LFO will sync to the same speed.

The Tremolo will make a multiplication of this speed if the Range switch has been altered.

## WAVEFORMS

There are 8 wave shapes to switch between. In order (left to right): Square, Square Half/Full, Ramp Down, Ramp Up, Sine, Triple Beat, Double Beat, Random.

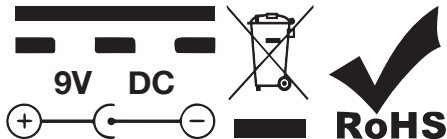
## TECHNICAL INFORMATION

Input Impedance:  $1\text{m}\ \Omega$   
Output Impedance:  $100\ \Omega$   
Current Consumption:  $35\text{mA}$

## SAFETY GUIDELINES

This pedal should be used with a 9v DC power adaptor dedicated for use with guitar effects. It uses a centre negative polarity 2.1mm socket (see diagram below), standard to 9v guitar pedals.

If any problems occur, stop using the pedal and contact us for advice any time of the week for advice on what to do.





## GUARANTEE INFORMATION

The pedal comes with a 6 month guarantee commencing from date of delivery. This covers any defects in the pedal operation resulting from faults in the materials or construction. Repairs outside of this time may incur a small fee but in most cases it's still free.

This guarantee is not extended to damaged, opened, modified or improperly used items.

## CONTACT DETAILS

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All circuitry, logo, names and design

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