

# TREMOLO



## TS-1 Tremolo Stereo Pan

Congratulations on choosing the Dunlop TS-1 Tremolo Stereo Pan. Like all Dunlop products, this unique effect is designed to give you quality sound through years of dependable service.

*Enjoy playing your new The TS-1 Tremolo Stereo Pan.*

### MONO SETUP

Plug input into the Input Jack on the back panel. Push in the Mono/Stereo Select Button on the back panel to select MONO. Plug your output into the Output Tip Jack on the back panel. Turn the effect on by pushing the Effect/Bypass Switch so the Red LED above the switch lights up. Play

### STEREO SETUP

Plug input into the Input Jack on the back panel. Push out the Mono/Stereo Select Button on the back panel to select STEREO. Plug your two amps into the Output Tip Jack and Output Ring Jack on the back panel. (You can also use two channels on a stereo mixer or recorder.) Turn the effect on by pushing the Effect/Bypass Switch so the Red LED above the switch lights up. Play.

**POWER SUPPLY:** The Dunlop TS-1 Tremolo Stereo Pan is shipped without a battery. The TS-1 requires one 9 volt battery or a 9Volt Regulated Adapter with a 5.5/2.1mm coax plug and negative tip. The Dunlop ECB-03 AC Adapter is recommended. Battery access is made through the battery door on the underside of the unit.

*Note: You must pull the input plug from the input jack to turn off the unit and save your batteries.*

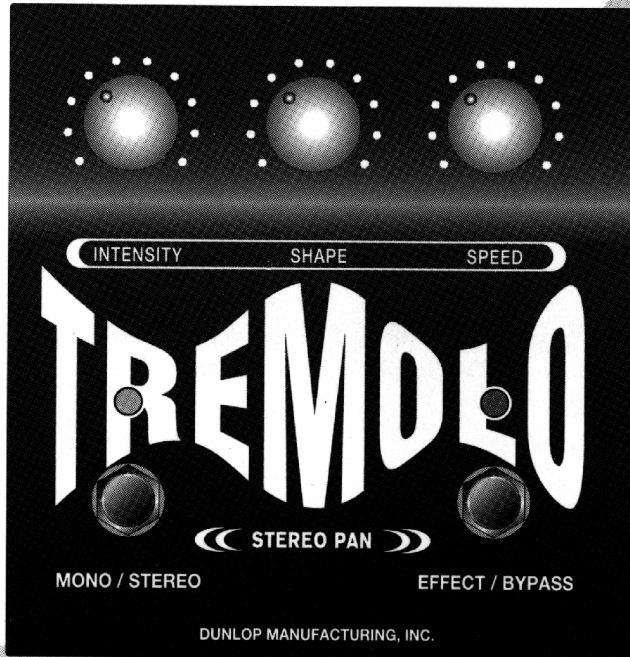


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## FRONT PANEL CONTROLS:

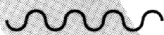
**EFFECT/BYPASS SWITCH:** This switch selects between Effect and No Effect. The Red LED will light when the effect is on. Transparent switching technology is used so there is no click heard when the effect is turned on or off.

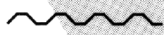
**MONO/STEREO SWITCH:** This allows you to choose between Mono and Stereo Modes. When Mono mode is selected, the LED lights Green only. When Stereo mode is selected, the LED alternates Green and Red. In Mono mode, the sound increases and decreases through both outputs at the same time. In Stereo mode, the sound increases and decreases alternately through the outputs.




**INTENSITY:** This knob adjusts how much the tremolo affects your signal. It can be adjusted from a gentle fluctuation, when the tremolo affects only a small portion of your signal, to staccato chopping, when the tremolo affects all of your signal.

**SHAPE:** The shape control allows you to adjust the shape of the waveform that modulates the Tremolo.

 With the shape knob at its fully counterclockwise setting, it produces a sine wave. The sound smoothly increases and decreases, similar to the classic tremolos producing the gentlest undulation.

 Centered, it produces a triangular or trapezoidal wave. The volume increases, decreases and increases again, like a ramp up and down.

 At the other extreme, the waveform is a square wave. The sound is turned on, then off, and on again, like an on/off switch being toggled up and down, creating a ping-pong effect. At fast speeds it gives a double picked effect.

*Varying the SHAPE and INTENSITY controls will allow you to sculpt your own custom tailored sound.*

**SPEED:** This knob controls the rate of the tremolo effect. It can be adjusted from about 1 sweep per second to about 10 sweeps per second. You will see the LED above the Mono/Stereo switch flash at the speed selected. This control allows you to set the speed of your tremolo to the beat of your song.

## BACK PANEL CONTROLS:

*It is important to understand the difference between MONO and STEREO.*

**MONO** - The mono jack has a tip and a sleeve. All sound is transmitted through the tip, therefore only one channel.

**STEREO** - The stereo jack has a tip, a ring, and a sleeve. The sound is transmitted through the tip and the ring, therefore two channels and the stereo sound.



**INPUT JACK:** Connect a cable from your guitar or effects chain here.

**STEREO/MONO BUTTON:** This red button allows you to select between mono and stereo *input* modes.

When Mono is selected, only the Tip is input.

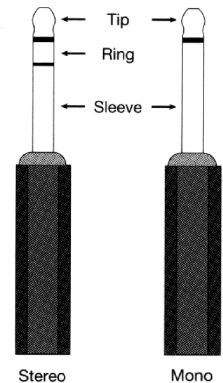
**If you have a Mono plug**, all your sound is in the Tip, so all your sound is input.

**If you have a Stereo plug**, the sound in the Ring is lost. Only the Tip sound is input.

When Stereo is selected, both the Tip and Ring are input.

**If you have a Mono plug**, all your sound is in the Tip, so the Ring reads the Sleeve (Ground = no sound)

**If you have a Stereo plug**, both the Tip and Ring are input into two separate channels



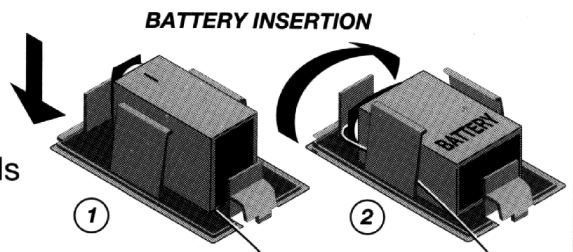
**OUTPUT TIP JACK:** This is the output from the tip (mono sound or one channel of the stereo sound). It can be right or left speaker, according to how you place your speakers.

**OUTPUT RING JACK:** This is the output from the ring (2nd channel of the stereo sound). It can be right or left speaker, depending on your setup.

## BATTERY ACCESS

Depress the battery hatch friction tab and remove the battery unit from TS-1 housing. Attach the 9 volt battery to the battery snaps.

Place the battery into the battery holder with the positive side down and the leads underneath. Rotate the battery to snap into position. Reverse these steps to remove battery.



# **NOTES FOR SETUP**