Reaction Tremolo
Instruction Manual

May be covered by one or more of the following: U.S. Patents #4538297, 4647876, 4696044, 4745309, 4881047, 4893099, 5124657, 5263091, 5268527, 5319713, 5333201, 5402498 and 5493617.
Other patents pending. Foreign patents pending.
Your Reaction Tremolo™ pedal has been tested and complies with the following Standards and Directives as set forth by the European Union:


**Standard(s):** EN55013, EN50082-1

This means that this product has been designed to meet stringent guidelines on how much RF energy it can emit, and that it should be immune from other sources of interference when properly used. Improper use of this equipment could result in increased RF emissions, which may or may not interfere with other electronic products.

To insure against this possibility, always use good shielded cables for all audio input and output connections. This will help insure compliance with the Directive(s).

For more information about other Rocktron products, please see your local dealer or one of our importers closest to you (listed on the Rocktron website (www.rocktron.com).

Read all instructions contained in this manual.
Keep these instructions
Heed all warnings
Follow all instructions.
Do not use this apparatus near water.
Clean with dry cloth

Copyright © 2009 GHS Corporation
All Rights Reserved.
Precautions

Refer all service to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply or plug is damaged, liquid has been spilled or objects have fallen into the apparatus or if the apparatus has been exposed to rain or moisture, does not operate normally or has been dropped.

DO NOT ATTEMPT TO SERVICE THIS EQUIPMENT. QUALIFIED PERSONNEL SHOULD SERVICE THIS EQUIPMENT ONLY. DO NOT MAKE ANY INTERNAL ADJUSTMENTS OR ADDITIONS TO THIS EQUIPMENT AT ANY TIME OR TAMPER WITH INTERNAL ELECTRONIC COMPONENTS AT ANY TIME. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY VOID THE WARRANTY OF THIS EQUIPMENT AS WELL AS CAUSING A SHOCK HAZARD.

OPERATING TEMPERATURE

Do not expose this unit to excessive heat. This unit is designed to operate between 32 F and 104 F (0 C and 40 C). This unit may not function properly under extreme temperatures.

Do not block any ventilation openings (if applicable). Install in accordance with the manufacturer’s instructions.
Do not install near any heat sources such as radiators, heat registers, stoves or other apparatus (including amplifiers) that produce heat.
This product is not equipped with a plug or cable. This pedal runs on a 9 Volt Battery, if a 9Volt DC adapter is the used please follow adapter manufacturer’s operation instructions. Only used attachments/accessories specified by the manufacturer.
Do not use this product with any case, stand tripod, bracket or table that is not specified by the manufacturer. Insure that the case, stand, tripod, bracket etc. is properly adjusted and setup (follow all instructions). Extra care and caution should be taken to avoid tip over and injury.
Unplug this apparatus during lightening storms or when unused during long periods of time.
Introduction:
Often used in the past for “surf” music, or for pop, the tremolo has resurfaced as a cool part of modern heavy rock and roll. The Reaction Tremolo provides a great sounding trem that lets you go from surf bum tremolo to a pulsating heart pounding Staccato tremolo (think death metal). The speed control allows enough range to even produce a machine gun effect, or a low tech re-sample effect as well. The Reaction Tremolo is a classic asymmetric analog tremolo that utilizes a photo cell for great results.

Rocktron’s Reaction Series pedals are built into a rugged metal slim form factor chassis, taking up as little space as possible on your pedalboard. The Reaction Tremolo is a TRUE BYPASS pedal: when you turn it off… it is out of your signal path!

Controls include SPEED which controls the speed of the tremolo modulation. ACTIVE is the LED which provides visual feedback to help set the SPEED control.

WAVEFORM lets you select either Triangle
(classic tremolo) or Square (staccato) modulation waveform. INTENSITY controls the mix between input source and effect output.

Tremolo pedals usually sound better when placed after distortion in the signal chain. However, the Reaction Tremolo can be used either before or after the distortion. Placing the Reaction Tremolo after a distortion while using the Square Wave selection can produce an effect that is dynamically controlled by how hard you attack a chord followed by the decay which the tremolo effect seems to creep up on and overtake…Very cool!

If using multiple pedals such as delays and other modulation effects, try the Reaction Tremolo in different parts of the signal chain until you find the sound you like best.

The footswitch on the Reaction Tremolo controls On/Off status as shown by the LED indicator. Reaction stomp boxes run on a 9V Alkaline battery, or may also be powered by Rocktron’s DC OnTap Universal Power Supply adaptor.
Descriptions
Descriptions continued........

1 SPEED Control - This control determines the speed of the tremolo modulation.

2 ACTIVE LED - This LED provides visual feedback to show you the speed and intensity of the tremolo waveform.

3 9VDC Input - This input jack provides 9VDC power to the pedal from the Rocktron DC OnTap 9V power supply (sold seperately).

4 WAVEFORM SELECT Button - This button allows you to select one of two different wave forms - Triangle (which is the classic tremolo sound) and Square (staccato) modulation waveform..

5 INTENSITY Control - This control determines the intensity of the tremolo waveform by providing a mix between the input source and effect output.

6 ON/OFF Leds - These LEDs shows if the pedal is on or off. When the LED is lit the pedal is on. When the LED is not lit the pedal is off.
7 BATTERY COMPARTMENT and COVER - The 9V battery can be found in this compartment.

8 INPUT Jack - Using a standard 1/4” guitar cable, plug your guitar into this jack.

9 THUMB SCREWS for Battery Compartment. Unscrew these thumb screws to access the battery compartment.

10 FOOTSWITCH - Use this switch to turn on or off the pedal. The On/Off Led will show you if the pedal is on or off.

11 OUTPUT Jack - Using a standard 1/4” guitar cable you can plug in another pedal from this jack or plug directly into your amplifier.
Typical Connection
### Specifications:

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Input</td>
<td>8dBu</td>
</tr>
<tr>
<td>Maximum Output</td>
<td>6Bu</td>
</tr>
<tr>
<td>Input Impedance</td>
<td>1MΩ</td>
</tr>
<tr>
<td>Output Impedance</td>
<td>1kΩ</td>
</tr>
<tr>
<td>Current Consumption</td>
<td>20mA</td>
</tr>
<tr>
<td>Power Requirements</td>
<td>9V Alkaline Battery or</td>
</tr>
<tr>
<td></td>
<td>Rocktron DC OnTap Uni-</td>
</tr>
<tr>
<td></td>
<td>veral Power Supply (sold</td>
</tr>
<tr>
<td></td>
<td>separately).</td>
</tr>
<tr>
<td></td>
<td>DC 9V</td>
</tr>
<tr>
<td>Dimensions</td>
<td>125mm x 78mm 61mm</td>
</tr>
<tr>
<td></td>
<td>5” x 3.25” x 2.5”</td>
</tr>
<tr>
<td>Weight</td>
<td>0.7kg</td>
</tr>
<tr>
<td></td>
<td>1.5lbs</td>
</tr>
</tbody>
</table>
How to change the battery:

To change the battery, remove the thumb screws on the top of the pedal and remove the battery compartment cover. Remove the old battery and replace it with a new 9V Alkaline battery. Replace battery in the same area as the old battery was located. Place the battery compartment cover on the pedal and re-insert the thumb screws.

Save yourself tons of money in batteries by using the Rocktron DC OnTap Universal Power Supply to power this pedal (sold seperately). The Rocktron DC OnTap provides a constant flow of power to the pedal, unlike a battery that will degrade over time. The Rocktron DC OnTap Universal Power Supply can also power up to 20 pedals and can be used with both 110V and 220V power sources.

Check, www.rocktron.com for more information on the DC OnTap and where to purchase.