

SPECIFICATIONS:

Dimensions: Height ~ 125mm; Width ~ 197mm; Thickness ~ 54mm
Weight: 1 pound, 8.6 oz. (698 grams) without batteries
Power Consumption: ~ 50 mA @ 5 volts DC

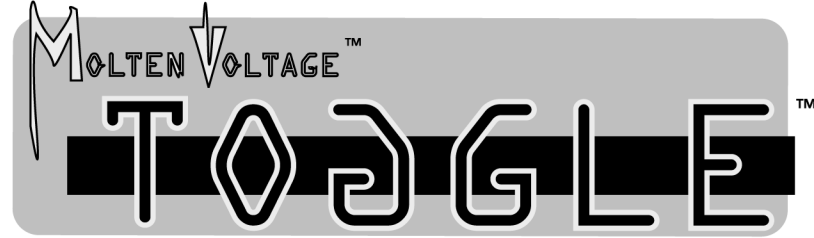
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: 1) Reorient or relocate the receiving antenna; 2) Increase the separation between the equipment and receiver; 3) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected; 4) Consult an experienced radio/TV technician for help.

This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Multiple Patents Pending. All Trademarks and Copyrights are the exclusive property of Molten Voltage.

Licensing opportunities are available ~ contact Legal@MoltenVoltage.com

Manufacturer name: Molten Voltage
Manufacturer address: P.O. Box 3753
Sunriver, Oregon 97707, USA



Owner's Manual

Version 1.0- © 2008

Find more setup suggestions or post your own at www.MoltenVoltage.com/Forum

Tremolo Swing! ~ In any Tap mode, without anything in the Send/Return jacks, TOGGLE functions like a tremolo, with the volume of each part of the cycle controlled by the Level Out knobs. The difference is that TOGGLE can Swing!

*Poor quality amplifiers sharing a common ground can generate considerable noise even when their channel is off.

psuedoquadraphonic. Also try panning the channels opposite each other.

But wait, there's more... Plug a different signal in the Output jack and route the channel Returns to left and right mixer channels or two amplifiers* for simultaneous stereo toggling of that independent signal - known at Molten Voltage as

as the Level Out knobs only affect the channel Returns.

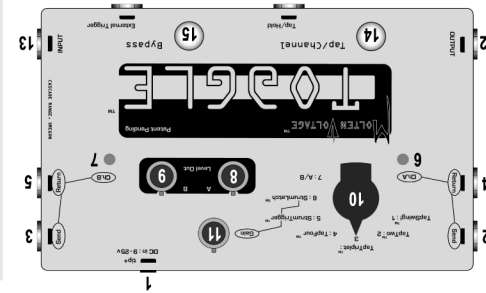
Stereo St-Si-Stereo ~ Connect the channel Sends to the left and right channels of a mixer or to two separate amplifiers* for astounding stereo effects. Note that you will need to control the volume at your amplifiers or mixer,

Apart from the standard configuration there exist a variety of alternative setups:

TOGGLE is typically set up with a guitar, bass, keyboard, or other line level signal plugged into the Input jack and an amplifier or mixing board plugged into the Output jack. Each channel Send is routed to a different effect then back into the corresponding Return jack. Note that there is maximum signal level for the Return jacks, beyond which that signal can leak to the opposite channel. As such, effects that add significant gain or feedback are not recommended.

SETUP SUGGESTIONS

- 1 ~ DC in jack. Input for external power supply.
- 2 ~ Tap/Channel button. In the Tap modes, use this button to manually switch channels.
- 3 ~ Channel A and B Send jacks. Route the input signal to 2 different effect chains.
- 4 ~ Channel A and B Return jacks. Route the processed signals to the output jack.
- 5 ~ Channel A and B Return jacks. Route the input signal to 2 different effect chains.
- 6, 7 ~ Channel indicator LEDs. Green when channel is active, red when inactive. When both are red, TOGGLE is in Bypass mode.
- 8, 9 ~ Channel A and B output level controls. Attenuate the channel levels at the Return jacks.
- 10 ~ Mode selector switch. Choose between TOGGLE's seven different modes by rotating this switch.
- 11 ~ Gain control. Adjusts the level from the input or External Trigger and StrumLatch circuit.
- 12 ~ Output jack. Connect to amplifier or mixing board.
- 13 ~ Input jack. Connect to guitar, bass, keyboard, or other line level signal.
- 14 ~ Tap/Channel button. In the Tap modes, use this button to input the tempo. In StrumTrigger mode, use this button to change the primary channel. In StrumLatch and A/B modes, use this button to manually switch channels.
- 15 ~ Bypass button. Bypass the effect chains. Input = Output, and both LEDs will glow red in true Bypass mode.
- 16 ~ Tap/Hold jack. Connect the optional Tap/Hold dual switch to remotely operate the Tap/Channel button and to Hold [pause] TOGGLE on Channel A during any of the modes. Switch available at MoltenVoltage.com
- 17 ~ External Trigger. Used with Strum modes. Connect a line level signal to override the Input jack and trigger Strum modes. Adjust the external signal level using the Gain control. External signal is isolated from audio chain.



COMPONENT DESCRIPTIONS

TAP MODE INSTRUCTIONS

TapSwing!™ ~ Control how fast TOGGLE switches between the two channels. Tap twice and the Channel A and B cycles will be equal length. Note that TOGGLE will pause for about 3 seconds while waiting for a third tap.

Tap three times to swing! ~ The Channel A cycle will match the time between taps 1 and 2, the Channel B cycle will match the time between taps 2 and 3. The tempo is set based on when the button is *pressed*, but hold the third tap until the downbeat because the toggling begins as soon as you *release* the button.

TapTwo™ ~ Works just like TapSwing! except the corresponding cycles are half as long. If you already have a tempo established, press the Tap/Channel button once and in about 3 seconds the tempo will be doubled.

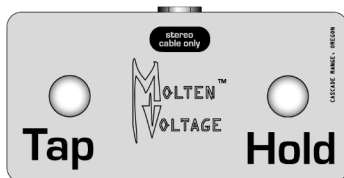
TapTriplet™ ~ Works just like TapSwing! except the corresponding cycles are one-third as long. If you already have a tempo established, press the Tap/Channel button once and in about 3 seconds the tempo will be tripled.

TapFour™ ~ Works just like TapSwing! except the corresponding cycles are one-fourth as long. If you already have a tempo established, press the Tap/Channel button once and in about 3 seconds the tempo will be quadrupled.

TAP/HOLD DUAL SWITCH ~ OPTIONAL

Connect the optional Tap/Hold dual switch using a 1/4" **stereo** cable to remotely operate the Tap/Channel button and to Hold [pause] TOGGLE on Channel A during any of the modes.

Hold Mode ~ If you are in a Tap mode and engage Hold, TOGGLE will lock on Channel A and turn its LED green while flashing the Channel B LED green and red in time with your tempo. You can set a new tempo while in Hold mode using the Tap/Channel button. The new tempo is flashed on the Channel B LED and will operate when Hold is disengaged.



If you are in a Strum mode, engaging Hold will simply lock TOGGLE on Channel A.

Hold Mode is used when you need to lock in the Channel A effect chain during one part of a song then use another mode during a different part of a song.

The Tap/Hold Switch and stereo cable are both available at MoltenVoltage.com

LIMITED WARRANTY - SAVE YOUR PROOF OF PURCHASE!

Molten Voltage is proud of its products and warrants this unit for a period of two (2) years from the date of purchase to be free from defects in materials and workmanship under normal use and service, so long as the unit is used in the U.S. or Canada and consistent with these instructions. Contact Service@MoltenVoltage.com regarding repairs. Any user repair attempts void the warranty. **PROOF OF PURCHASE IS REQUIRED FOR WARRANTY REPAIRS.**

STRUM MODE INSTRUCTIONS

StrumTrigger™ ~ Switch channels based on the intensity of your playing. While you are strumming hard, the channel is toggled, while you are hardly strumming it's not. As long as the signal is loud, the unit will be in the secondary channel [e.g. channel B if the primary channel is A]. While the signal is soft, the unit will remain in the primary channel.

To get a balanced sound, you may need to reduce the output level on the secondary channel to compensate for the louder playing when switched to that channel.

Press the Tap/Channel button to swap the primary and secondary channels.

StrumLatch™ ~ Switch channels with each distinct hard strum. During soft strumming or consistent loud playing, the channel stays latched. The unit will unlatch and swap channels when you play softly then loud again.

Press the Tap/Channel button to switch channels manually.

Both Strum Modes ~ Start with the Gain control fully left and rotate until TOGGLE switches when you strum loudly. Where you set the Gain control will depend on the level of your input signal and how sensitive you want the effect. For best results, play as dynamically as possible. It may take a bit of practice to get the "feel" for the Strum modes. Because the Strum modes require a dynamic signal, the use of a distortion pedal before the Input jack will usually make it impossible to use those modes.

External Trigger ~ Connect a line level signal to override the Input jack and trigger the Strum modes. Try using a feed from a kick drum, or a metronome from a sequencer, to sync TOGGLE to your music. To minimize leakage, start with the Gain control fully right and raise the external signal level until switching occurs.

PRECAUTIONS

Do not get TOGGLE wet. Clean only with a dry cloth. No user serviceable parts. Email Service@MoltenVoltage.com for repair information.

POWER

TOGGLE uses either 6 AA batteries or a DC adapter. Use of a DC adapter will override the batteries.

When using batteries, TOGGLE switches on when a **mono** audio cable is plugged in the Input jack.

If TOGGLE malfunctions or the LEDs are dim, try replacing the batteries. To do so, remove the six screws on the bottom of the unit, disconnect the battery holder, and insert 6 AA batteries, either rechargeable or alkaline, but do not mix and match. Reconnect the battery holder to the battery clip and gently place it inside the unit while being careful not to damage the circuit board or wiring. Replace the cover and screws **being careful not to overtighten the screws**, as the box is aluminum and may be damaged. Always plug and unplug cables with your amplifier or mixer off, and always disconnect all cords before replacing batteries to avoid damaging your gear.

A 9 - 25 volt (minimum 140 mA) 2.1 or 2.5 mm, center positive, DC power supply may be used to power TOGGLE by connecting it to the "DC in". Be aware that when using an external power source, TOGGLE may switch on even without a cable in the Input jack, depending on the width of the connector. TOGGLE will always switch on when a mono audio cable is plugged into the Input jack.

Molten Voltage sells an optional 9 volt power supply [MV1] on our website, MoltenVoltage.com