

FX TYPE: Breadbuddy Enclosure Size: n/a © 2022 madbeanpedals



### **Overview**

The **Strober** is a testing/prototyping utility I use for stereo effects. It accepts a mono input and two outputs. It's a handy tool if you are building or testing some stereo modulation, delays or reverbs. It utilizes a 4PDT toggle switch for passive bypass. It also has connections for audio probe and ground clip and a switch to go between normal operation and audio probing.

The Strober can be built using any number of connected breadboards according to your needs. For mounting it all together, I suggest a small, cheap cutting board. The Stober PCB can be attached with velcro, standoffs or screws.



**Terms of Use:** You are free to use purchased **Strober** circuit boards for both DIY and small commercial operations. You may not offer **Strober** PCBs for resale or as part of a "kit" in a commercial fashion. Peer to peer re-sale is fine, though.

**Technical assistance** for your build(s) is available via the <u>madbeanpedals forum</u>. Please go there rather than emailing me for assistance on <u>builds</u>. This is because (1) I'm not always available to respond via email in a timely and continuous manner, and (2) posting technical problems and solutions in the forum creates a record from which other members may benefit.



Note the "-" and "+ orientation of the breadboards. Bypass is right, effect mode is left on the 4PDT.

A 1/4W resistor (4k7 or more) and LED of your choice.

#### Mono jacks (3):

https://www.taydaelectronics.com/hardware/6-35mm-1-4-plugs-jacks/6-35mm-1-4-stereo-insulated-switched-socket-jack-pcb-mono.html

#### 2.1mm DC Jack:

https://www.taydaelectronics.com/dc-power-jack-2-1mm-barrel-type-pcb-mount.html

#### 4PDT Toggle:

https://www.taydaelectronics.com/electromechanical/switches-key-pad/toggle-switch/mini-toggle-switch-1m-series-4pdt-on-on.html

#### SPDT Slide Switch:

https://www.taydaelectronics.com/slide-switch-1p2t-through-hole-0-5a-50vdc.html

#### 220n cap:

https://www.taydaelectronics.com/capacitors/polyester-film-box-type-capacitors/0-22uf-100v-5-jfj-polyester-film-box-type-capacitor.html

For connecting from the SND, RTN1 and RTN2 to the breadboards, you can use SIL sockets or female pin headers.

- 1. 4 pin 2.54mm SIL Sockets: <u>https://www.taydaelectronics.com/connectors-sockets/sockets/sip-sockets/4-pin-dip-sip-ic-sockets-adaptor-solder-type-single-row.html</u>
- 2. 4 pin 2.54mm Pin Header: <u>https://www.taydaelectronics.com/connectors-sockets/pin-headers/4-pin-2-54-mm-single-row-female-pin-header.html</u>

Alligator clip:

https://www.taydaelectronics.com/black-alligator-clip-crocodile-35mm.html

Philmore Test Probe:

https://smallbear-electronics.mybigcommerce.com/test-probes/ https://www.ebay.com/itm/232638424136

# Check the mbp <u>ProtoRig documentation</u> for more info on how to use this Philmore probe as an audio probe:

You can use any cheap multimeter/test probe and simply strip the connector end to solder it to the sProbe PCB. So long as the probe tip is insulated (IOW, has a plastic covering) it will work fine as an audio probe.

Ex:

https://www.tritekelectronics.com/electronic-test-equipment/clips-leads-probes/test-leads/philmore-sa15-test-lead-kit\_

https://www.tritekelectronics.com/electronic-test-equipment/test-leads/test-leads-philmore-473 https://www.tritekelectronics.com/electronic-test-equipment/test-leads/philmore-467-test-leads

## **Build Pic**

Primary use case:

Connect your guitar or signal source to the input. Connect the outputs to one or more amplifiers. Breadboard a circuit or test a pre-built PCB using the SND, RTN1 and RTN2 connections.

Secondary use case:

- The Strober has an audio probe and ground connection. When the Probe SPDT is in the down position, the MON and STR jacks are connected directly to the RTN1 and RTN2 pads. When the Probe SPDT is in the up position the probe is activated and the regular RTN1 connection is deactivated. Now the audio probe will transmit the audio output of from wherever it is placed in-circuit to the MONO output jack.
- The ground clip is always active no matter where the Probe switch is set. Use this to connect to the black lead of your multimeter when measuring voltages.

