TBS1

True Bypass System

The TBS1 is a True Bypass System module. Combined with a momentary soft-touch switch, the TBS1 allows you to add no-click true bypass switching in place of the standard mechanical 3PDT to almost any effects pedal.

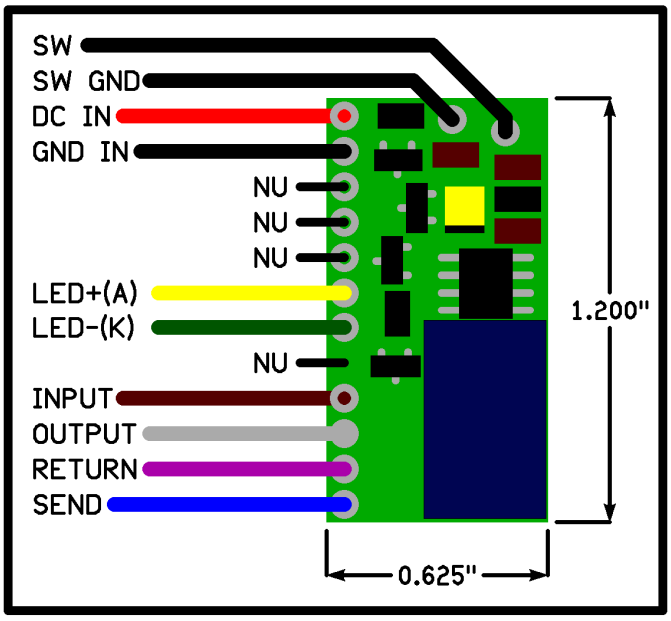
WIRING

SW (black): Momentary Switch wire 1.
SW-GND (black): Momentary Switch wire 2.
DC IN (red): Any positive voltage, 6-24VDC
GND IN (black): Ground

LED+ (yellow): *Optional*, use this to power the anode of the LED from the TBS1.
LED- (green): Cathode (Grounded) side of LED. This assumes the LED is powered from your effect PCB's wiring or directly from the DC jack (with a series resistor).

INPUT (brown): Input Jack Tip
OUTPUT (grey): Output Jack Tip
RETURN (violet): Output from the effect PCB
SEND (blue): Input to the effect PCB

NU: Not Used



MOUNTING RECOMMENDATIONS: The PCB can be mounted inside the enclosure in many ways, including double sided foam tape, or in a heat shrink sleeve stuffed in the battery compartment convenient corner of the pedal enclosure.

WIRING NOTES:

-Wiring colors are suggestions only, use whatever color you want!
-SPST footswitch must be "normally open".
-Implementing the LED:
-If your effect PCB has a spot for an LED (with on-board resistor), connect the LED wire (ensure it's the cathode side) to **LED-** on TBS1.
-If you'd like to power your LED from the TBS1, send the **LED+** to the anode and cathode to **LED-** . Fixed 5v output with a 1k resistor. Brightness will not be adjustable.

DEFAULT STARTUP: The TBS1 will default to engaged or bypassed each time the pedal receives power. To change whether the pedal starts engaged or bypass **1)** unplug power, **2)** hold the footswitch down, **3)** plug in power while holding down the footswitch for at least 6 seconds.

POWER REQUIREMENTS:

LED Current 2-10mA typical (varies).
Circuit Current: ~120µA (.12mA).
Switching Current: 30mA for 10mS.

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