Myriad Design

6582A211A True Bypass Relay V4

(SKU SV210)

User Guide V1b – July 2025

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Thank you for purchasing the Stompville True Bypass Relay V4 Module.

The module is designed to integrate with an effects pedal to allow true bypass. The module uses a high-quality signal relay with a latched coil (which only uses energy during switching.)

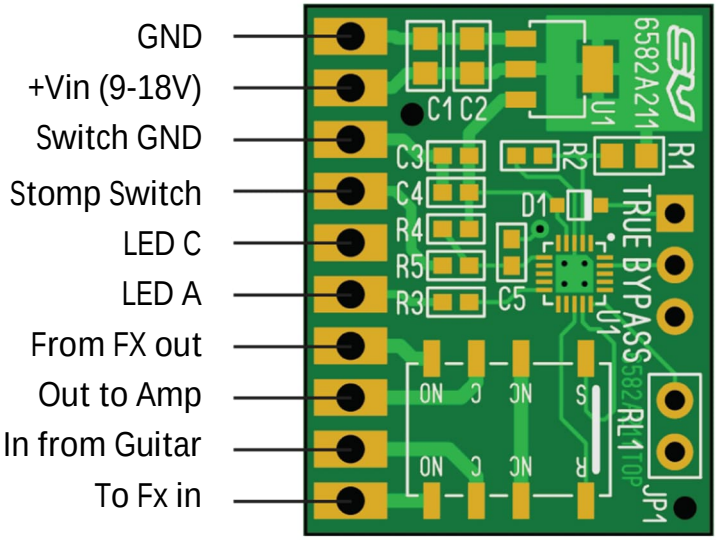
The module requires connections to a stomp switch (momentary or latching), a stomp LED, and a source of power and provides four relay connections for bypassing.

The module will accept a supply voltage between 7V and 22V. However, it is assumed that that the module will run on a nominal 9V or 18V supply.

When the module powers up, the stomp LED with flash once. However, if the supply voltage is below around 7.3V on power-up (indicating a 9V battery at end-of-life), the stomp LED will flash ten times to indicate the low battery. The module will continue to operate until the supply voltage drops too low for correct operation (around 7V).

You can use a latching or non-latching stomp switch. The two connections marked JP1 should be shorted together if a latching stomp switch is used. The stomp switch may be connected remotely from the module. The remote cable should be screened and a maximum of a few metres long.

Do not connect anything to the connections marked 5 , U, G - these are only for factory programming.



Connection

Connect power between +Vin and GND observing polarity. Take care as there is no reverse polarity protection on the module.

Connect the stomp switch between STOMP SW and SW GND. Note that the switch input is a volt-free closing contact and if the switch is remoted from the module, a screened cable should be used. The screen should be connected to SW GND.

Connect the LED between LED A and LED C observing the correct polarity for anode and cathode. The LED will not be damaged if you connect it back-to-front. An LED current-limiting resistor is built-in and is selected for a red or green LED at ~2mA current.

Link the connections on JP1 if you use a latching stomp switch. Do not remote this connection as there is no additional protection on the microcontroller input.

Connect the true bypass module into the signal chain. Note that the bypass relay only switches the signal, so all four grounds for the guitar in, Fx in, Fx out and amp out must be connected elsewhere.

Operation

When the module is in bypass mode (LED off), the IN FROM GUITAR and OUT TO AMP are directly connected and the FX in and FX out are floating (unconnected).

When the module is in Fx mode (LED on) the IN FROM GUITAR is connected to OUT TO AMP via the Fx unit.

If you set the mode to unlatched (no short on JP1) and use a momentary stomp switch, the mode will change (toggle between Fx on and bypass) each time you stomp.

If you set the mode to latched (short JP1) and use a latching switch, the mode will change each time you stomp.

If you set the mode to latched (short JP1) and use a momentary switch, then the Fx will be active only whilst you keep your foot on the stomp switch.

If you hold the stomp switch on whilst you power up the unit, the mode will change so the unit powers up in Effect-on mode. Repeat to return to power-up in Effect-off mode

Beware of using the true bypass module in an old-school PNP fuzzbox which has positive ground wiring.

Disclaimer

If you hear a click on the audio when the relay changes, this is because there is a dc voltage present in the Fx circuit. This is not a fault of the relay module and there is nothing you can do to mitigate this unless you modify the Fx circuit to remove the d.c. offset.

Disclaimer.

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