SSBP

FX Type: **UTILITY**
Build Level: Beginner

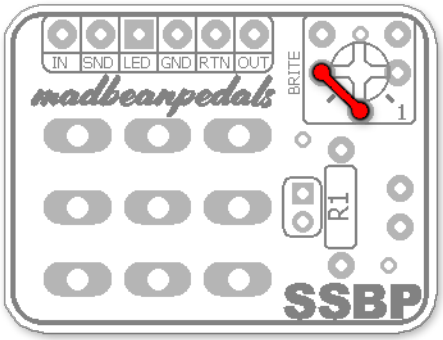
Last Updated: April 25, 2024 9:11 AM

Overview

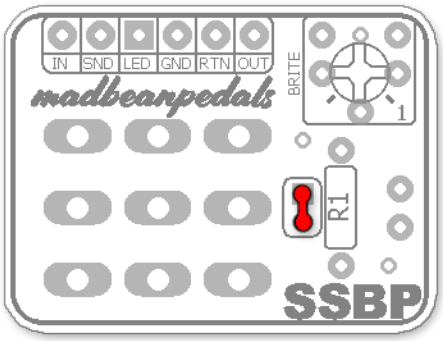
The SSBP (Standard Series Bypass) is a simple 3PDT bypass board available for the Standard Series as well as other upcoming madbeanpeals projects.

Build Notes

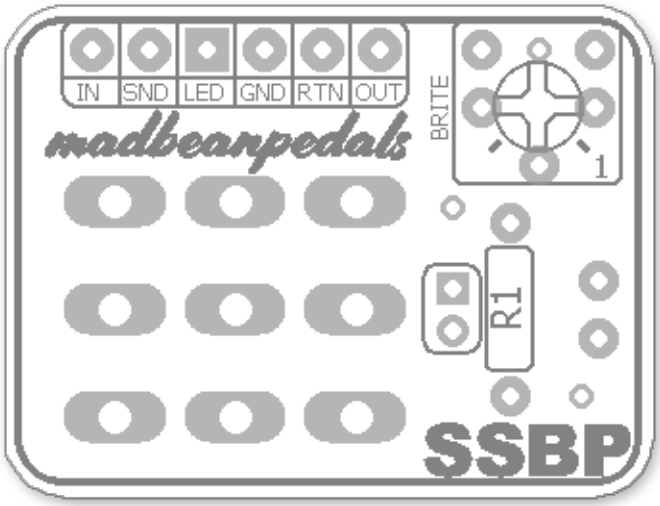
If you are using the SSBP with a 1590B or 1590BB enclosure, omit the trimpot and solder a jumper wire as shown below. Make R1 the value you want for the bypass LED (4k7, 10k, etc). You can use the trimpot for 125B and 125BB builds since they have enough height to clear the bottom lid. For 125B and 125BB use 1k for R1.

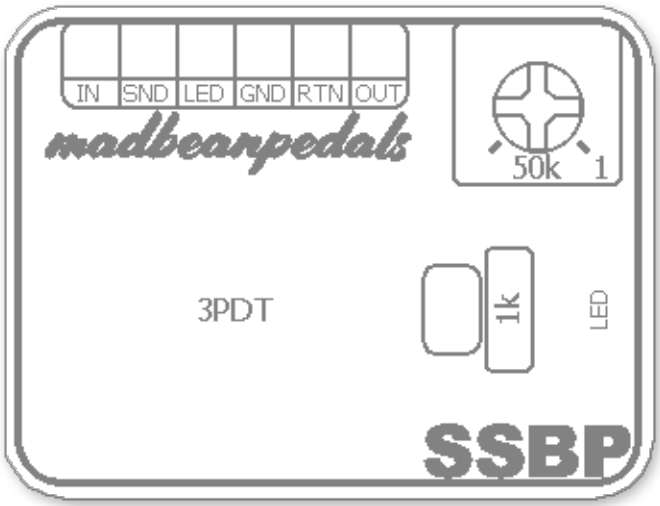


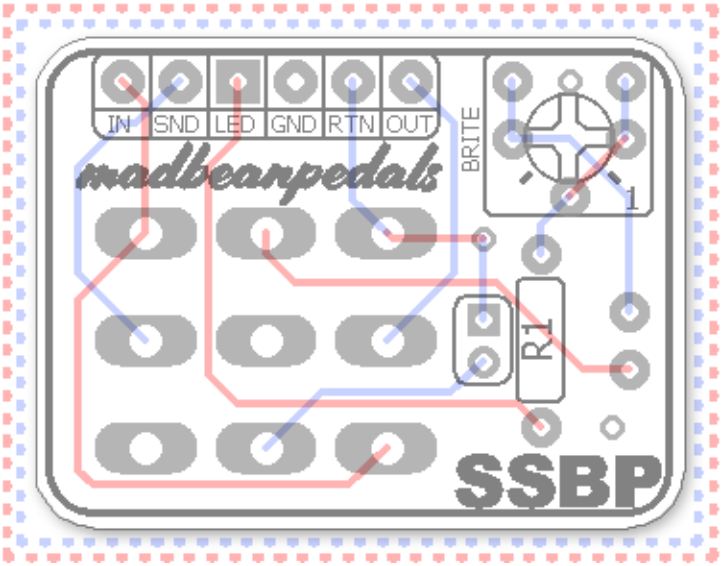
The SSBP grounds the circuit input (SND) on bypass. There is an option to ground the circuit output (RTN) on bypass as well. Generally this is not needed, but if you have an effect that has an unruly “pop” when switched, try the RTN grounding. To enable this feature, solder a jumper wire between the two pads shown below. Otherwise, leave them unconnected.



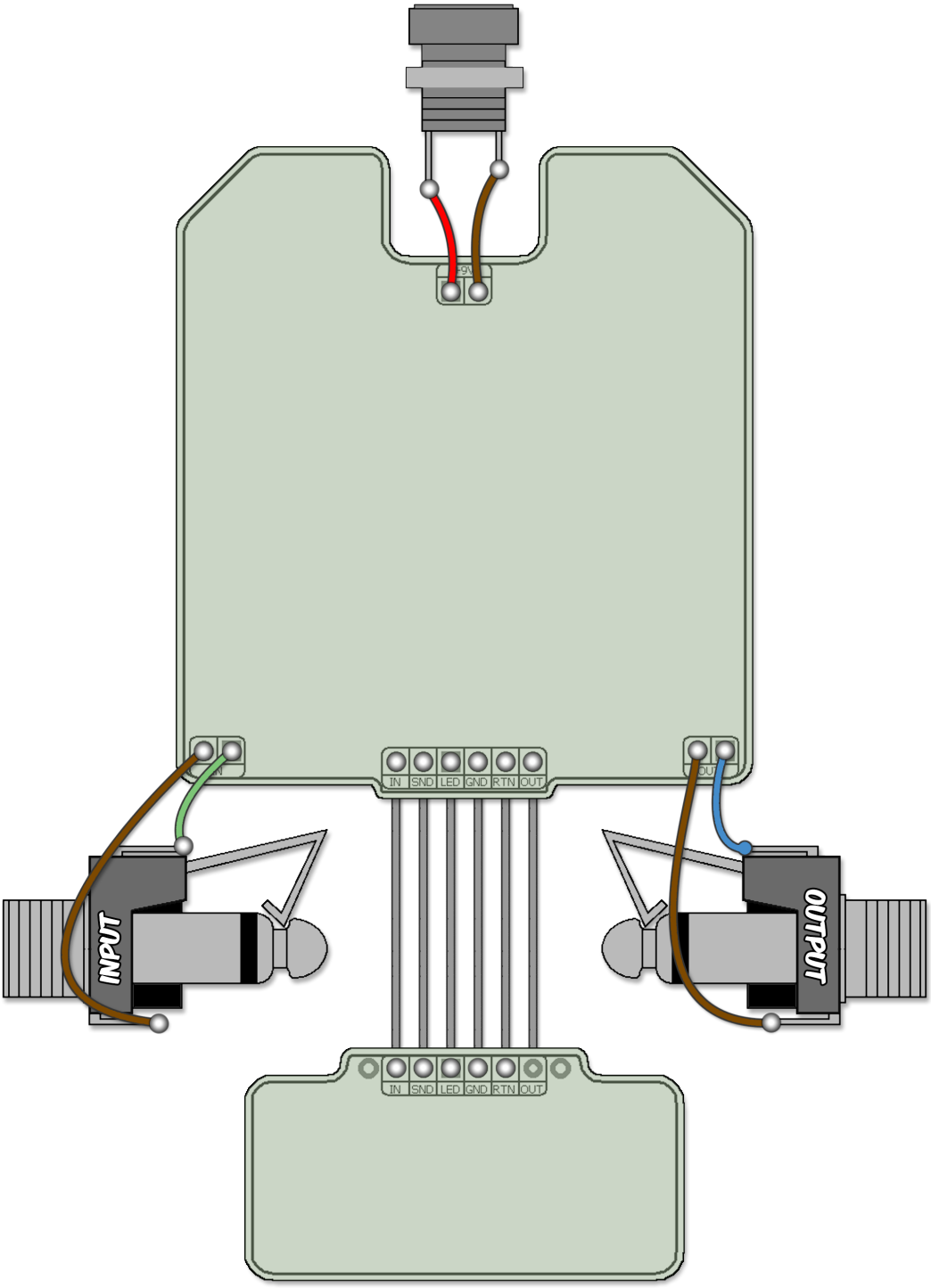
Parts Layout







Wiring

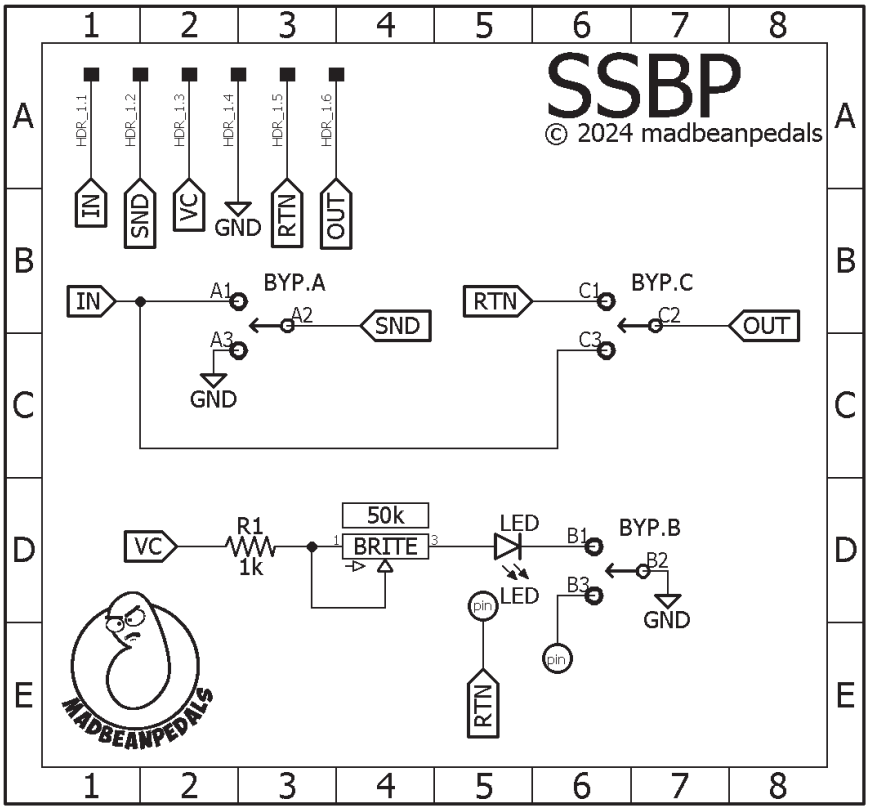


Unless otherwise noted, all Standard Series projects have the same wiring regardless of which 3PDT bypass board is used. A 6-pin, 2” ribbon cable is recommended for soldering the connections between the two PCBs.

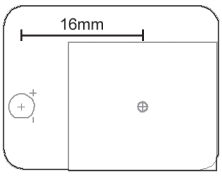
B.O.M.

Resistors	
R1	1k
Diodes	
LED	5mm
Switches	
BYP	3PDT
Trimmers	
BRITE	50k

Schematic



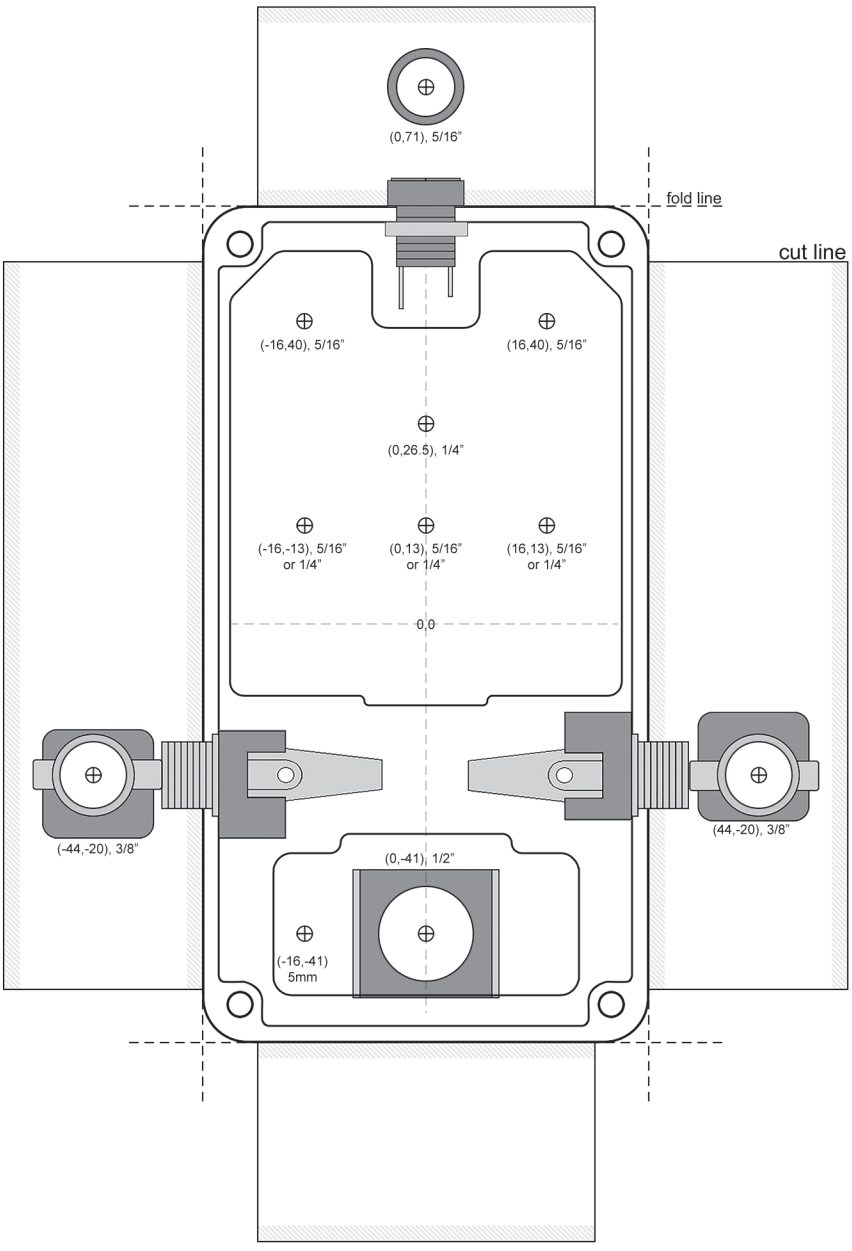
Drill



Actual size. 16mm from 3PDT to LED on center. Shown top down (as it appears from the outside of the enclosure).

1590B Drill Template

Coordinates are denoted in [(X,Y), drill size] format starting from the center (0,0) location of the enclosure.



Hardware

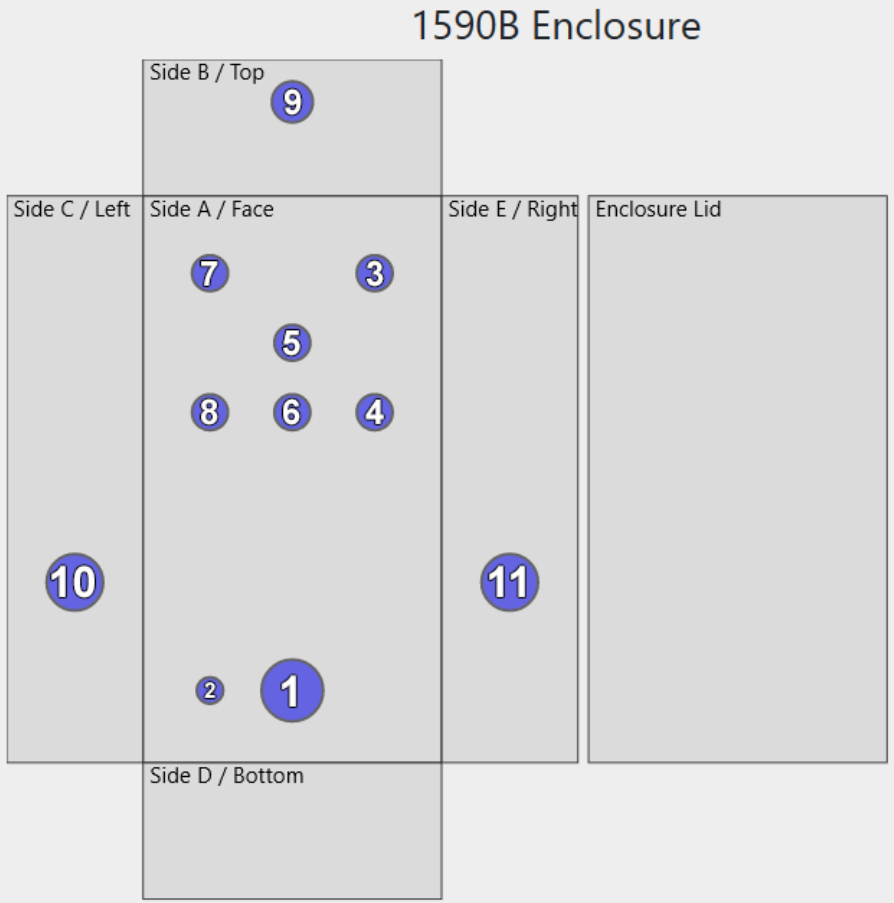
1590B enclosure
16mm pots
Lumberg 1/4” Compact mono jacks
Slim 2.1mm DC jack
Standard 3PDT footswitch
5mm LED

NOTE: Different 1/4” and DC jack styles may require different sized drill holes.

Tayda Drill Template

Holes | Lines | Shapes

	Hole # - Side	Diameter(mm)	X Position (mm)	Y Position (mm)	
Hole #1	A	12	0	-41	x
Hole #2	A	5.2	-16	-41	x
Hole #3	A	7.5	16	40	x
Hole #4	A	7.5	16	13	x
Hole #5	A	7.5	0	26.5	x
Hole #6	A	7.5	0	13	x
Hole #7	A	7.5	-16	40	x
Hole #8	A	7.5	-16	13	x
Hole #9	B	8	0	5	x
Hole #10	C	9.5	0	-20	x
Hole #11	E	9.5	0	-20	x



I've set the drill sizes according to the hardware spec'd in this doc (Lumberg jacks, slim 2.1mm DC jack, etc). If you use different parts you'll need to measure them for the correct millimeter drill size. Note that the pots use 7.5mm and switches only require 6.5mm. These drill sizes are slightly oversized from what's required but better to have a little more room than needed. Also, I've set the drill size for the 1/4" jacks to fit the annular ring inside the enclosure wall. If you don't want to do that, make #10 and #11 drills 9mm instead (it seems not all the Lumberg jacks have the ring around the jack anyway).

Link to Tayda Standard Series master drill template