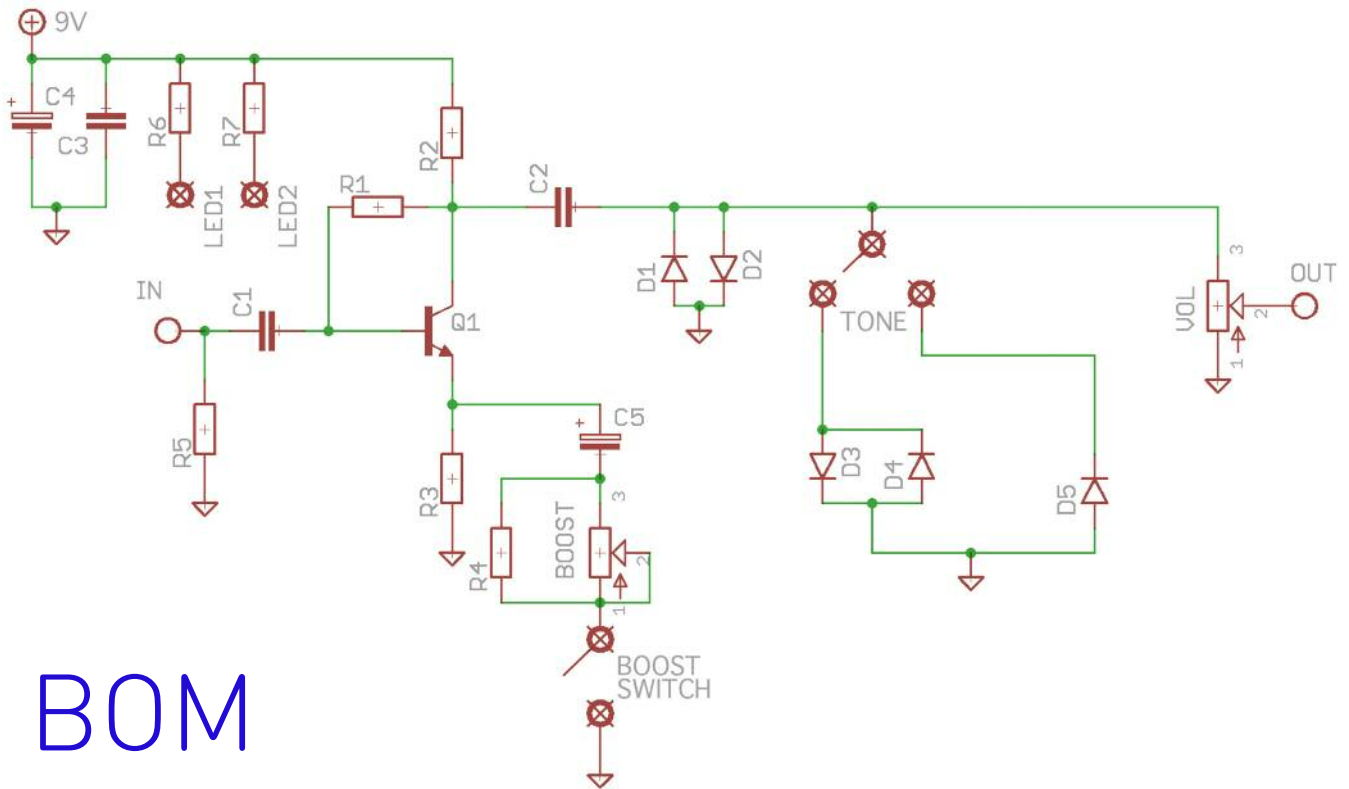


# L'IL LOUIE

Clone of a boutique  
Fender Tweed tone box

[PedalParts.co.uk](http://PedalParts.co.uk)

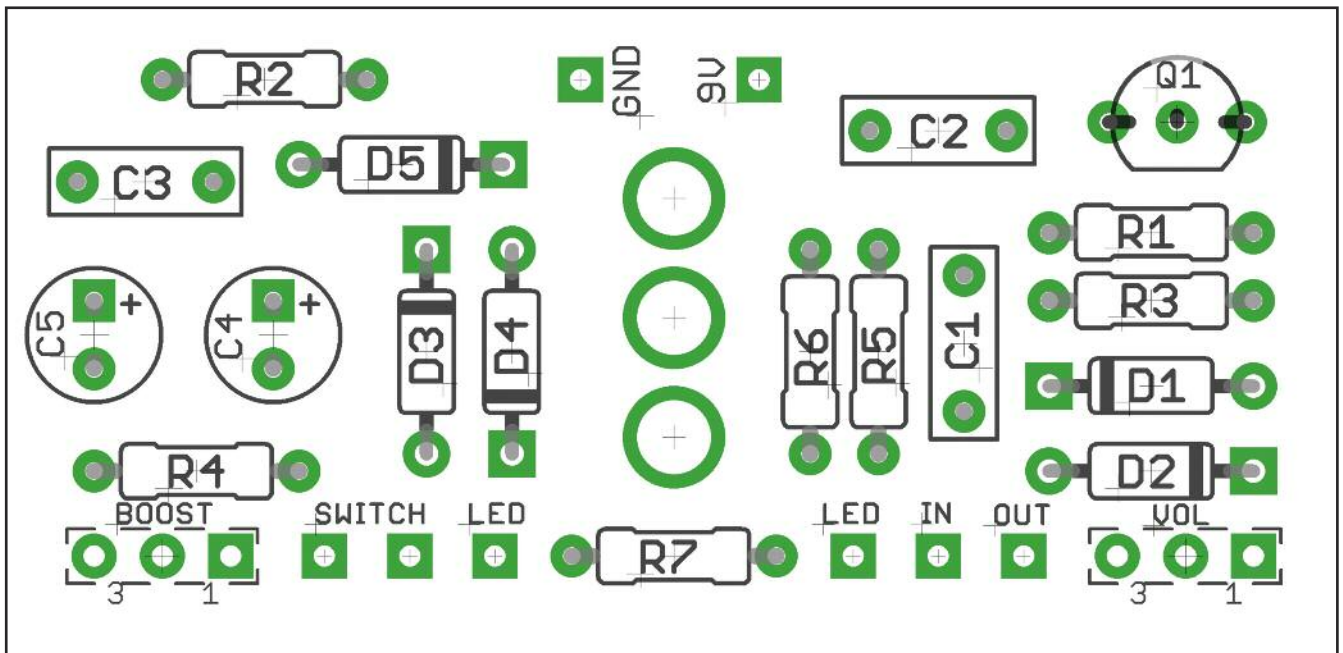
# Schematic



## BOM

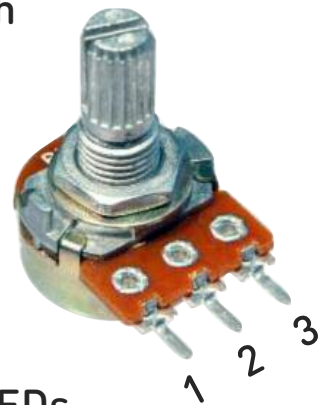
R1	3M3		
R2	3K3		
R3	330R		
R4	1K	D1,2	1N4148 / 1N914
R5	1M		
R6	2K2 (CLR)	D3-5	BAT46*
R7	2K2 (CLR)		
		Q1	2N5088
C1	47n		
C2	100n	BOOST	1KB
C3	100n	VOL	100KB
C4	47u elec		
C5	47u elec	TONE	SPDT (ON-OFF-ON)

\*Experiment with different diodes for tonal variation



Snap the little metal tag off the pots to mount them flush in the box.

You should use some kind of heat sink on the legs of the diodes and transistors when soldering. They aren't keen on heat. Any more than 3-4 seconds of iron and they're toast.

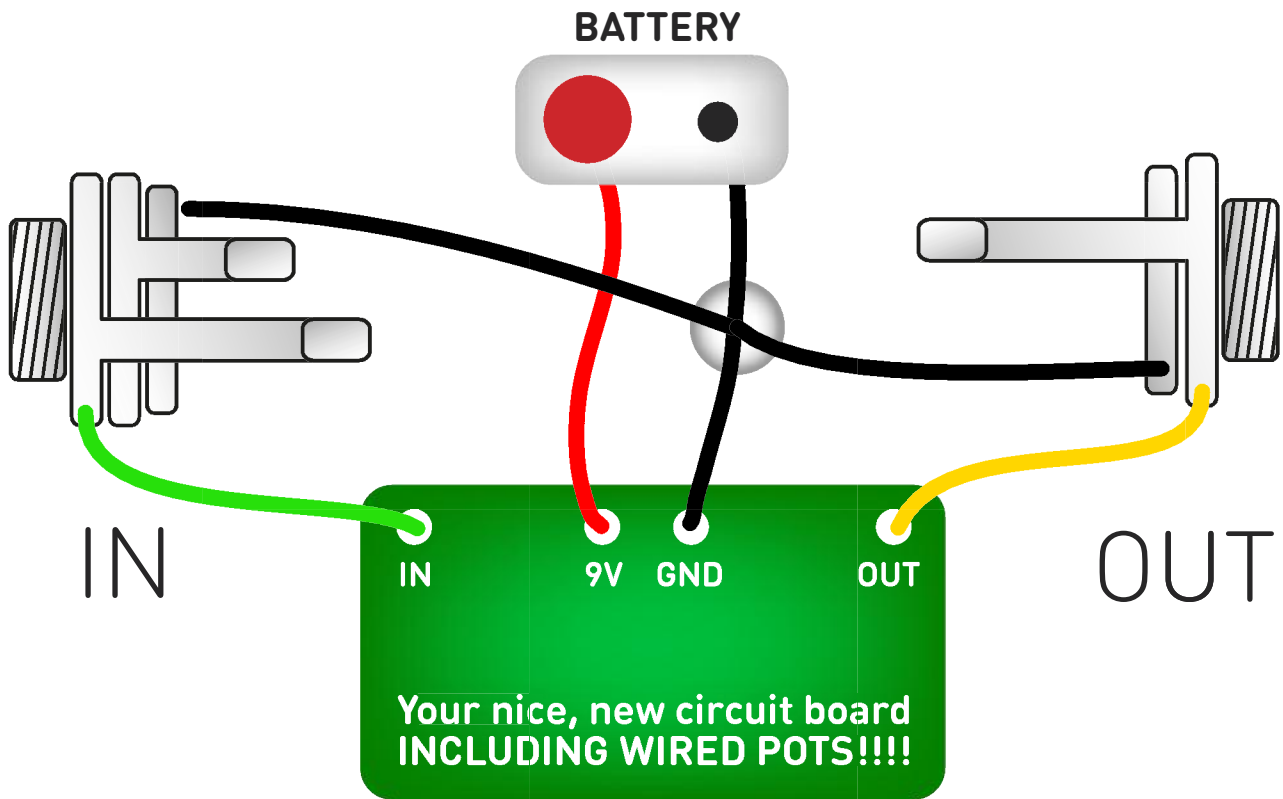


I've incorporated the Current Limiting Resistor for the LEDs into the board for your pleasure. It doesn't matter which LED pad goes to which switch in the wiring diagram. Whichever is more convenient for your box layout.

DPDT switch mounts on the underside of the board. This can be used to hold the PCB firmly in the enclosure. Neat huh?

The clipping from D1 and D2 is constantly in the circuit. The TONE switch will give you three different Fender amp tones, as it brings in clipping from D3 and D4 in the top position, D5 in the bottom. Middle position is D1 and D2 only.

# Test the board!



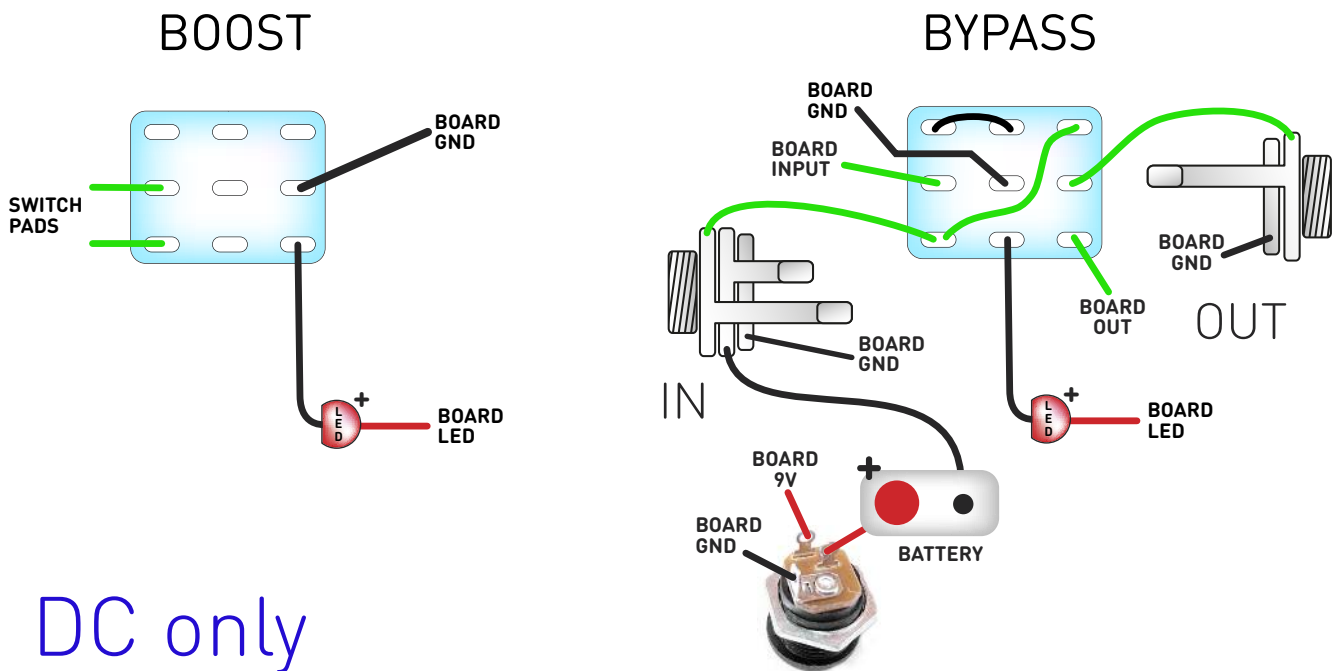
Once you've finished the circuit it makes sense to test it before starting on the switch and LED wiring. It'll cut down troubleshooting time in the long run. If the circuit works at this stage, but it doesn't once you wire up the switch - guess what? You've probably made a mistake with the switch.

**Add long wires from the SWITCH pads. You can test the BOOST function by simply touching the bare ends together to simulate the switch.**

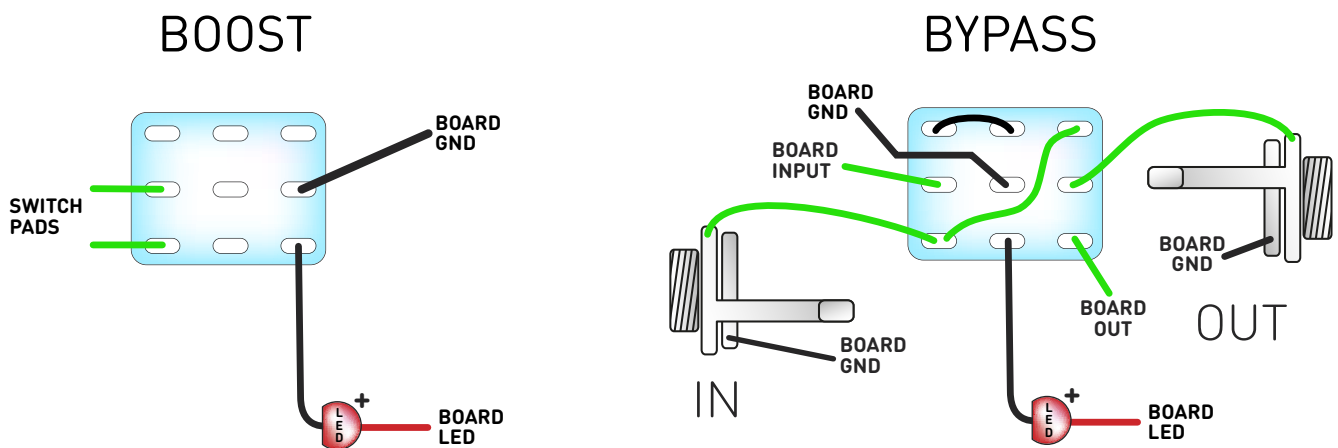
Solder some nice, long lengths of wire to the board connections for 9V, GND, IN and OUT. Connect IN and OUT to the jacks as shown. Connect all the GNDs together (twist them up and add a small amount of solder to tack it). Connect the battery + lead to the 9V wire, same method. Plug in. Go!

If it works, crack on and do your switch wiring. If not... aw man. At least you know the problem is with the circuit. Find out why, get it working, THEN worry about the switch etc.

# Wire it up - including battery



DC only



The Board GND connections don't all have to directly attach to the board. You can run a couple of wires from the DC connector, one to the board, another to the IN jack, then daisy chain that over to the OUT jack. It doesn't matter how they all connect, as long as they do.

BOOST switch can be DPDT. Just ignore the middle lugs on the diagram above. It doesn't matter which of the SWITCH pads is which. Same for which the LED pads.

This circuit is standard, Negative GND. Your power supply should be Tip Negative / Sleeve Positive. That's the same as your standard pedals (Boss etc), and you can safely daisy-chain your supply to this pedal. Now... crank it!

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