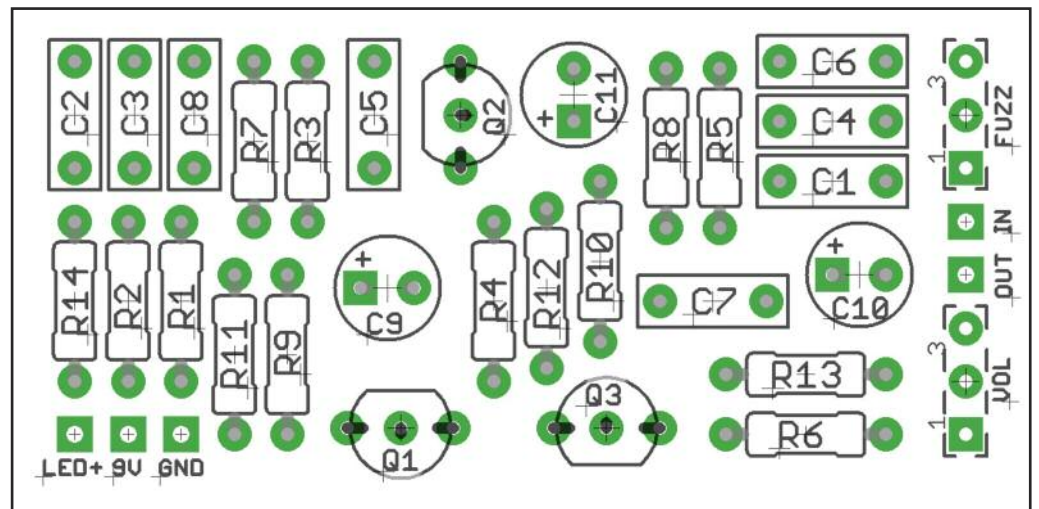
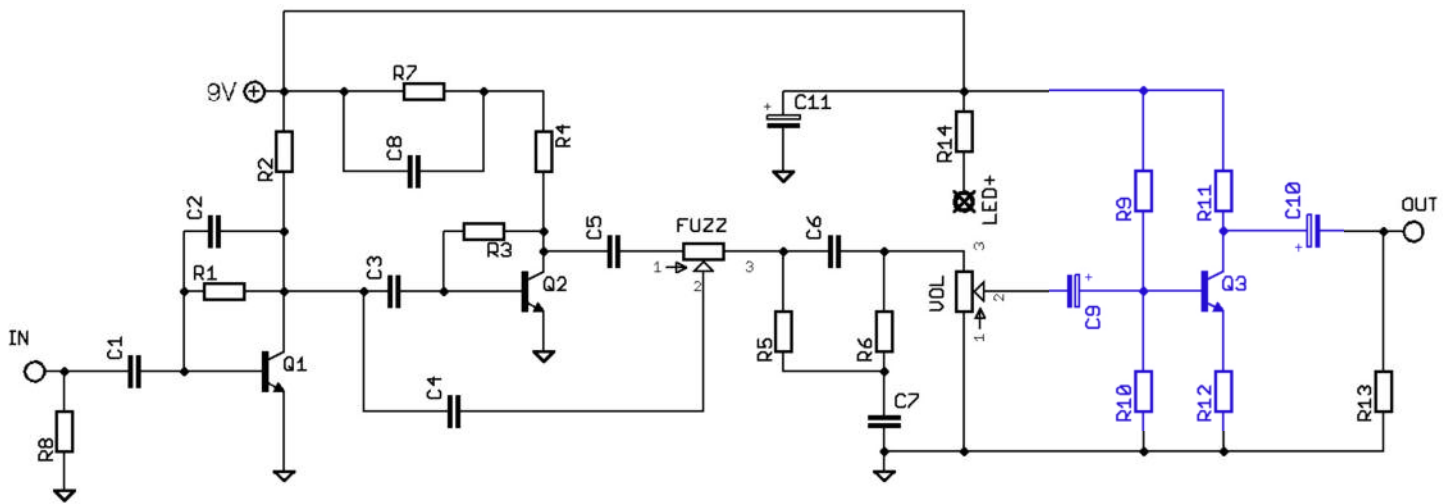


FY2

Shin-ei FY2 Companion Fuzz
with LPB post-boost

PedalParts.co.uk

Schematic



BOM

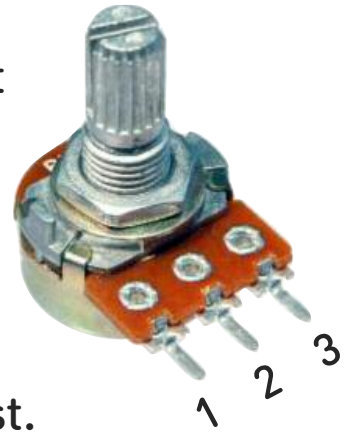
R1	2M2	C1	47n	Q1,2	Low gain silicon NPN (2N3904, 2N2222 etc)
R2	22K	C2	1n	Q3	2N3904
R3	1M2	C3	47n	VOL	50KB
R4	47K	C4	2n2	FUZZ	50KB
R5	10K	C5	3n3		
R6	15K	C6	1n		
R7	100K	C7	100n		
R8	1M	C8	47n		
R9	470K	C9	10u		
R10	47K	C10	10u		
R11	10K	C11	100u		
R12	390R				
R13	100K				
R14	CLR (2K2)				

Components shown in blue on the schematic are the LPB post-boost circuit. Feel free to leave them out and take your OUT wire from pin 2 of the VOL pot rather than wire it to the board. Warning: your output will be low.

Wiring shown overleaf will disconnect the battery when you remove the jack plug from the input, and also when a DC plug is inserted.

Snap the little metal tag off the pot to mount it flush in the box.

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



Recommended assembly order:

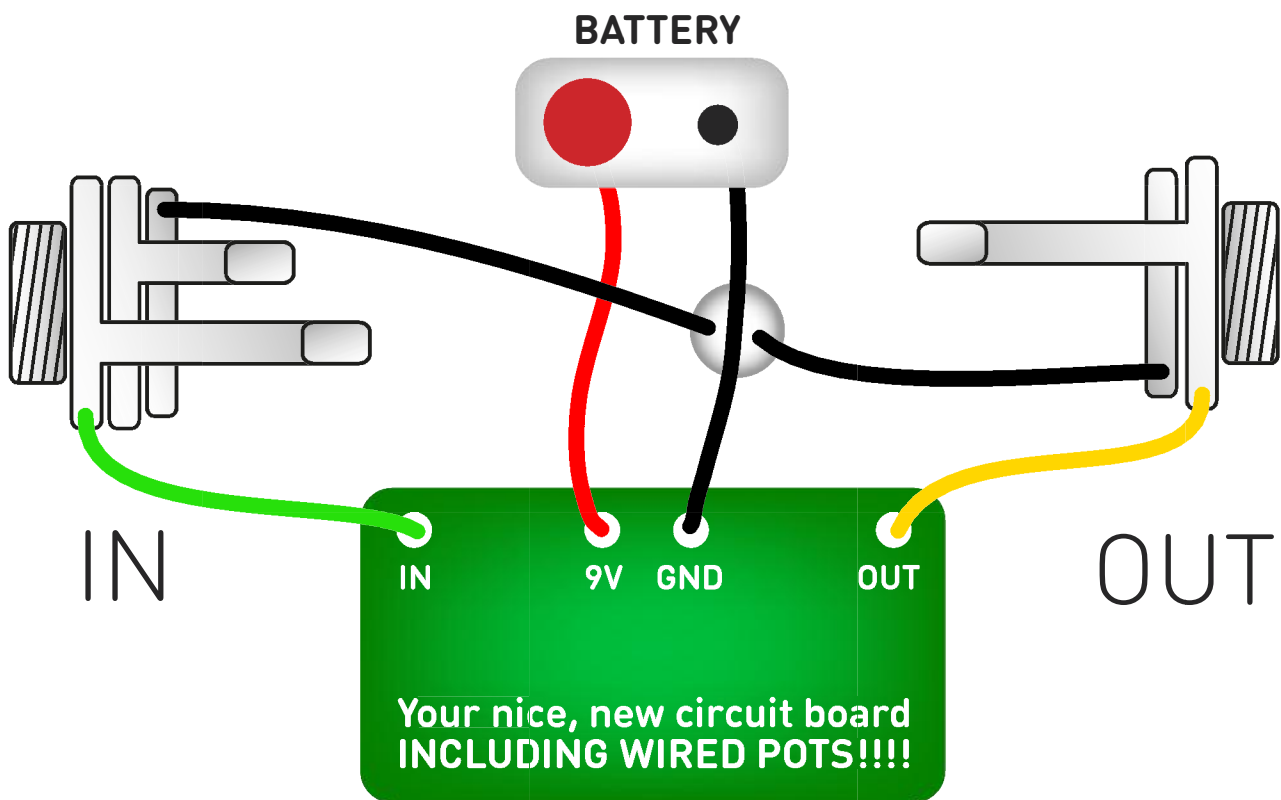
Resistors, Caps, Transistors, , Wires, Pots

I've incorporated the Current Limiting Resistor for the LED into the board for your pleasure.

Post Boost..??

The board incorporates a LPB circuit as a post-boost to raise the signal level. The FY2 has a very low output, and this makes it much more friendly without colouring the sound at all.

Test the board!

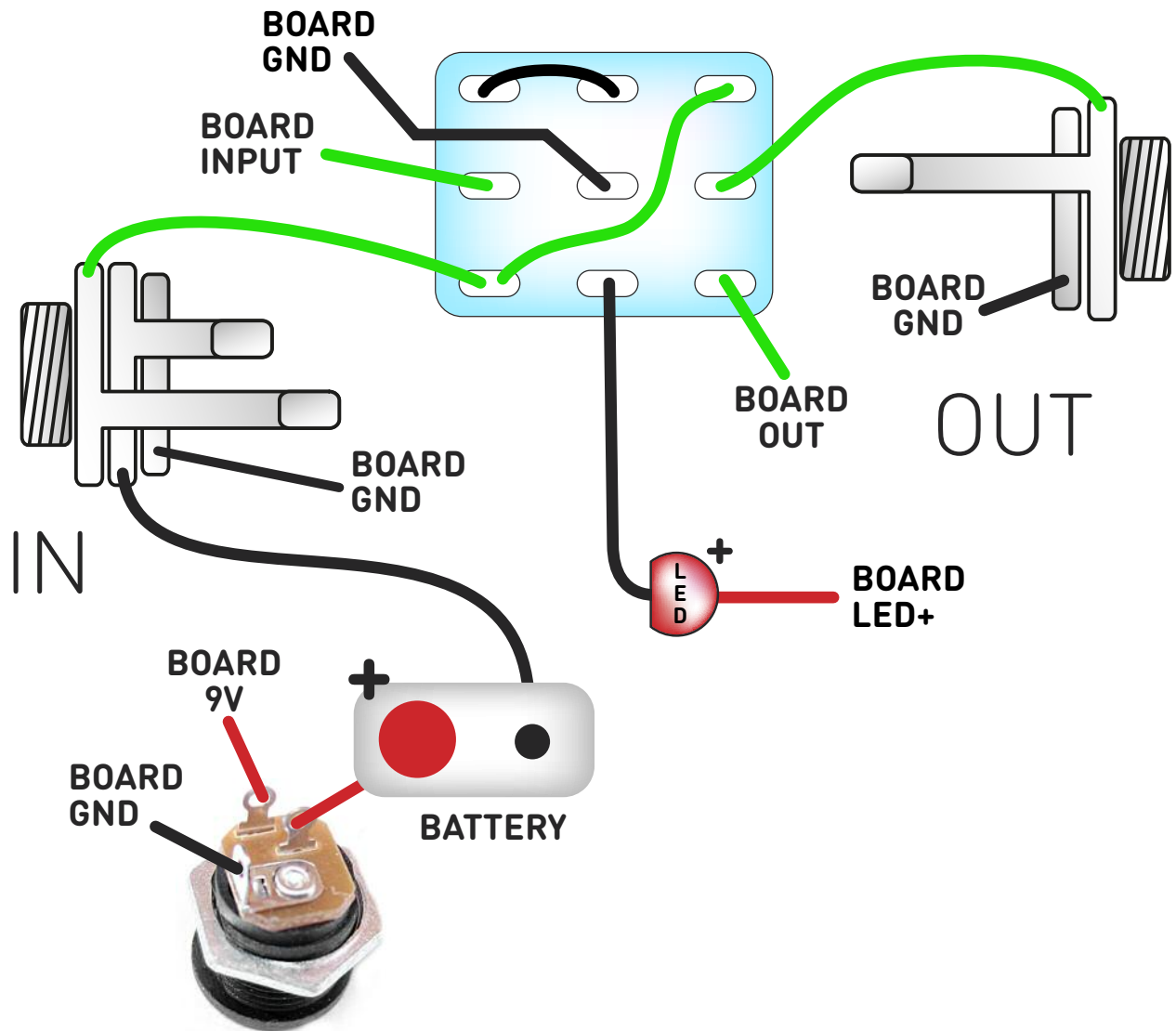


Once you've finished the circuit it makes sense to test it before starting on the switch and LED wiring. It'll cut down troubleshooting time in the long run. If the circuit works at this stage, but it doesn't once you wire up the switch - guess what? You've probably made a mistake with the switch.

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



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.

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... FFFUUUUZZZZZZZZ!

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