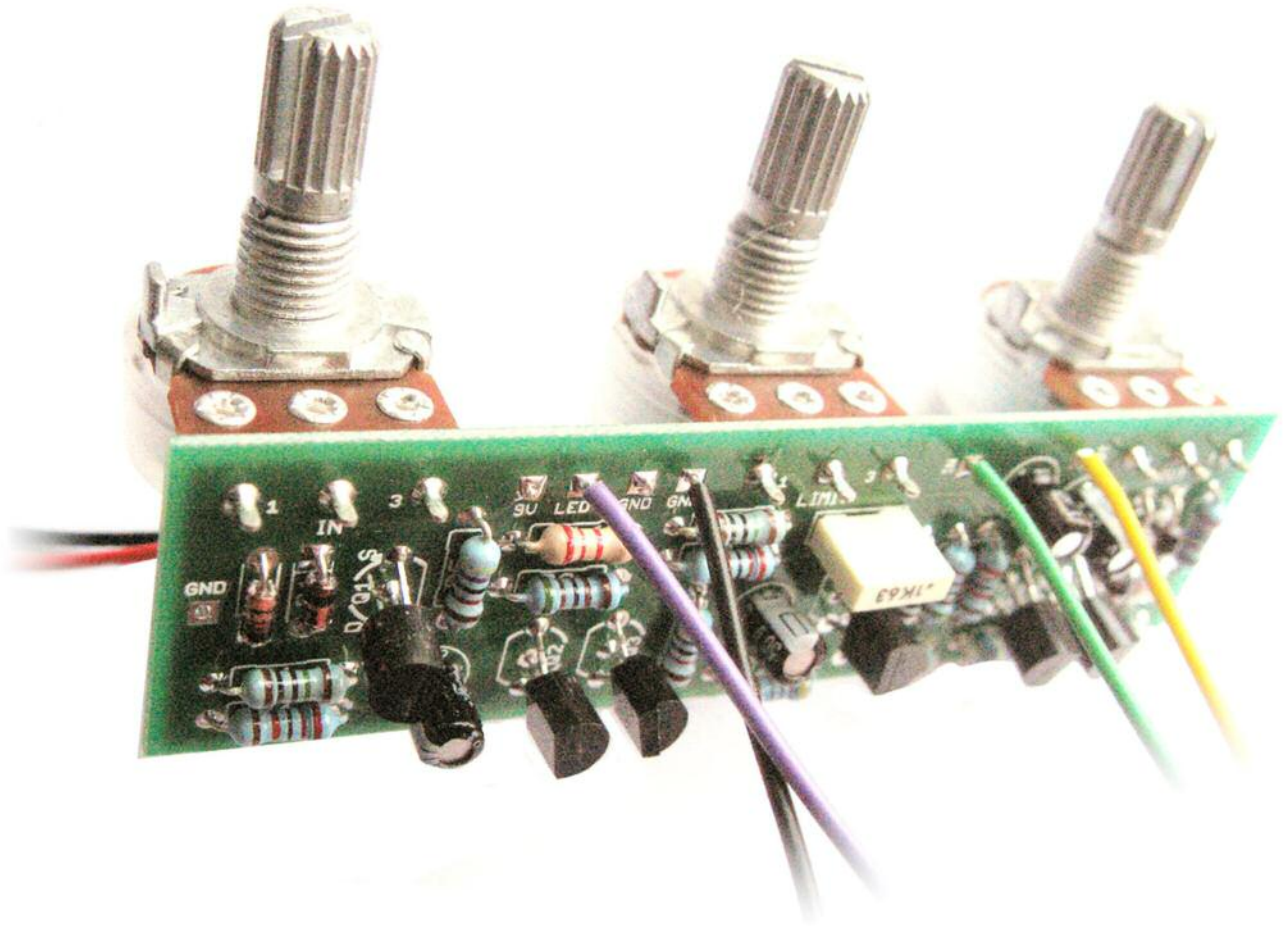
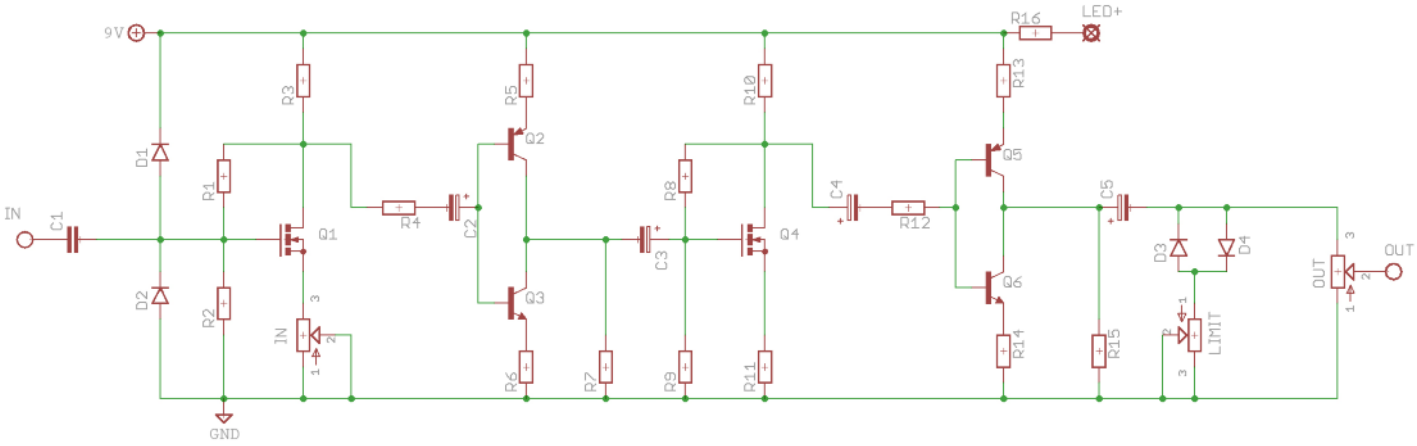


Greasy Tool

Frequency Tripling Crossover Distortion

PedalParts.co.uk

Schematic



BOM

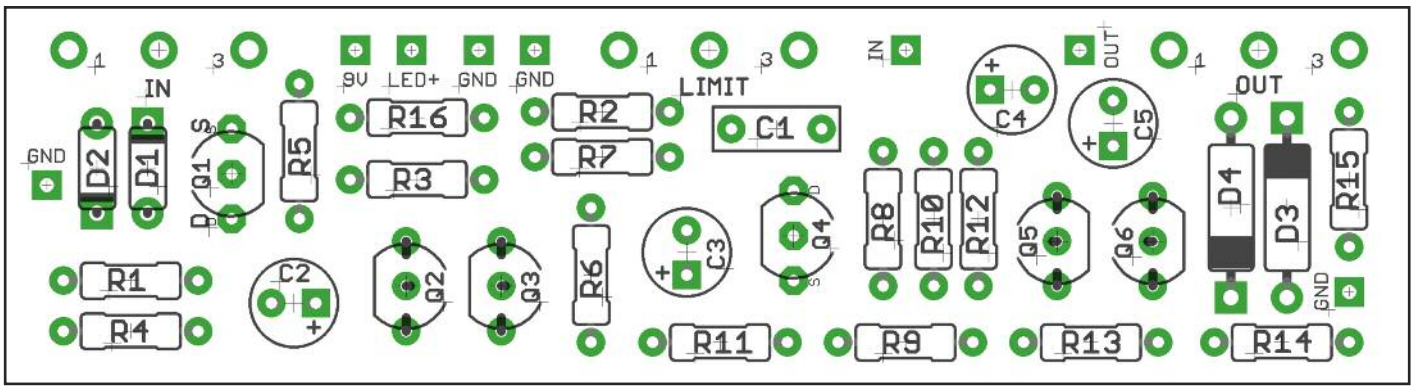
R1	10M
R2	10M
R3	5K1
R4	22K
R5	47K
R6	47K
R7	22K
R8	10M
R9	10M
R10	5K1
R11	470R
R12	22K
R13	47K
R14	47K
R15	22K
R16	CLR (2K2)

C1	100n
C2	1u
C3	1u
C4	1u
C5	1u

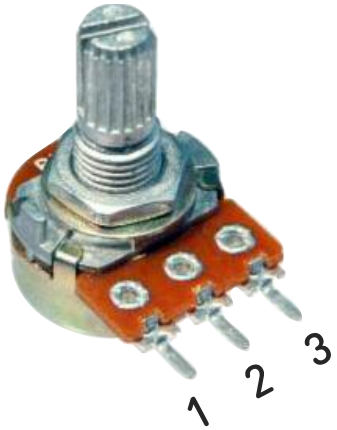
Q1,4	BS170
Q2,5	2N3906
Q3,6	2N3904

D1,2	1N4148
D3,4	1N34A

IN	5KC
LIMIT	50KB
OUT	100KB



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 pots to mount them 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.

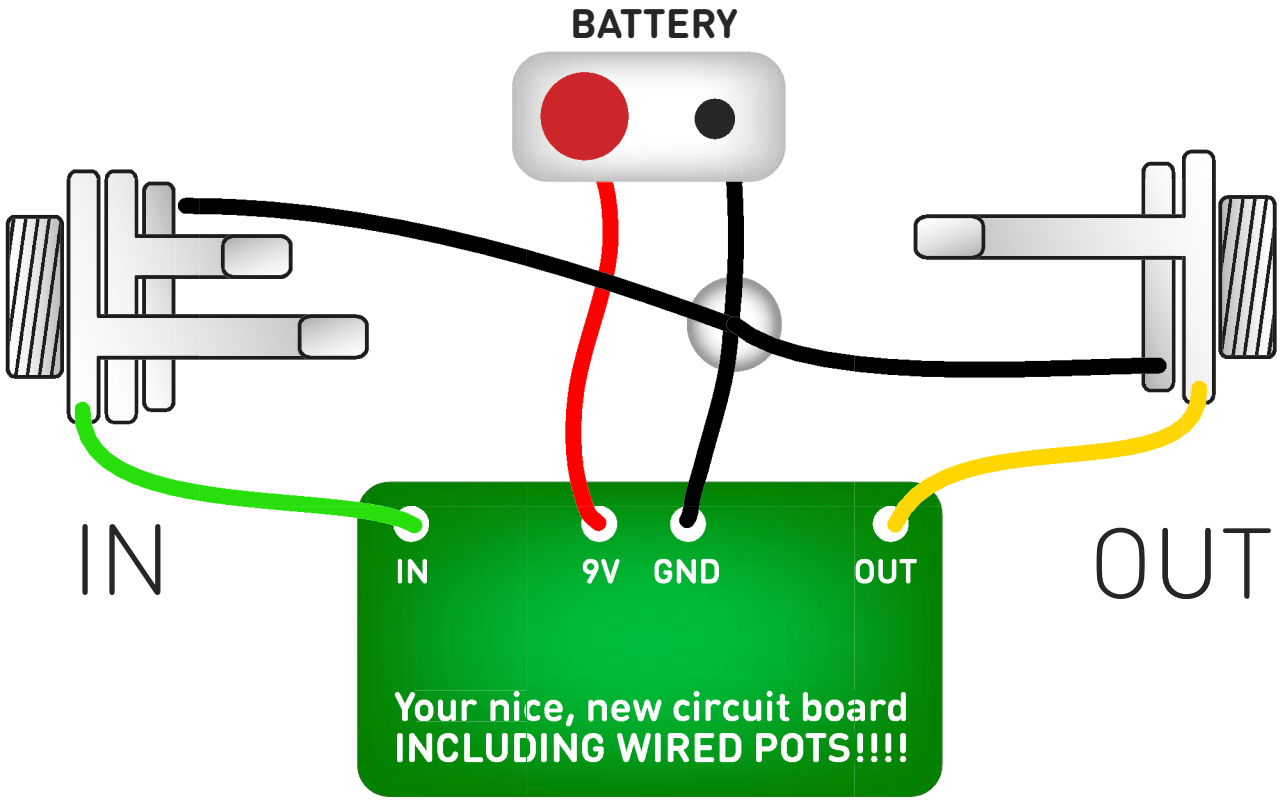
I've incorporated the Current Limiting Resistor for the LED into the board for your pleasure.

Be VERY careful when bending the legs of the 1N34A. The glass case is very fragile and likely to break. Best to hold the leg with some needle-nosed pliers against the case, and bend the leg with your finger so the pliers are taking any strain away from the diode.

Pots mount on the back side of the board.

NOTE: this circuit sounds ghastly on its own. Really. Properly horrible. Some of you crazy kids may like that kind of thing. It comes into its own when placed in front of a chain of other stuff - ODs, distortions, fuzzes. Click it on and hear the notes sing through the sonic mush.

Test the board!

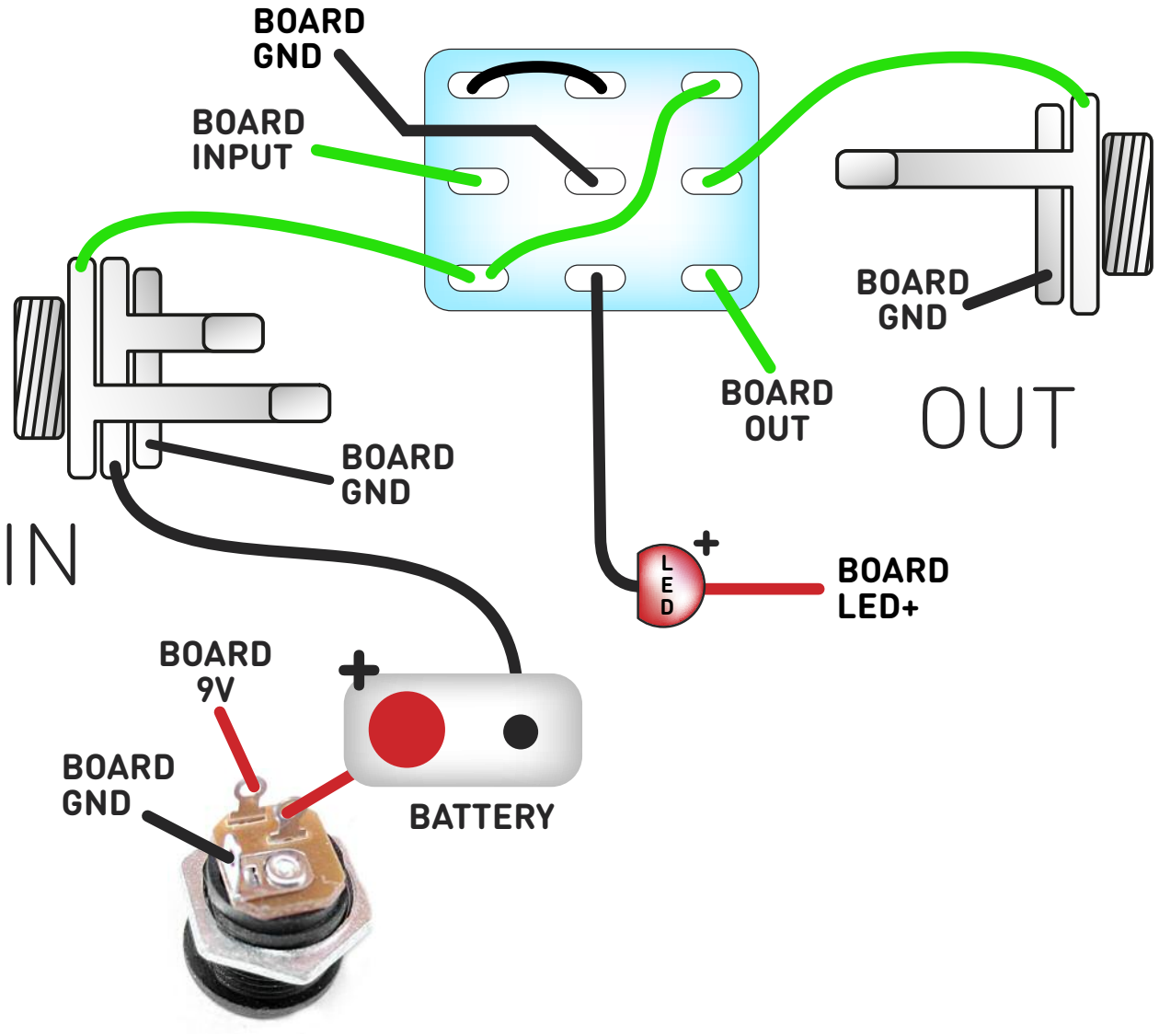


Once you've finished the circuit it makes sense to test is before starting on the switch and LED wiring. It'll cut down troubleshooting time in the long run. If the circuit works at this stage, but it doesn't once you wire up the switch - guess what? You've probably made a mistake with the switch.

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



There are multiple GND points on the PCB, in strategic places. You should be able to run a separate one to each required point - the two jacks, the DC socket and the footswitch. You can attach the wire to either side of the board - the connections run all the way through.

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... erm... yeah.

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