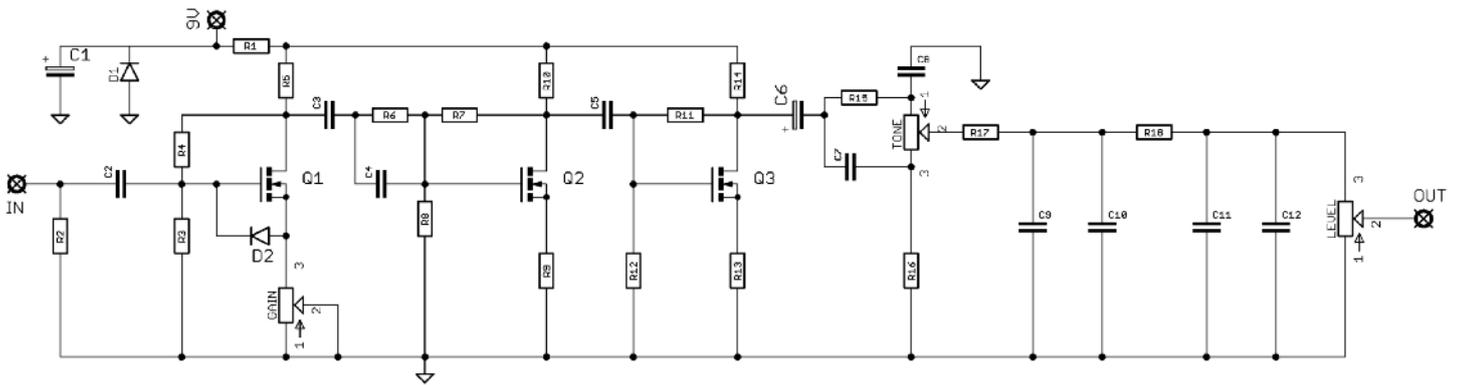


RockBox (no boost)

The RockBox...
without the boost



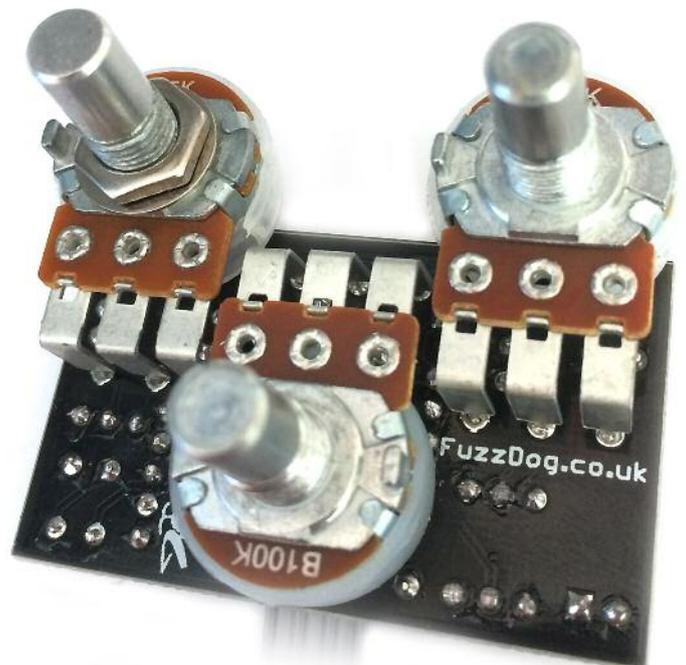
Schematic + BOM

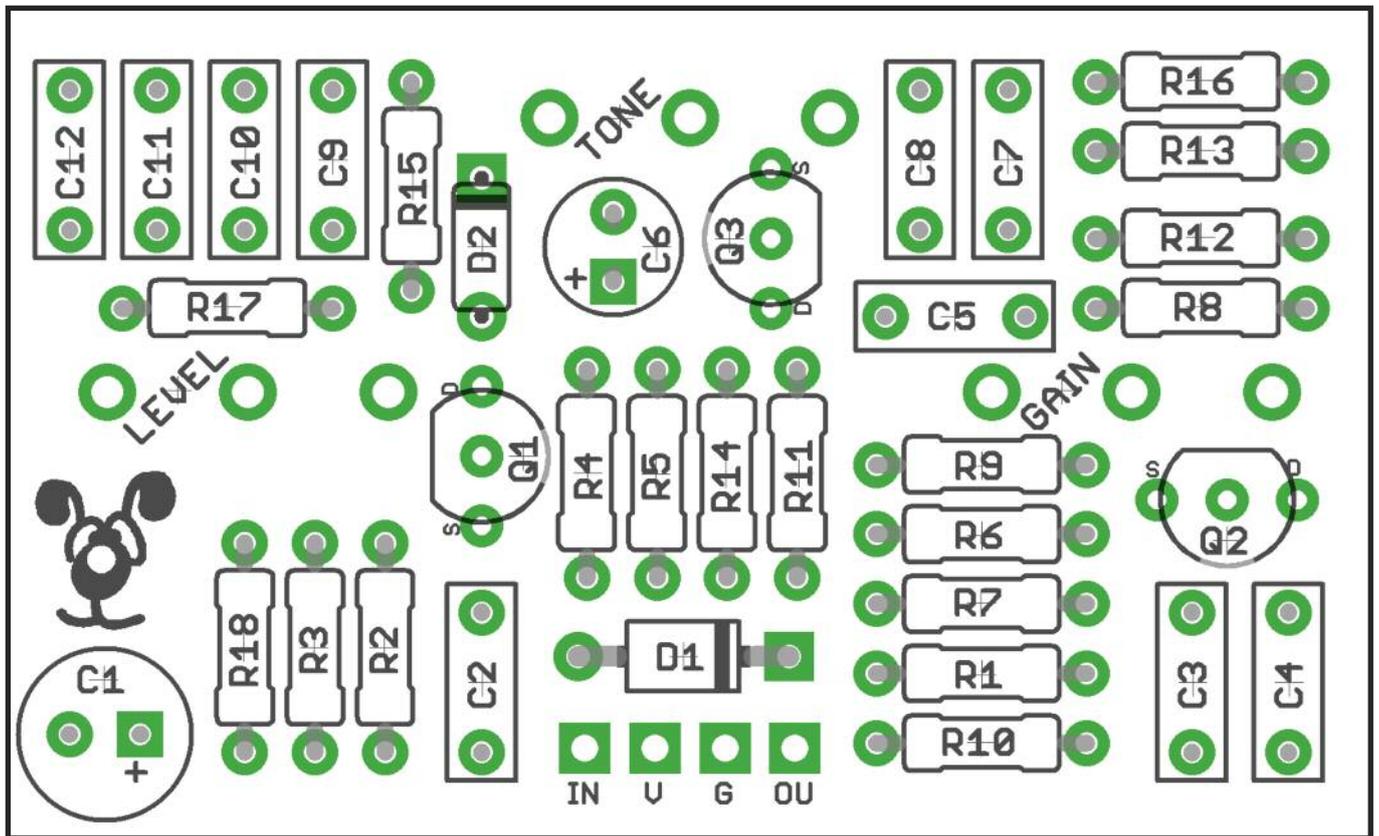


R1	82R	C1	47u elec	Q1-3	BS170
R2	1M	C2	100n	D1	1N4001
R3	1M	C3	22n 10n	D2	9.1V Zener
R4	1M	C4	470p		
R5	5K1	C5	22n 10n	LEVEL	100KB
R6	470K	C6	1u elec	GAIN	5KC
R7	1M	C7	10n 100n	TONE	100KB
R8	1M	C8	22n		
R9	100R 270R	C9	1n 2n2		
R10	5K1	C10	1n empty		
R11	1M 510K*	C11	1n 2n2		
R12	1M	C12	1n empty		
R13	330R 360R				
R14	5K1				
R15	47K				
R16	82K				
R17	10K				
R18	10K				

Main BOM is JTM45 version.
Tweaks for '59 Bassman in blue.

*520K in original. 510K is fine.





The power and signal pads on the PCB conform to the FuzzDog Direct Connection format, so can be paired with the appropriate daughterboard for quick and easy offboard wiring. Check the separate daughterboard document for details.

Snap the small metal tag off the pots so they can be mounted flush in the box.

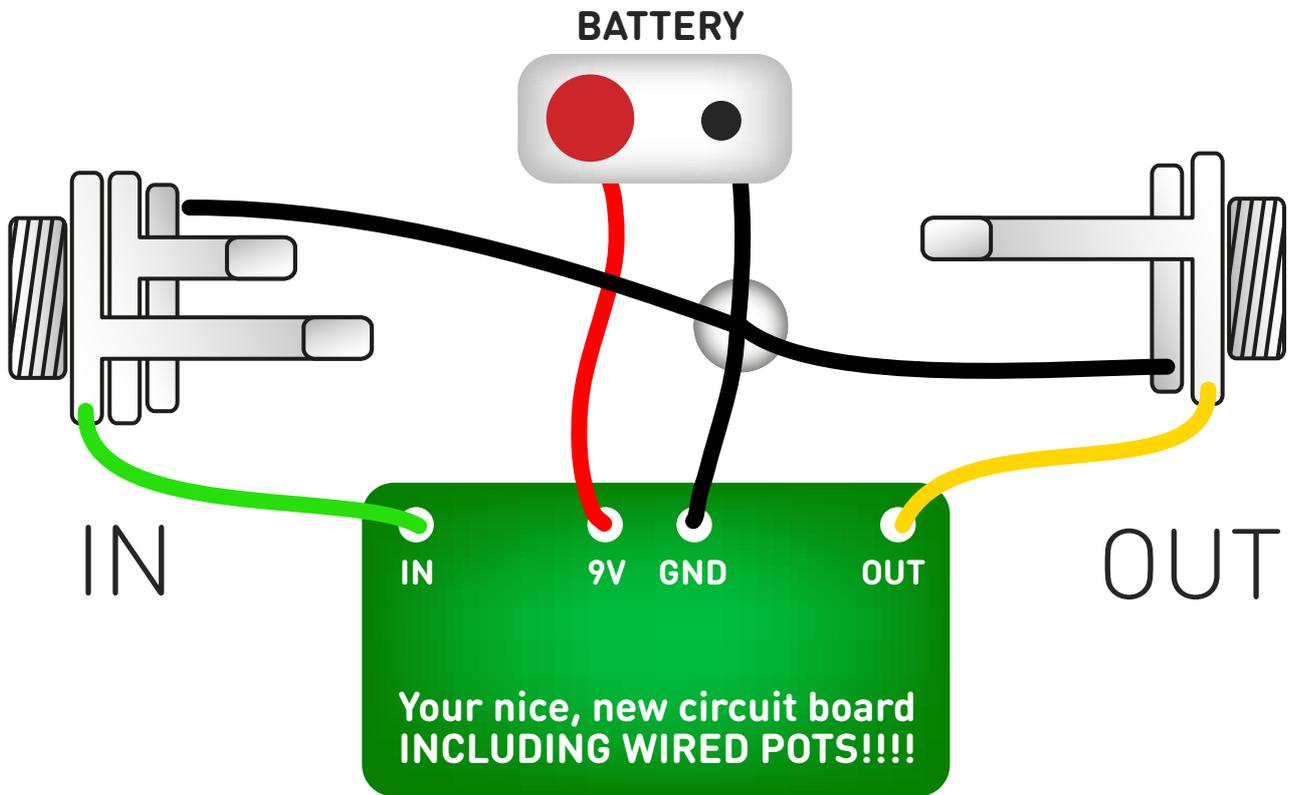
Positive (anode) legs of the electrolytic caps go to the square pads.

Negative (cathode) legs of the diodes go to the square pad.

Be very careful when soldering the diodes and BS170. They're very sensitive to heat. You should use some kind of heat sink (crocodile clip or reverse action tweezers) on each leg as you solder them. Keep exposure to heat to a minimum (under 2 seconds).

You should solder all other board-mounted components before you solder the pots. Once they're in place you'll have no access to much of the board. Make sure your pots all line up nicely. The best way to do that is to solder a single pin of each pot in place then melt and adjust if necessary before soldering in the other two pins. Ensure you leave a decent gap between the pot body and the PCB otherwise you risk shorting out the circuit.

Test the board!



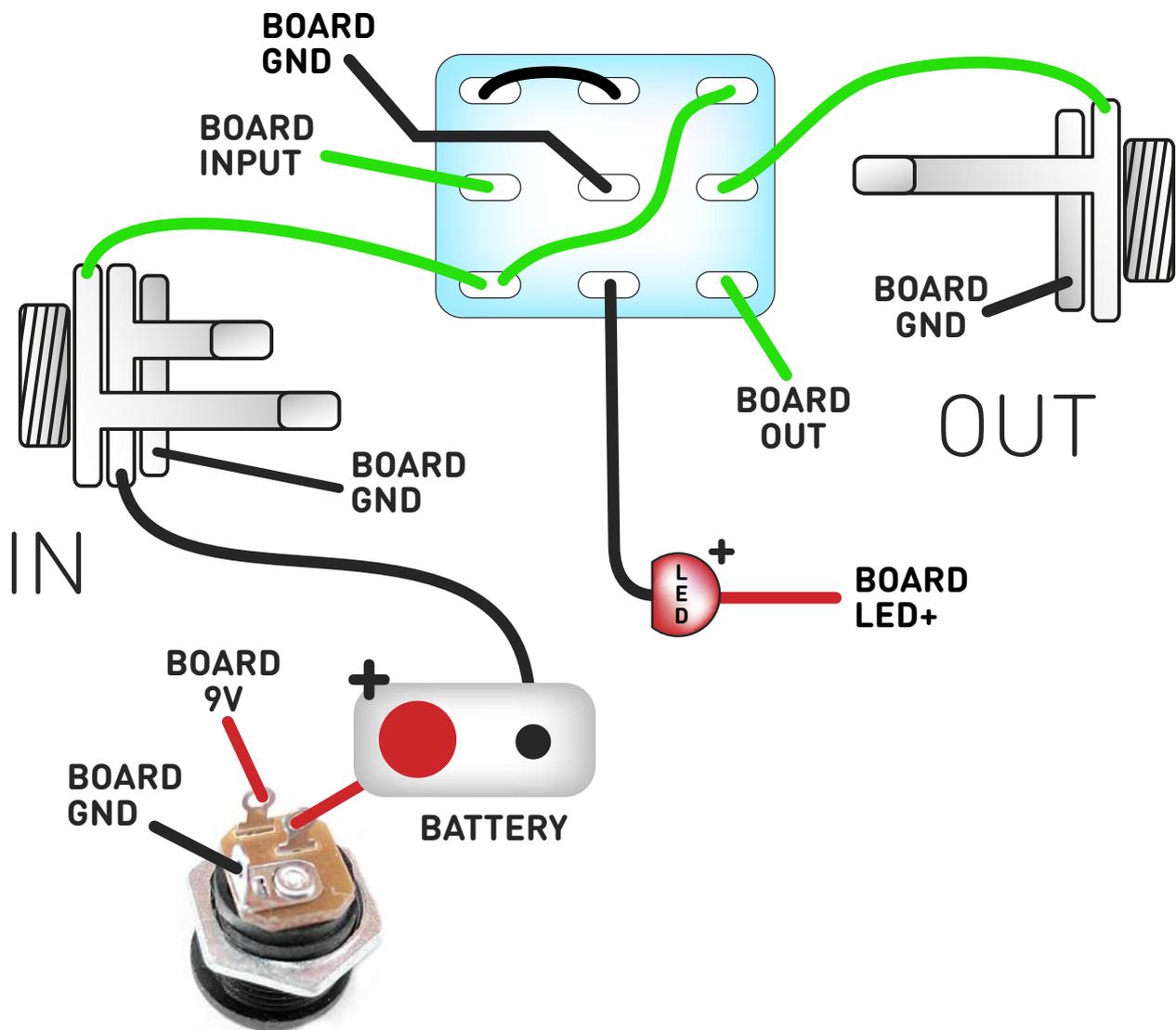
UNDER NO CIRCUMSTANCES will troubleshooting help be offered if you have skipped this stage. No exceptions.

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 (if using a daughterboard please refer to the relevant document)



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

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.

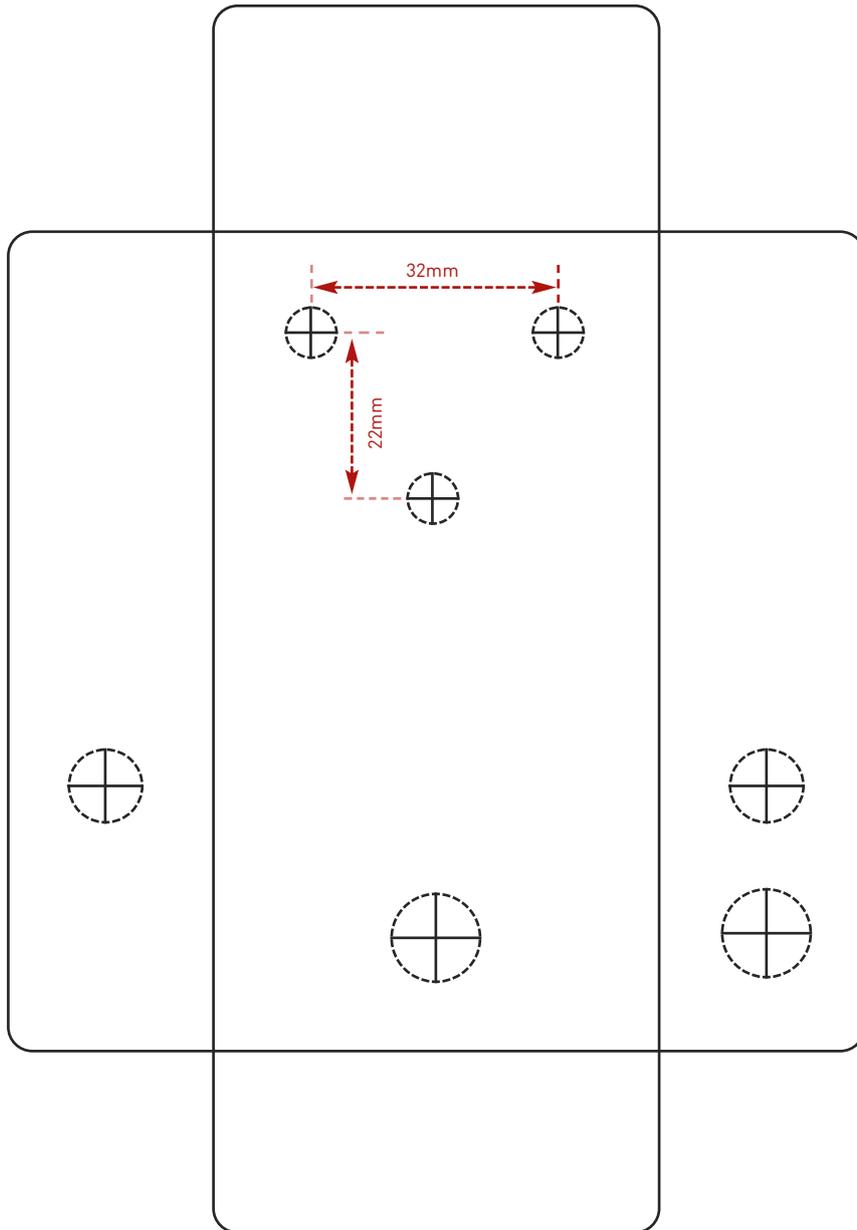
Drilling template

Hammond 1590B
60 x 111 x 31mm

Recommended drill sizes:

Pots	7mm
Jacks	10mm
Footswitch	12mm
DC Socket	12mm

It's a good idea to drill the pot and toggle switch holes 1mm bigger if you're board-mounting them.
Wiggle room = good!



This template is a rough guide only. You should ensure correct marking of your enclosure before drilling. You use this template at your own risk.
Pedal Parts Ltd can accept no responsibility for incorrect drilling of enclosures.

FuzzDog.co.uk