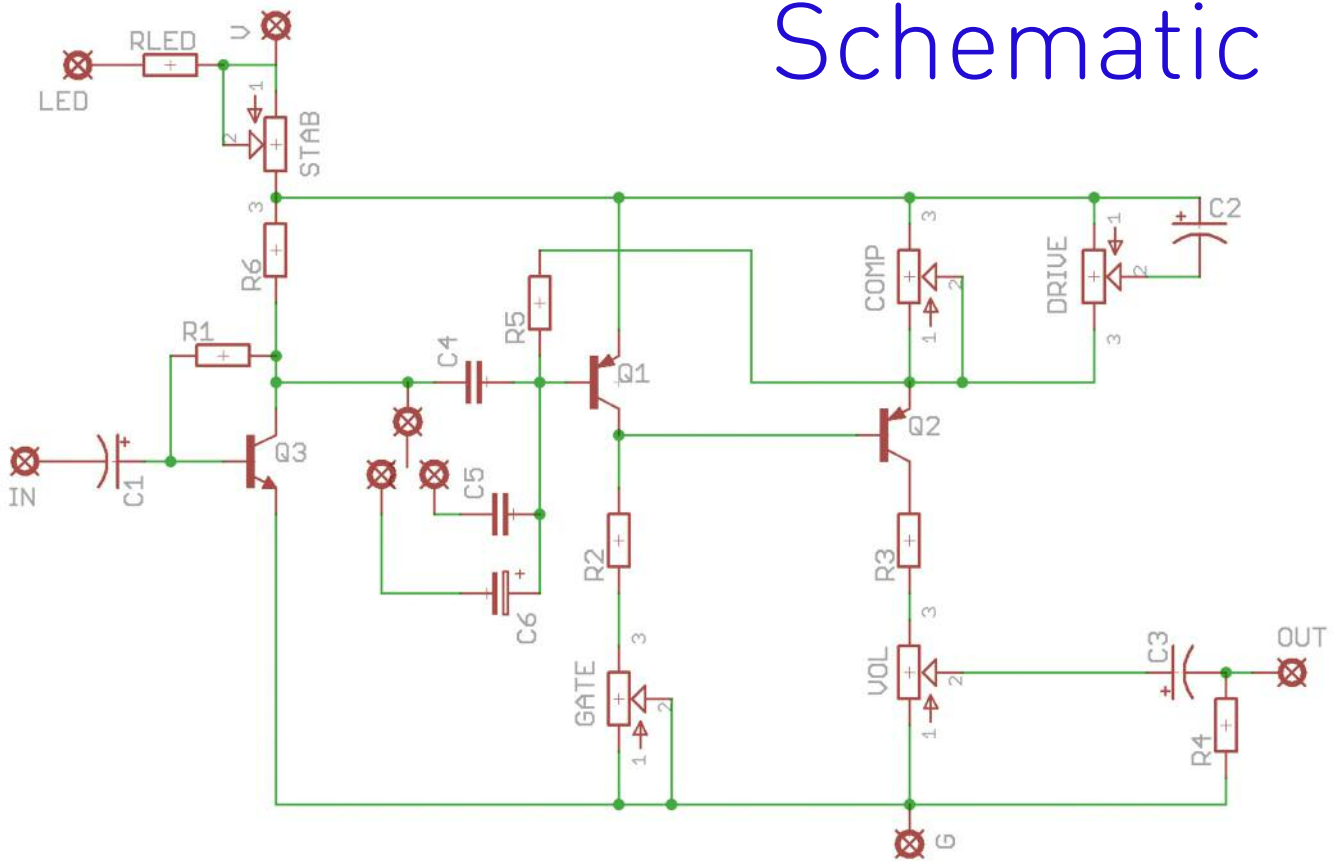


# Filthy Fack!






Compact vertical box version of the five-knobbed extremely industrious fuzz monster



# Schematic

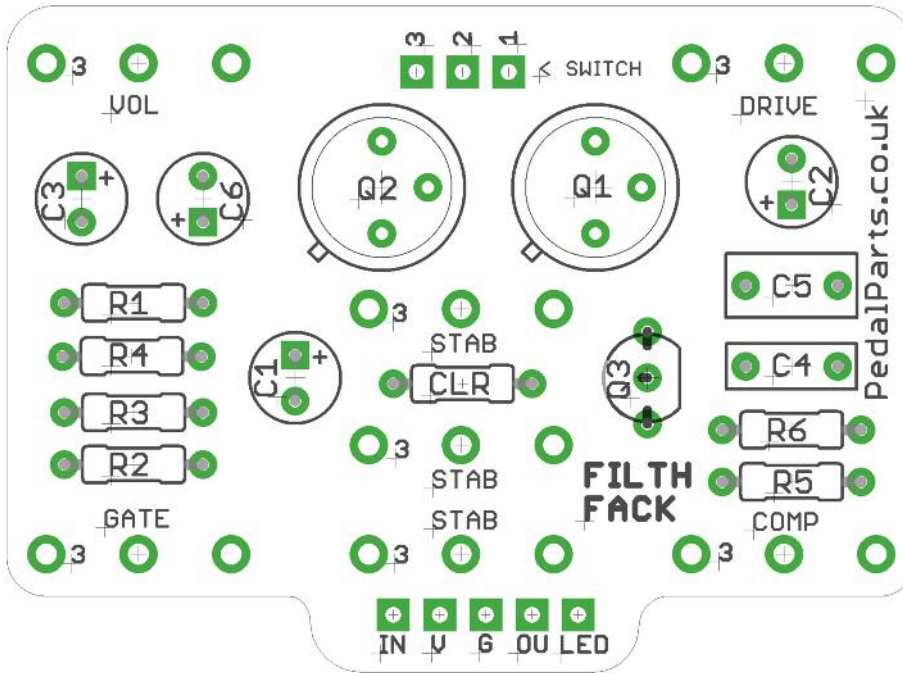


# BOM

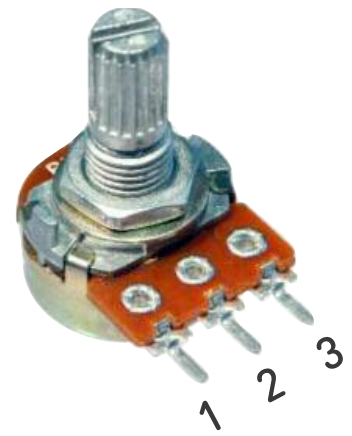
R1,4	220K		Q1,2	AC128/2N404 or other PNP Germs
R2	470R		Q3	2N3904
R3	5K1		STAB	5KC (B will work)
R5	47K		DRIVE	10KB
R6	10K		COMP	10KB
C1,2,3	10u		GATE	10KB
C4	100n		VOL	5KB
C5	220n*		SWITCH	SPDT ON-OFF-ON*
C6	2u2 elec*			

Adjust values for C5 and C6 to taste. Larger values will allow more bass signal through. Remember whichever caps you have in there are added to the 100n, so with a C5 of 220n, you'll actually have 330n.

C5 and C6 are optional. If you prefer to make a standard Fack! just leave out those and the toggle switch.



PCB Layout ©2015 PedalParts Ltd.



**Why the multiple STAB pot pads? See next page.**

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.

Be very careful when soldering the transistors. 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).

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

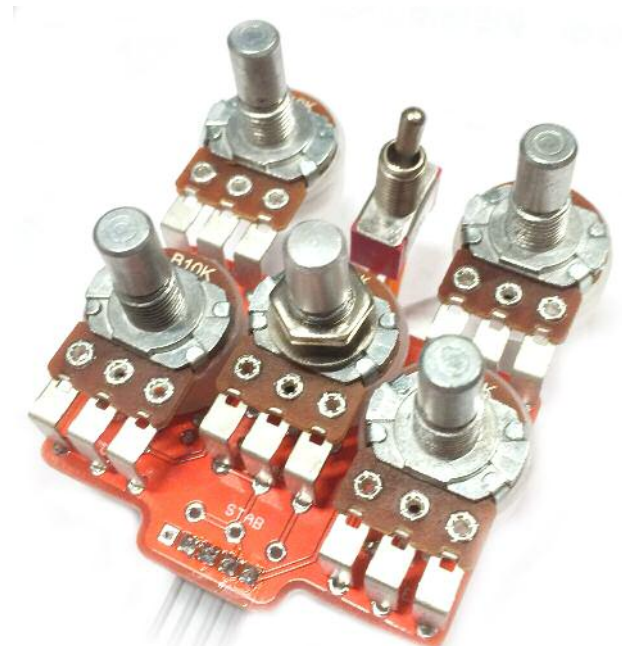
Pot mounts on the back side of the board. You can use vertical-mount pots or just wire up 'normal' ones.

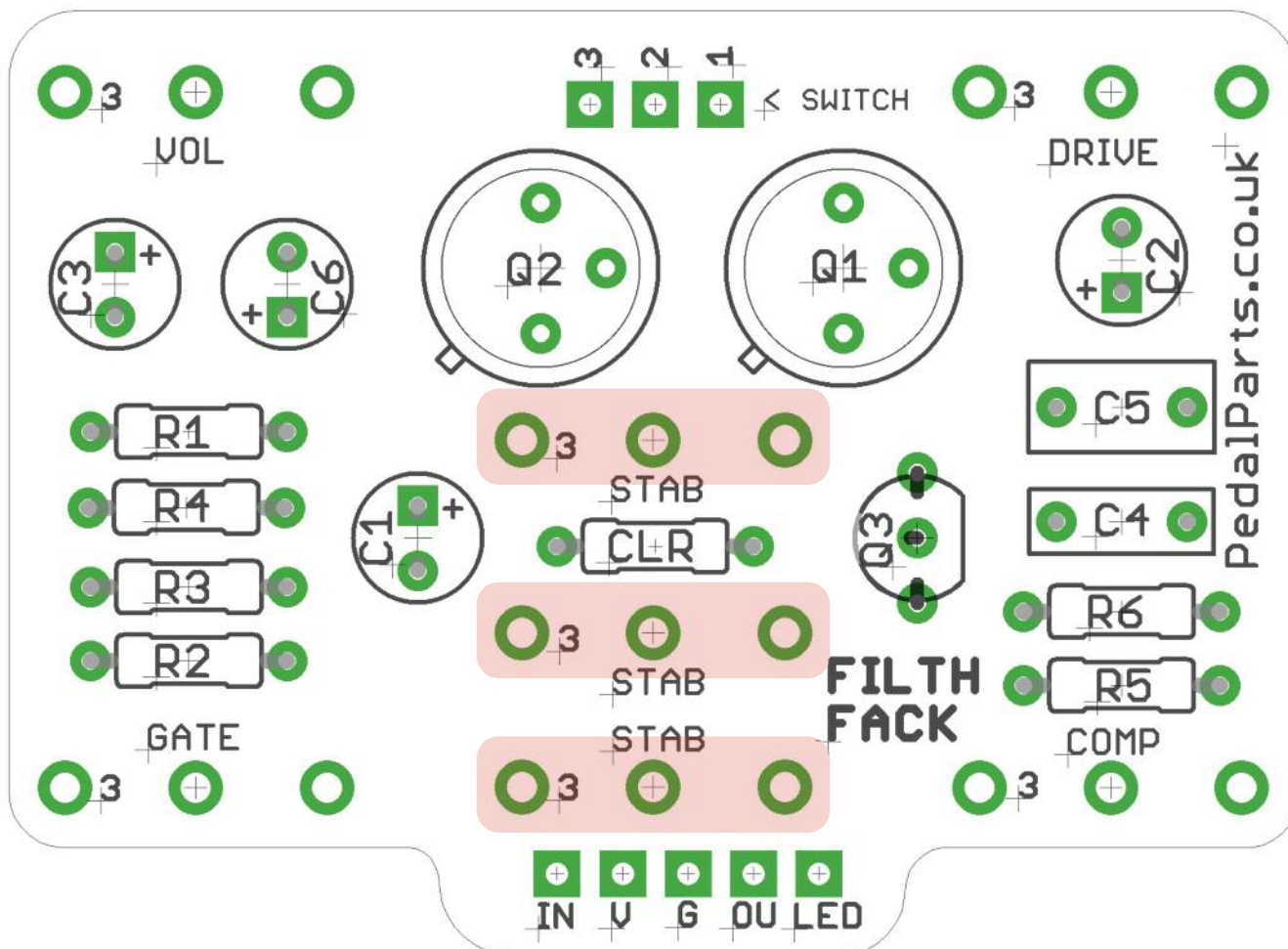
You should solder all components before you solder the pots. Once they're in place you'll have no access to much of the underside of the board.

Pots should be placed as shown >>>

It's useful to place the pots in the holes in the enclosure when soldering to make sure you get them all the right height and position. Solder one leg of each pot first, then check them for position. Melt and adjust if necessary. Get them all even before soldering the other two pins of each.

If your pots have plastic covers, sweet. If not, be careful to keep the bases away from the PCB pads. Slip some thick card between the pots and the PCB while you solder them in to space them nicely. If you're building this with the STAB pot inline with the GATE and COMP pots you'll have to remove the plastic covers or they won't fit in side by side.



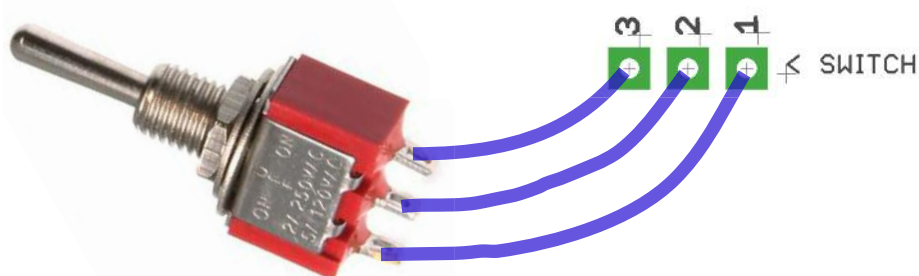


## STAB POT

There are three different sets of STAB pot pads. This enables you to position it in line with GATE and COMP, slightly above, or centered between the other four pots. First two are recommended if you're using a FAT switch, otherwise you may find your knob is too close to the toggle. It doesn't matter which one you use - they're all connected together. No jumpers are necessary for any configuration.

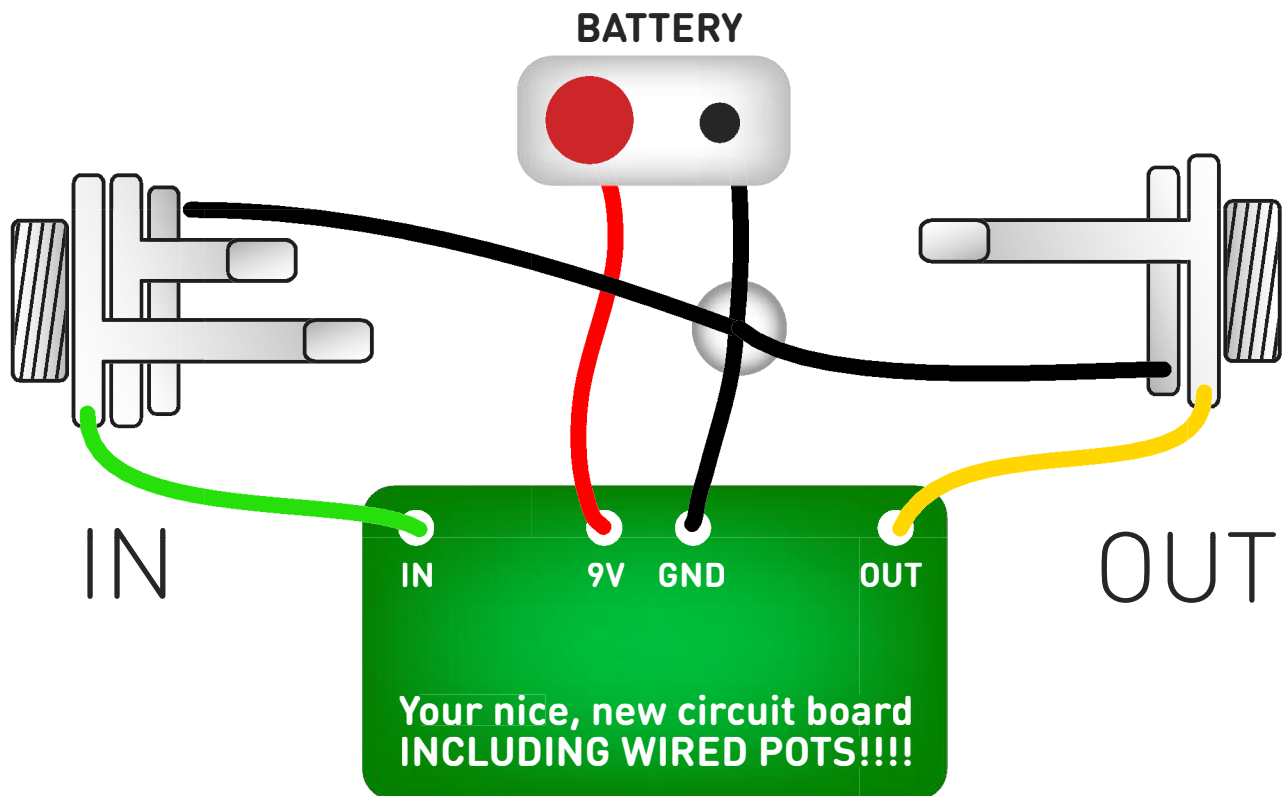
## FAT SWITCH

Add some extra bottom end to the circuit by using a SPDT ON-OFF-ON switch along with C5 and C6. Centre position will be the stock setting. Connect like this:





# Test the board!



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

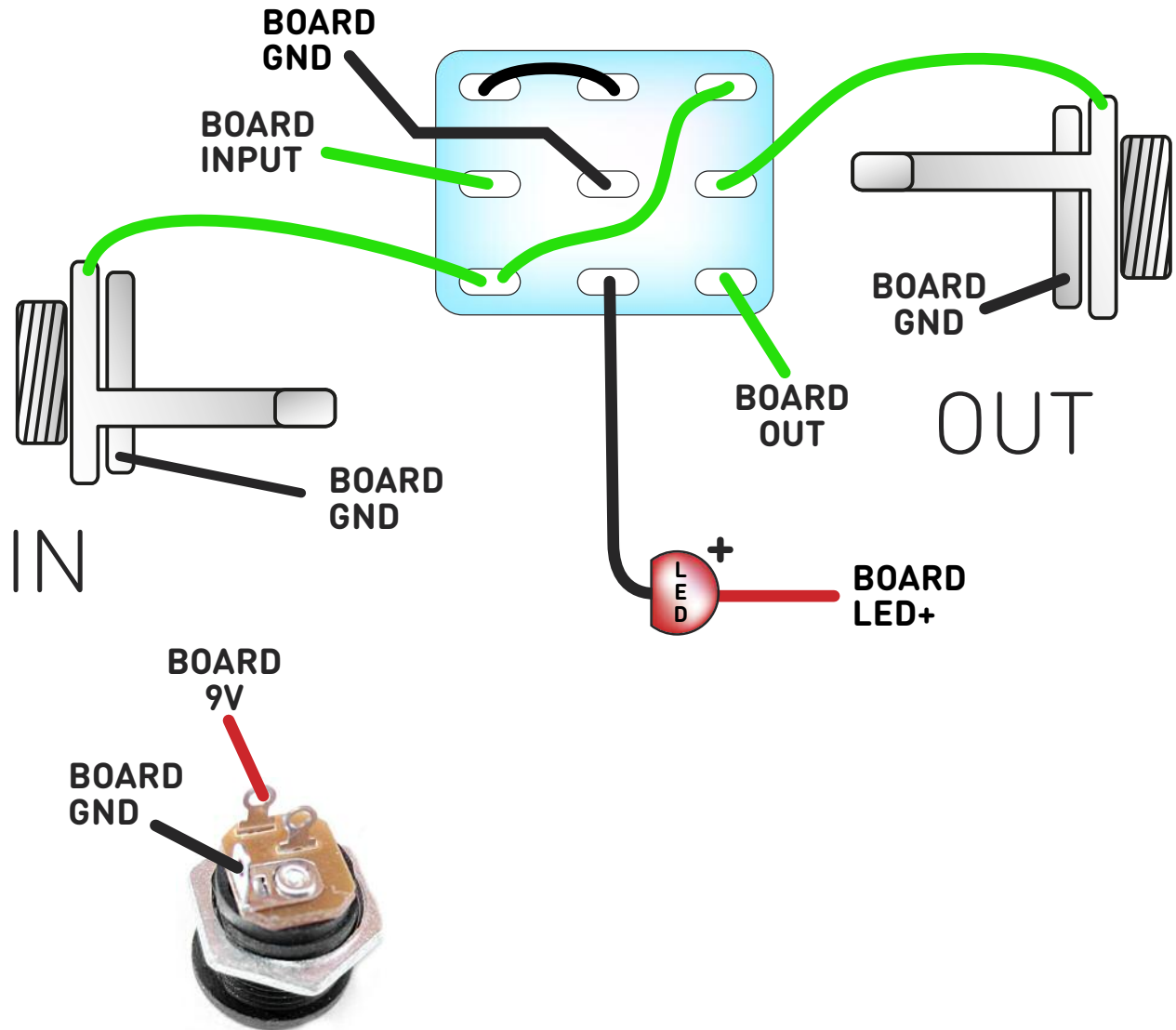
Once you've finished the circuit it makes sense to test it before starting on the switch and LED wiring. It'll cut down troubleshooting time in the long run. If the circuit works at this stage, but it doesn't once you wire up the switch - guess what? You've probably made a mistake with the switch.

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 - DC only version

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

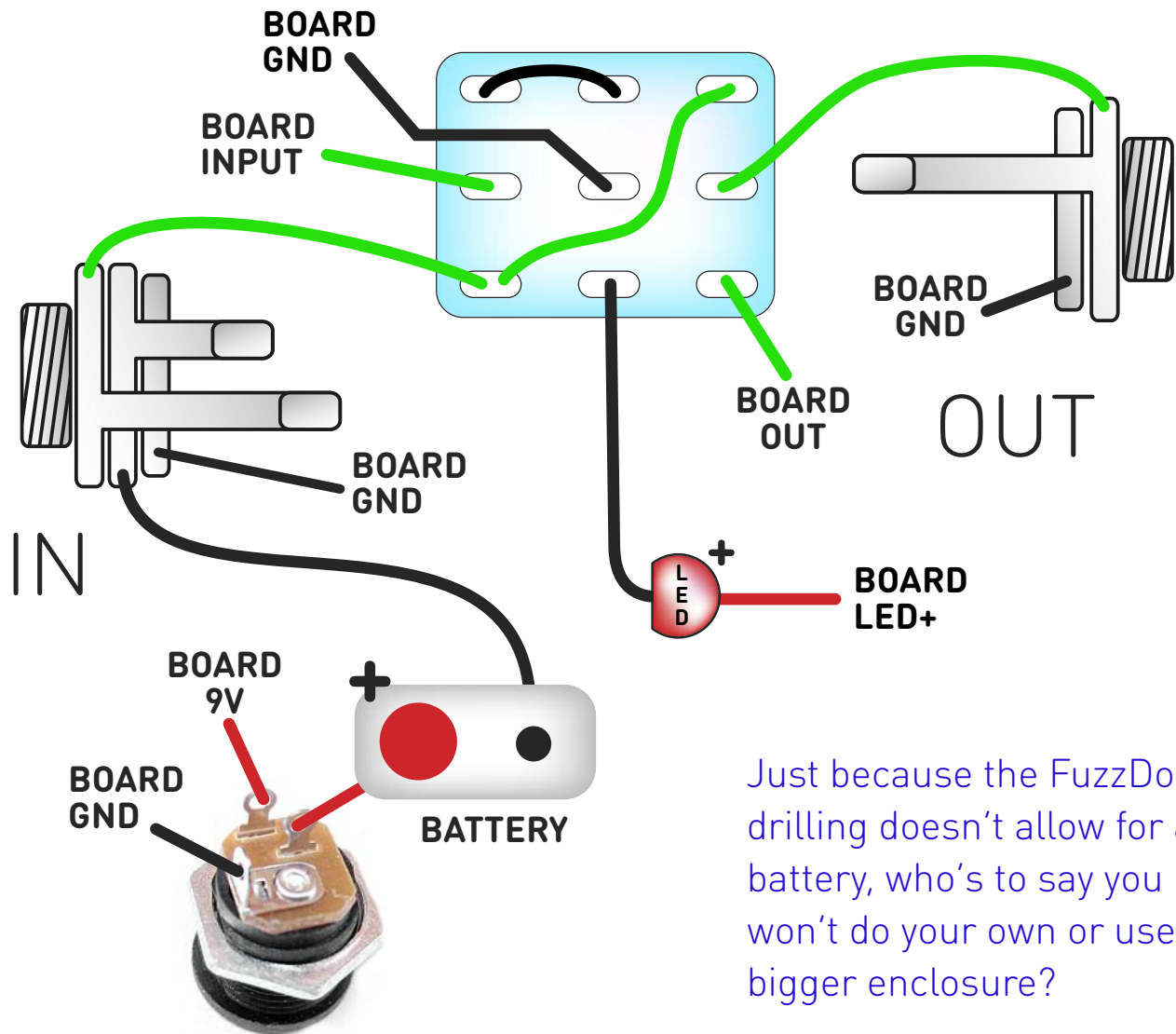


This circuit is standard, Negative GND. Your power supply should be Tip Negative / Sleeve Positive. That's the same as your standard pedals (Boss etc), and you can safely daisy-chain your supply to this pedal.

The BOARD GND connections don't all have to connect to one point. They can be daisy-chained around the circuit, using larger connection points (such as jack socket lugs) for multiple connections. As long as they all connect together in some way.

# Wire it up - with battery

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



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.

The BOARD GND connections don't all have to connect to one point. They can be daisy-chained around the circuit, using larger connection points (such as jack socket lugs) for multiple connections. As long as they all connect together in some way.

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# Drilling template

Fack! - vertical

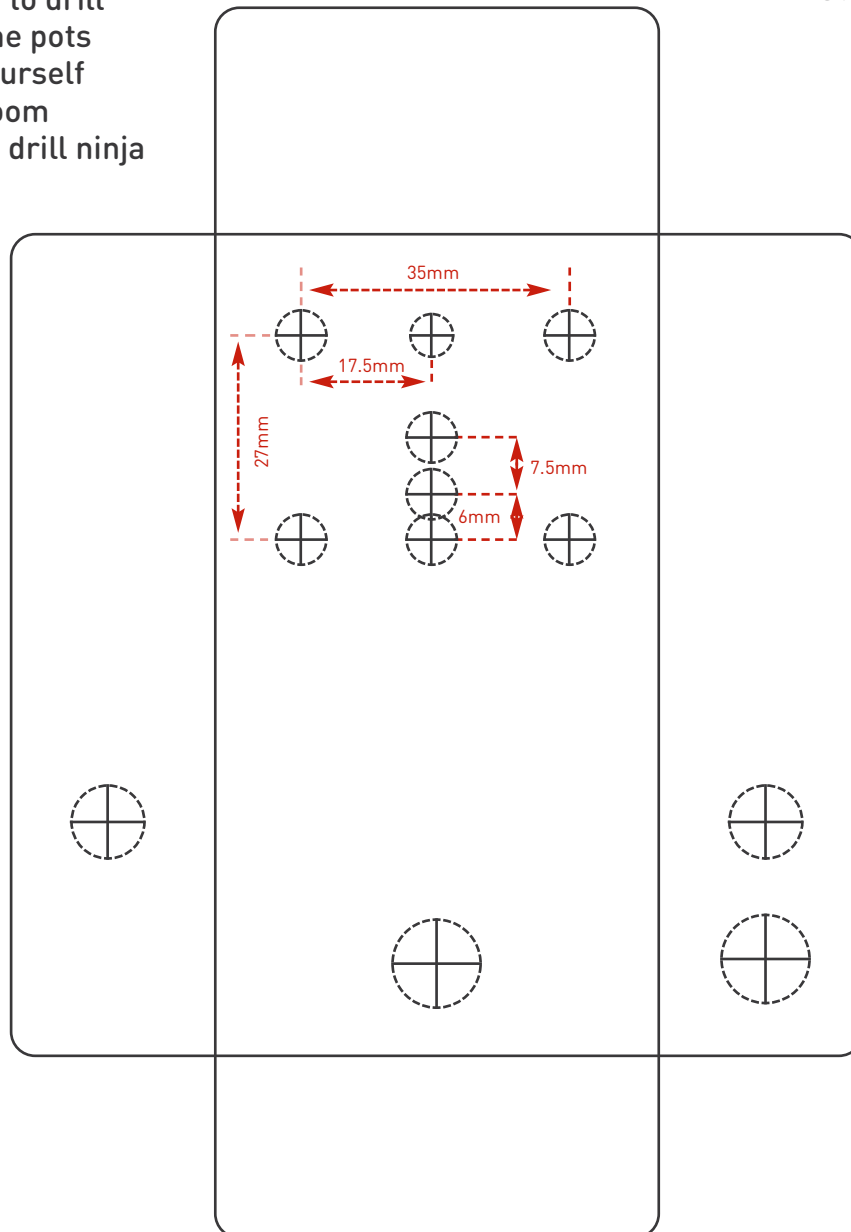
Hammond 1590B

60 x 111 x 31mm

Recommended drill sizes:

Pots	7mm
Jacks	10mm
Footswitch	12mm
DC Socket	12mm
Switch	6mm

It's a good idea to drill the holes for the pots 8mm to give yourself some wiggle room unless you're a drill ninja



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.

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