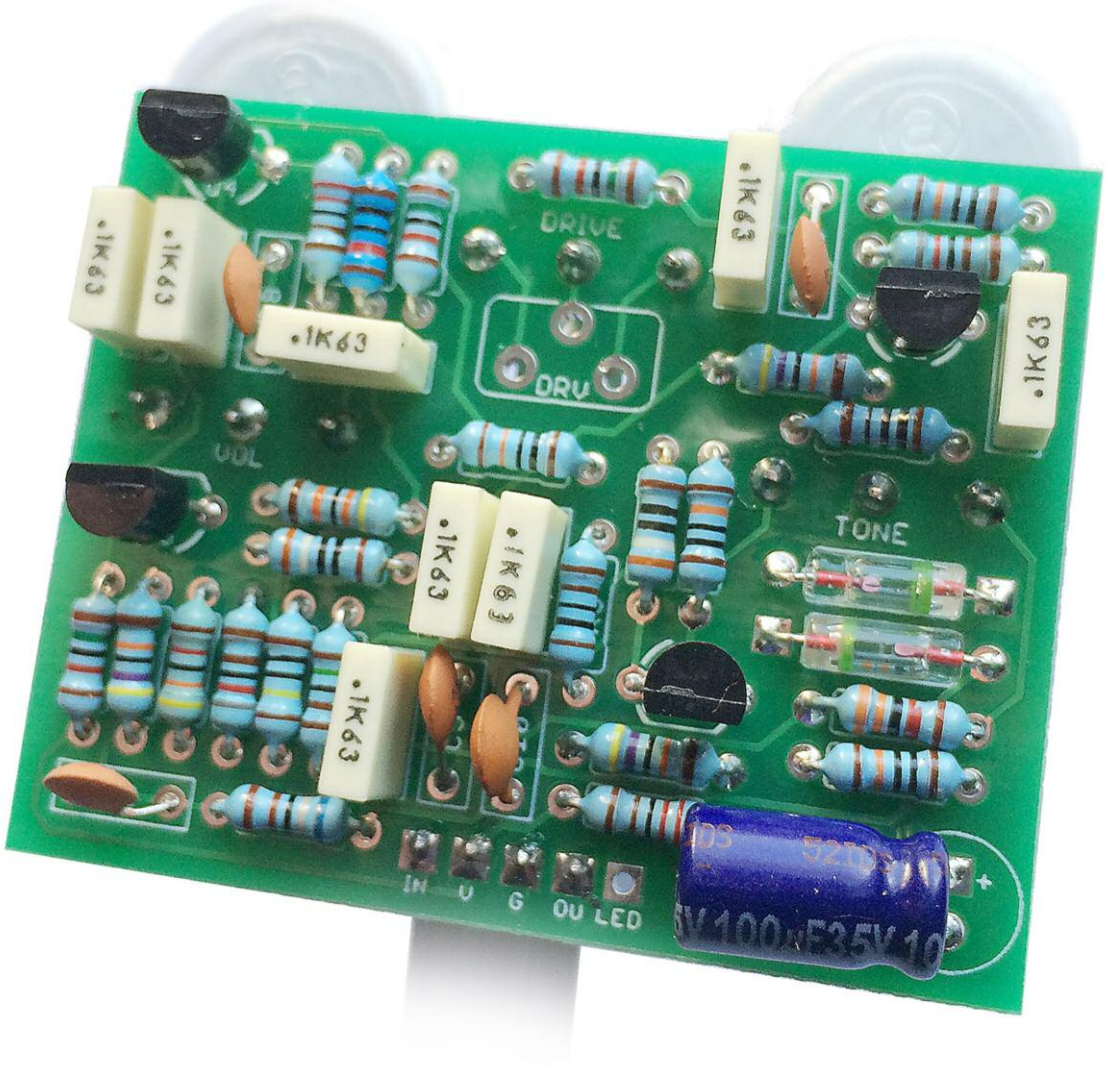
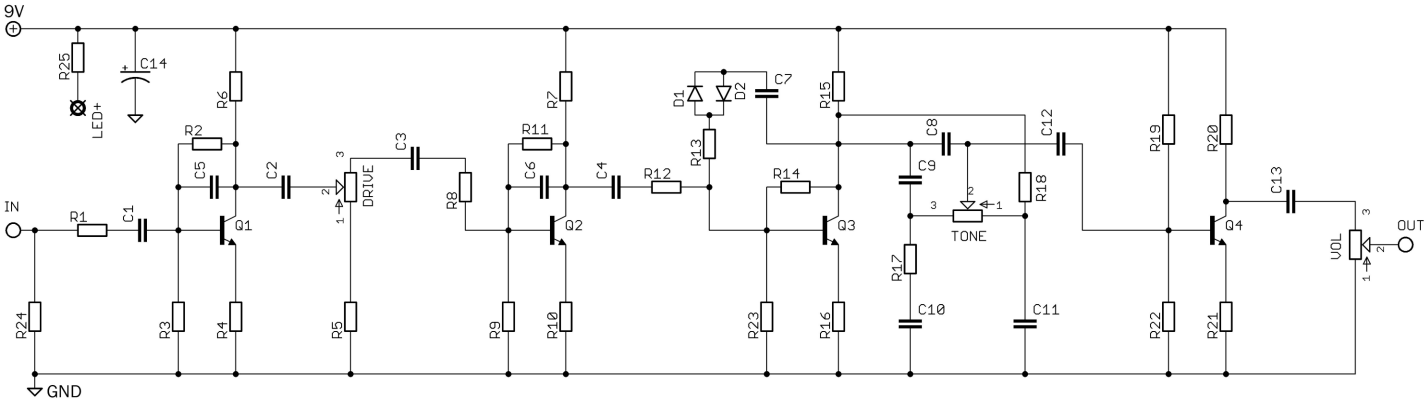


RAW FUZZ V2

Great Muff-based abrasive fuzz with wild tone sweep

Schematic + BOM



R1	1K5
R2	470K
R3	100K
R4	390R
R5	1k
R6	15k
R7	15k
R8	8k2
R9	100k
R10	100R
R11	470k
R12	8k2
R13	43k
R14	470k
R15	15k
R16	390r
R17	6k8
R18	33k
R19	430k
R20	10k
R21	2k2
R22	100k
R23	100k
R24	1M
R25	2k2 (CLR)

C1	100n
C2	100n
C3	100n
C4	100n
C5	470p
C6	470p
C7	100n
C8	680p
C9	2n2
C10	6n8
C11	100n
C12	100n
C13	100n
C14	100u

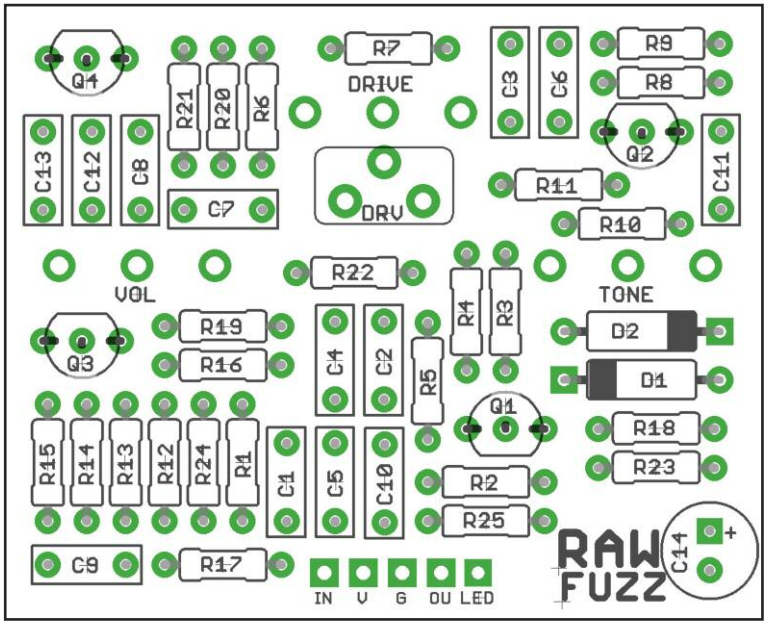
D1,2	1N34A
Q1-4	2N5088
TONE	100KB
VOL	100KB*
DRIVE	100KA**
	or
	100K trim

Original has been produced in both two and three knob versions. It's up to you whether you add an external drive control. This schematic is traced from an original 2-knob unit. We don't know if any changes have been made to the circuit when it was changed to a 3-knob format.

*Linear volume pot isn't great. Log is better.

**Use EITHER the DRIVE pot or the DRV trimmer.

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 and diodes. 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.

The cathode (striped end) of the diodes go into the square pads. Those germaniums have very delicate casings. You should place some needle-nosed pliers right against the body while gripping the leg, then bend it against the pliers rather than directly on the body. If you attempt to bend the leg without protecting the join to the body there's a very good chance you'll crack the glass casing.

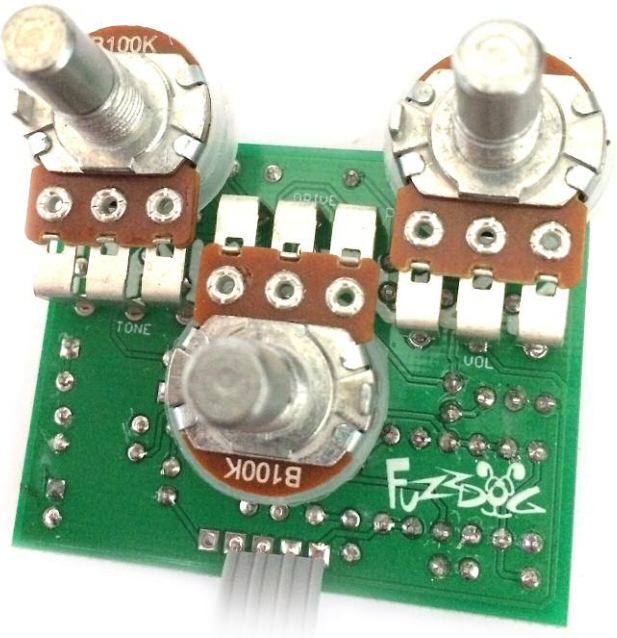
The anode (long leg) of electrolytic capacitors go into the square pads. C14 can be placed flat across the PCB as shown in the cover image to ensure plenty of clearance in the enclosure.

Pots 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.

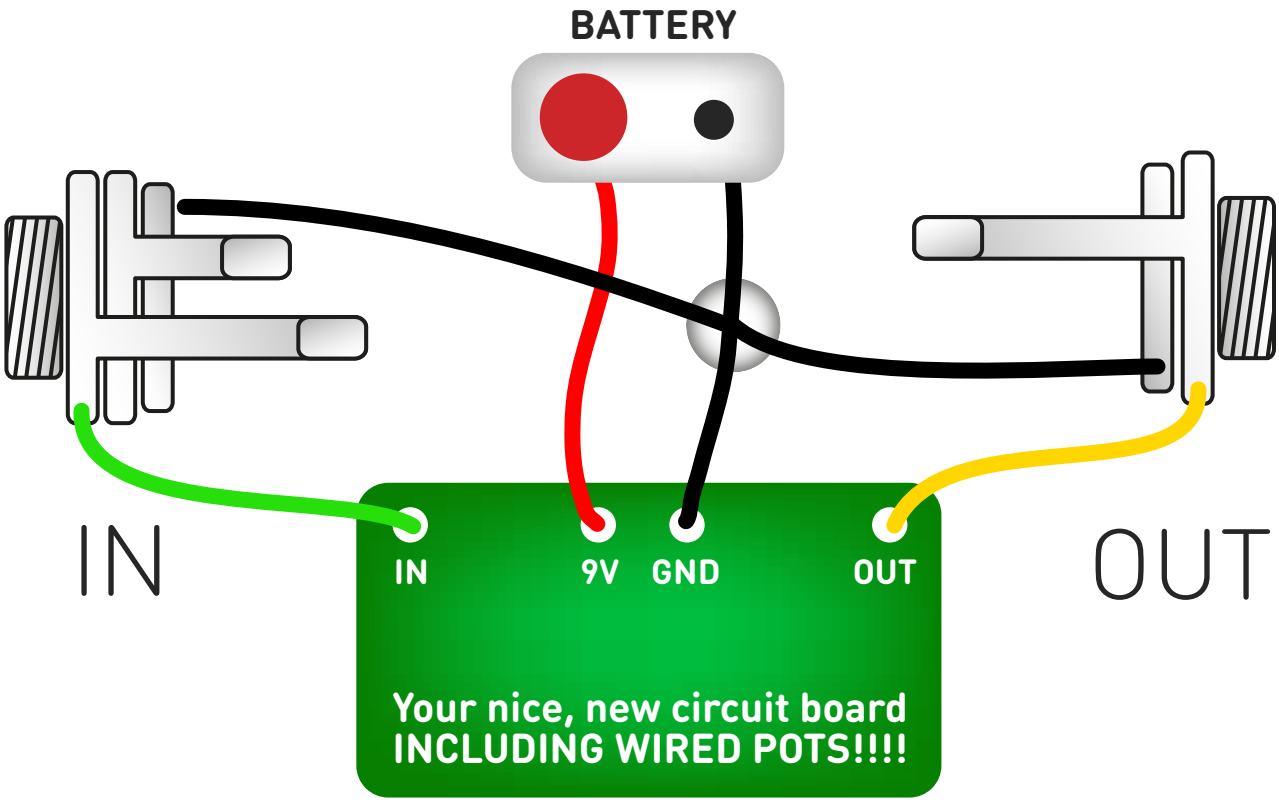
It's useful to place the pots in the holes in the enclosure when soldering to make sure you get them all the right height and position. Solder one leg of each pot first, then check them for position. Melt and adjust if necessary. Get them all even before soldering the other two pins of each.

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.



Test the board!

Check the 3PDT Daughterboard document for details if you're using one.



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

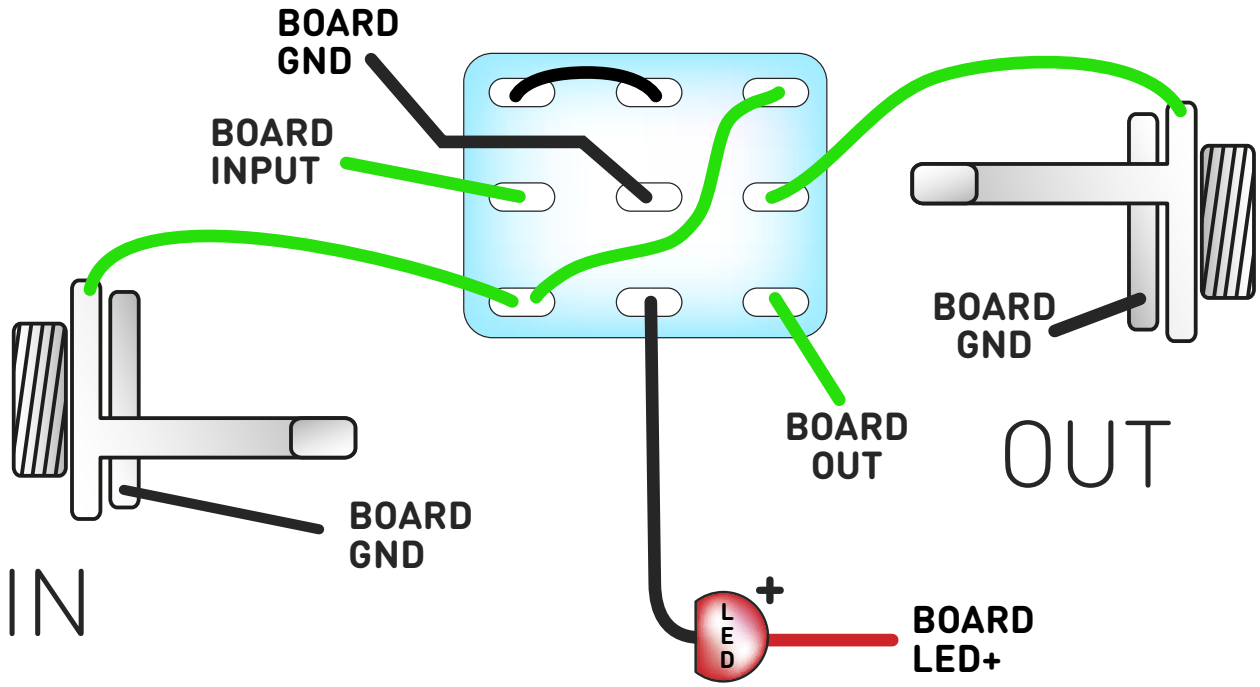
Once you've finished the circuit it makes sense to test is before starting on the switch and LED wiring. It'll cut down troubleshooting time in the long run. If the circuit works at this stage, but it doesn't once you wire up the switch - guess what? You've probably made a mistake with the switch.

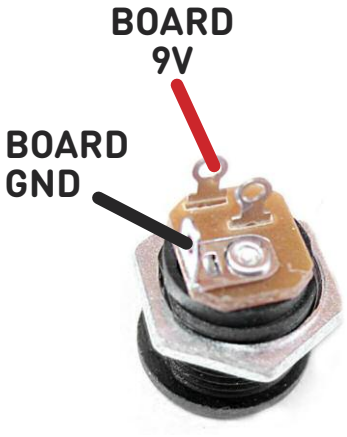
Solder some nice, long lengths of wire to the board connections for 9V, GND, IN and OUT. Connect IN and OUT to the jacks as shown. Connect all the GNDs together (twist them up and add a small amount of solder to tack it). Connect the battery + lead to the 9V wire, same method. Plug in. Go!

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 - DC only version

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



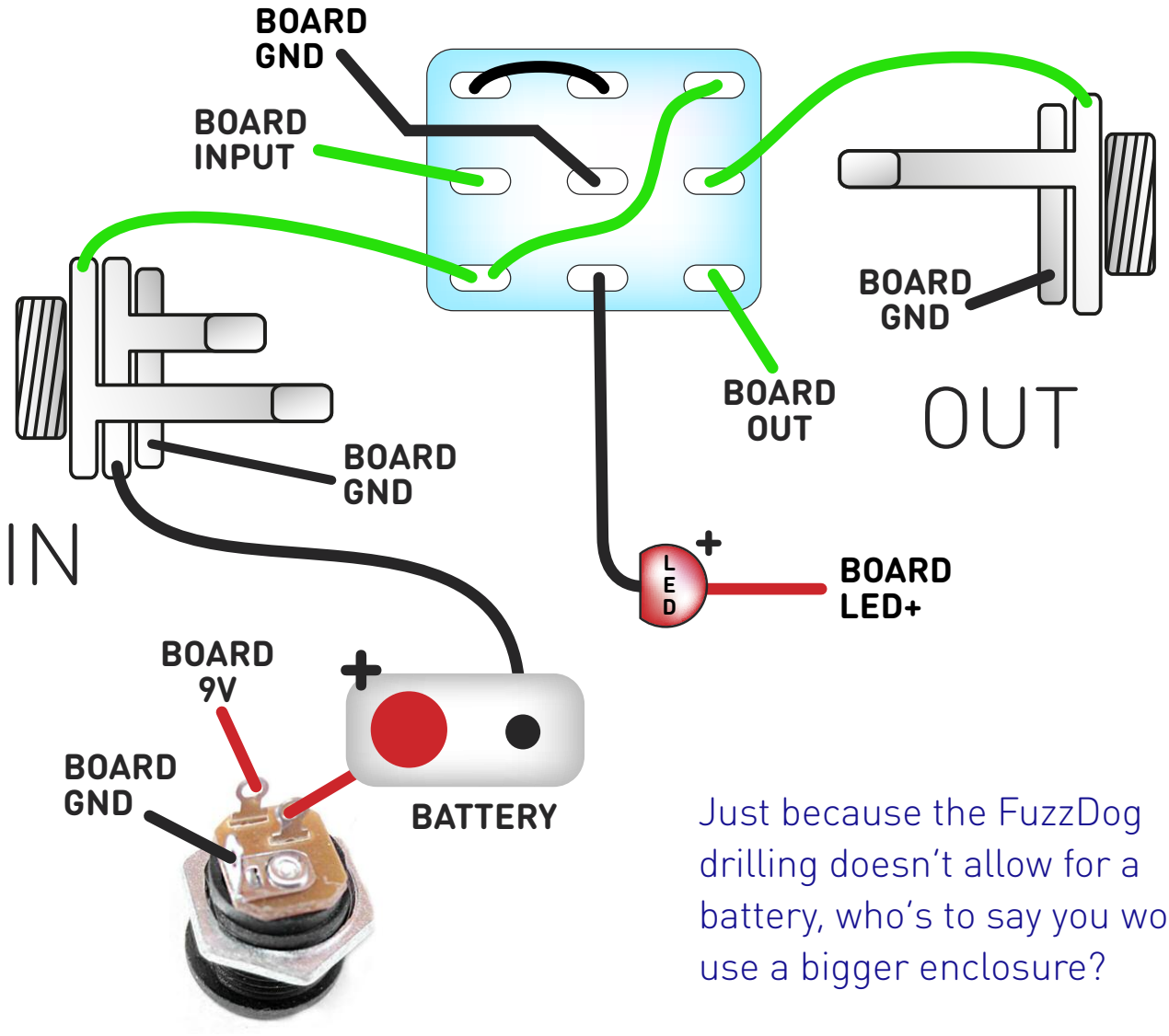


This circuit is standard, Negative GND. Your power supply should be Tip Negative / Sleeve Positive. That's the same as your standard pedals (Boss etc), and you can safely daisy-chain your supply to this pedal.

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)



Just because the FuzzDog drilling doesn't allow for a battery, who's to say you won't use a bigger enclosure?

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.

PedalParts.co.uk

Drilling template

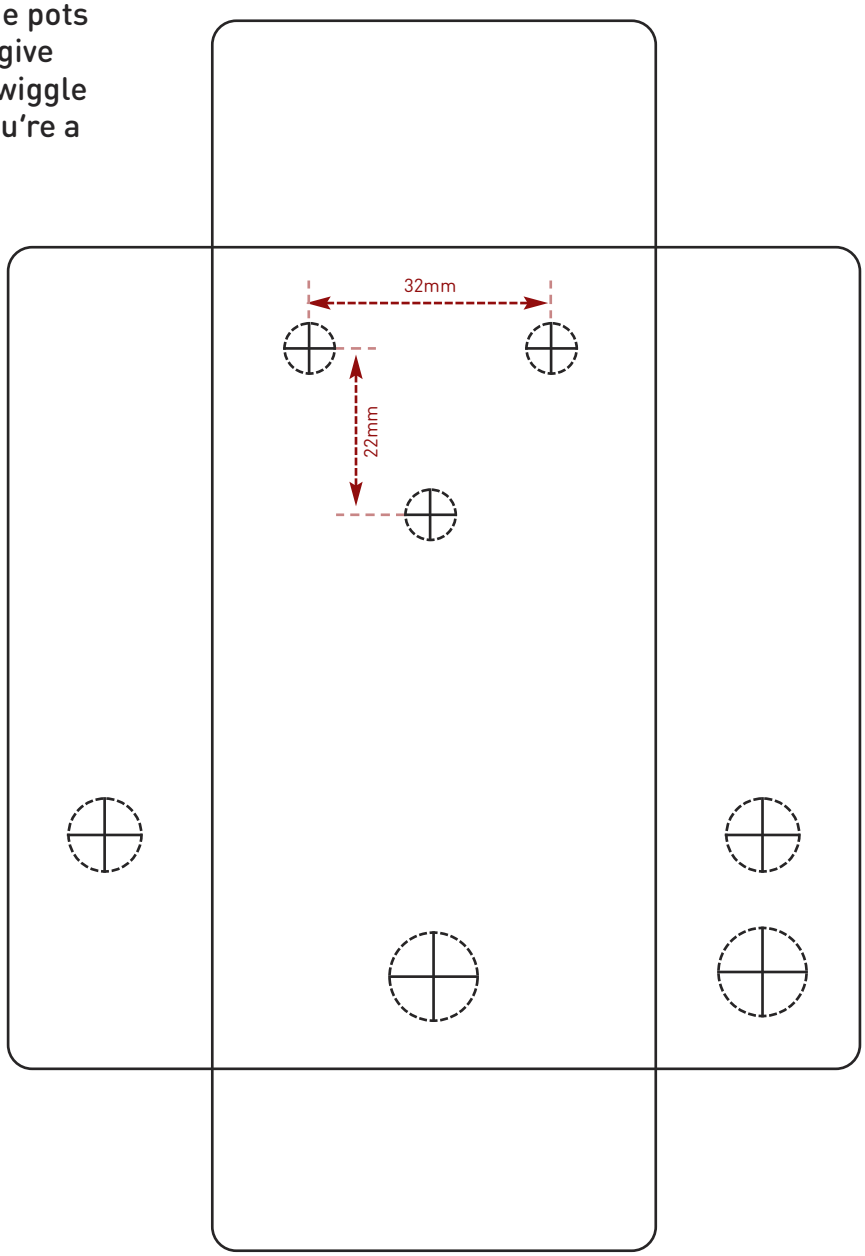
Hammond 1590B

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 holes for the pots 1mm larger 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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