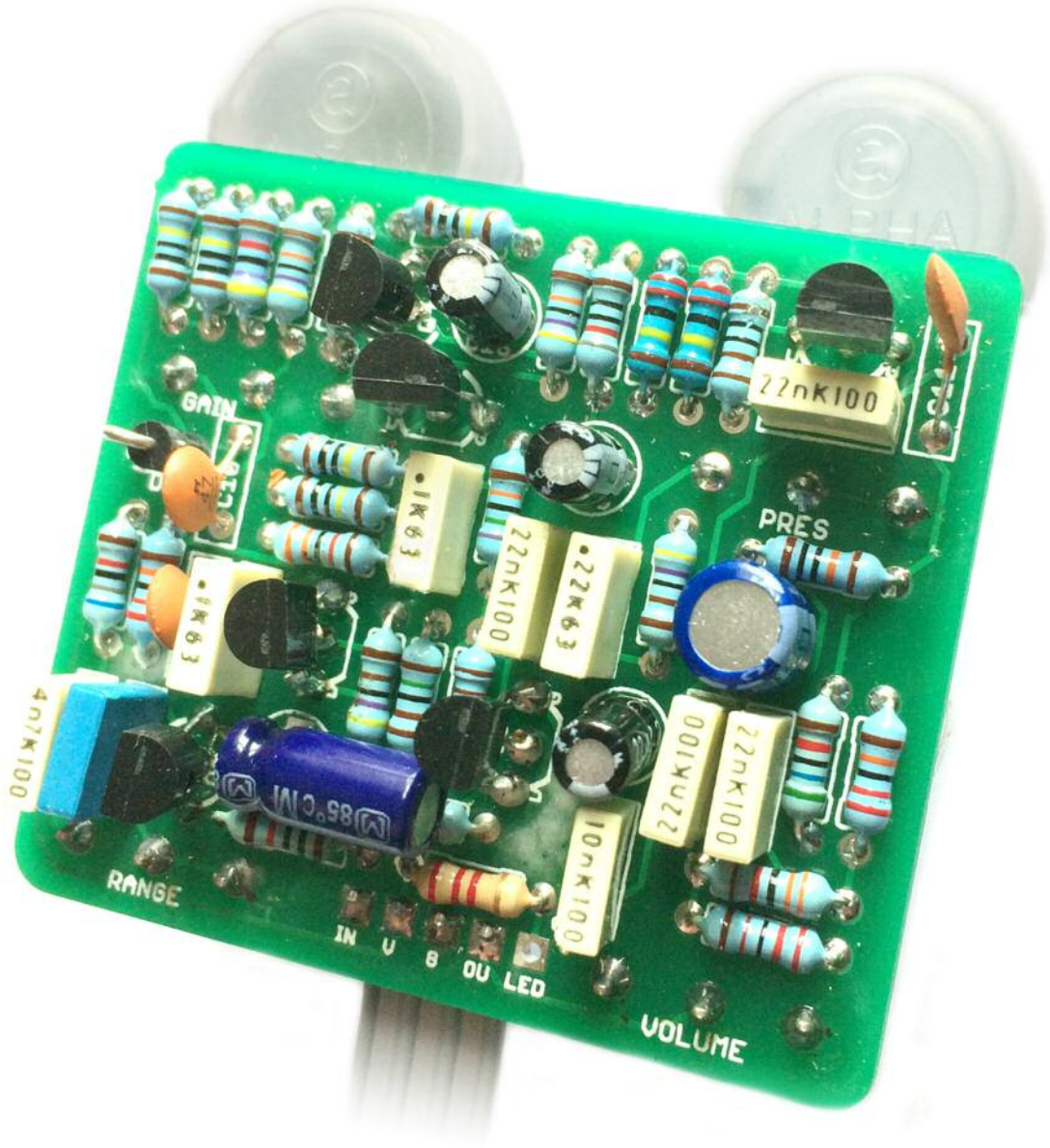
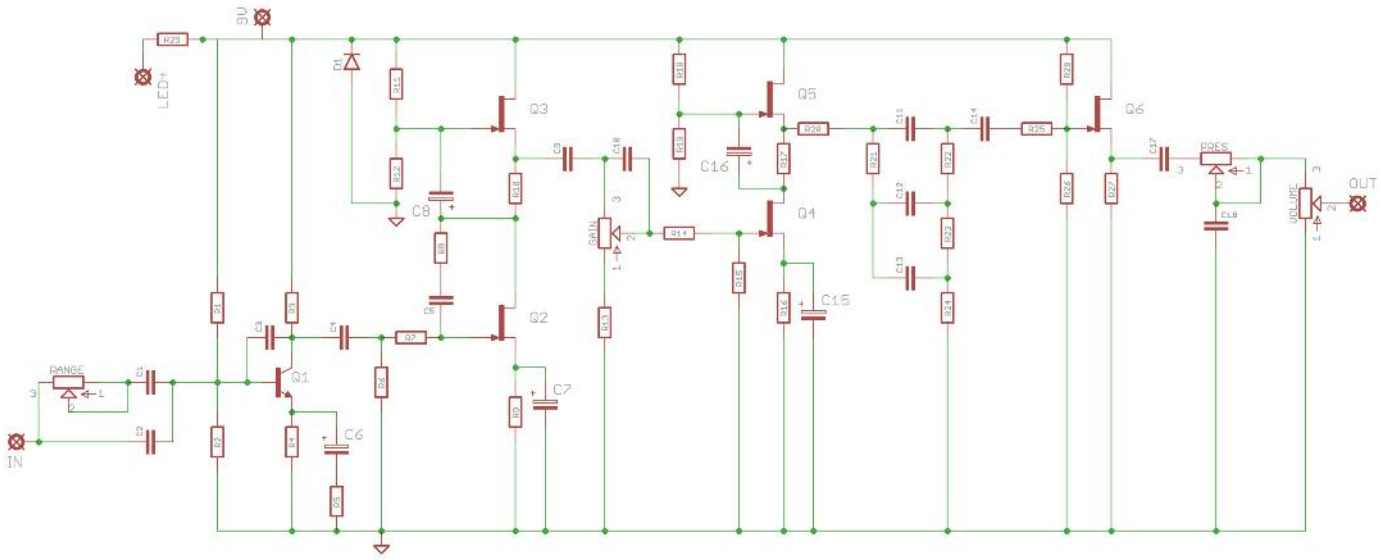


War Pig

Lovely little box of Sabbath - better warn the neighbours!

Schematic + BOM



R1	220K	R20	100K	C1	68n
R2	68K	R21	56K	C2	4n7
R3	10K	R22	220K	C3	47p
R4	4K7	R23	33K	C4	100n
R5	47R	R24	22K	C5	100n
R6	1M	R25	1K	C6	47u elec
R7	33K	R26	2M2	C7	22u elec
R8	750K	R27	4K7	C8	2u2 elec
R9	1K5	R28	2M2	C9	22n
R10	1K	R29	2K2 (CLR)	C10	47p
R11	1M			C11	270p
R12	1M	Q1	BC184	C12	22n
R13	47K	Q2-6	MPF4393	C13	22n
R14	470K	D1	1N4001*	C14	22n
R15	470K			C15	2u2 elec
R16	820R	GAIN	1MA	C16	2u2 elec
R17	1K	PRES	10KB	C17	220n
R18	1M	RANGE	500KC	C18	10n
R19	1M	VOL	250KB		

*D1 needs to be reversed on the board, i.e. striped leg to round pad instead of square.

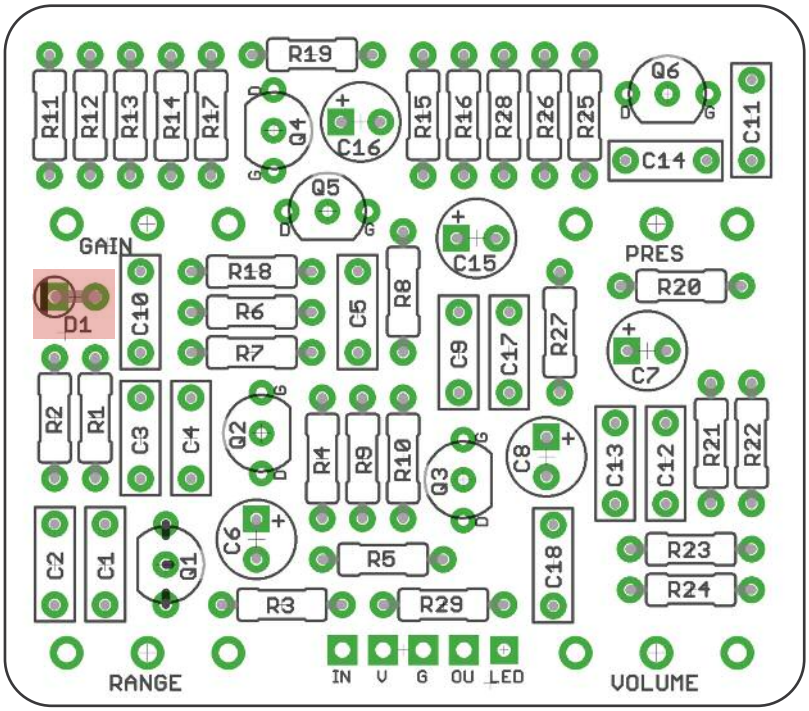
Note: BC184 is not the same as BC184L. You may be able to substitute Q1 with the more common BC184L but you'll need to twist the legs to fit and the sound may differ. Check your datasheet.

Massive thanks to JuanSolo and Cleggy for tracing this beast, supplying parts for a test build and confirming it's accuracy by A-Bing a build with the original. Nice one fellas!

Remember to reverse D1!

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 LED, diode and 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.

Positive (anode) leg of the electrolytic capacitors go into the square pads. C6 can be laid flat across the top of the adjacent resistors to ensure plenty of clearance when mounting in the enclosure. See front cover image.

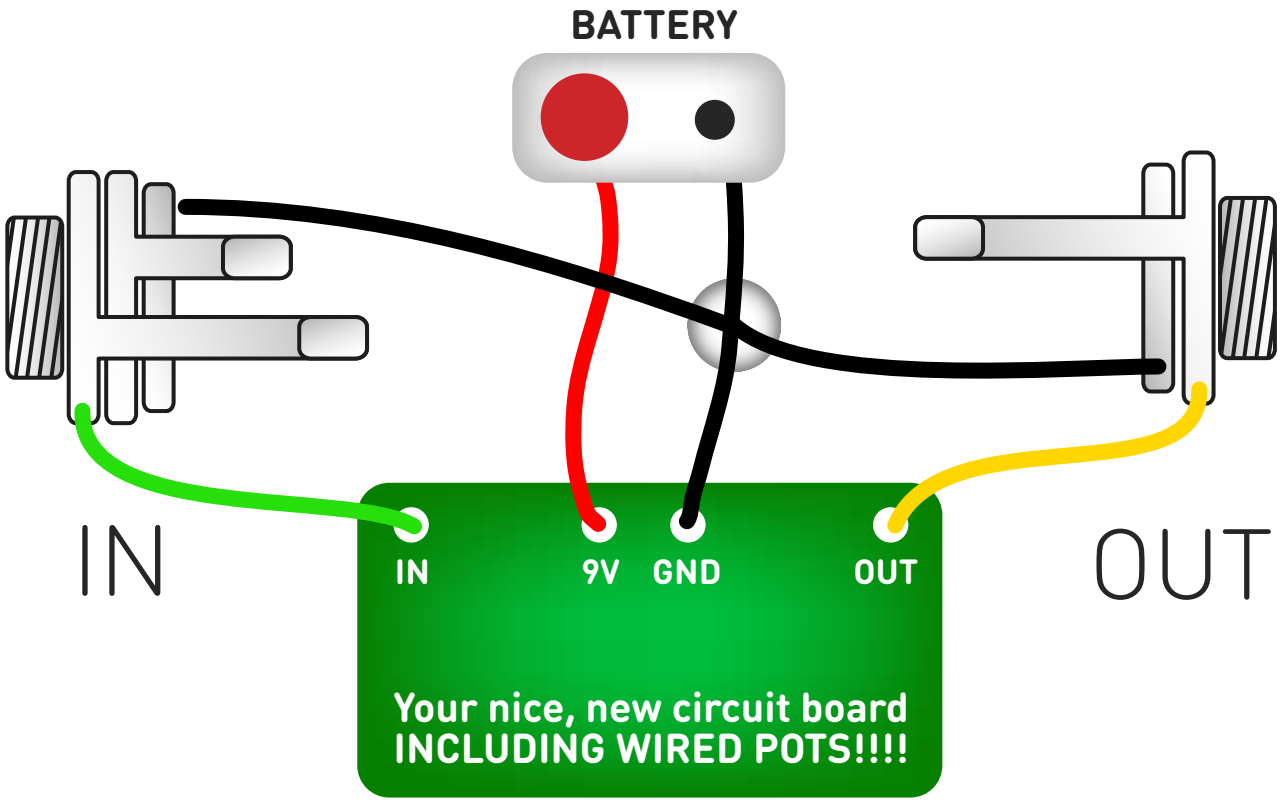
Pots mount on the back side of the board. You can use vertical-mount pots or just wire up 'normal' ones. It's a good idea to place the pots in their holes in the enclosure when you're soldering them in place on the PCB. That way you know they're going to line up ok. Best way to do it is to solder a single pin of each pot in place, then do a visual check to see that they're all sitting at the same height. If not, melt the joints and readjust any that are off.

If your pots don't have protective plastic covers you should place a strip of thick card between them and the board when soldering to keep them a good distance from the pcb to avoid shorting other components.

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 underside of the board.

The bottom of your board should look like this >>>>>>

Test the board!



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

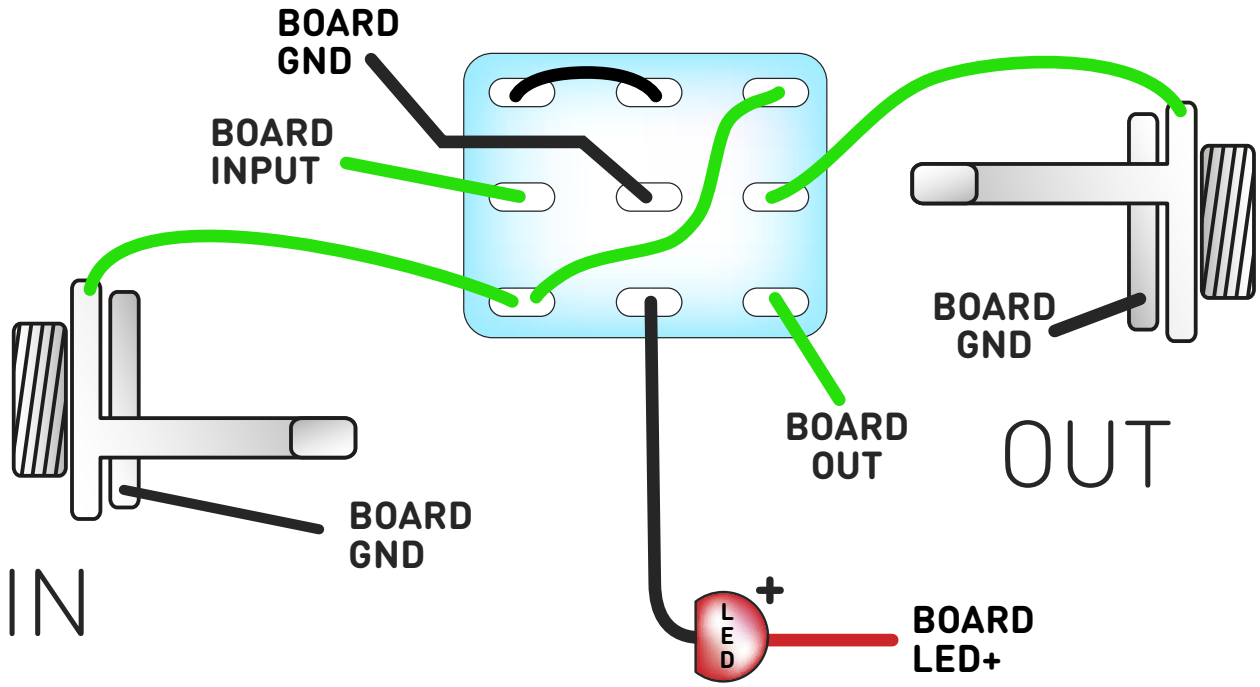
Once you've finished the circuit it makes sense to test is before starting on the switch and LED wiring. It'll cut down troubleshooting time in the long run. If the circuit works at this stage, but it doesn't once you wire up the switch - guess what? You've probably made a mistake with the switch.

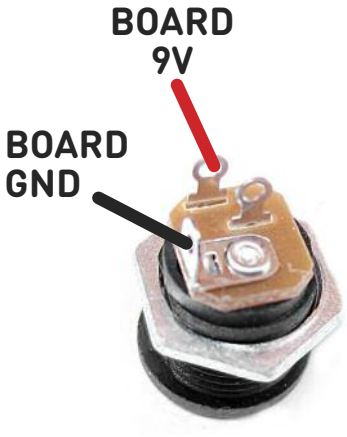
Solder some nice, long lengths of wire to the board connections for 9V, GND, IN and OUT. Connect IN and OUT to the jacks as shown. Connect all the GNDs together (twist them up and add a small amount of solder to tack it). Connect the battery + lead to the 9V wire, same method. Plug in. Go!

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)



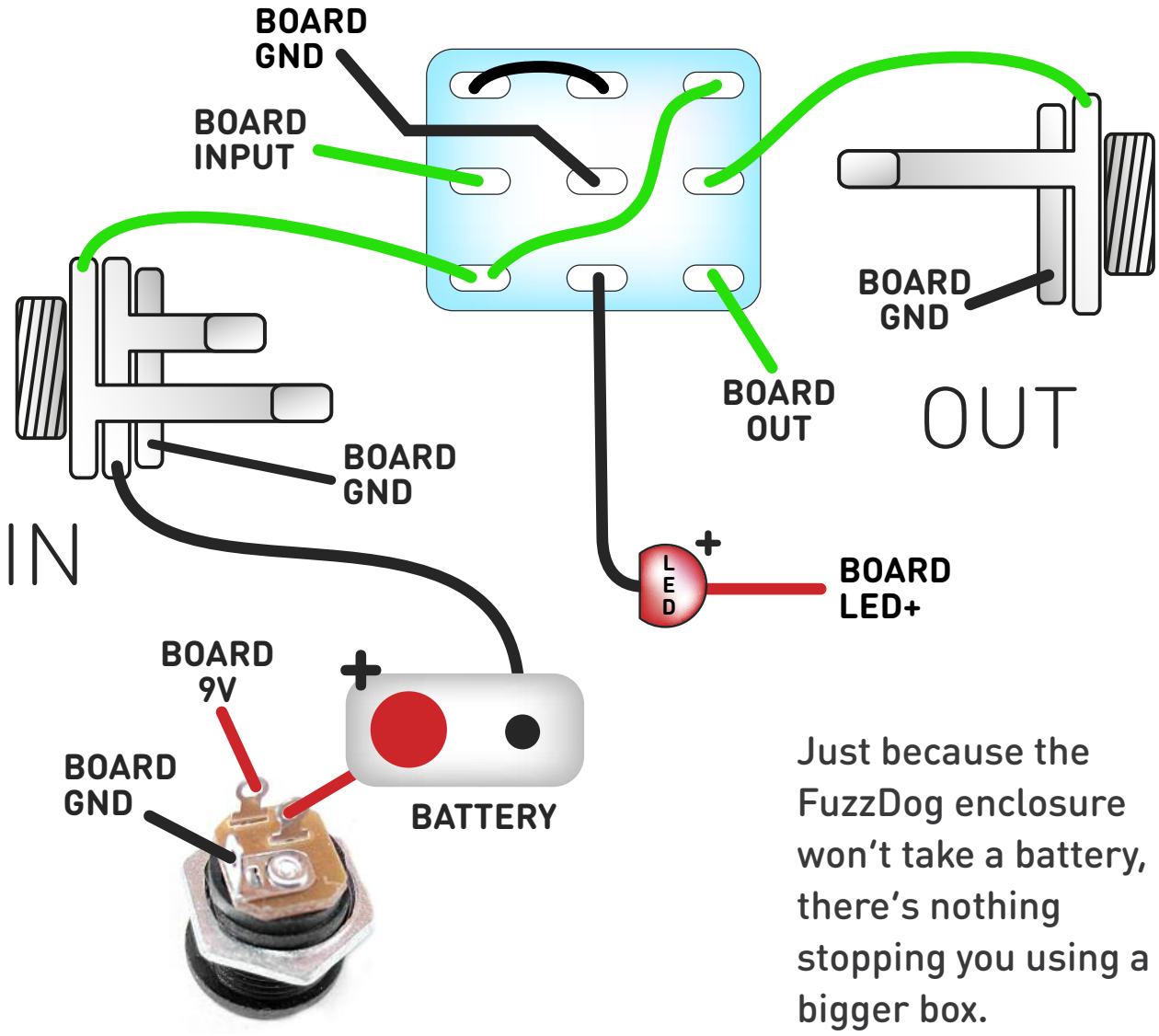


This circuit is standard, Negative GND. Your power supply should be Tip Negative / Sleeve Positive. That's the same as your standard pedals (Boss etc), and you can safely daisy-chain your supply to this pedal.

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 enclosure won't take a battery, there's nothing stopping you using a bigger box.

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

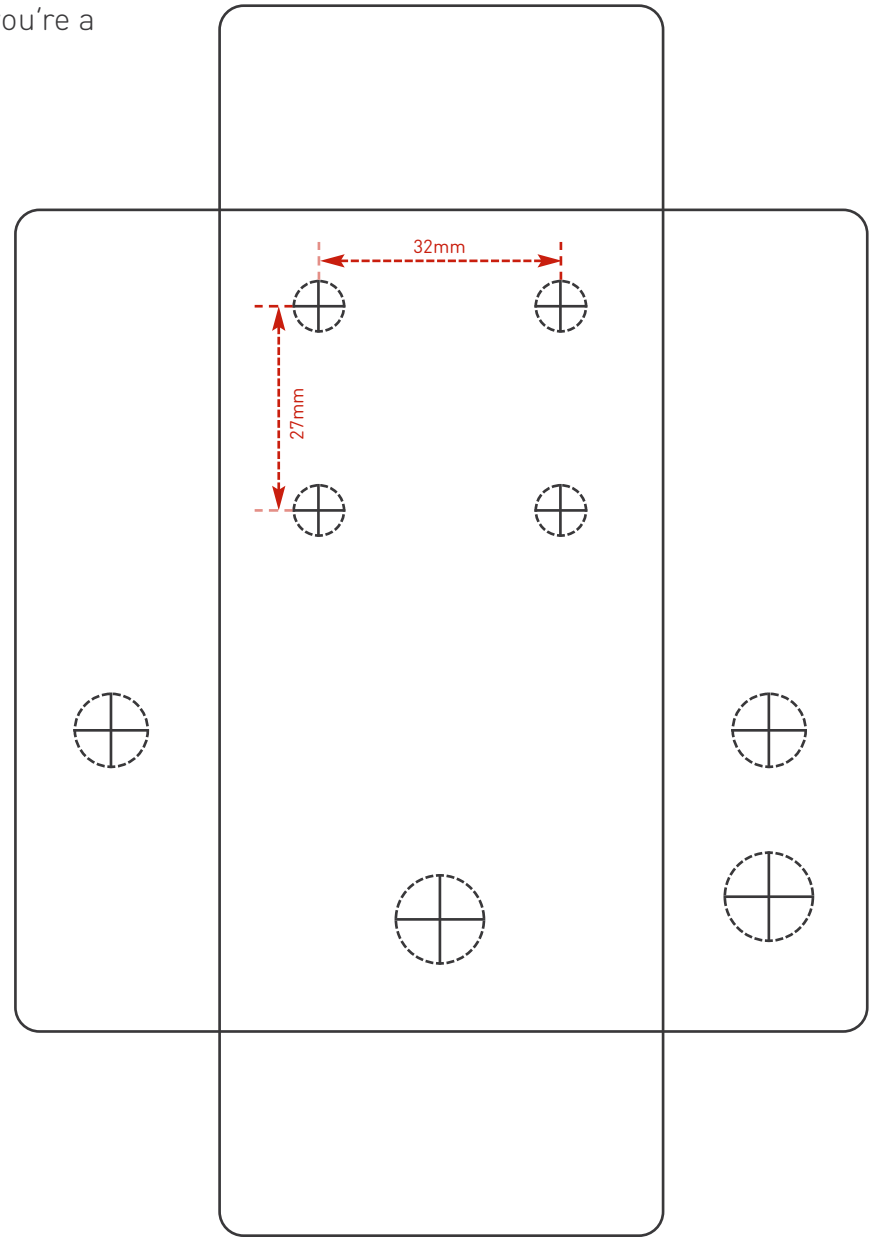
Hammond 1590B

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 bigger 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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