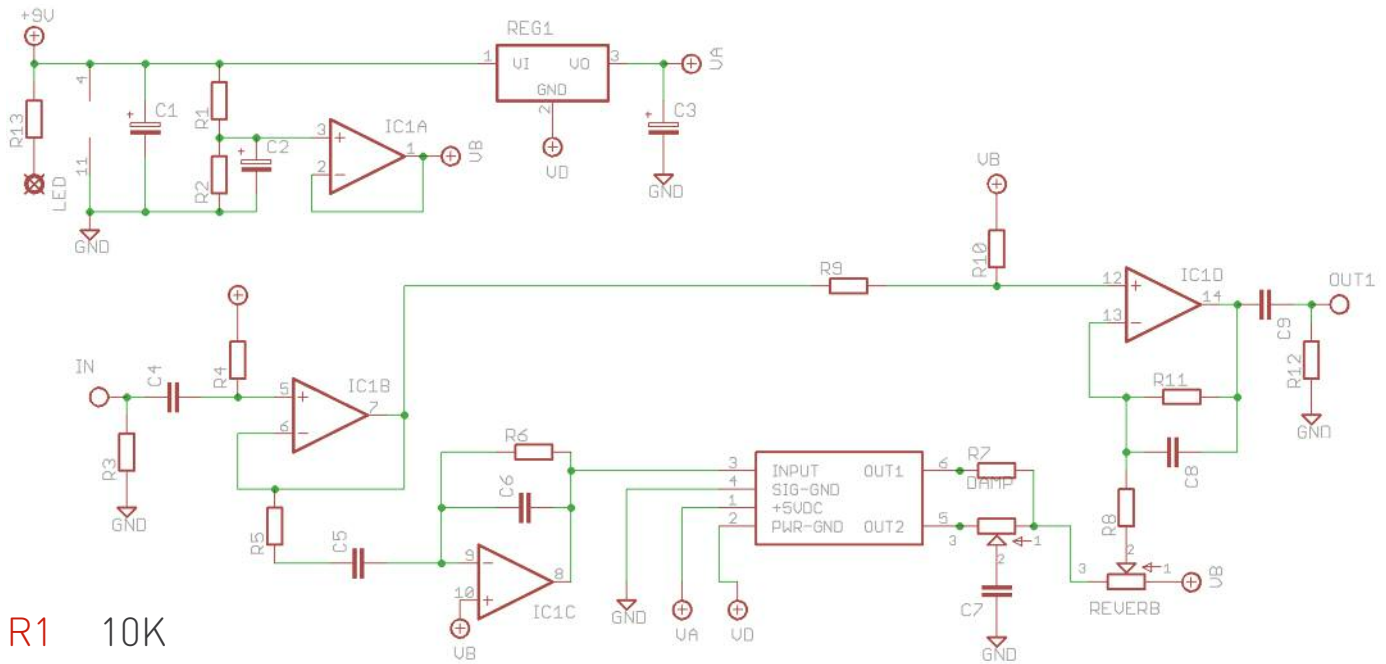


VERB v2

Space is, indeed, the place
with the Box of Hall Reverb



Schematic + BOM



R1	10K	C1	100u elec	D1	1N4001*
R2	10K	C2	47u elec	IC1	TL074
R3	2M2	C3	100u elec	IC2	78L05 Regulator**
R4	1M	C4	100n	REVERB	20-25KB
R5	10K	C5	22n	DAMP	10KB
R6	22K	C6	100p (470p)		
R7	10K	C7	22n (33n)		
R8	10K	C8	1n (4n7)		
R9	10K	C9	1u		
R10	33K				
R11	10K (33K)				
R12	33K				
R13	2K2 (CLR)				

Designed for use with the Accutronics BTDR-2H reverb brick.

*Not shown on schematic, but it is across 9V and GND for polarity protection.

**Orientation of the voltage regulator is shown on the board for 78L05 (which is what is supplied with the kit). Pinout is opposite to a 7805 (the larger one with heat sink).

Component values are based on the "Heaven Within" mods at tagboardeffects. CultureJam's original values are shown in blue.

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 diode, LED and voltage regulator. 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). Same goes for the IC if you aren't using a socket (why not???)

The striped leg (cathode) of the diode go into the square pad.

The long leg (anode) of the electrolytic capacitors go into the square pads.

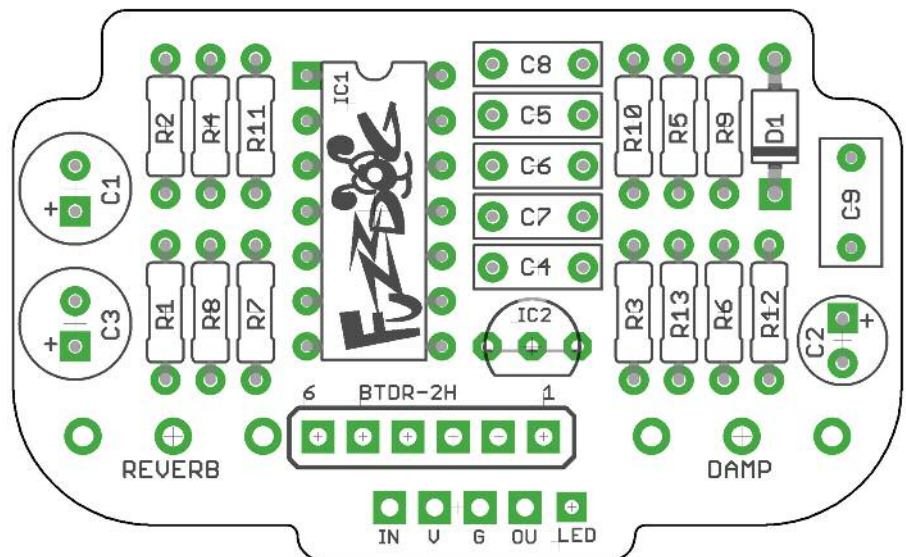
Snap the small metal tag off the pots so they can be mounted flush in the box.

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

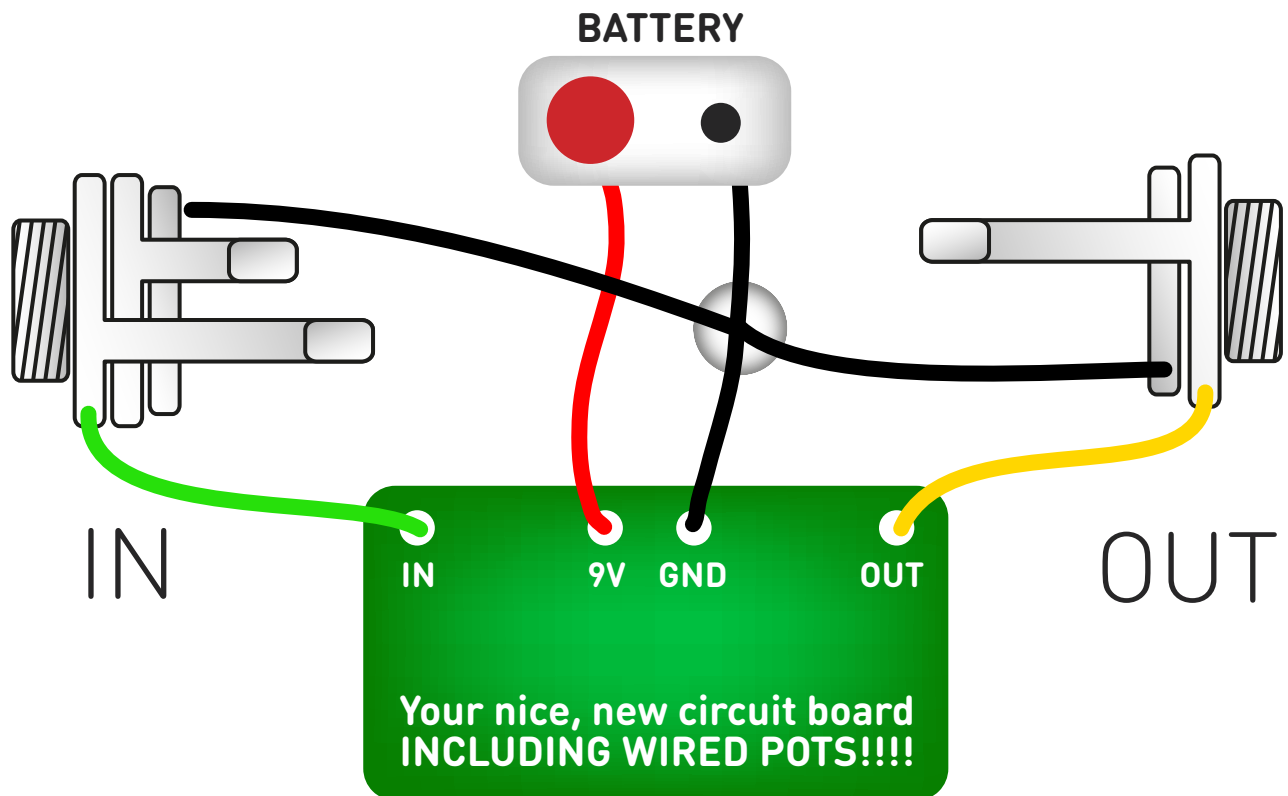
If your pots don't have protective plastic covers you should place a strip of thick card between them and the board when soldering to keep them a good distance from the pcb to avoid shorting other components.

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. That applies to your signal/power pads (or ribbon cable if using one). Once the brick is soldered in place you won't be able to access them.

When soldering in the brick, make sure you get it quite tight to the PCB. If you're using board-mounted pots make sure the body sits in line or above the brick, otherwise they won't sit properly in the enclosure. Best way to do that is to put them in the board then put them into the holes in the enclosure, on the top surface rather than inside the box. that way they'll sit at the ideal height for you to solder them in place.



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.

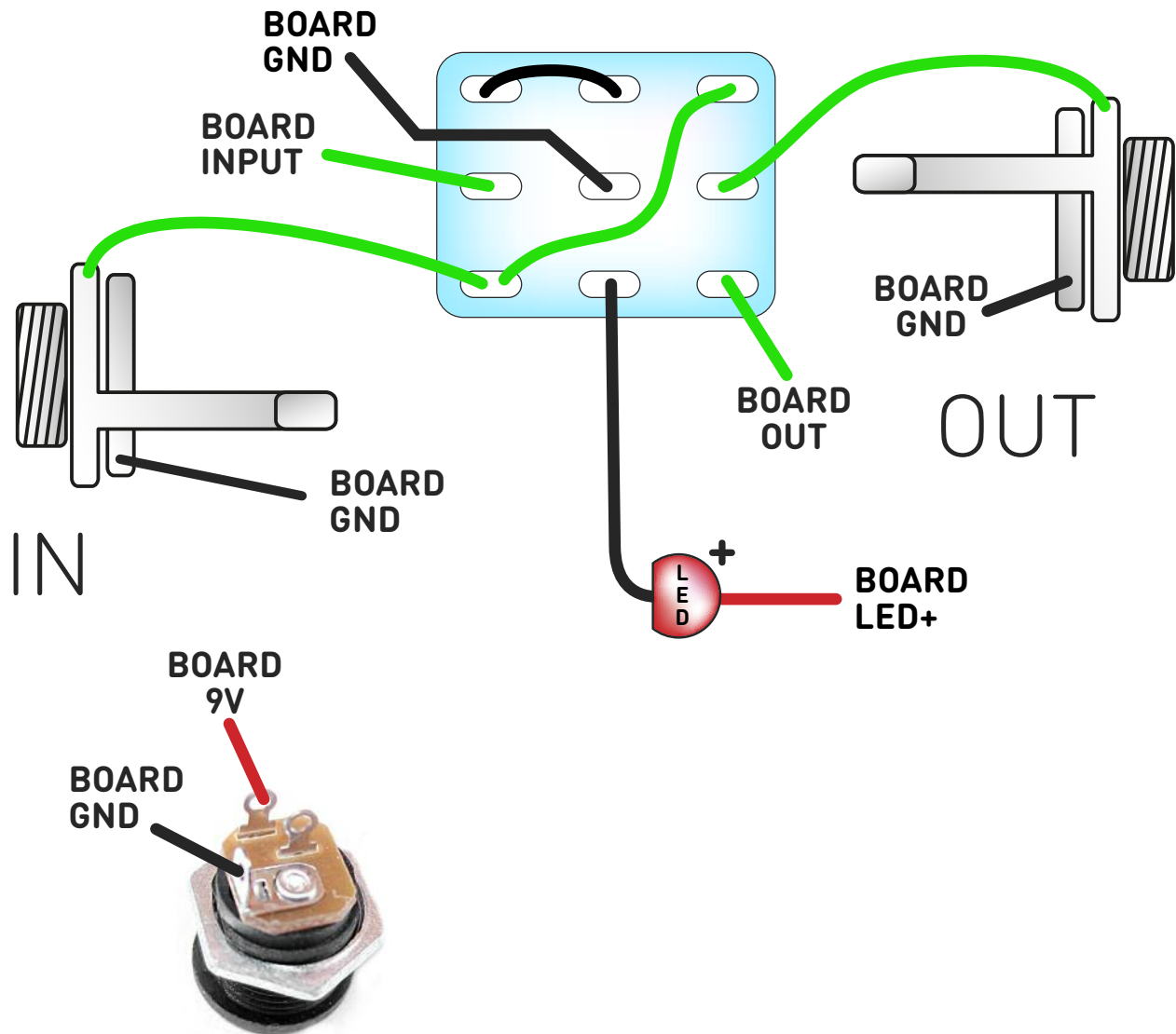
Solder some nice, long lengths of wire to the board connections for 9V, GND, IN and OUT. Connect IN and OUT to the jacks as shown. Connect all the GNDs together (twist them up and add a small amount of solder to tack it). Connect the battery + lead to the 9V wire, same method. Plug in. Go!

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)

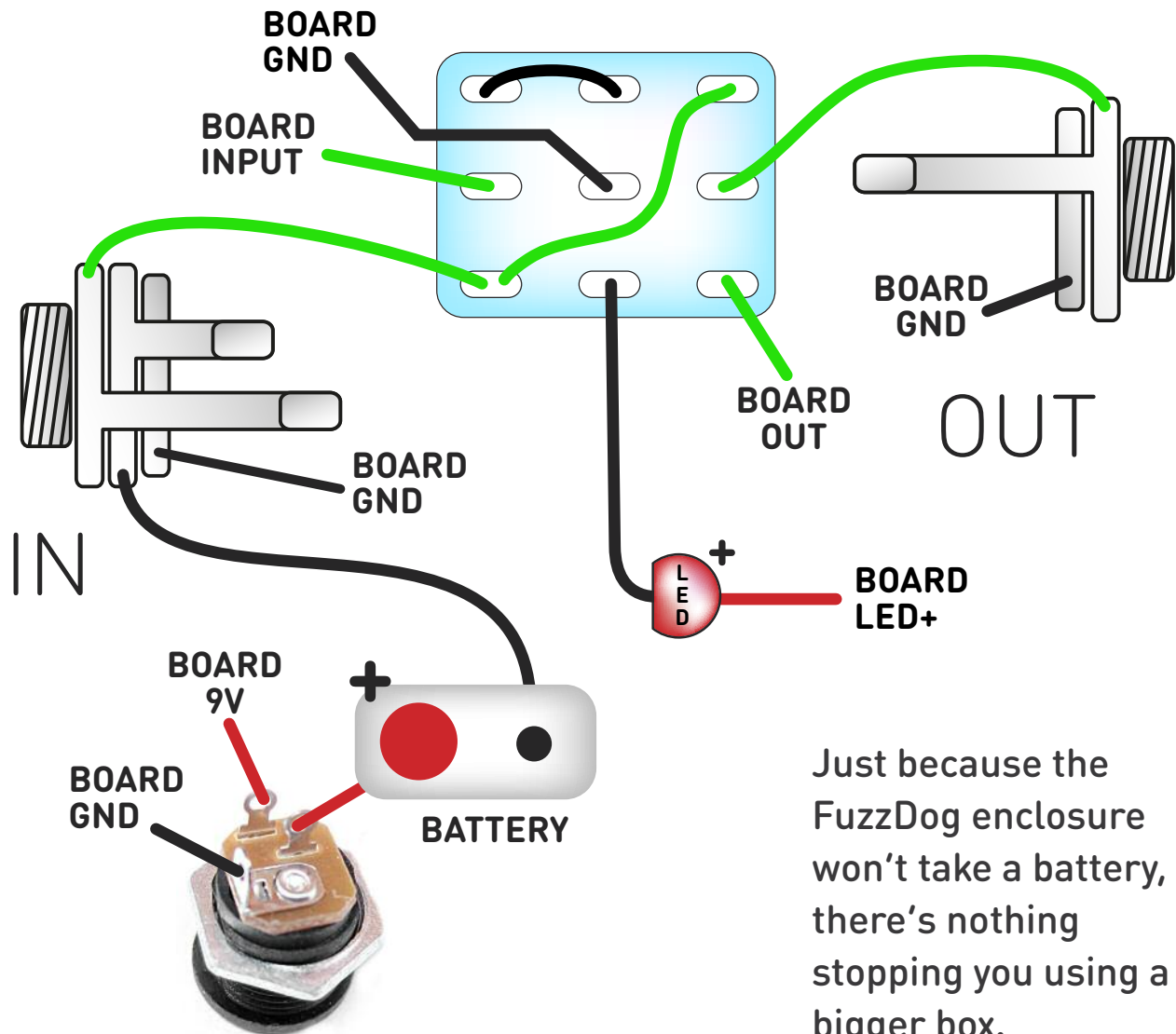


This circuit is standard, Negative GND. Your power supply should be Tip Negative / Sleeve Positive. That's the same as your standard pedals (Boss etc), and you can safely daisy-chain your supply to this pedal.

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)



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

Stinky Cheese

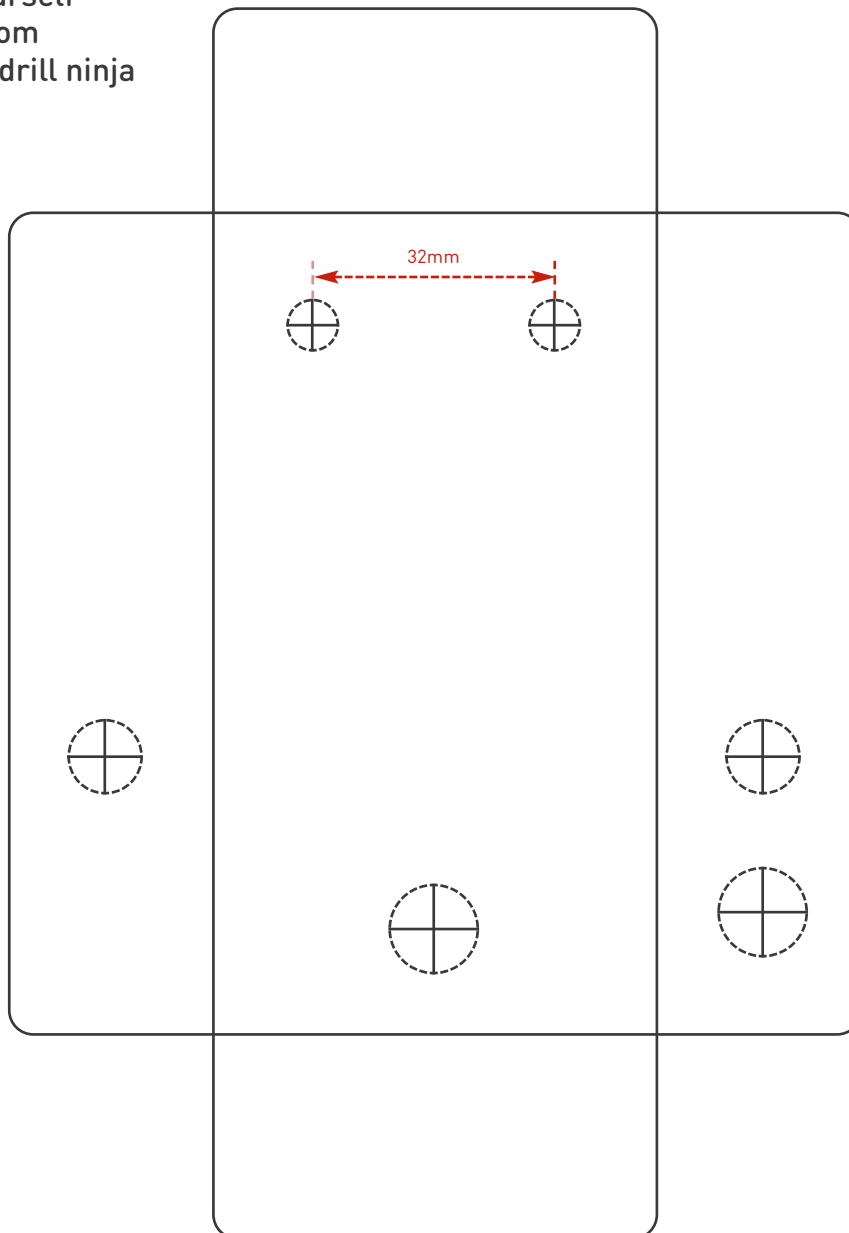
Hammond 1590B

60 x 111 x 31mm

Recommended drill sizes:

Pots	7mm
Jacks	10mm
Footswitch	12mm
DC Socket	12mm
Rotary Switch	9mm

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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