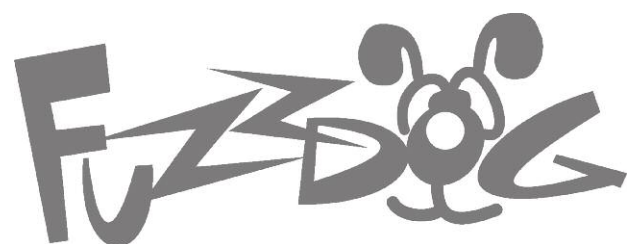


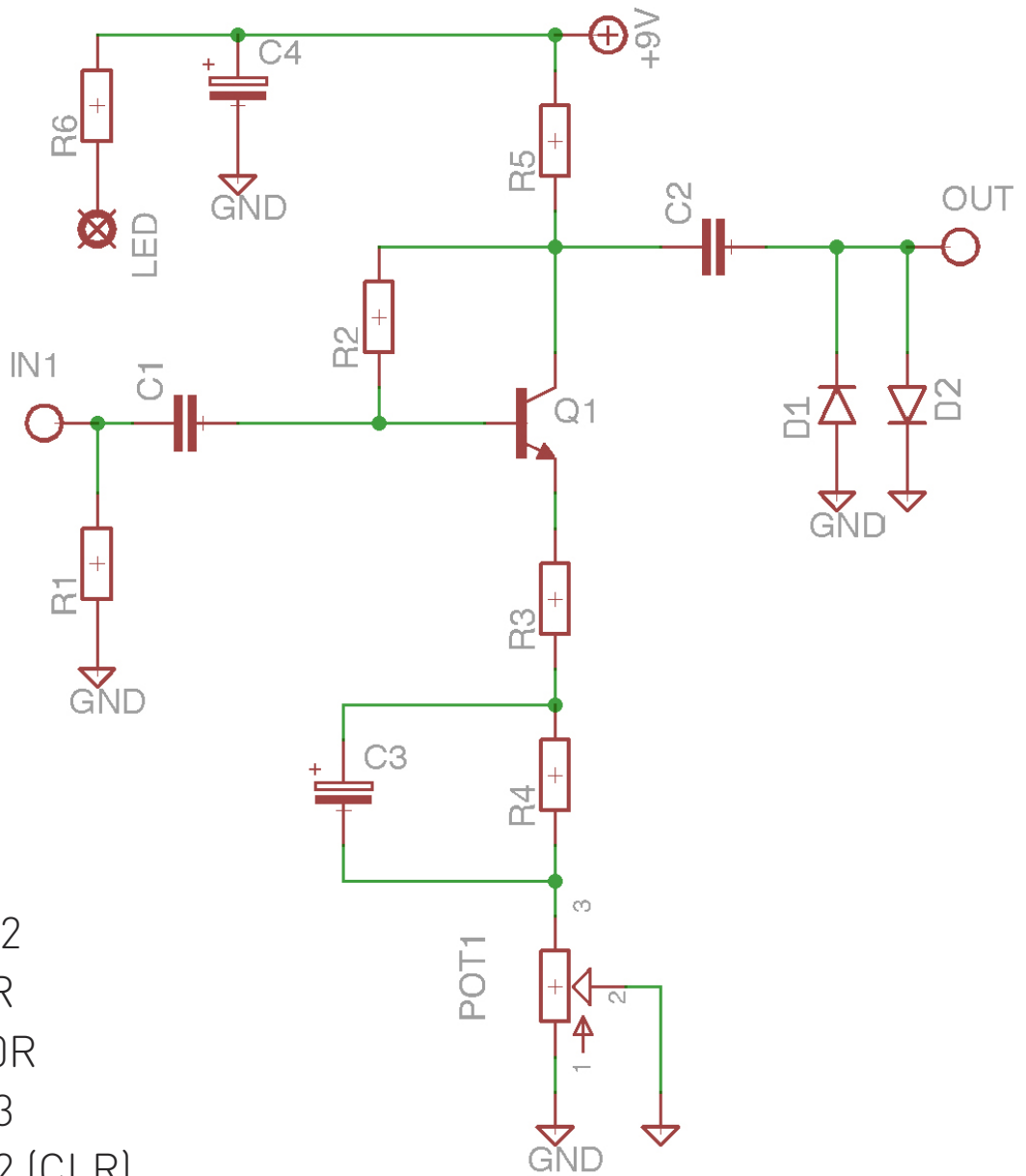


# Box Of Tone 50

Boutique Boost/Overdrive



# Schematic



## BOM

R1	1M
R2	2M2
R3	47R
R4	330R
R5	3K3
R6	2K2 (CLR)

D1,2\* 1N60

C1 47n

C2 100n

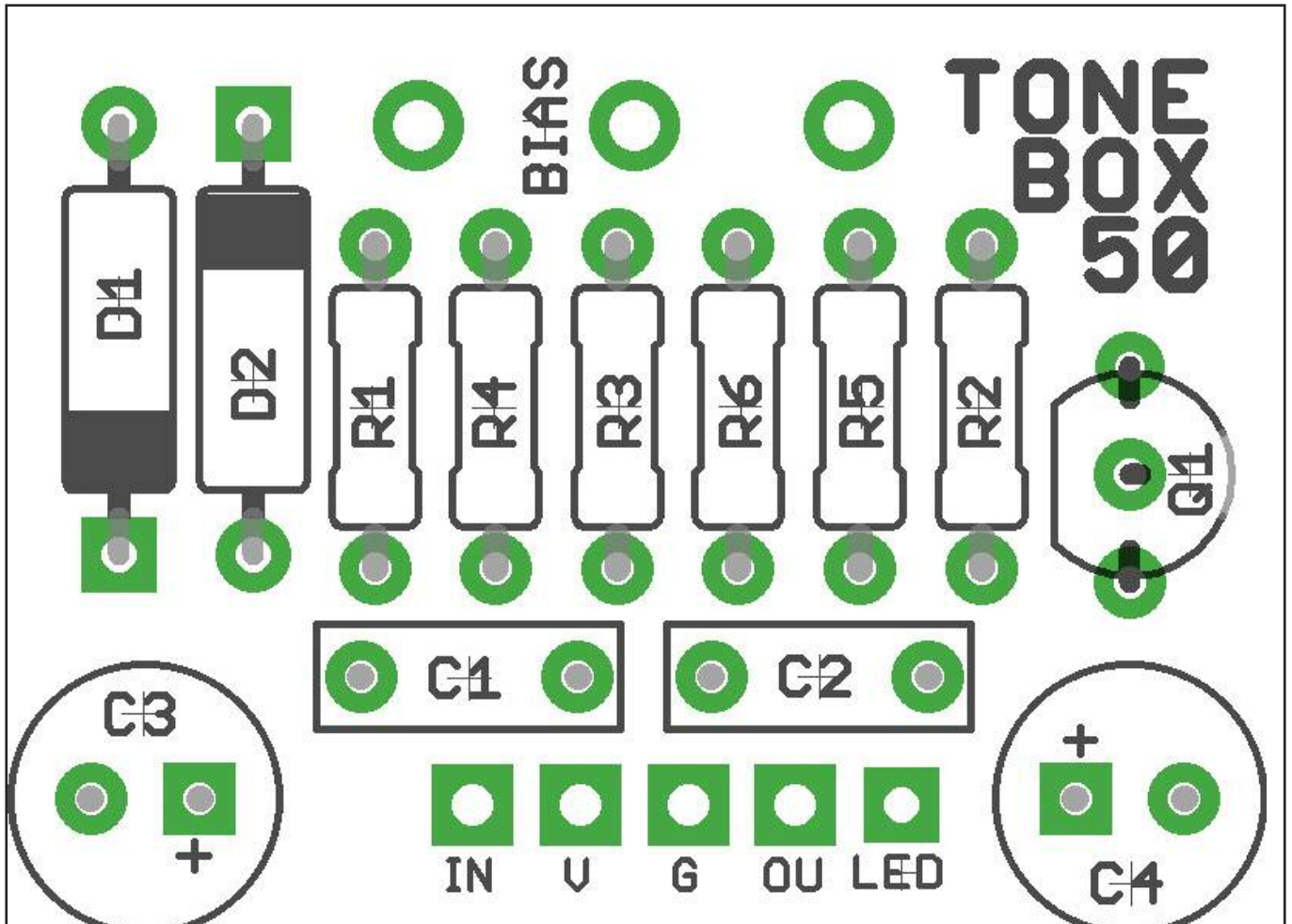
C3,4 47u electrolytic

Q1\*\* 2N5088

BIAS 1KB

\*Many different diodes have been reported in 'de-gooped' versions of this pedal. Experiment to find your ideal pair. BAT46 reportedly sound very good.

\*\* Other transistors can be used. Again, experiment if you feel like it.



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 transistor, LED 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).

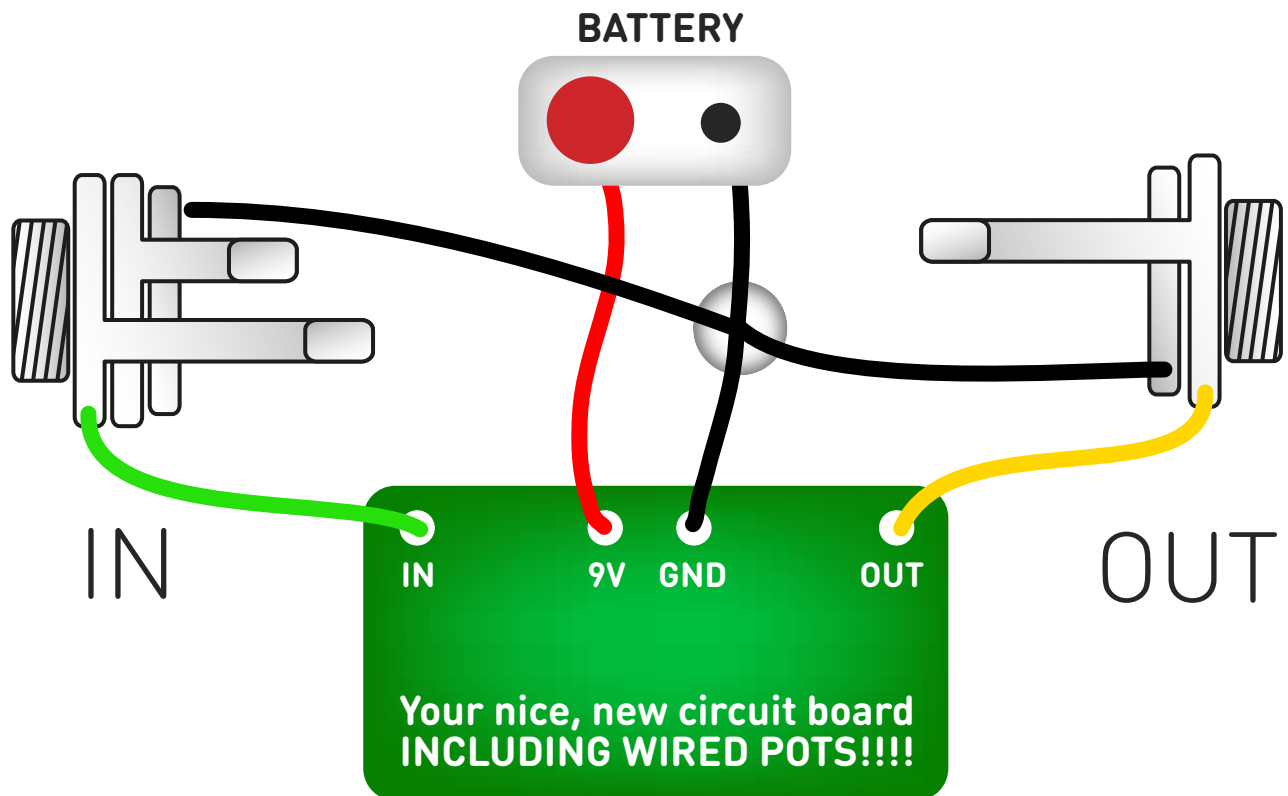
Be very careful when bending the legs of the germanium diodes in D07 cases. The glass casing is very brittle where the leg enters it. You should grip the leg with some fine needle-nosed pliers pushed right against the glass body, then bend the leg with your fingers. The pliers will take the strain away from the body.

The cathode (striped end) of the diodes go into the square pads. The anode (long leg) of electrolytic capacitors go into the square pads.

Snap the small metal tag off the pot so it can be mounted flush in the enclosure.

If you're using a footswitch daughterboard don't bother soldering R6. You'll use that on the daughterboard instead.

# 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.

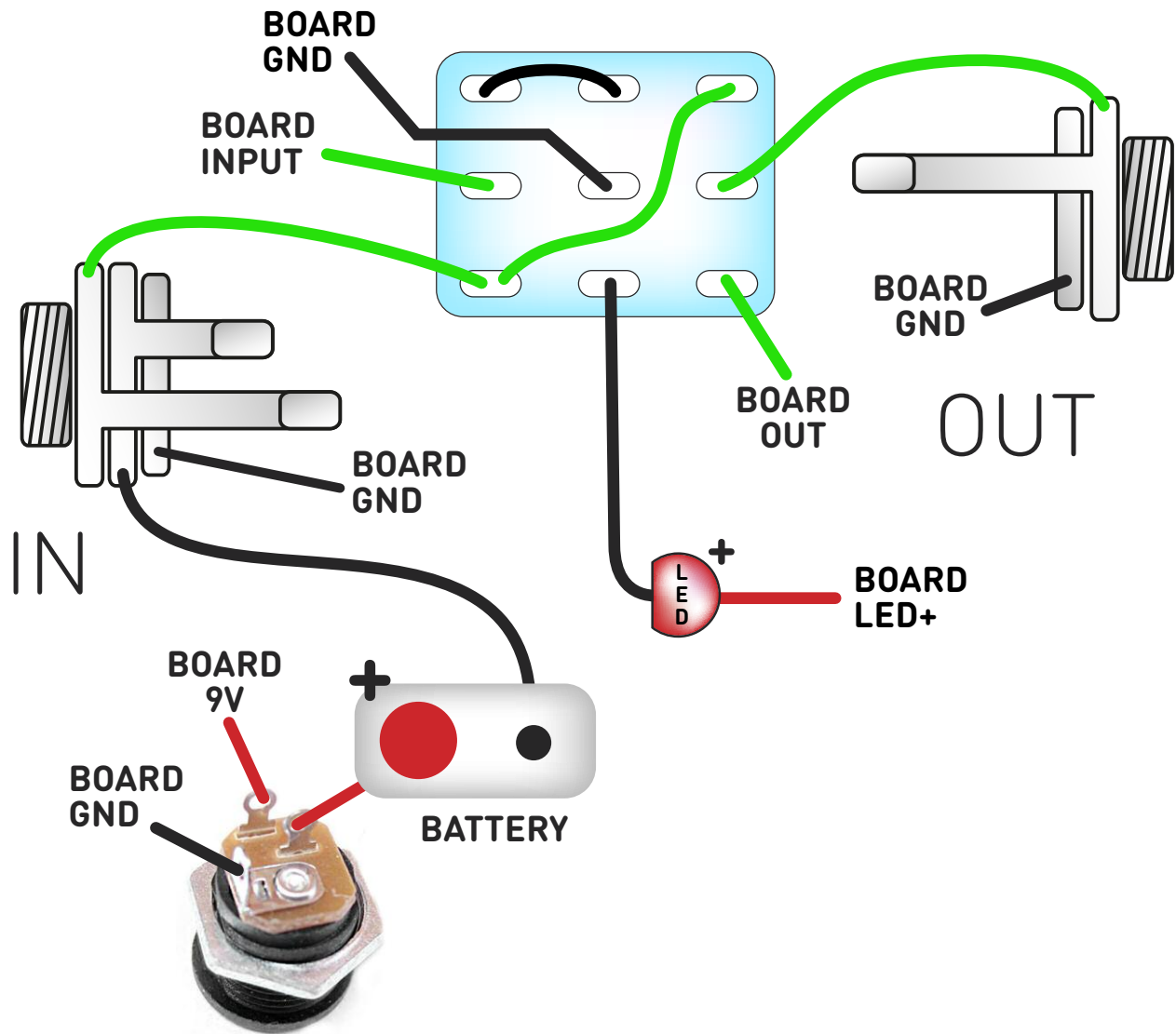
Solder some nice, long lengths of wire to the board connections for 9V, GND, IN and OUT. Connect IN and OUT to the jacks as shown. Connect all the GNDs together (twist them up and add a small amount of solder to tack it). Connect the battery + lead to the 9V wire, same method. Plug in. Go!

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 - with battery

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

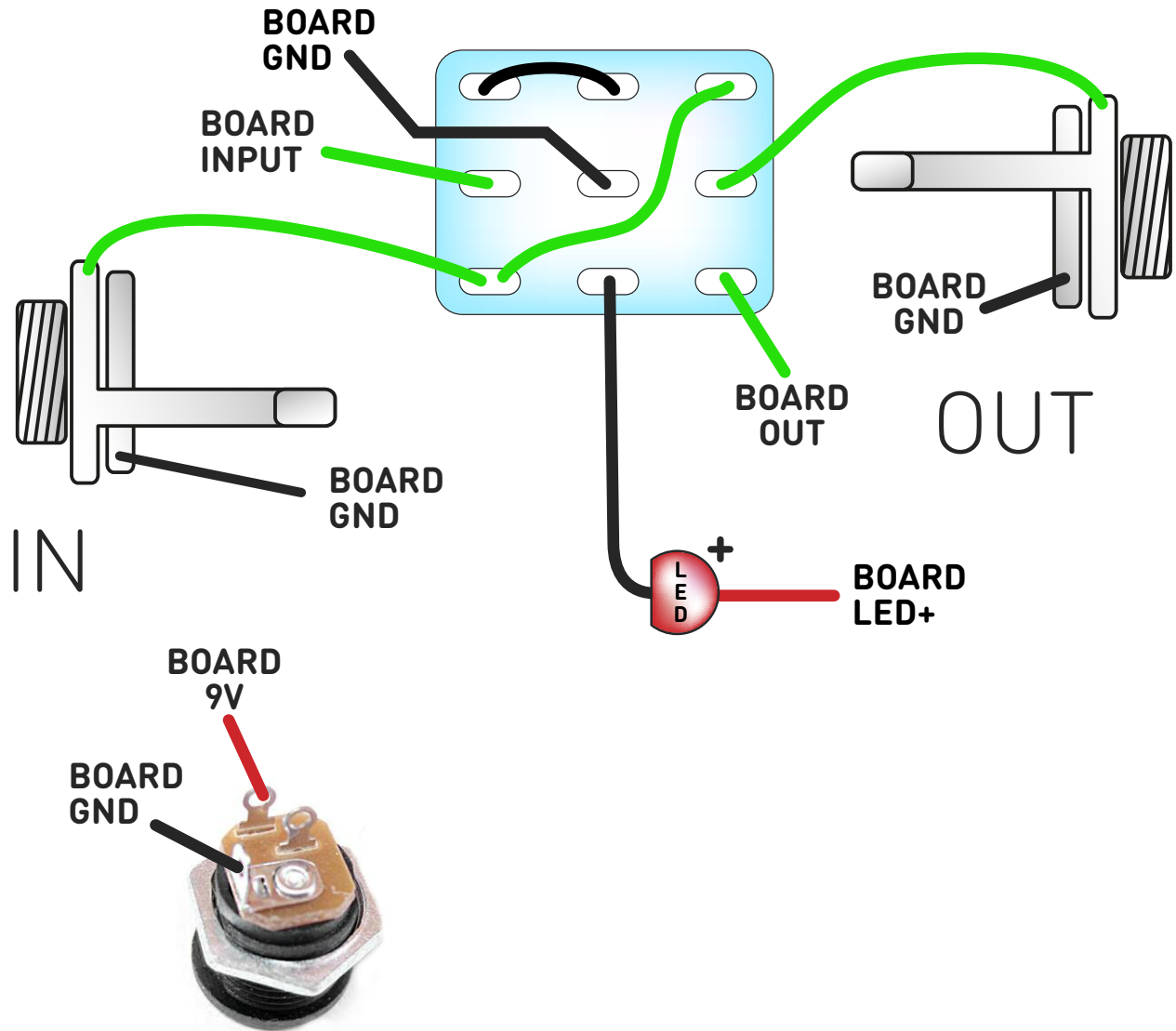


This circuit is standard, Negative GND. Your power supply should be Tip Negative / Sleeve Positive. That's the same as your standard pedals (Boss etc), and you can safely daisy-chain your supply to this pedal.

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.

# 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.

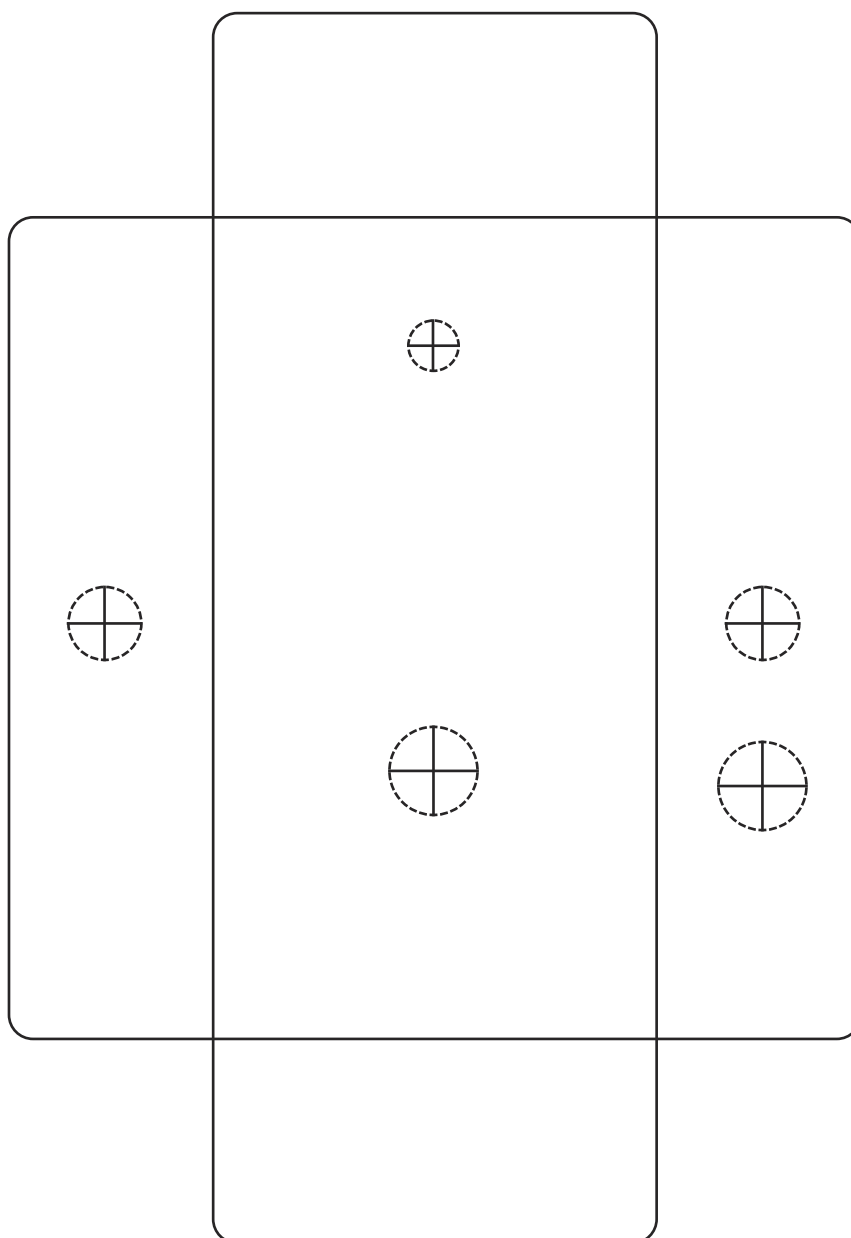
# Drilling template

Hammond 1590B

60 x 111 x 31mm

Recommended drill sizes:

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



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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