

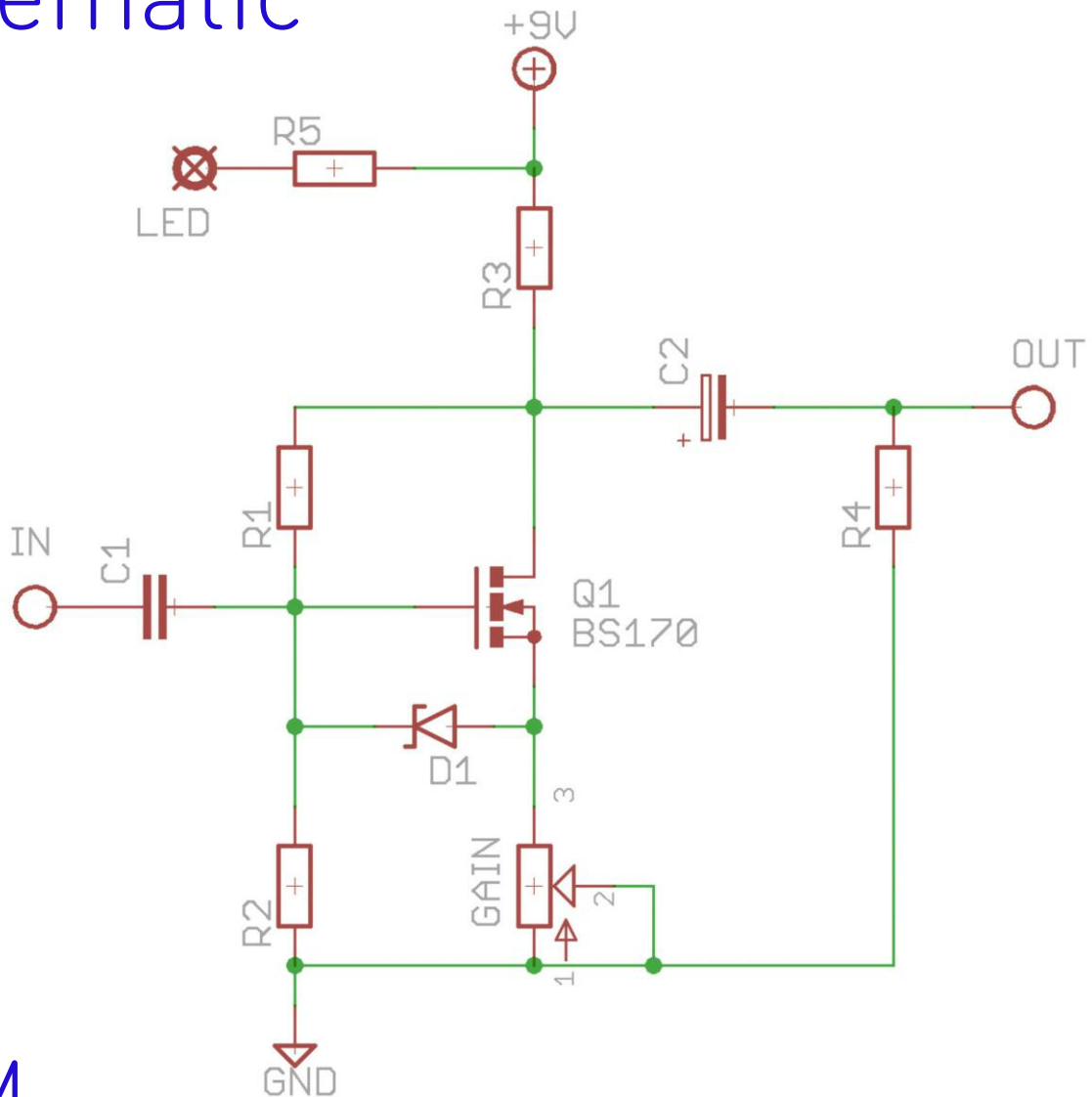


Boner Boost v3.0

A lot of oomph and a little crackle for good measure



Schematic



BOM

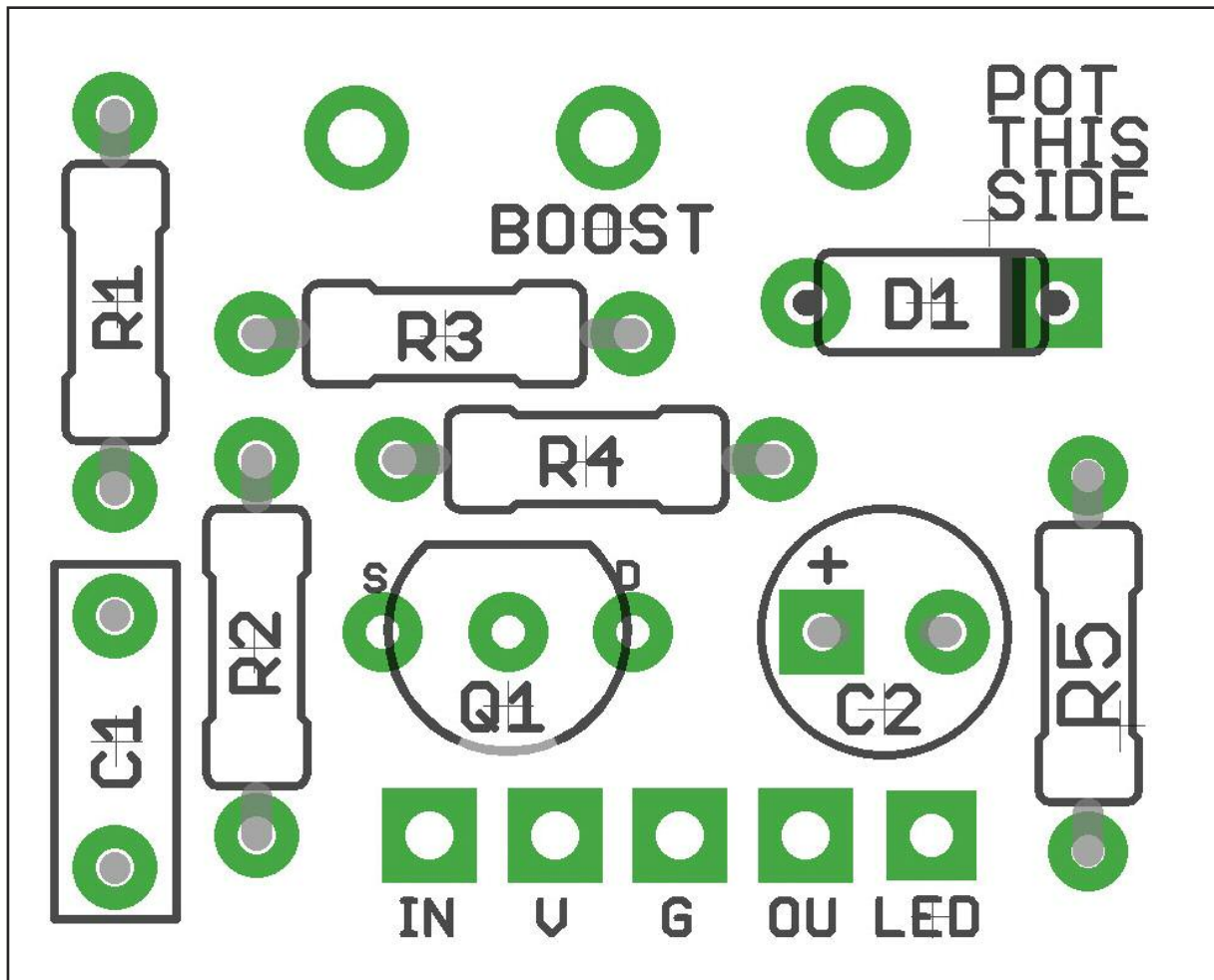
R1,2	10M
R3	5K1
R4	100K
R5	2K2 (CLR)
C1	100n
C2	10u
D1	9.1v zener
Q1	BS170
GAIN	5KC

This lovely little boost can do a lot of things. It'll breath life into tired, weak pickups, and add a bit of zonk to pretty much anything you run through it. From adding a layer of presence to the signal, to full-on overdrive.

The circuit will produce an audible 'crackle' when the knob is turned. That's ok. The BS170 is rebiasing.

Please, please turn it right down when you first plug it in. This babe is capable of some HOT signal output.

This is the revised single zener diode version which is less susceptible to static problems than the first version.



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.

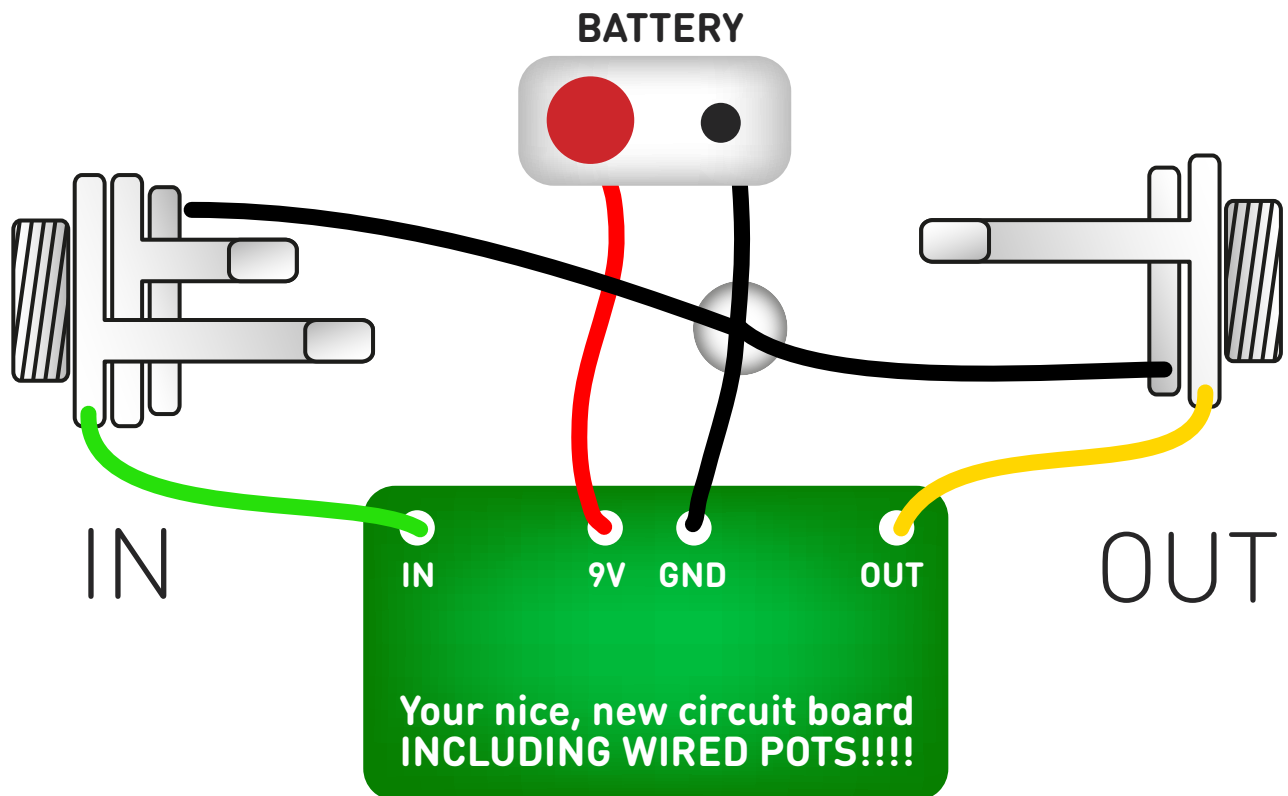
Be very careful when soldering the transistor, LED and diode. They're very sensitive to heat. You should use some kind of heat sink (crocodile clip or reverse action tweezers) on each leg as you solder them. Keep exposure to heat to a minimum (under 2 seconds).

The cathode (striped end) of the diode goes into the square pad. The anode (long leg) of electrolytic capacitor goes into the square pad.

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 R5. 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.

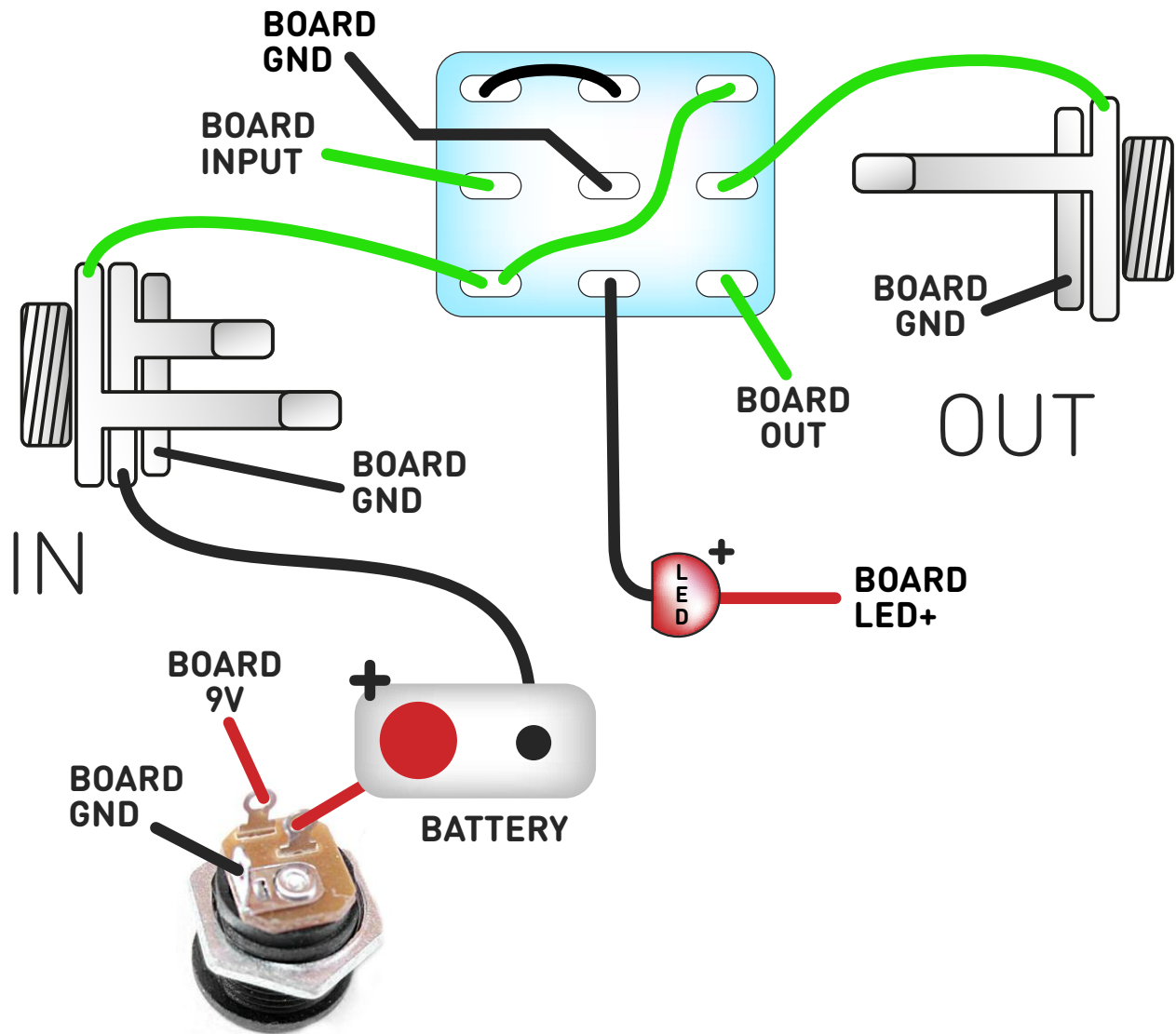
Solder some nice, long lengths of wire to the board connections for 9V, GND, IN and OUT. Connect IN and OUT to the jacks as shown. Connect all the GNDs together (twist them up and add a small amount of solder to tack it). Connect the battery + lead to the 9V wire, same method. Plug in. Go!

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)

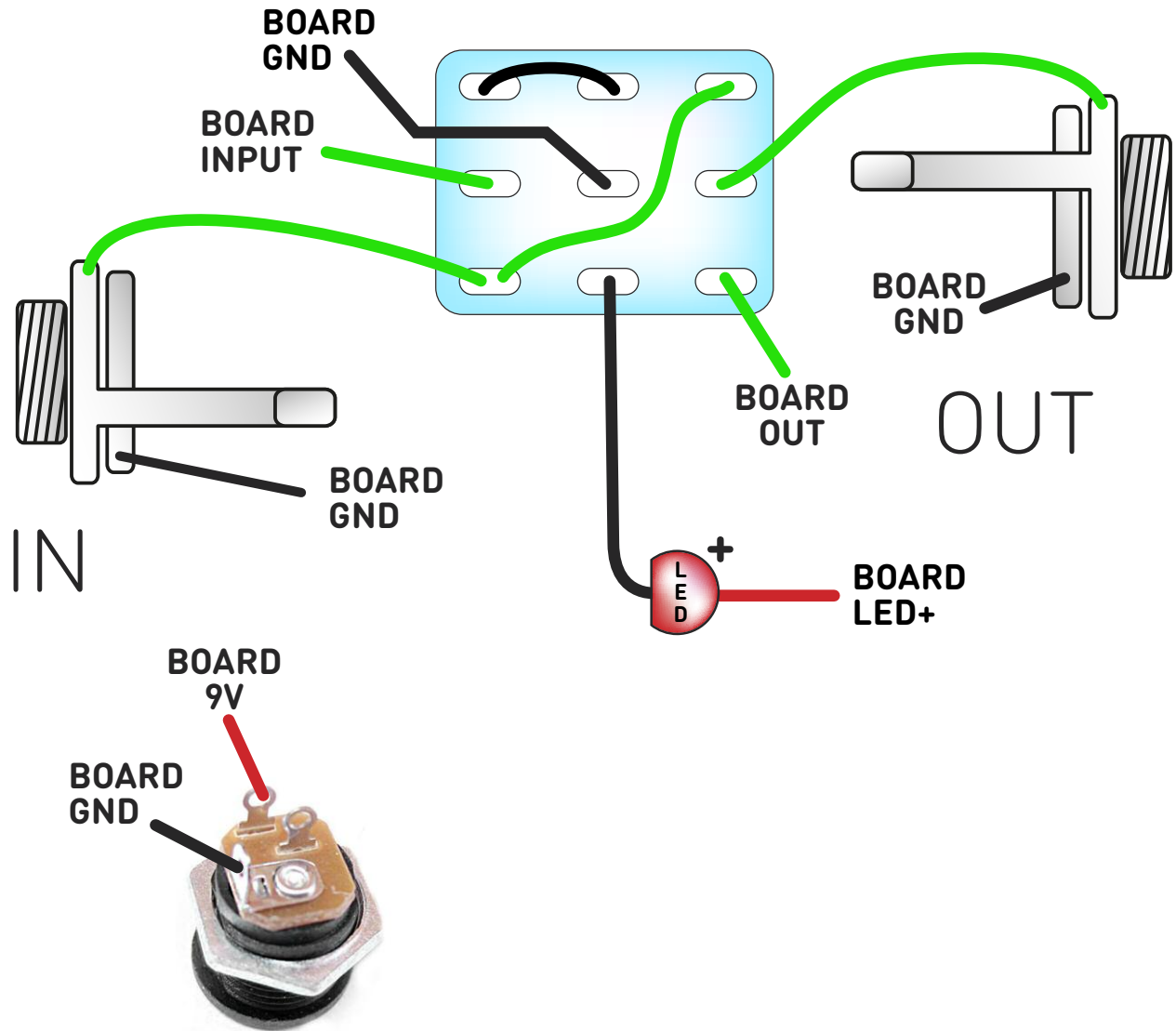


This circuit is standard, Negative GND. Your power supply should be Tip Negative / Sleeve Positive. That's the same as your standard pedals (Boss etc), and you can safely daisy-chain your supply to this pedal.

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)



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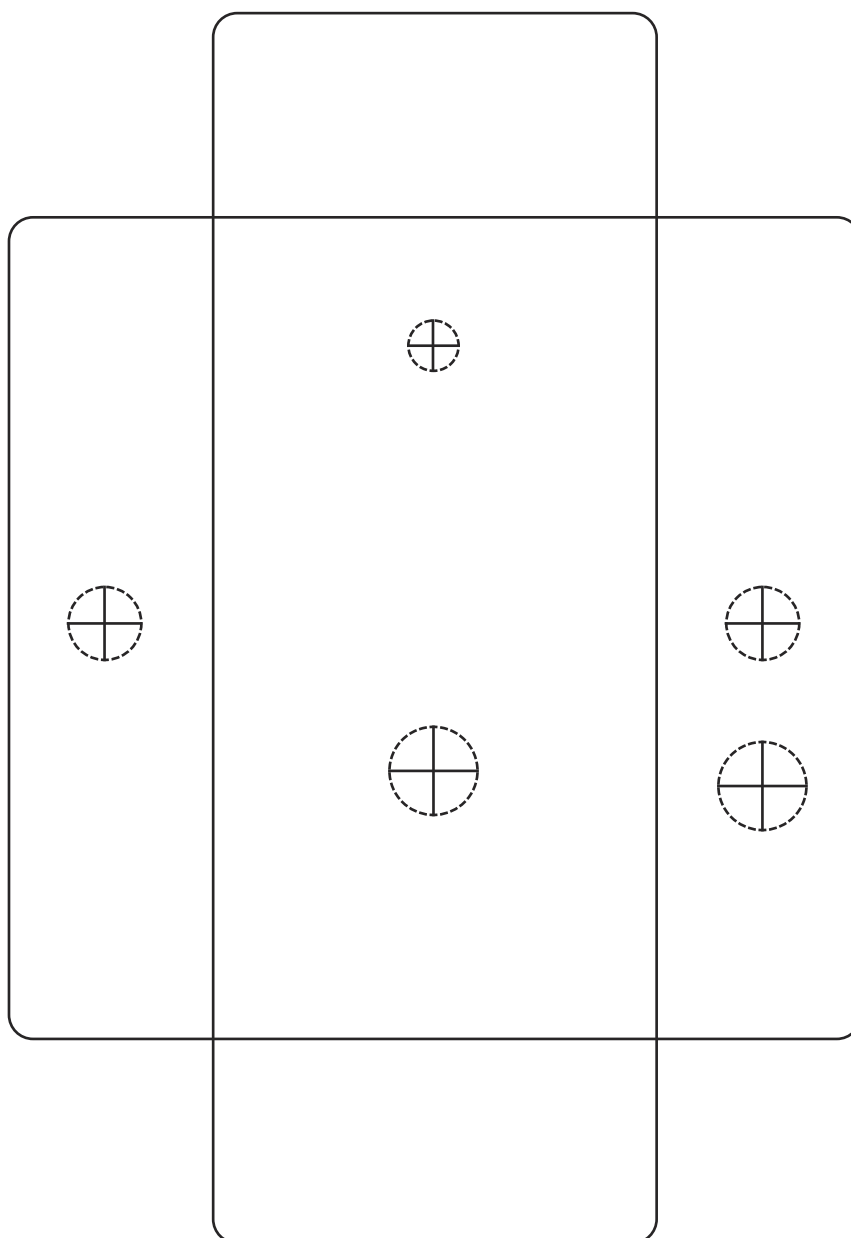
Drilling template

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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