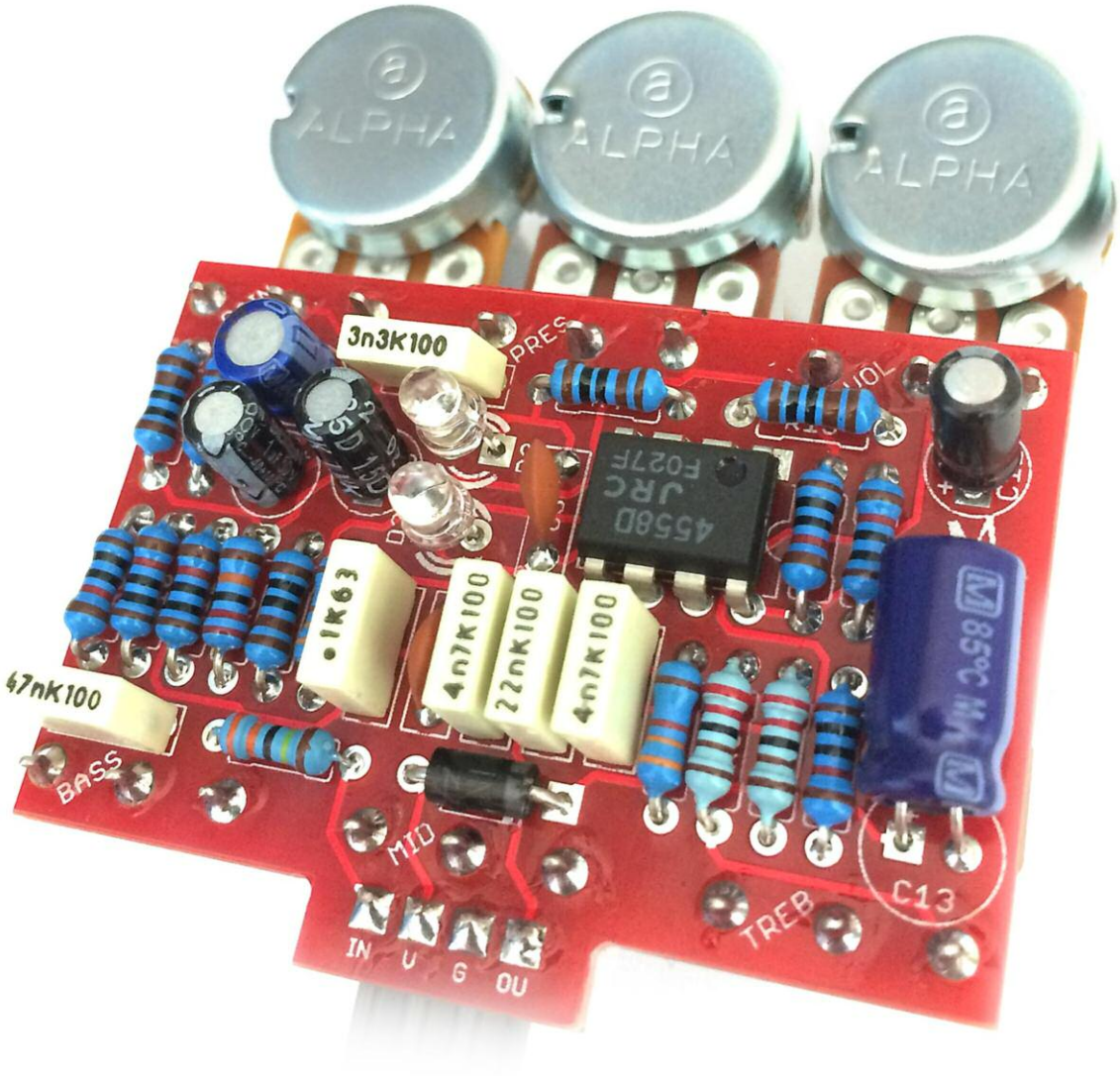
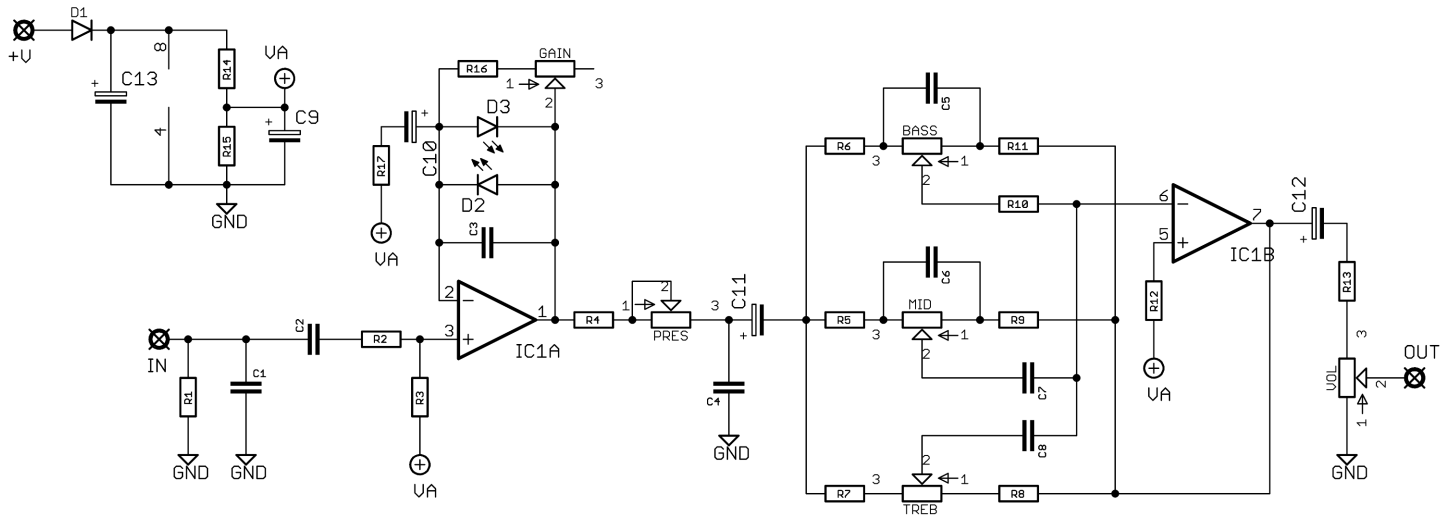


Eagle Claw

A mighty drive with plenty of EQ tweakability

Schematic + BOM



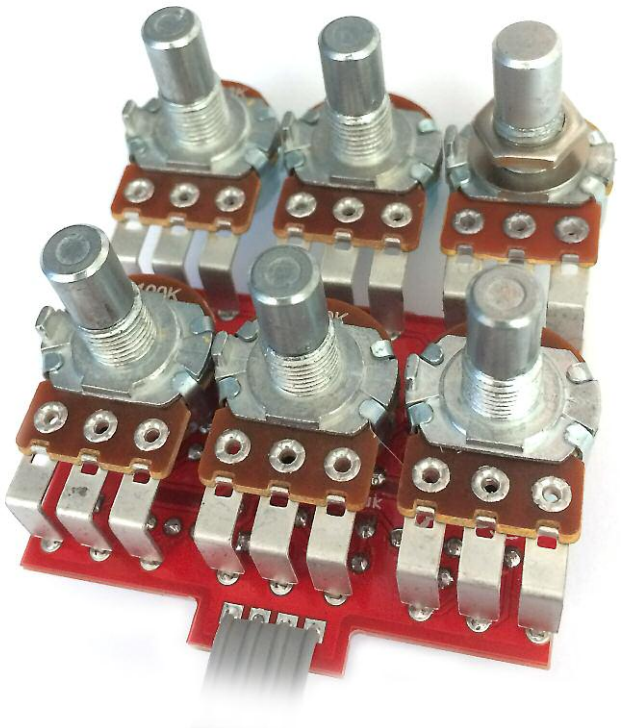
R1	3M3
R2	1K
R3	220K
R4	1K
R5	3K3
R6	10K
R7	2K2
R8	2K2
R9	3K3
R10	10K
R11	10K
R12	10K
R13	1K
R14	10K
R15	10K
R16	4K7
R17	1K

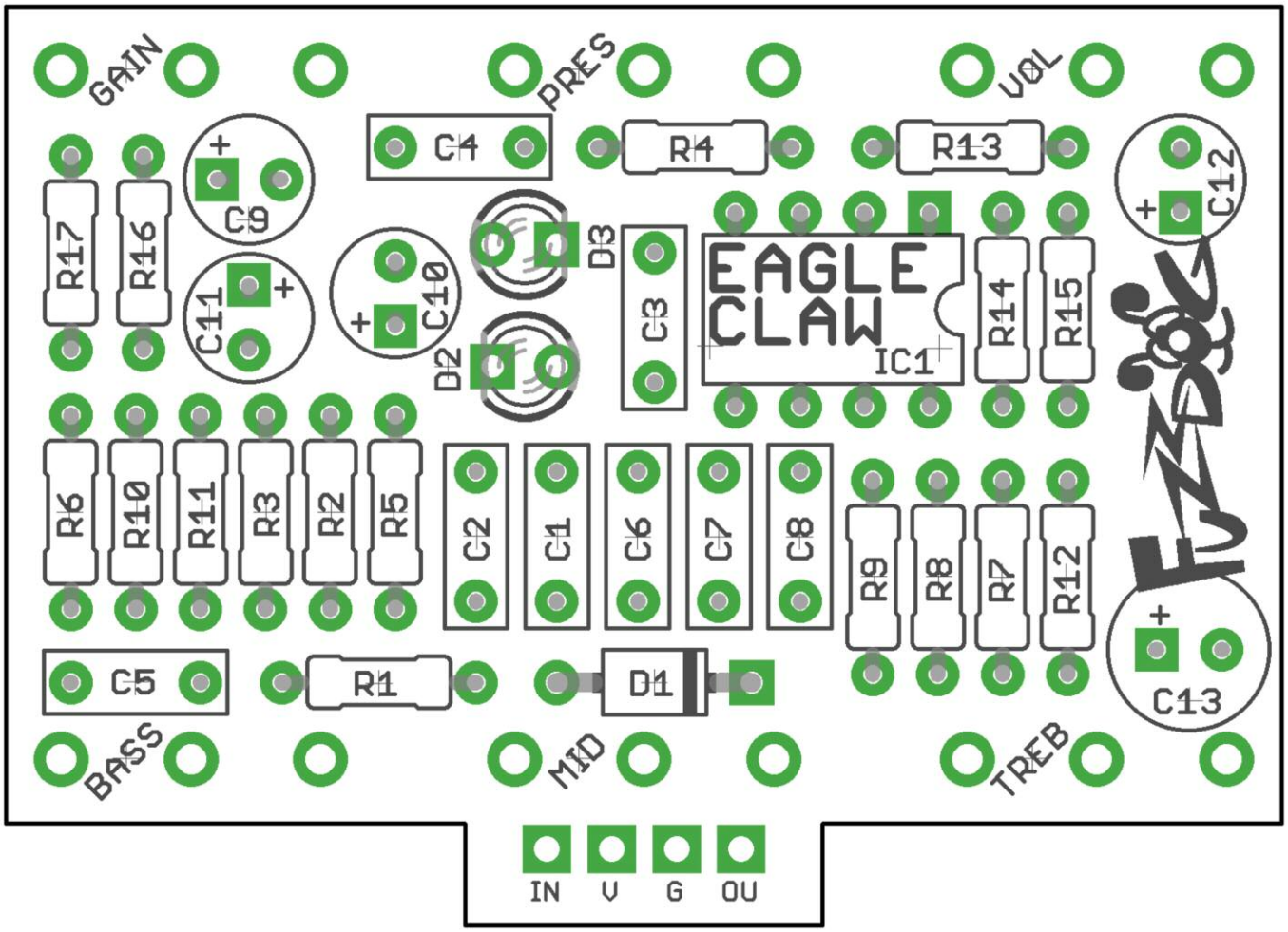
C1	100p
C2	100n
C3	100p
C4	3n3
C5	47n
C6	4n7
C7	22n
C8	4n7
C9	10u elec
C10	1u elec
C11	1u elec
C12	2u2 elec
C13	100u elec

IC1	TL072 or 4558

D1	1N4001
D2-3	3MM Red LED (clear)

VOL	100KA
BASS	50KB
MID	50KB
TREB	100KB
GAIN	500KA
PRES	5KB





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. Check the separate daughterboard document for details.

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

If your pots have smart little plastic jackets you're going to have to lose them - the spacing it too tight for those.

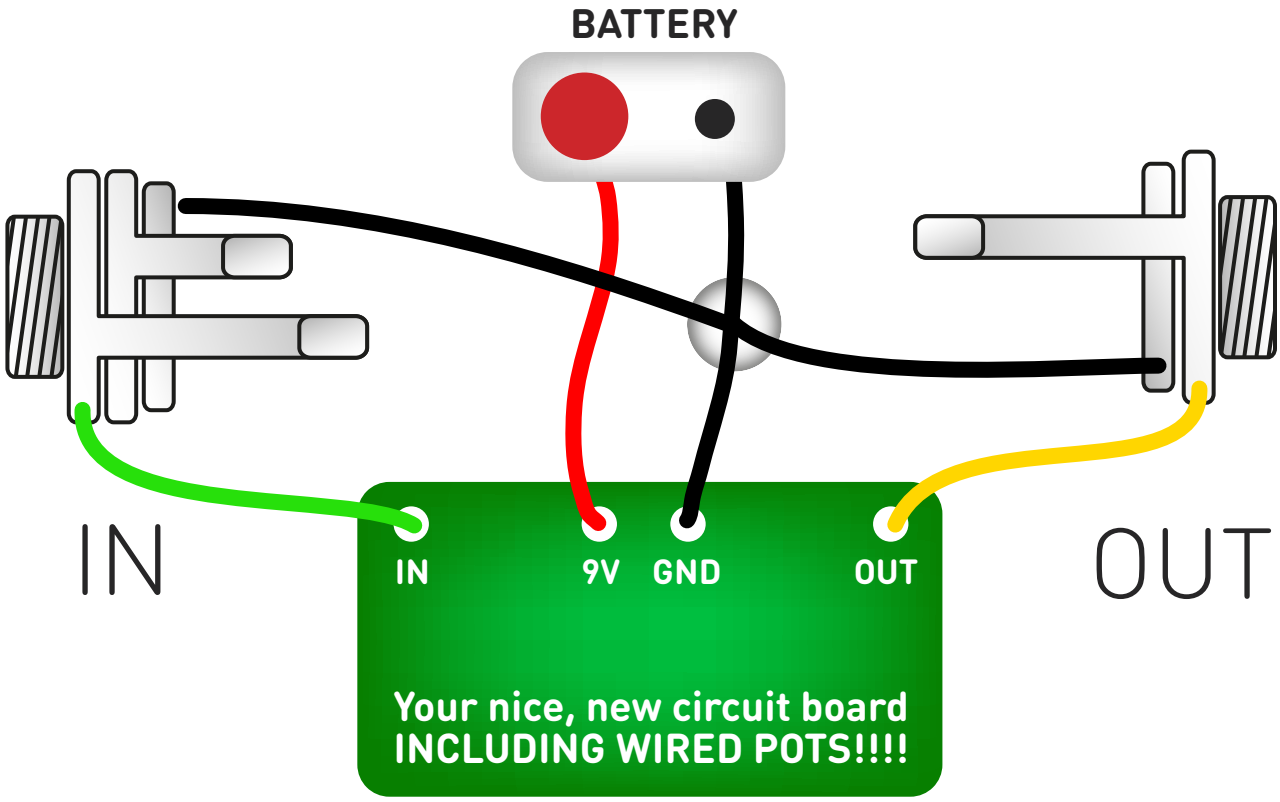
Positive (anode) legs of the electrolytic caps go to the square pads.

Negative (cathode) legs of the diodes go to the square pad.

Be very careful when soldering the diode and LEDs. 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.

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 board. Make sure your pots all line up nicely. The best way to do that is to solder a single pin of each pot in place then melt and adjust if necessary before soldering in the other two pins. Ensure you leave a decent gap between the pot body and the PCB otherwise you risk shorting out the circuit.

Test the board!



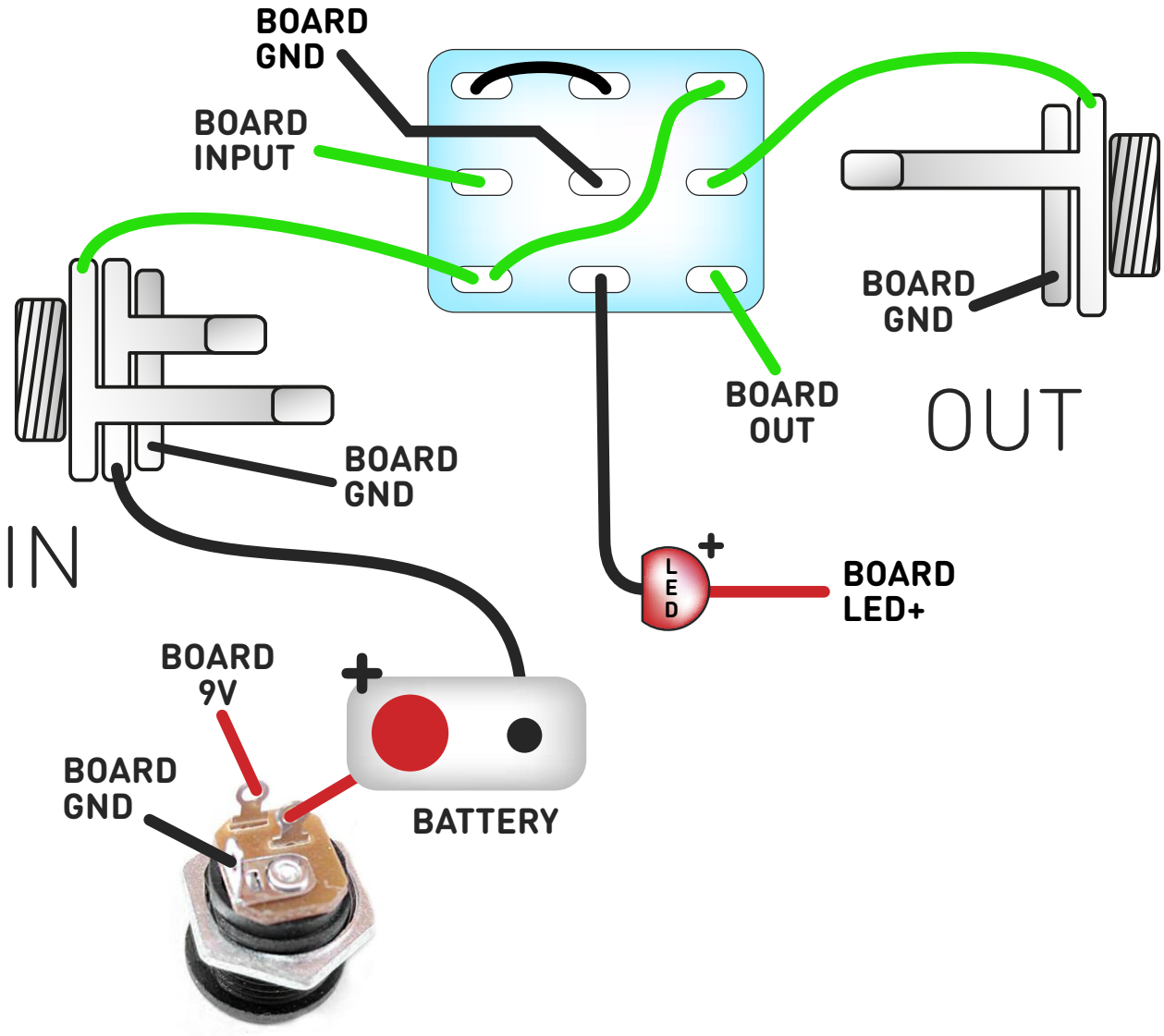
UNDER NO CIRCUMSTANCES will troubleshooting help be offered if you have skipped this stage. No exceptions.

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



Wiring shown above will disconnect the battery when you remove the jack plug from the input, and also when a DC plug is inserted.

The Board GND connections don't all have to directly attach to the board. You can run a couple of wires from the DC connector, one to the board, another to the IN jack, then daisy chain that over to the OUT jack.

It doesn't matter how they all connect, as long as they do.

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.

Drilling template

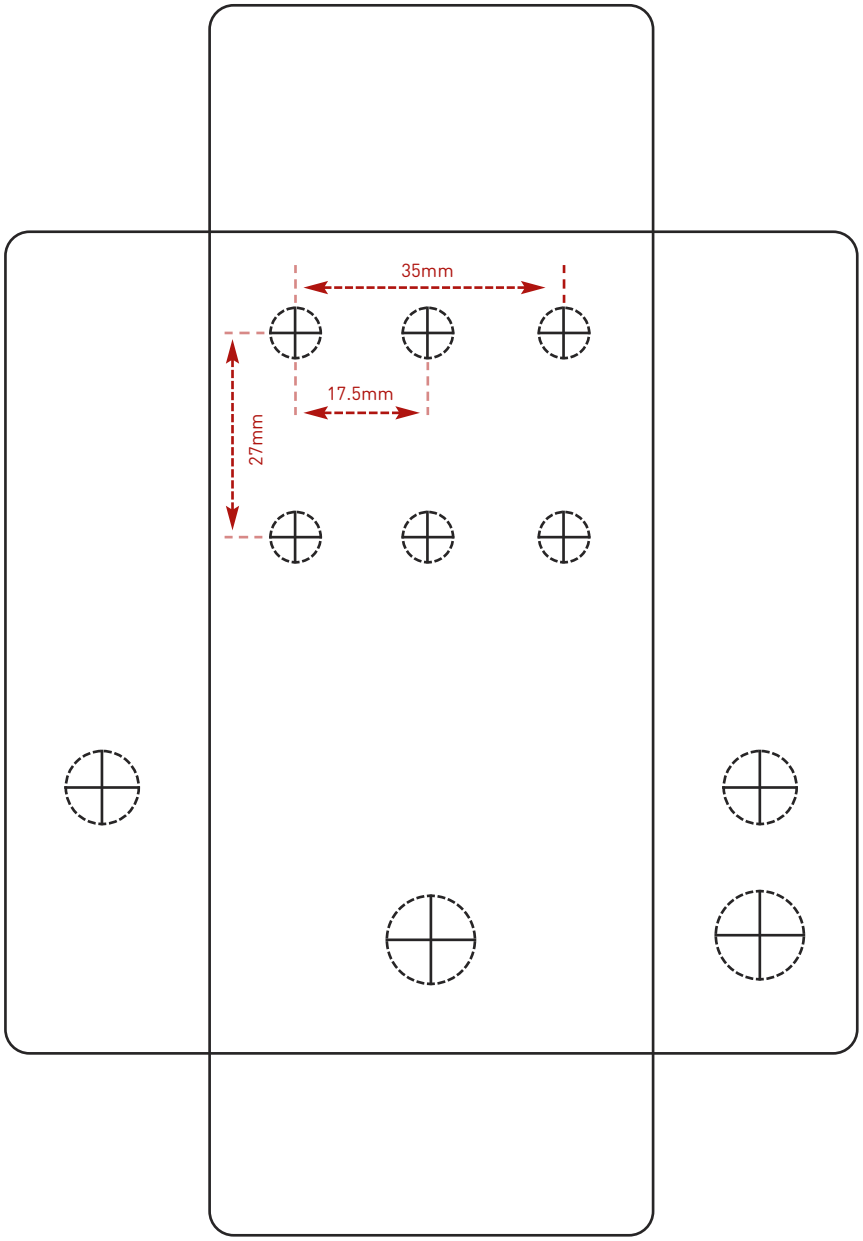
Hammond 1590B

60 x 111 x 31mm

It's a good idea to drill the pot and toggle switch holes 1mm bigger if you're board-mounting them.
Wiggle room = good!

Recommended drill sizes:

Pots	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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