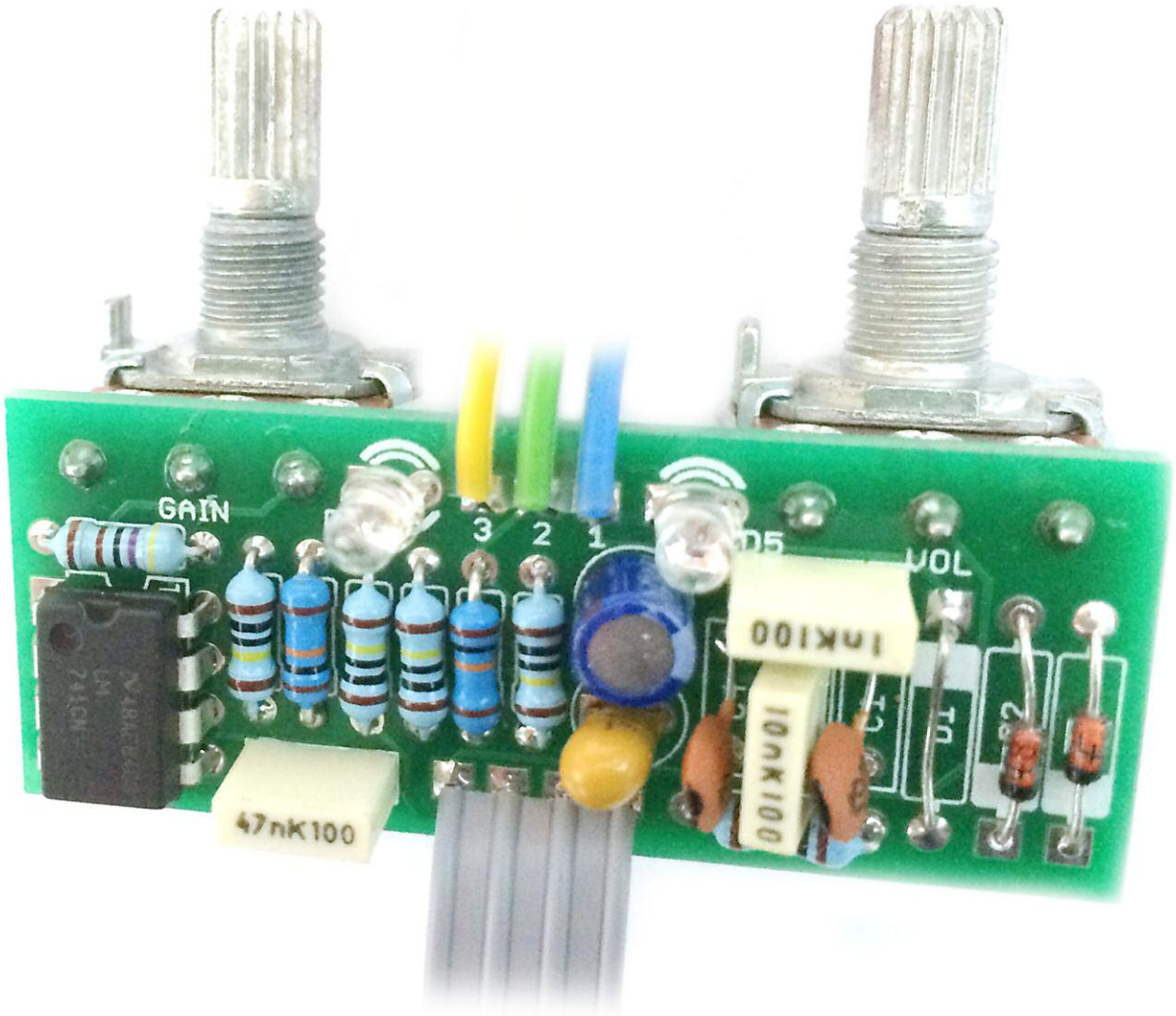
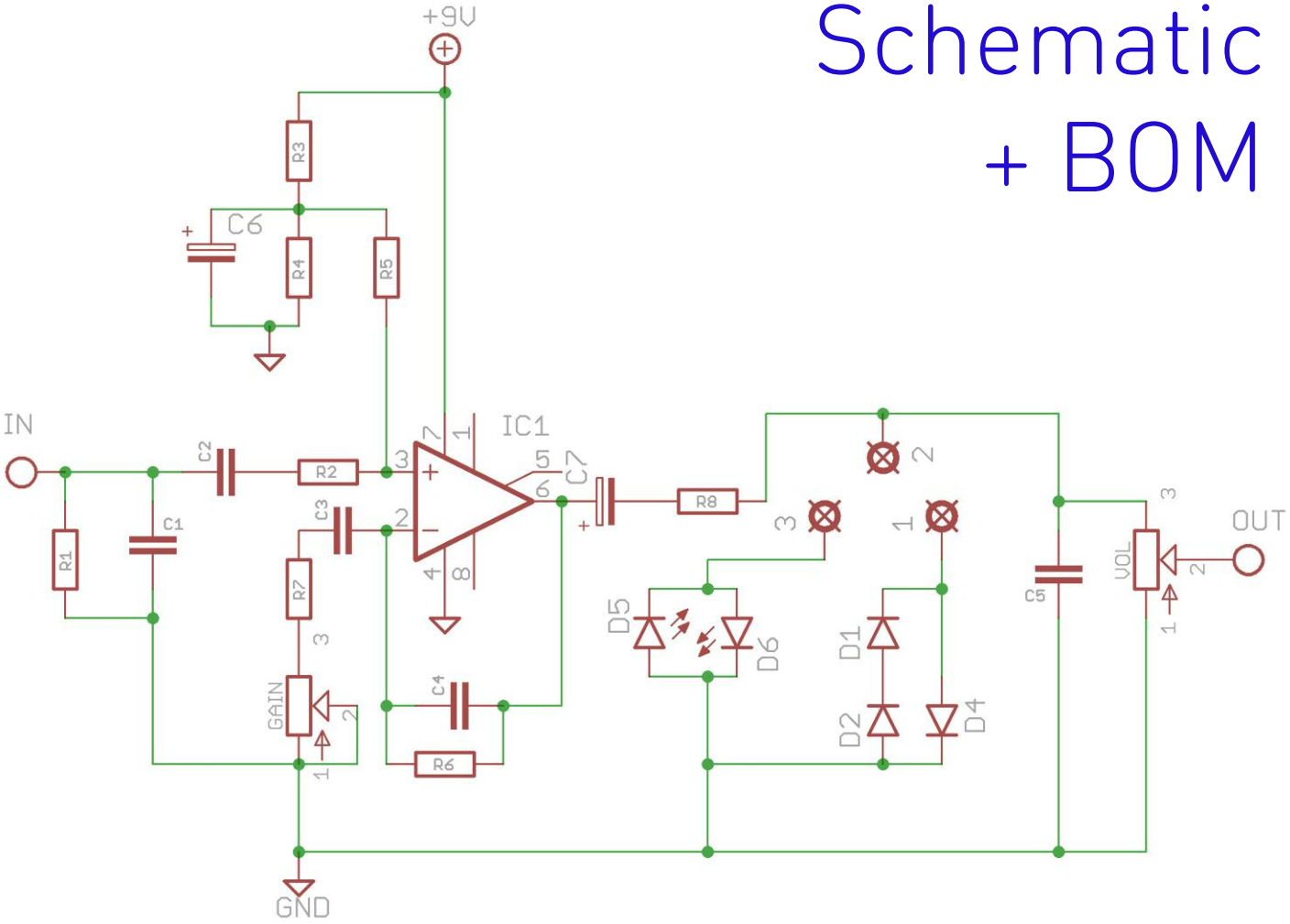


Toxic Minx V2

Distortion+/OD250 with clipping mods

Schematic + BOM



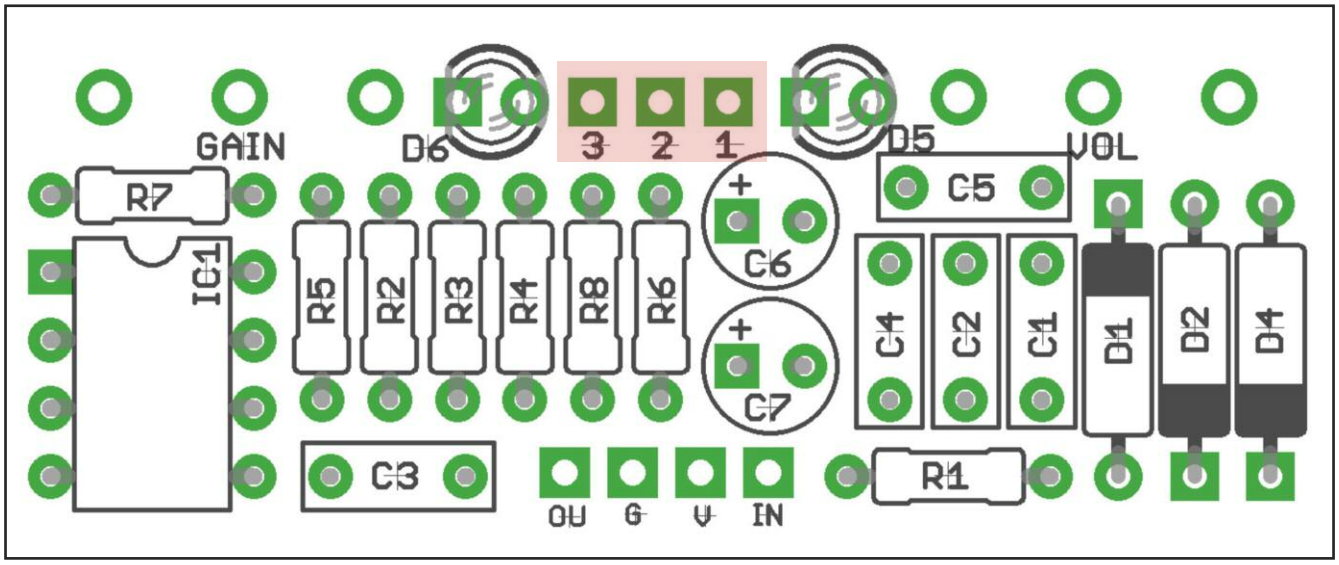
R1	1M	C1	10p (empty)	D1	Jumper*
R2	10K	C2	10n	D2	1N4148
R3	1M (22K)	C3	47n	D4	1N4148
R4	1M (22K)	C4	10p (25p)	D5-6	3MM LED**
R5	1M (470K)	C5	1n		
R6	1M	C6	10u elec	IC1	LM741
R7	4K7	C7	1u elec (4u7)		
R8	10K			GAIN	500KC***
				VOL	50KA (100KA)

BOM shows Distortion+. Values in blue should be substituted for OD250.

*You can add another 1N4148 in D1 if you want to see how the circuit sounds with asymetrical clipping.

**Extra pads are provided for a second clipping option. See overleaf.

***Originally 1MB, but the sweep is terrible. 500KC is much more useable.



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 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). You should use a socket for the IC, or be super careful not to overheat. Take your time.

The striped leg (cathode) of the diodes go into the square pads. Long leg (anode) of the LEDs go into the round pads.

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.

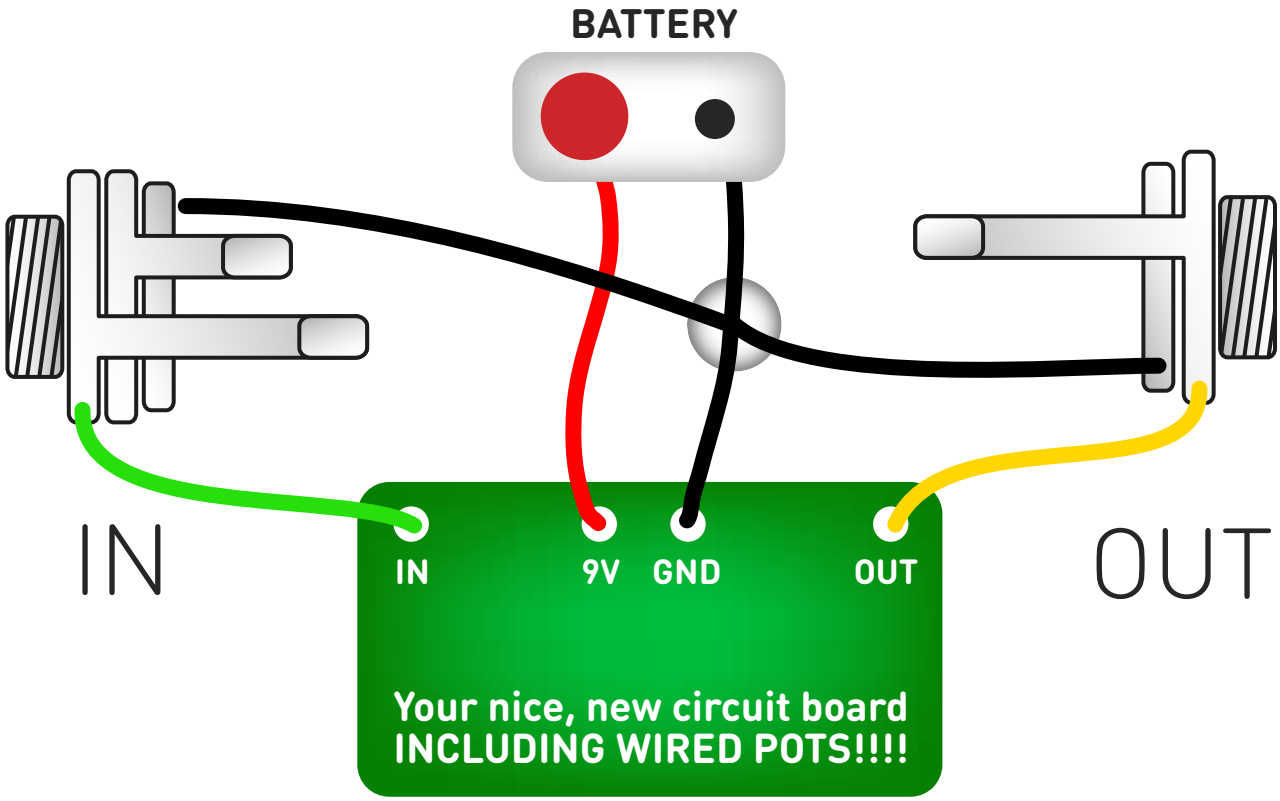
CLIPPING

If you're going for a single clipping option place a jumper across the appropriate pads. If you're utilising D1, 2 and 4 then connect pads 1 & 2. If you're using D5-6 connect pads 2 & 3.

You can have two clipping options on the board at the same time, using a SPDT toggle switch to select between them. Just wire it up with pad 2 going to the centre lug, 1 and 3 going to the outer lugs.

The circuit can sound vastly different depending on your diode selection. Experiment. Germaniums will typically give a much softer clip. LEDs will be harder. You don't have to put LEDs into D5 and D6 - you could put normal diodes in there positioned upright.

Test the board!



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

Battery clip is supplied to test the circuit. Power supply is recommended when using the finished delay as it will EAT batteries.

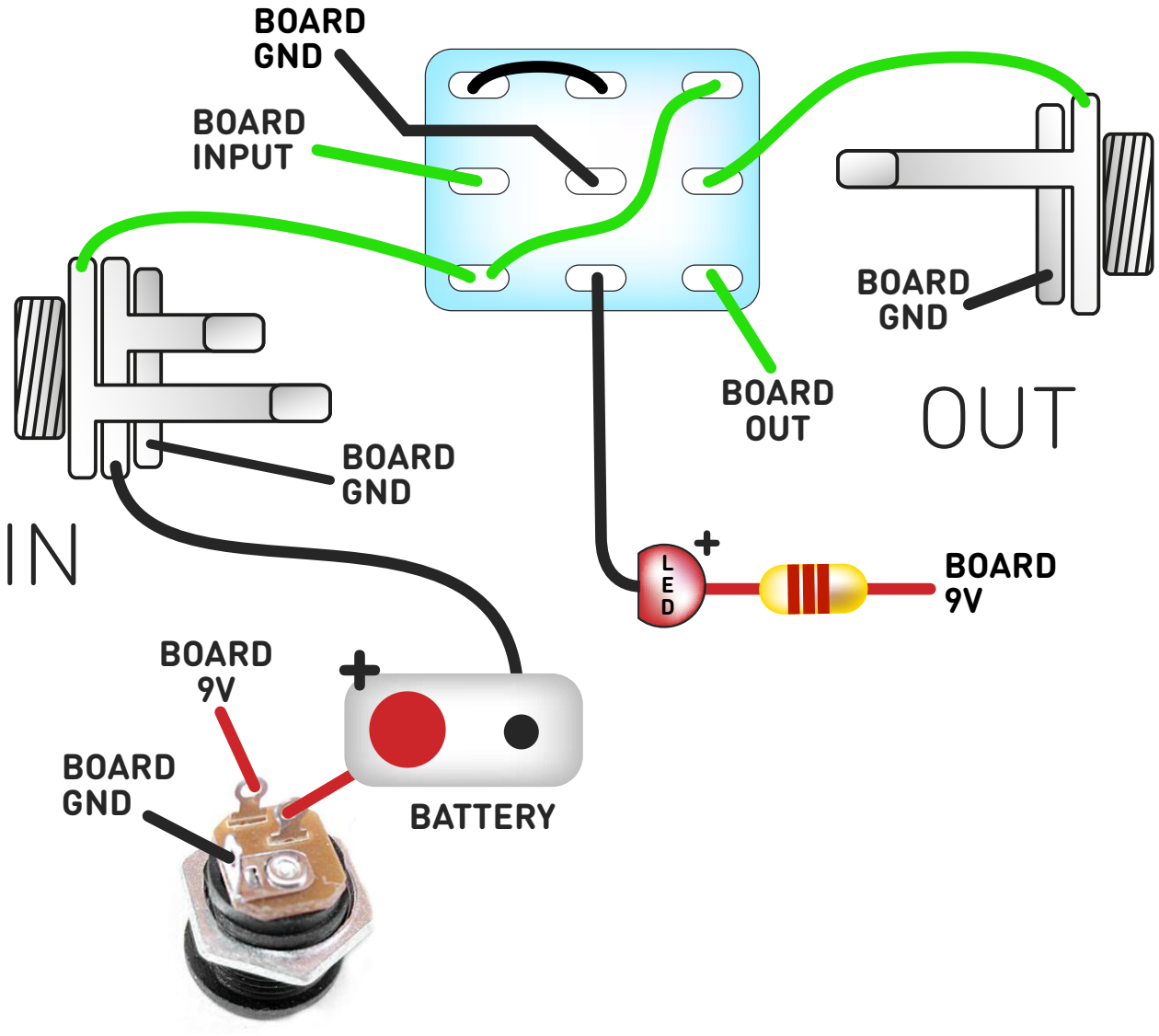
Once you've finished the circuit it makes sense to test is before starting on the switch and LED wiring. It'll cut down troubleshooting time in the long run. If the circuit works at this stage, but it doesn't once you wire up the switch - guess what? You've probably made a mistake with the switch.

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.

PedalParts.co.uk

Drilling template

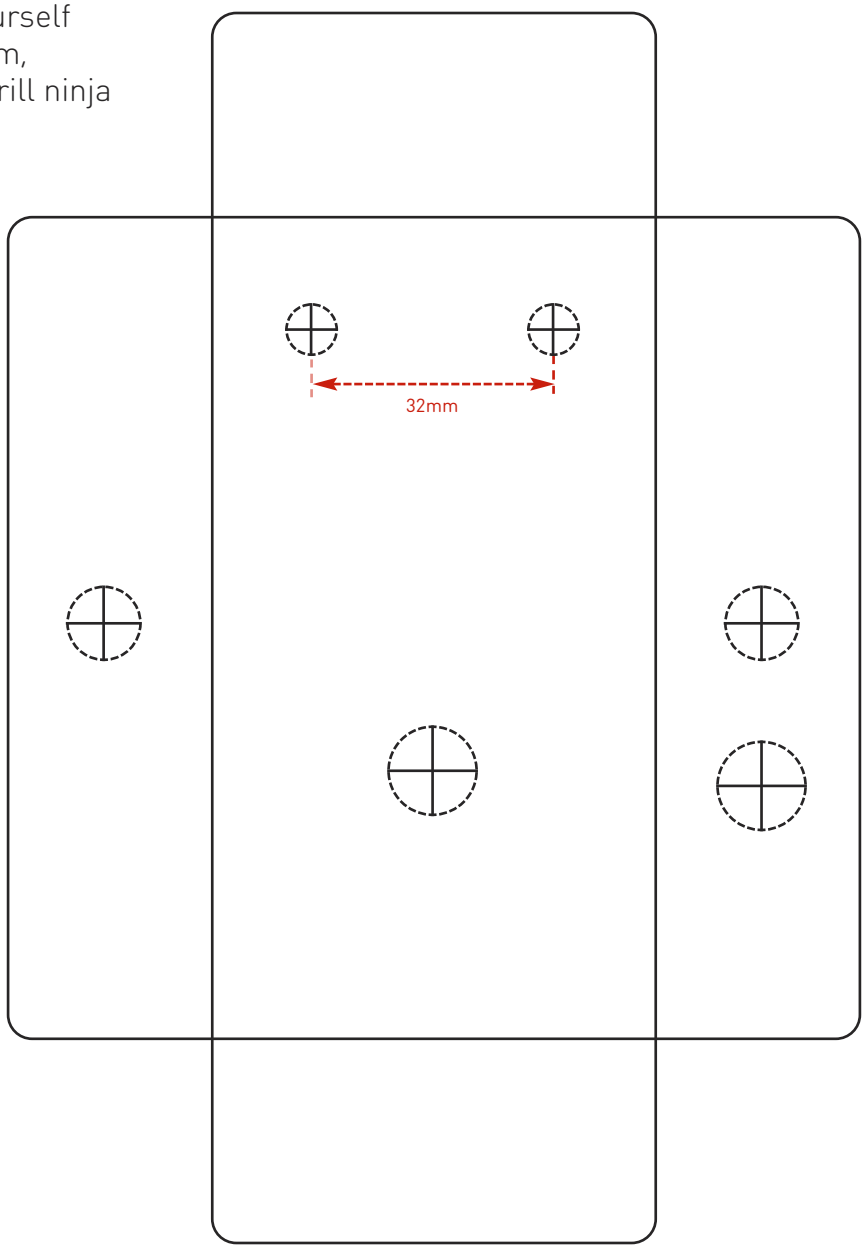
Hammond 1590B

60 x 111 x 31mm

It's a good idea to drill the holes for the board-mounted parts 1mm bigger to give yourself some wiggle room, unless you're a drill ninja

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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Drilling template - with switch

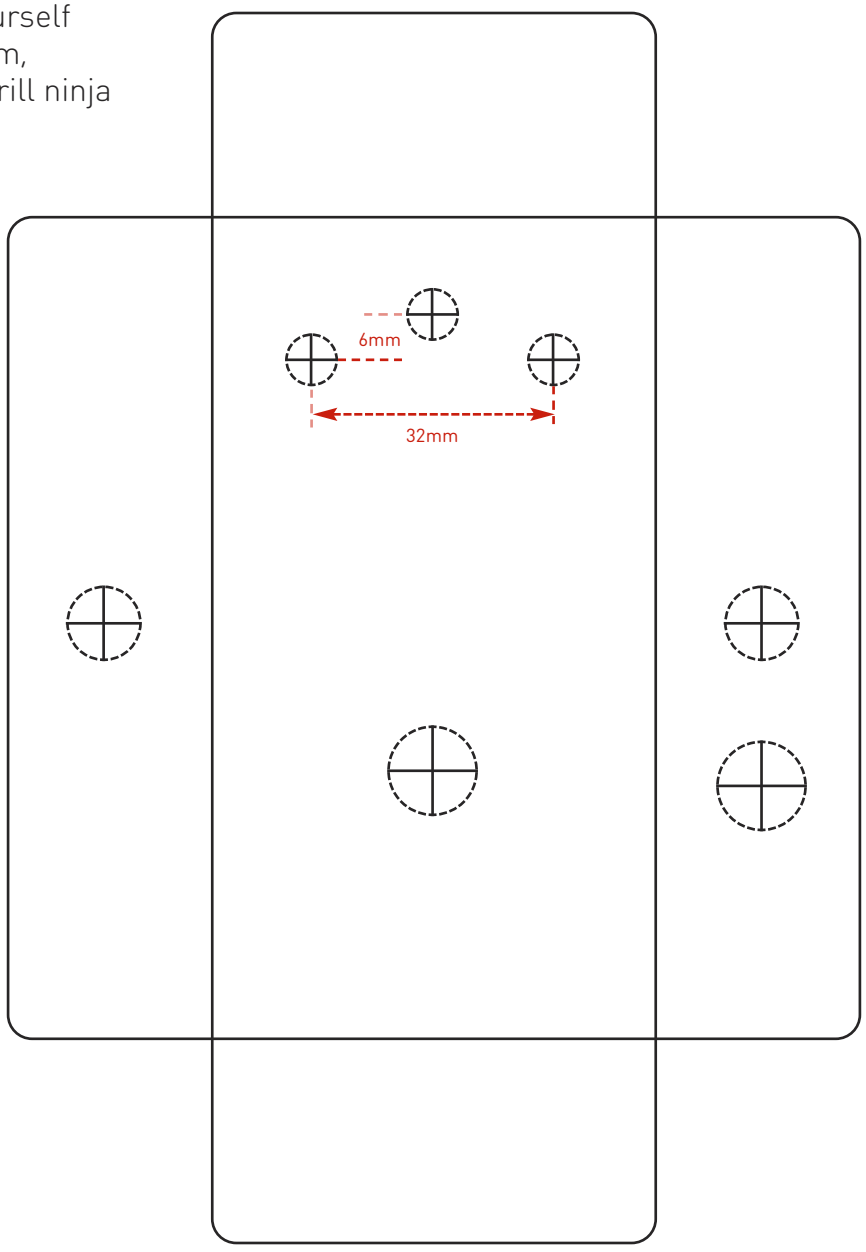
Hammond 1590B

60 x 111 x 31mm

It's a good idea to drill the holes for the board-mounted parts 1mm bigger to give yourself some wiggle room, unless you're a drill ninja

Recommended drill sizes:

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



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