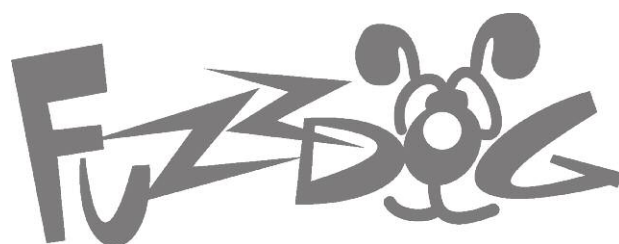
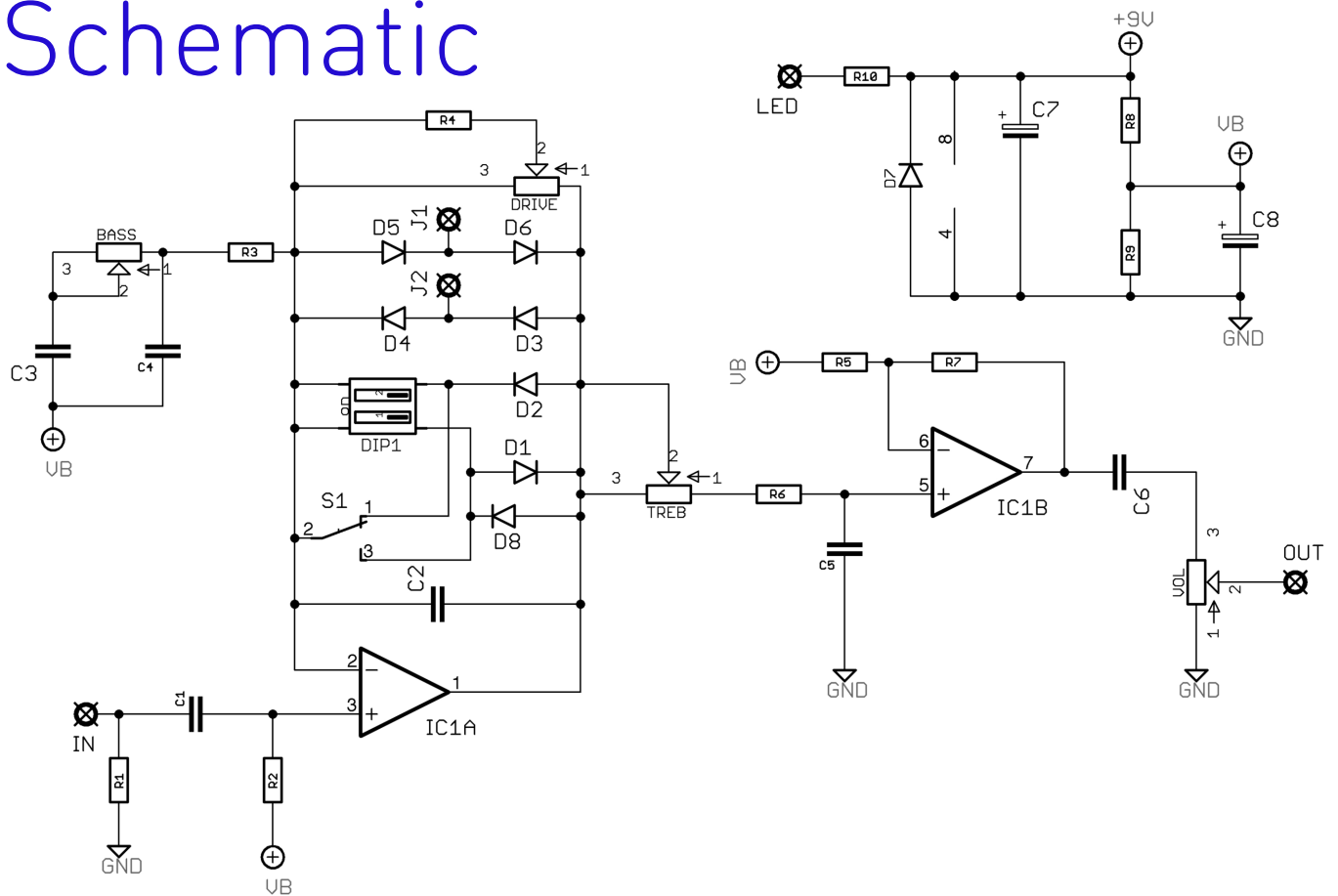


CandyMan v2

Boutique OD with a loooooong waiting list. Don't say it out loud!



Schematic



BOM

R1	2M2	C1	47n	IC1	4559***
R2	510K	C2	100p*	DRIVE	1MA
R3	3K3	C3	1u	BASS	50KA
R4	3K3	C4	39n	TREB	50KA
R5	3K3	C5	10n	VOL	10KA
R6	1K5	C6	1u	SW1	2-WAY DIP SPST
R7	3K3	C7	47u elec		OR
R8	8K2	C8	47u elec		SPDT ON-OFF-ON
R9	10K	D1-8	1N4148**		
R10	2K2 (CLR)	D7	1N4001		

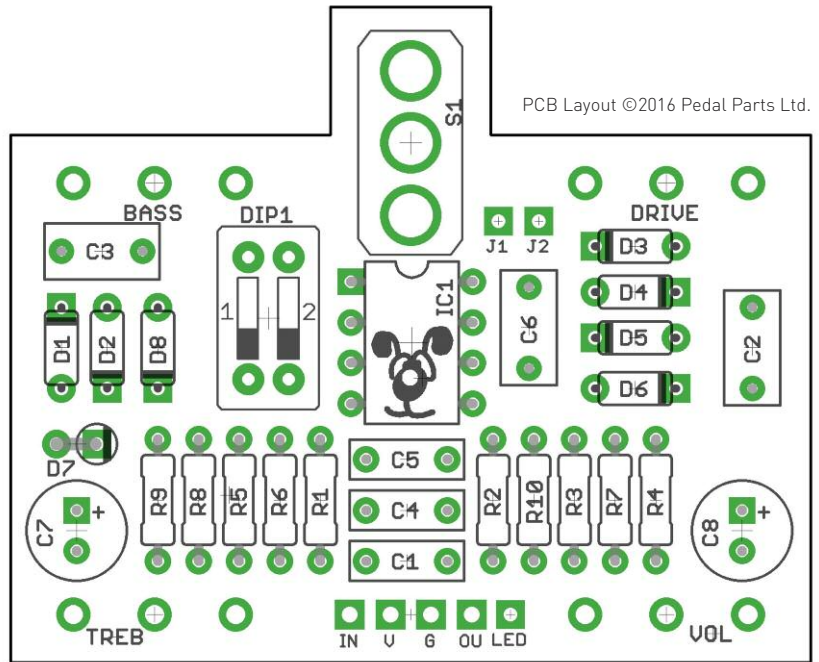
*Silver Mica in original - try ceramic if you don't have one.

**You may not need all the diodes. See later.

**Other ICs may give better results than the original - it's down to personal taste. Try 4558, 072, OPA2134 or other dual op-amp.

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 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). Use a socket for the IC, or be ultra mega careful.



The cathode (striped end) of the diodes go into the square pads. The anode (long leg) of electrolytic capacitors goes into the square pad. C7 and C8 can be bent over the adjacent resistors to save on height, giving more clearance when mounting in the enclosure.

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

If you're using a footswitch daughterboard don't bother soldering R10. You'll use that on the daughterboard instead.

Pots mount 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 sitting at the same height. If not, melt the joints and readjust any that are off.

TREBLE and BASS are cut controls, so you'll lose more of each when rotating clockwise. Why? Perhaps Anti-log pots were harder to come by when the circuit was designed.

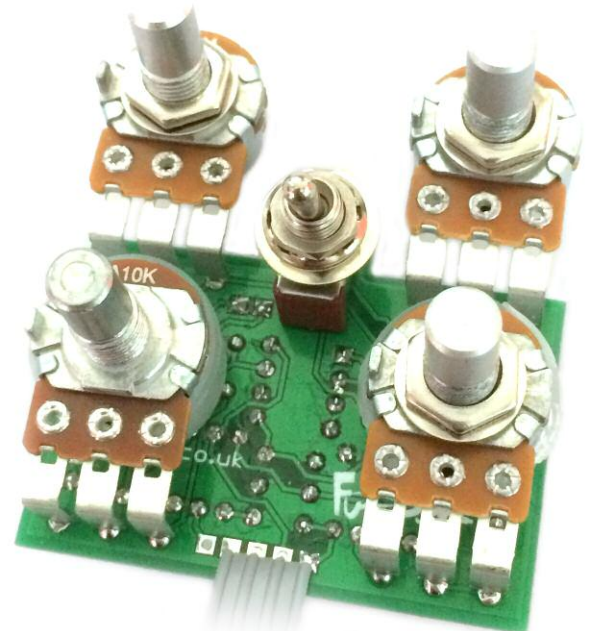
CLIPPING

Use either DIP1 or S1, not both. Using an ON-OFF-ON toggle switch will give you the same clipping options as the internal DIP selectors would.

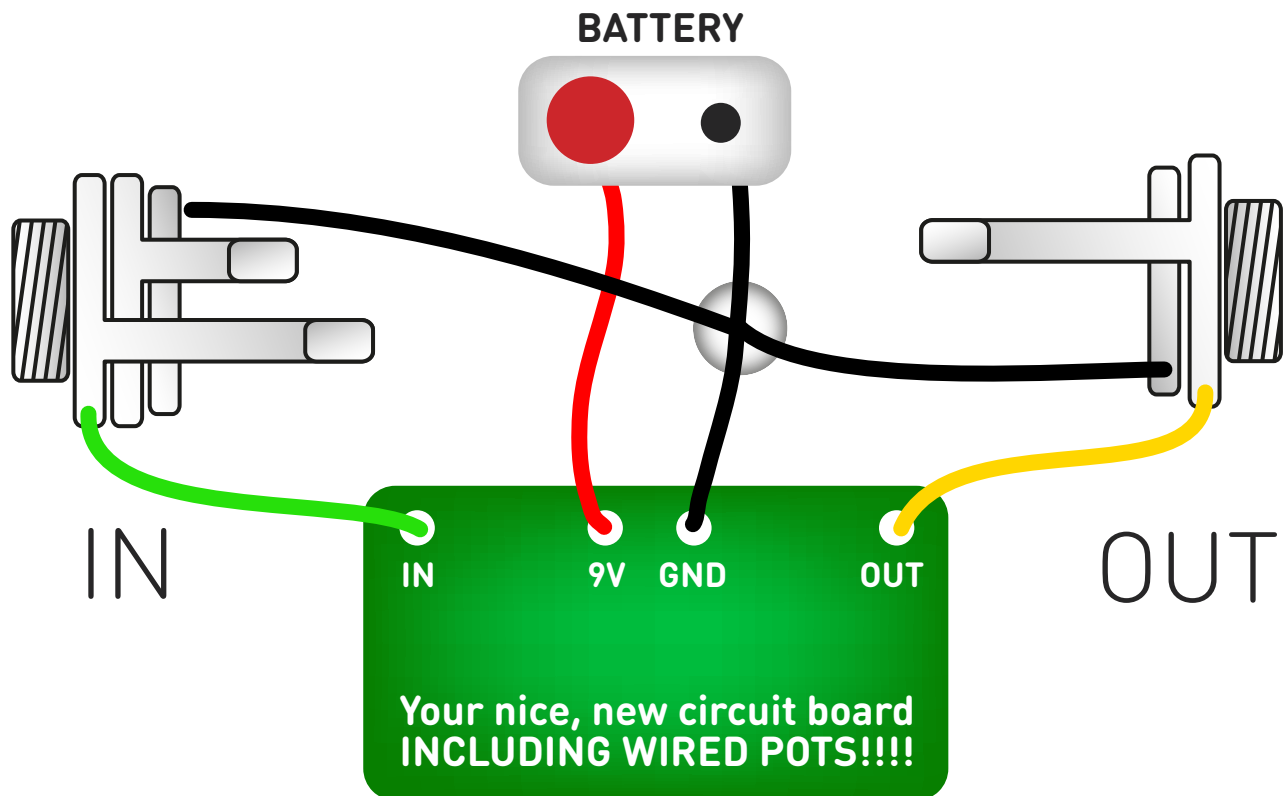
If you're using a toggle switch, add D8.

If using DIP, leave out D8.

Place a jumper across pads J1 and J2. This creates a bridge between the two sets of diodes D3-4 and D5-6. Why not a hard trace in the PCB? The Jan Rey version of this circuit doesn't have that link. Try it without - you may prefer it. Who knows?



Test the board!



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

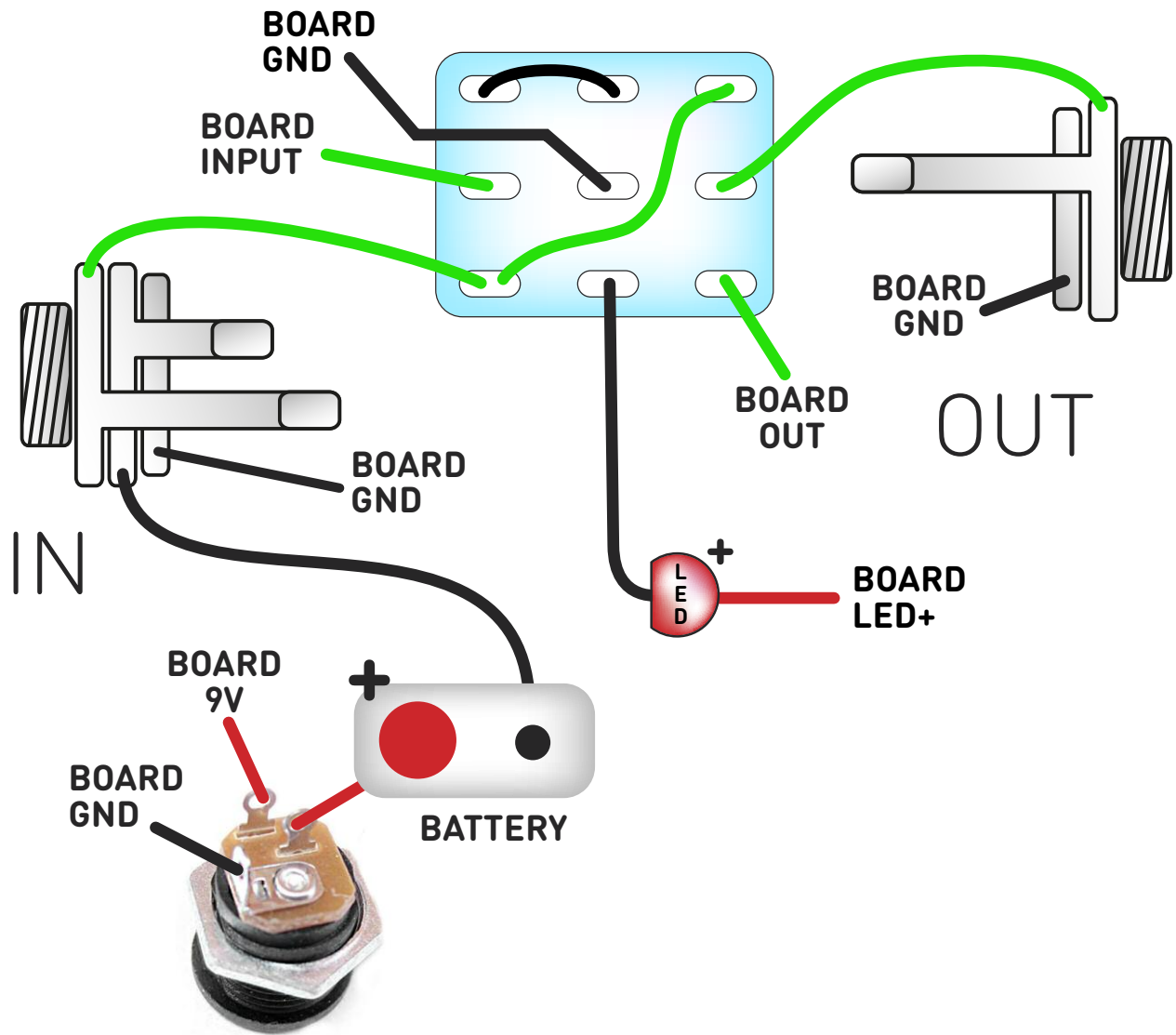
Once you've finished the circuit it makes sense to test it before starting on the switch and LED wiring. It'll cut down troubleshooting time in the long run. If the circuit works at this stage, but it doesn't once you wire up the switch - guess what? You've probably made a mistake with the switch.

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)

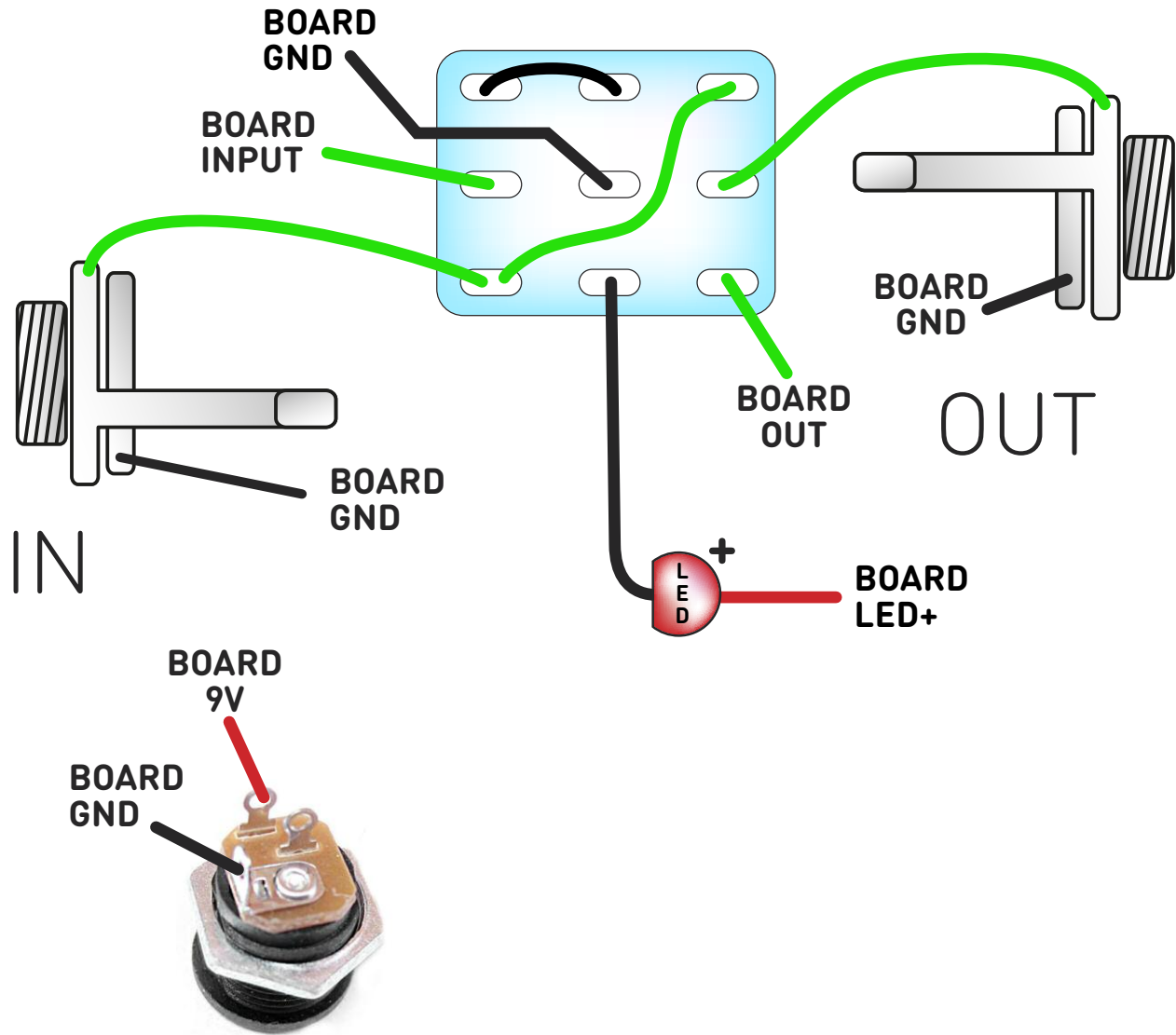


This circuit is standard, Negative GND. Your power supply should be Tip Negative / Sleeve Positive. That's the same as your standard pedals (Boss etc), and you can safely daisy-chain your supply to this pedal.

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.

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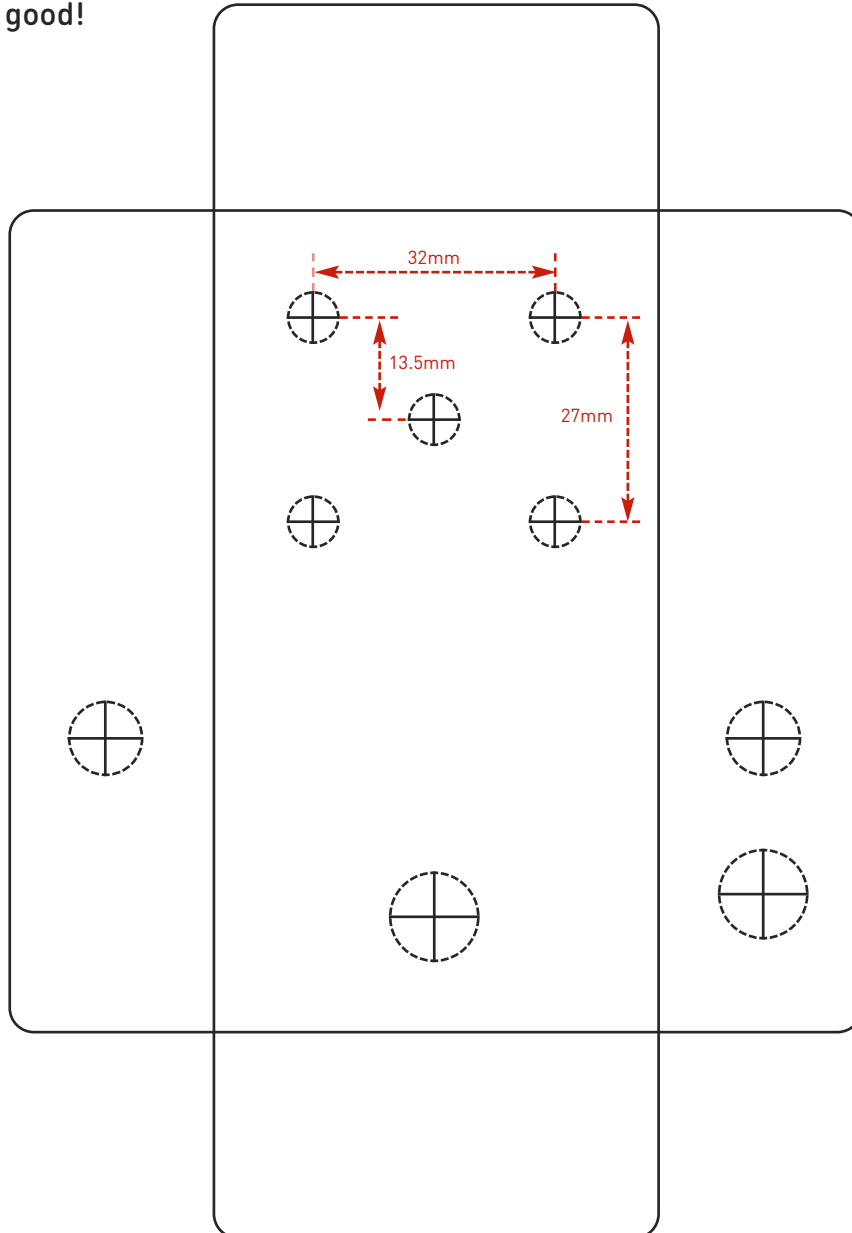
Drilling template

Hammond 1590B
60 x 111 x 31mm

Recommended drill sizes:

Pots	7mm
Jacks	10mm
Footswitch	12mm
DC Socket	12mm
Toggle switch	6mm

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



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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