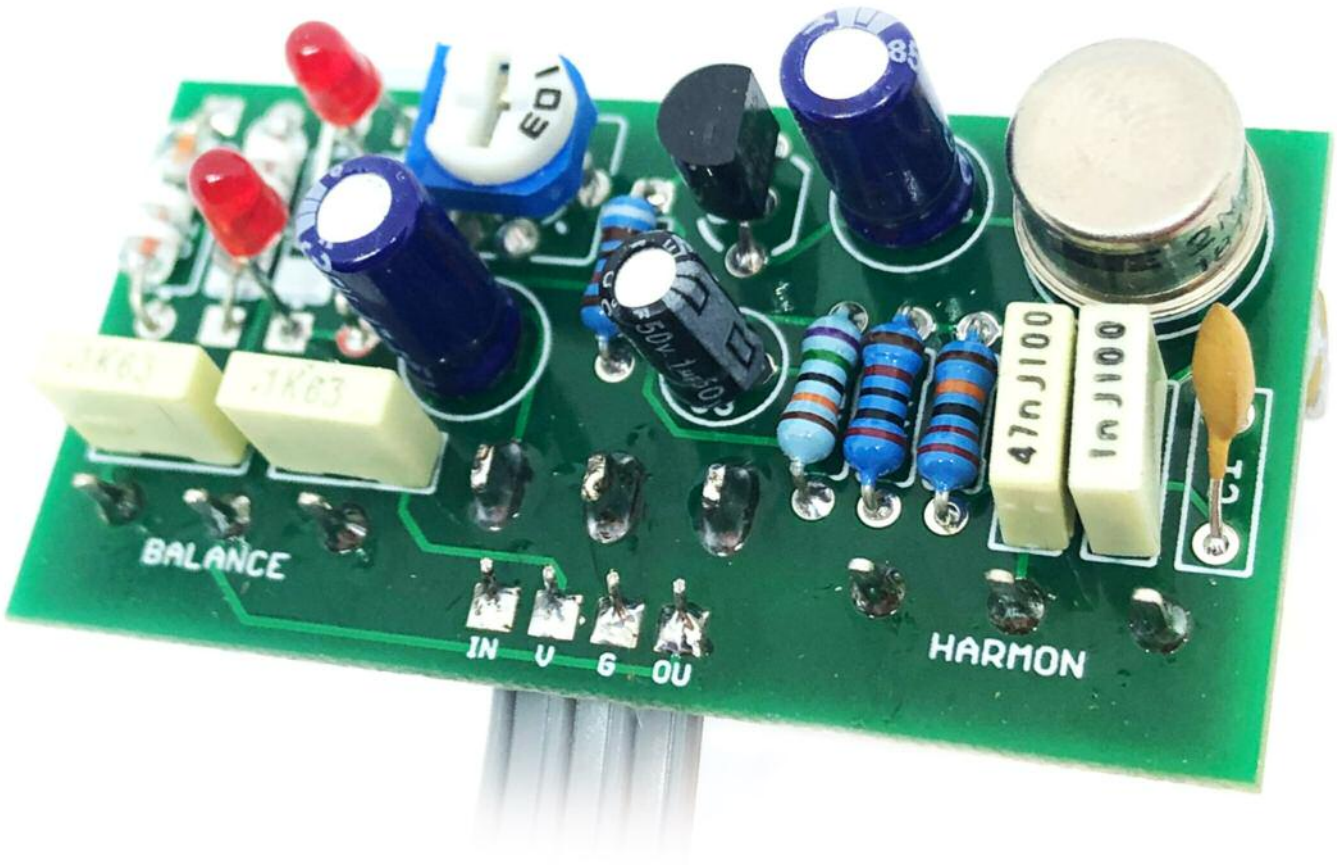
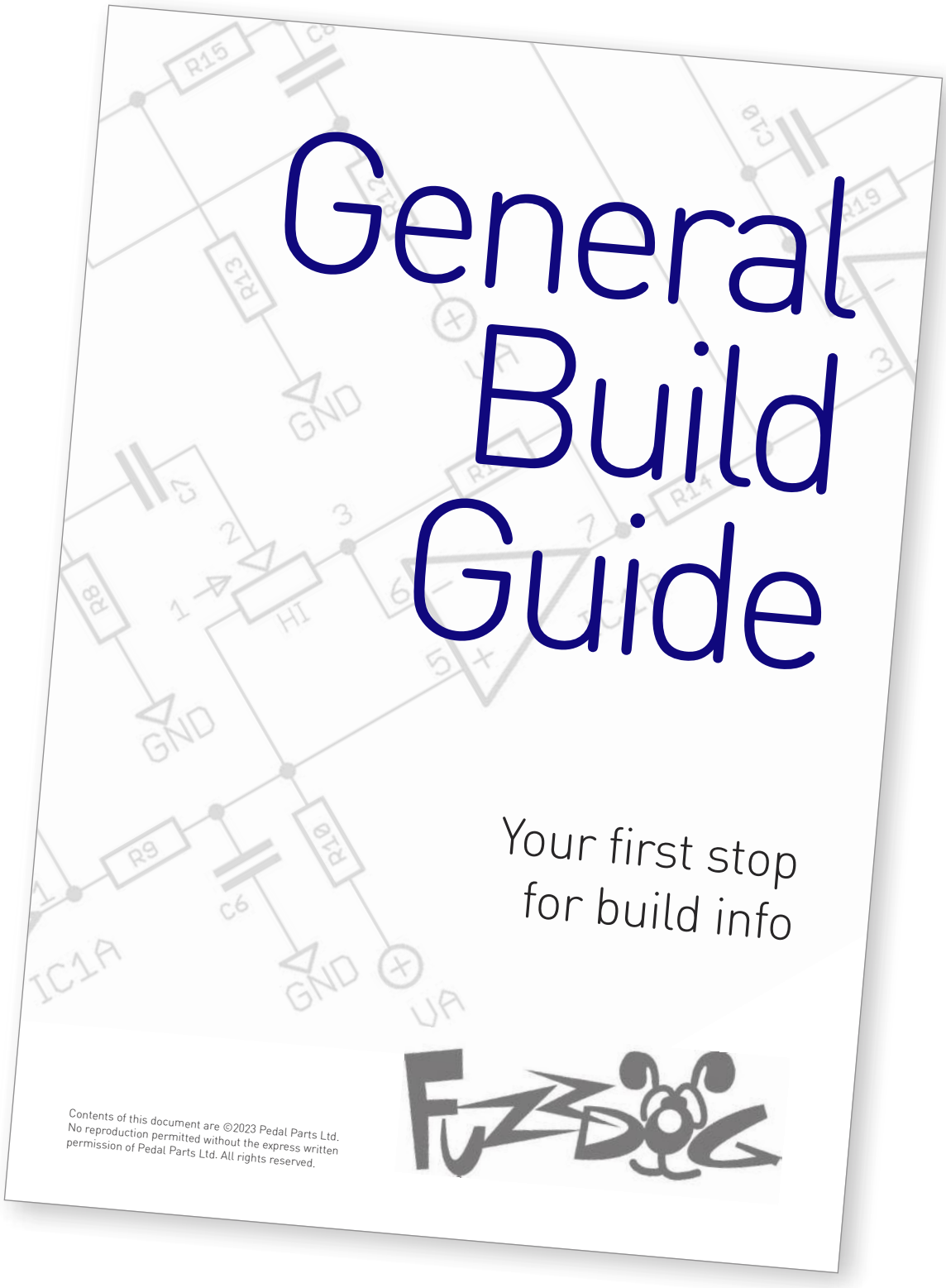


Harmonic Percolator

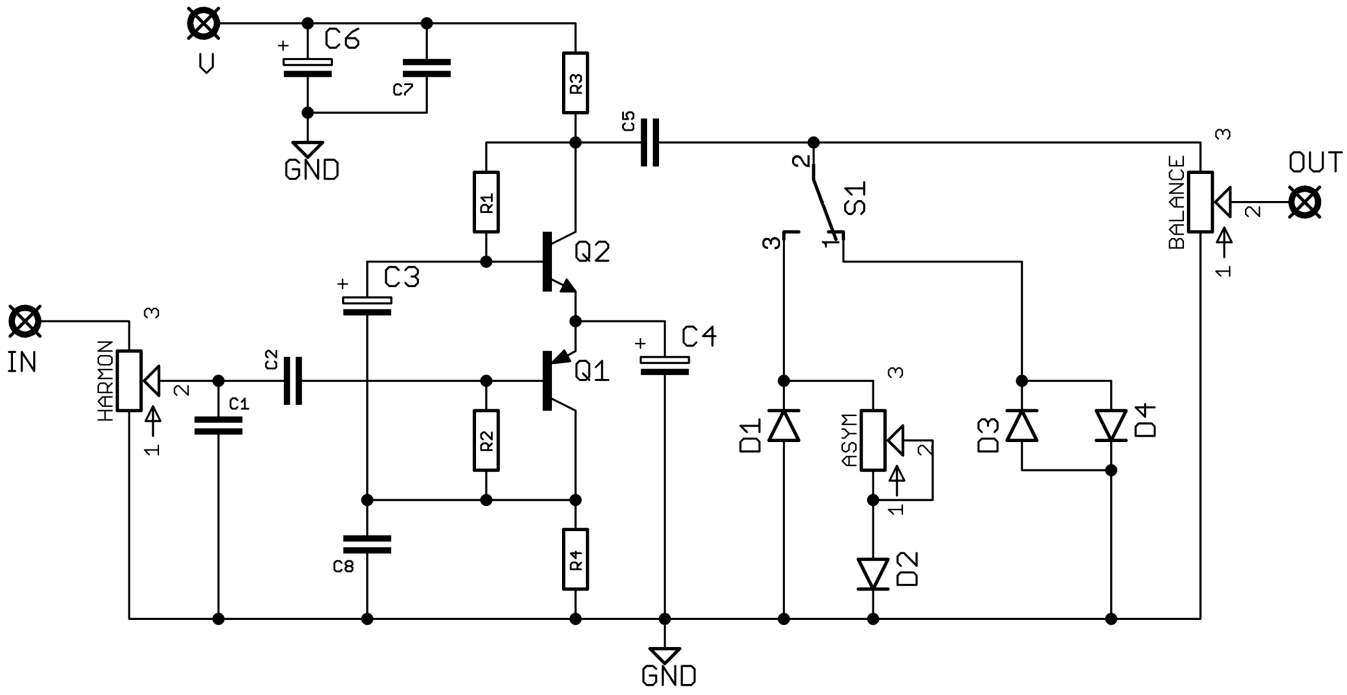
Your very own clone of the Interfax HP-1

Before you dig in, ensure you download and read the **General Build Guide**.

It contains all the information you need for a successful outcome.



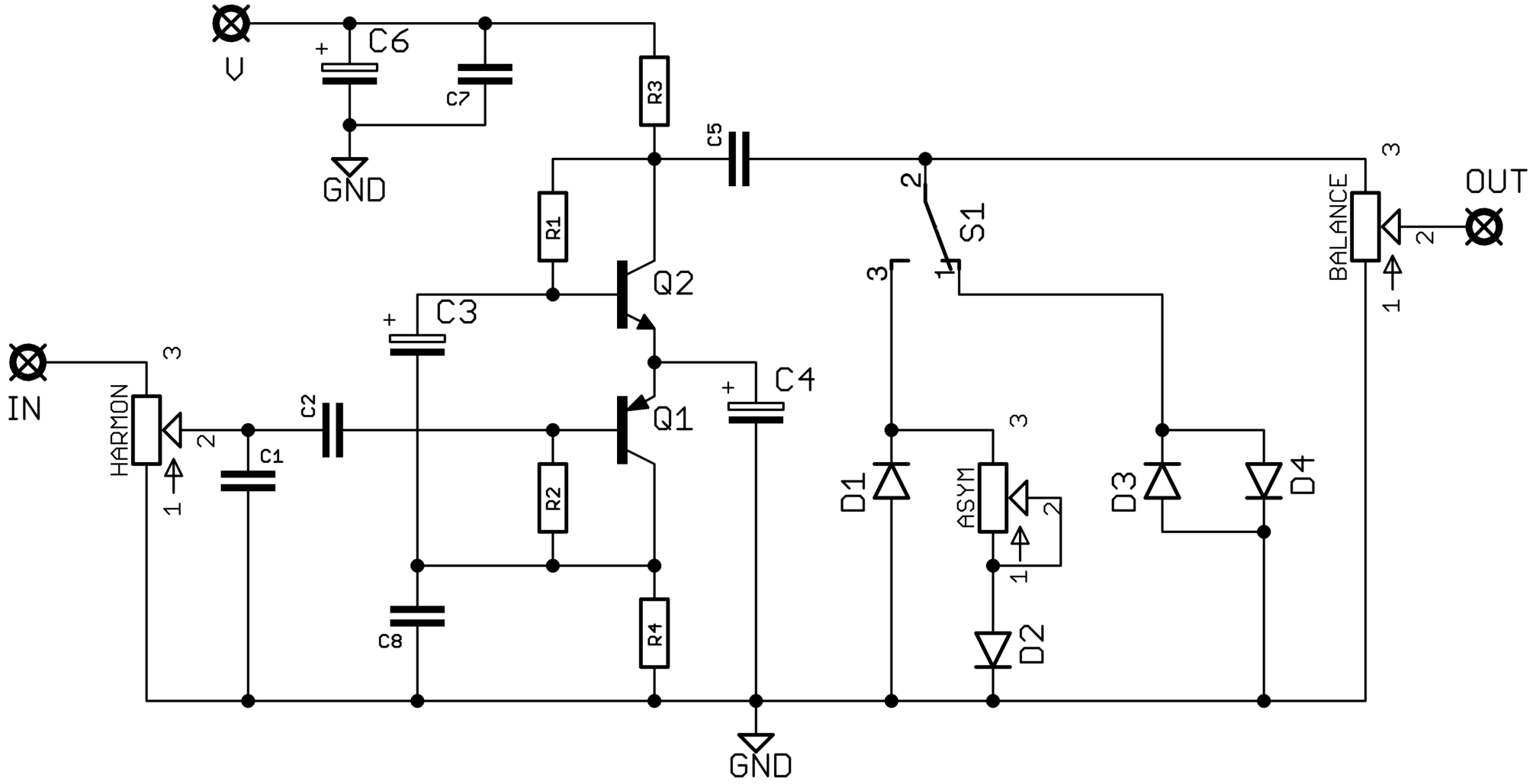
Schematic + BOM

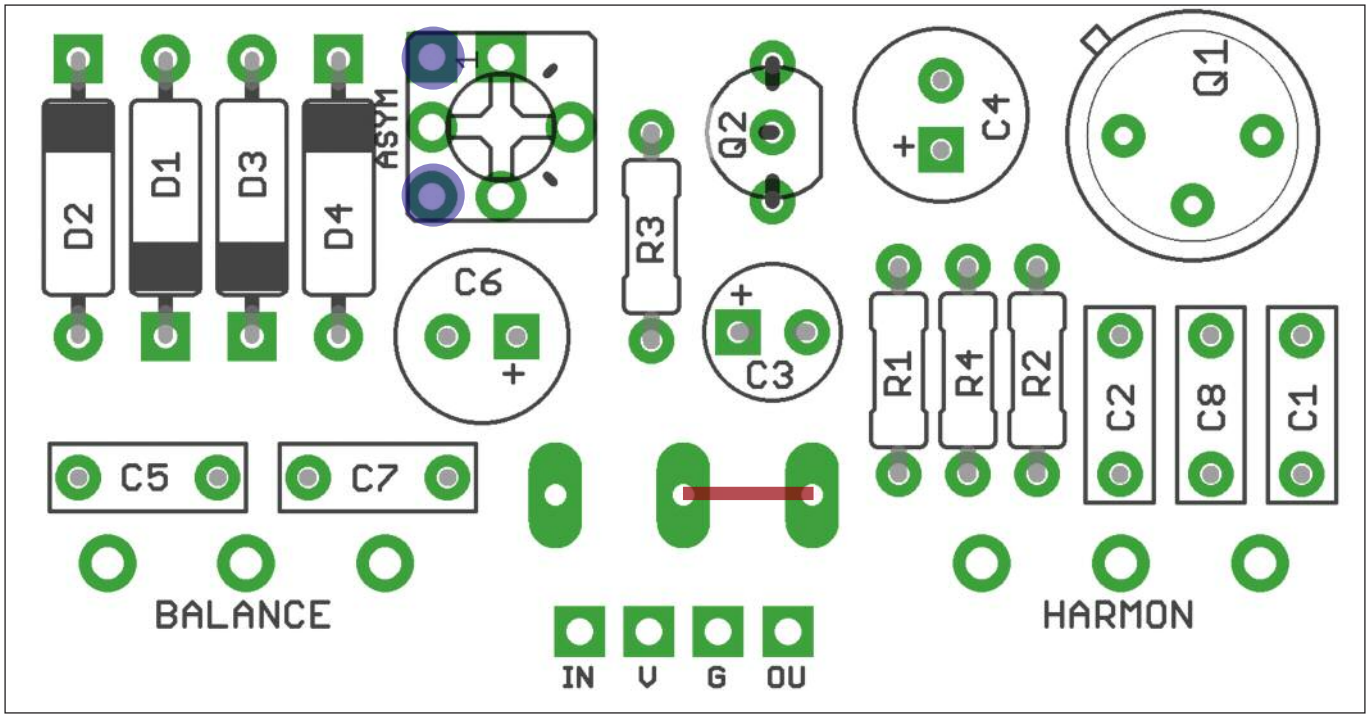


R1	750K (3M9)	C1	100p	D1-2	Germanium
R2	220K (51K)	C2	47n	D3-4	Your choice
R3	91K	C3	1u tant (2u2 tant)		
R4	20K (91K)	C4	47u elec	Q1	2N404 / PNP Ge
		C5	100n	Q2	2N3565
		C6	100u elec		
		C7	100n	HARM	100KA
		C8	1n (1n5)	BAL	50KA
				ASY	10K trimmer

Substitutions in brackets are for the Albini version.

There are many traces of the Harmonic Percolator, mostly with different values. We can only assume there was a lot of variation across the life of the pedal.


V
C6
C7
GND
R3
C5
R1
Q2
C3
C4
Q1
R2
R4
C8
IN
HARMON
C2
C1
S1
D1
ASYM
D2
D3
D4
BALANCE
OUT
GND



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

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.

CLIPPING

There's room for two different pairs of clipping diodes on the PCB. D1-2 and D3-4.

You don't have to use both. For a single option with no clipping switch, use D1-2 and place a jumper across the unused toggle switch pads as shown in red above. Leave D3-4 empty.

If you'd like a second option, populate D3-4 with your choice of diodes and use a toggle switch.

The switch can be either SPDT ON-ON to select between the two diode sets, or ON-OFF-ON if you want to include the option of no clipping in the centre position. Note, this will be considerably louder than either of the two clipping options, so turn the vol down when selecting this.

We've used red LEDs and 1N4148 with good results.

D1-2 also have the option of adjustable asymetry. Use a 10K trimmer in that spot. This is normally a 4K7 resistor, so you'll be roughly thereabouts with your trimmer in the centre position. If you'd rather leave this as stock you can just place a 4K7 resistor upright across the two pads marked in blue above.

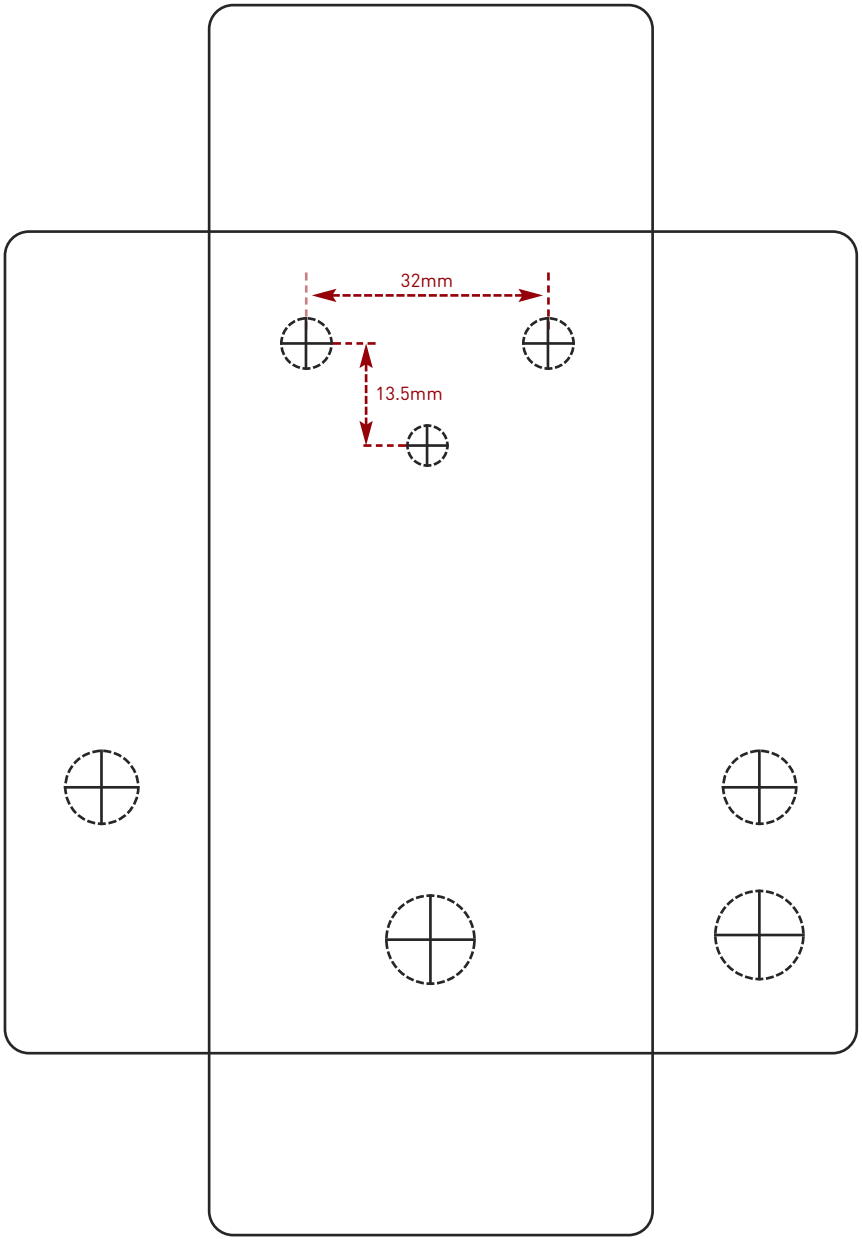
Drilling template

Hammond 1590B - 60 x 111 x 31mm

Drill sizes listed are minimum.
It's a good idea to add 1mm to anything mounted on the PCB that'll poke through the front of the enclosure.

Drill sizes:

Pots	7mm
Jacks	10mm
Footswitch	12mm
DC Socket	12mm
Toggle switches	6mm
Rotary switches	10mm



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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