

L'il Louie Mini

Fender-ish break-up in a
board-friendly 1590B



Important notes

If you're using any of our footswitch daughterboards, DOWNLOAD THE DAUGHTERBOARD DOCUMENT

- Download and read the appropriate build document for the daughterboard as well as this one BEFORE you start.
- DO NOT solder the supplied Current Limiting Resistor (CLR) to the main circuit board even if there is a place for it. This should be soldered to the footswitch daughterboard.

POWER SUPPLY

Unless otherwise stated in this document this circuit is designed to be powered with 9V DC.

COMPONENT SPECS

Unless otherwise stated in this document:

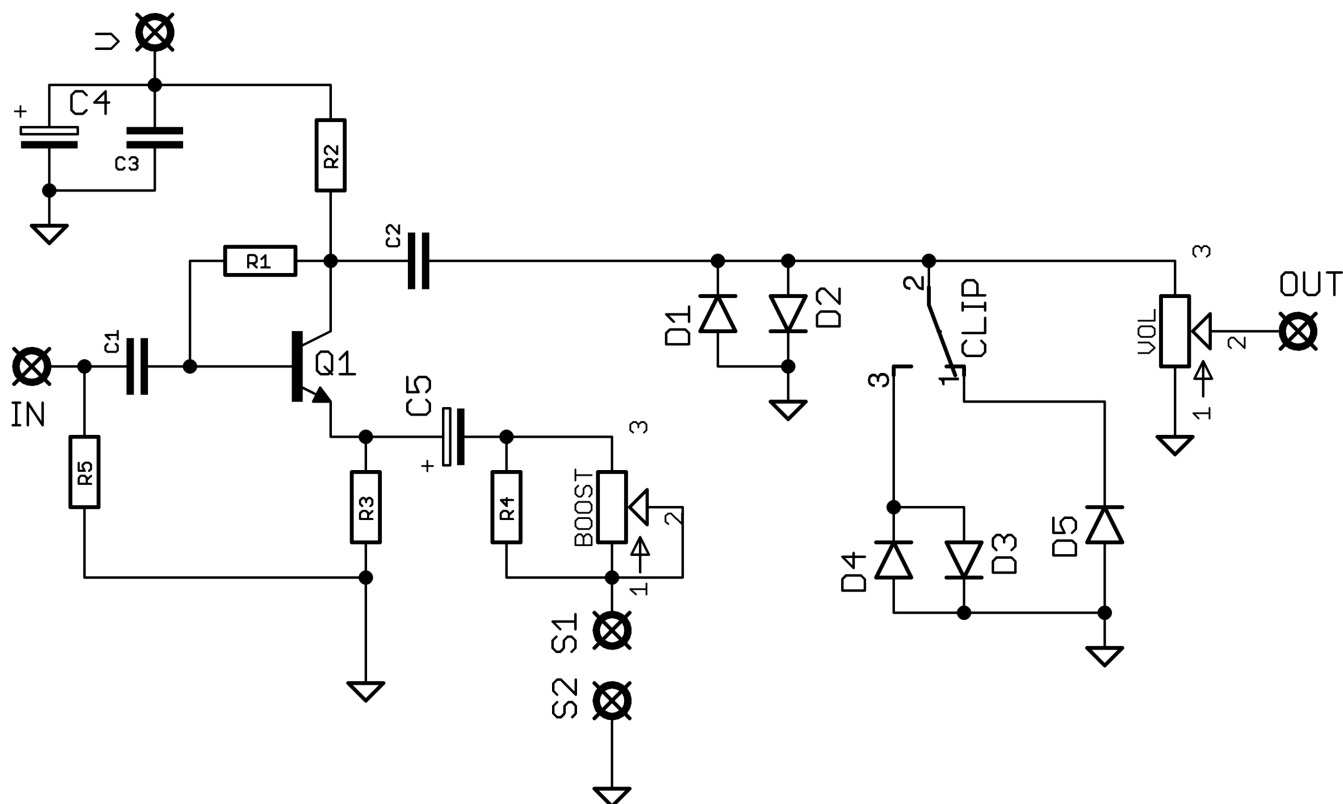
- Resistors should be 0.25W. You can use those with higher ratings but check the physical size of them.
- Electrolytics caps should be at least 25V for 9V circuits, 35V for 18V circuits. Again, check physical size if using higher ratings.

LAYOUT CONVENTIONS

Unless otherwise stated in this document, the following are used:

- **Electrolytic capacitors:**
Long leg (anode) to square pad.
- **Diodes/LEDs:**
Striped leg (cathode) to square pad. Short leg to square pad for LEDs.
- **ICs:**
Square pad indicates pin 1.

Schematic + BOM



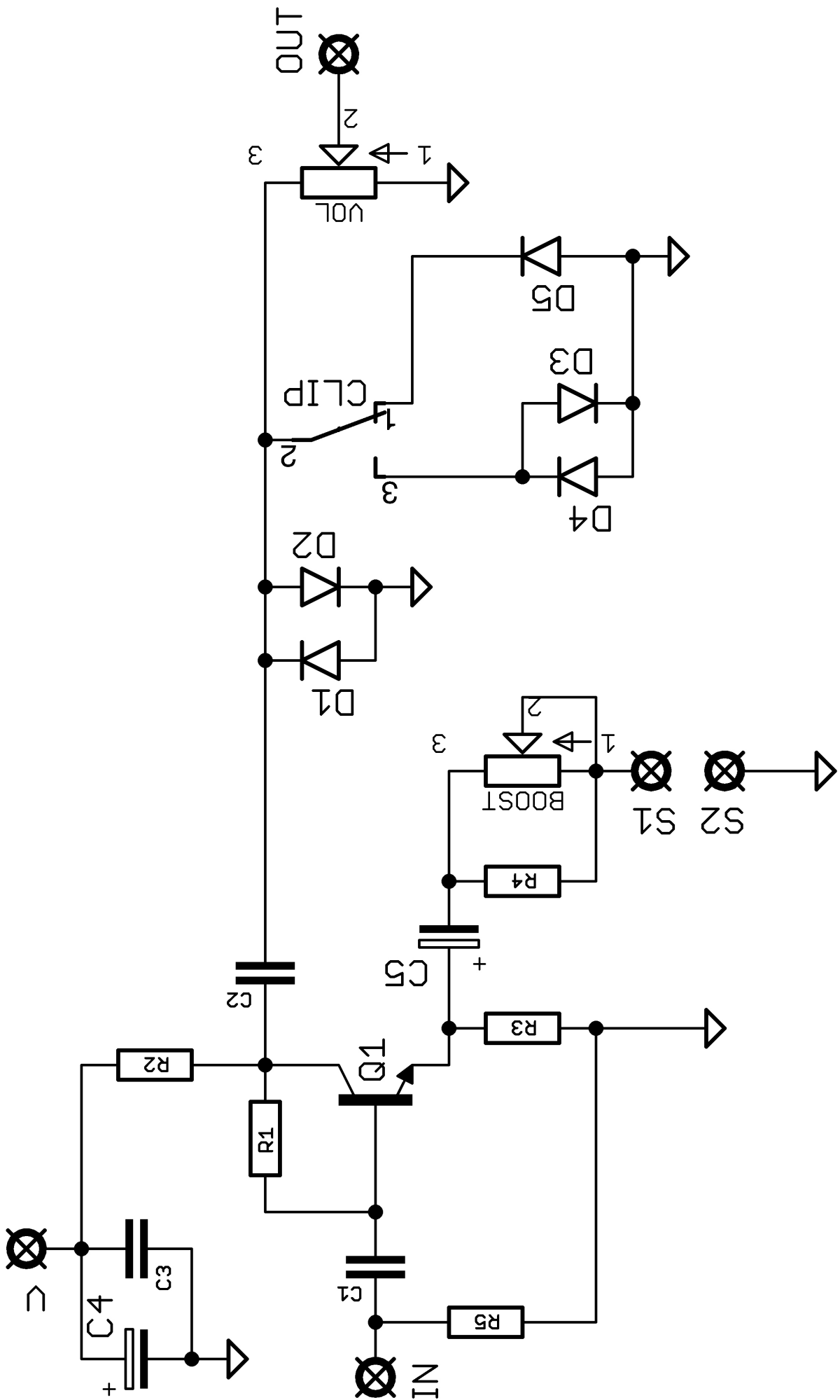
R1 3M3
 R2 3K3
 R3 330R
 R4 1K
 R5 1M

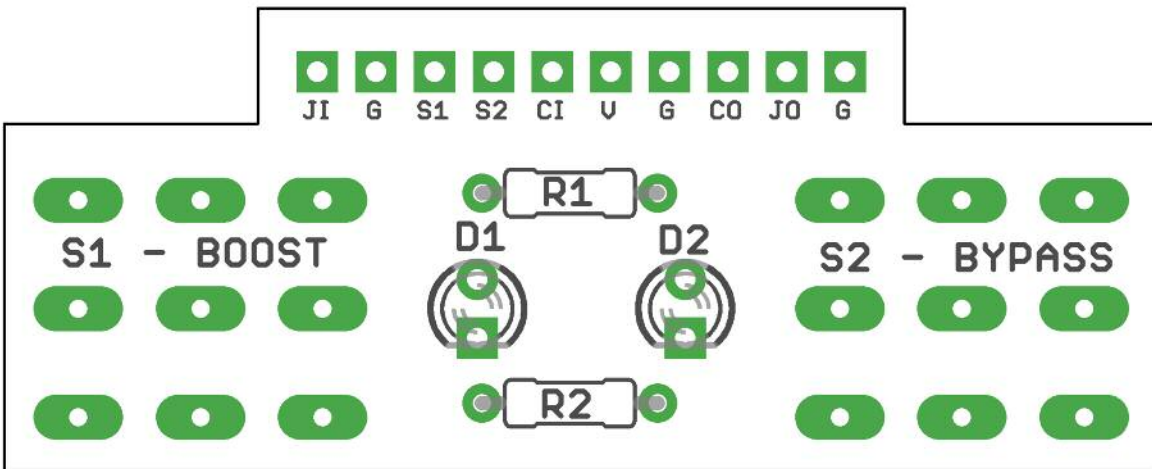
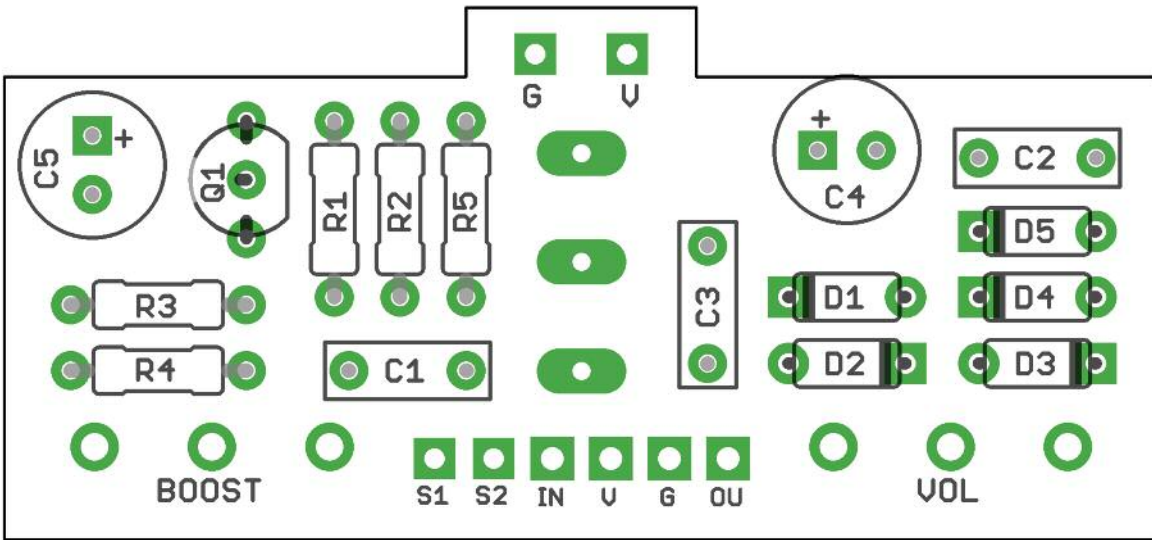
C1 47n
 C2 100n
 C3 100n
 C4 47u
 C5 47u

D1-2 1N4148
 D3-5 BAT46
 Q1 2N5088
 BOOST 1KB
 VOL 100KB

DAUGHTERBOARD

R1-2 2K2

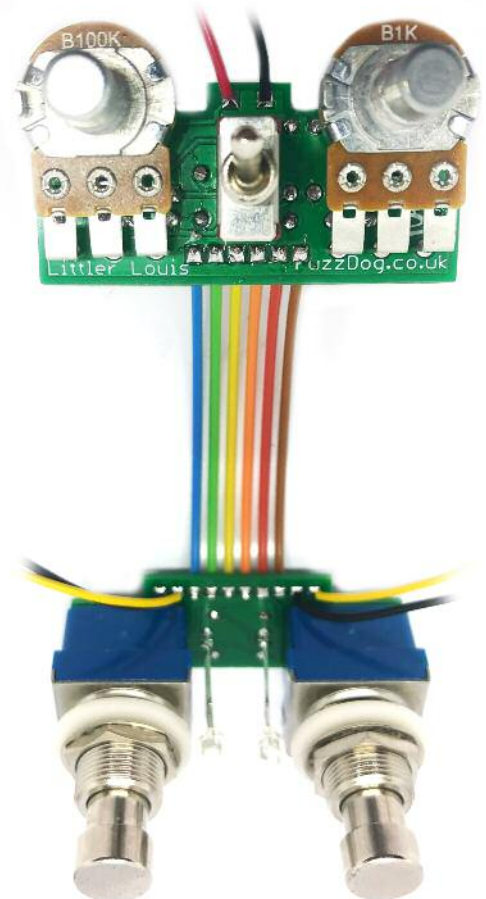




Be very careful when soldering the diodes, transistors and LEDs. They're very sensitive to heat. You should use some kind of heat sink (crocodile clip or reverse action tweezers) on each leg as you solder them. Keep exposure to heat to a minimum (under 2 seconds).

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. Make sure your pots all line up nicely.



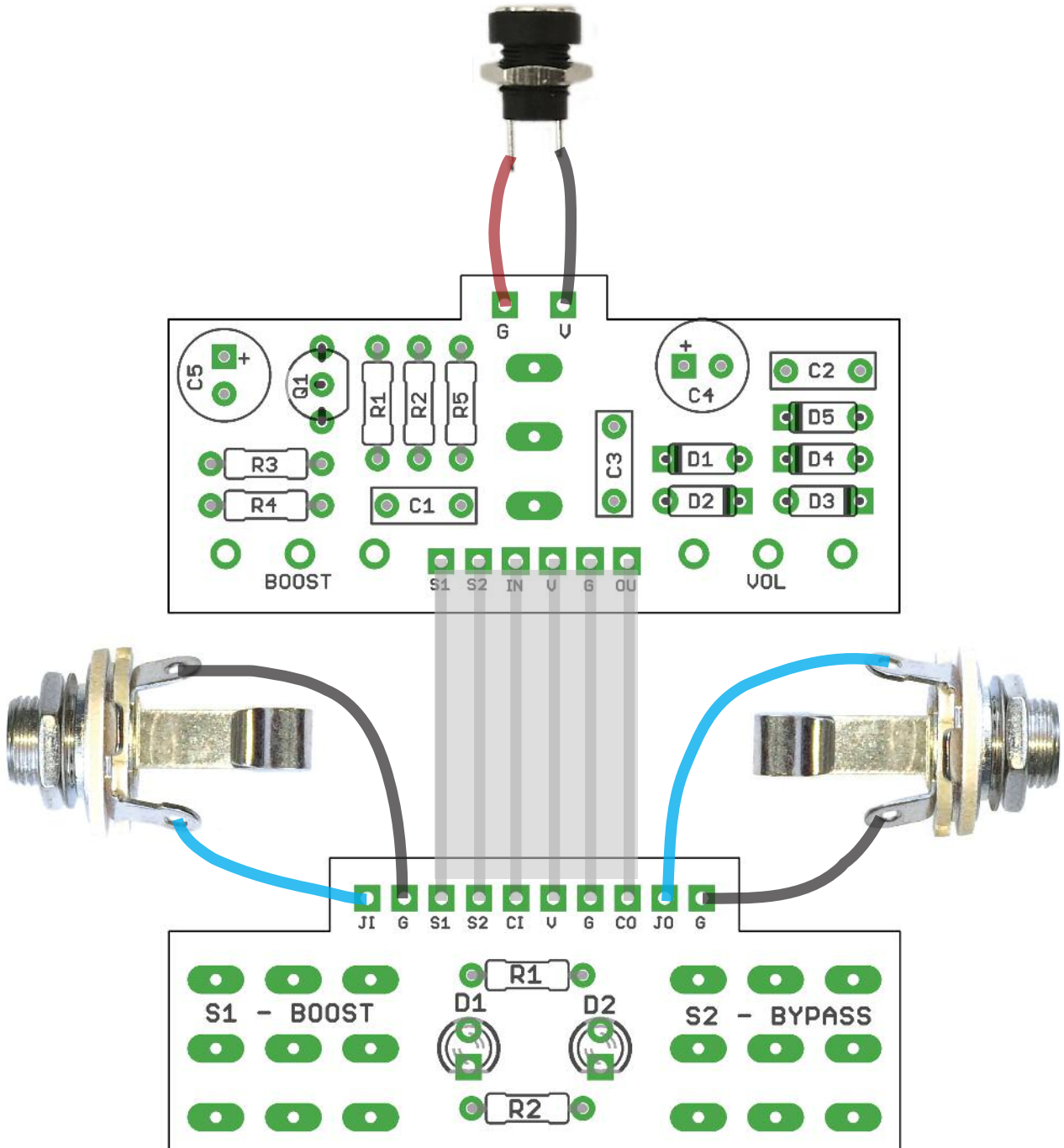
Connecting the boards and offboard components.

You can use a ribbon cable or just 6 lengths of wire to connect the main PCB to the daughterboard.

Use the other four pads on the connection strip of the daughterboard to connect your jacks.

The V and G pads at the top of the main PCB connect to your DC socket.

R1 and R2 on the daughterboard are the current limiters for the LEDs. We use 2K2.



Drilling template

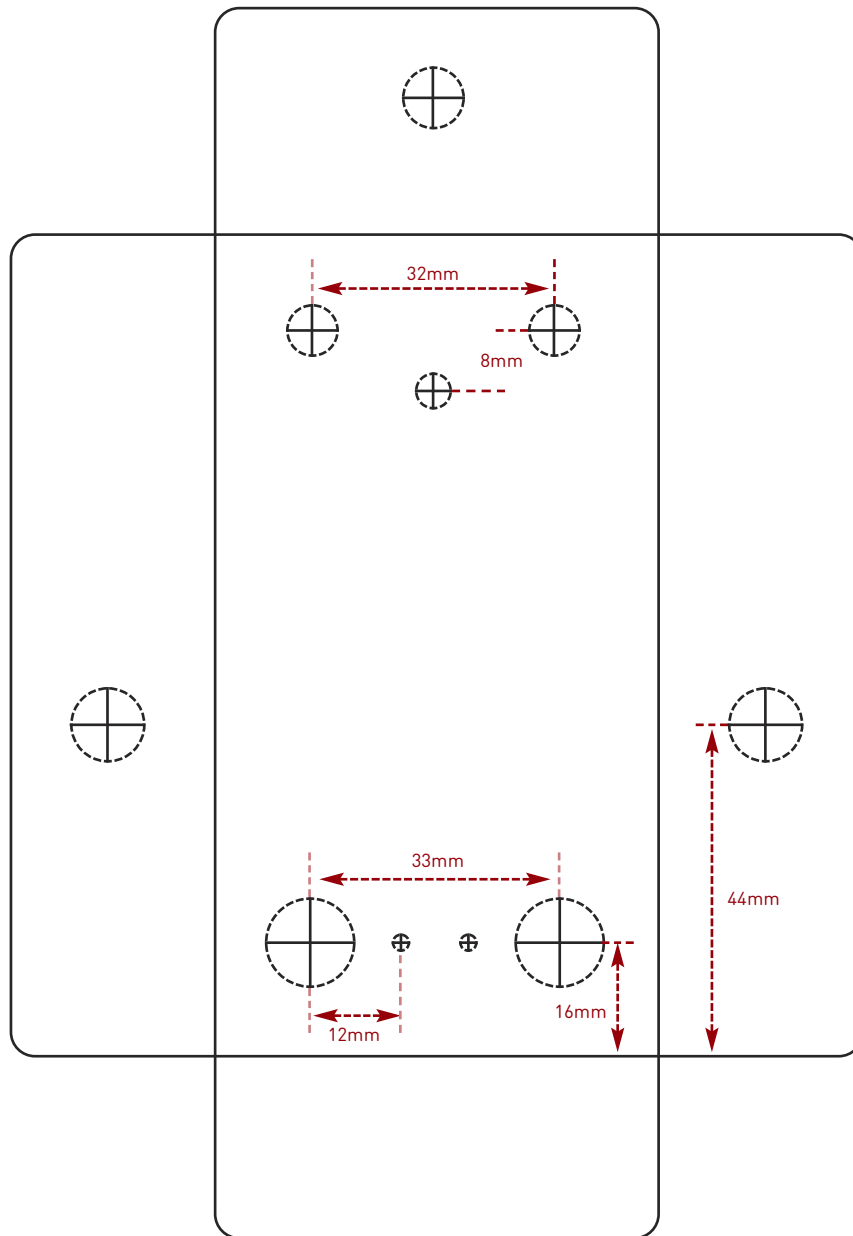
Hammond 1590BB

It's a good idea to drill the pot and footswitch holes 1mm bigger.

Wiggle room = good!

Recommended drill sizes:

Pots	7mm
Jacks	10mm
Footswitch	12mm
DC Socket	8mm
Toggle switches	6mm



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.

FuzzDog.co.uk