

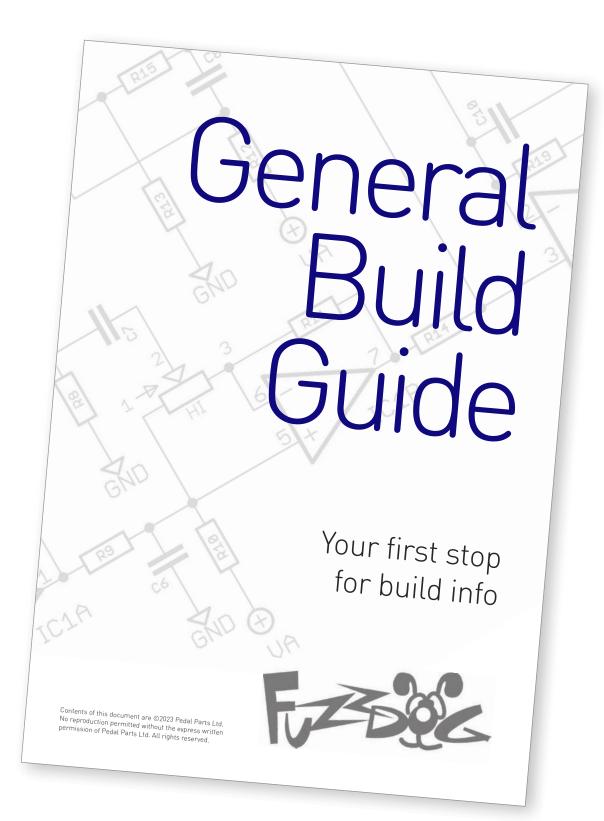
# Necropolis

Lots of Tone Bender flavours at your fingertips

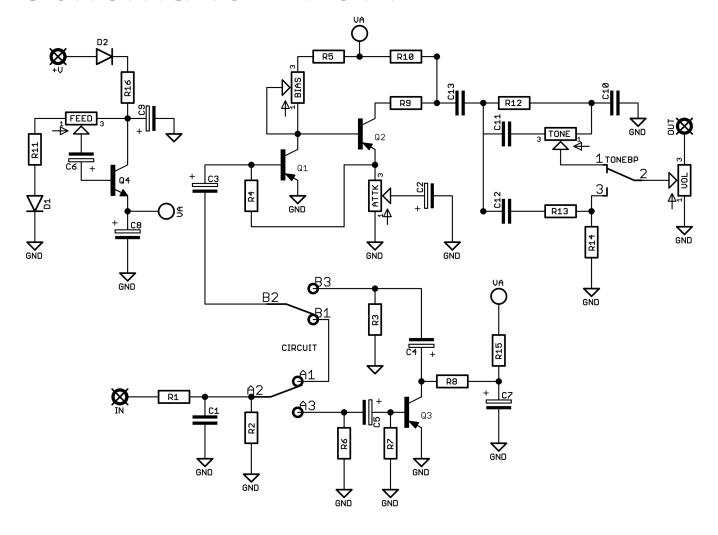


Before you dig in, ensure you download and read the **General Build Guide**.

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

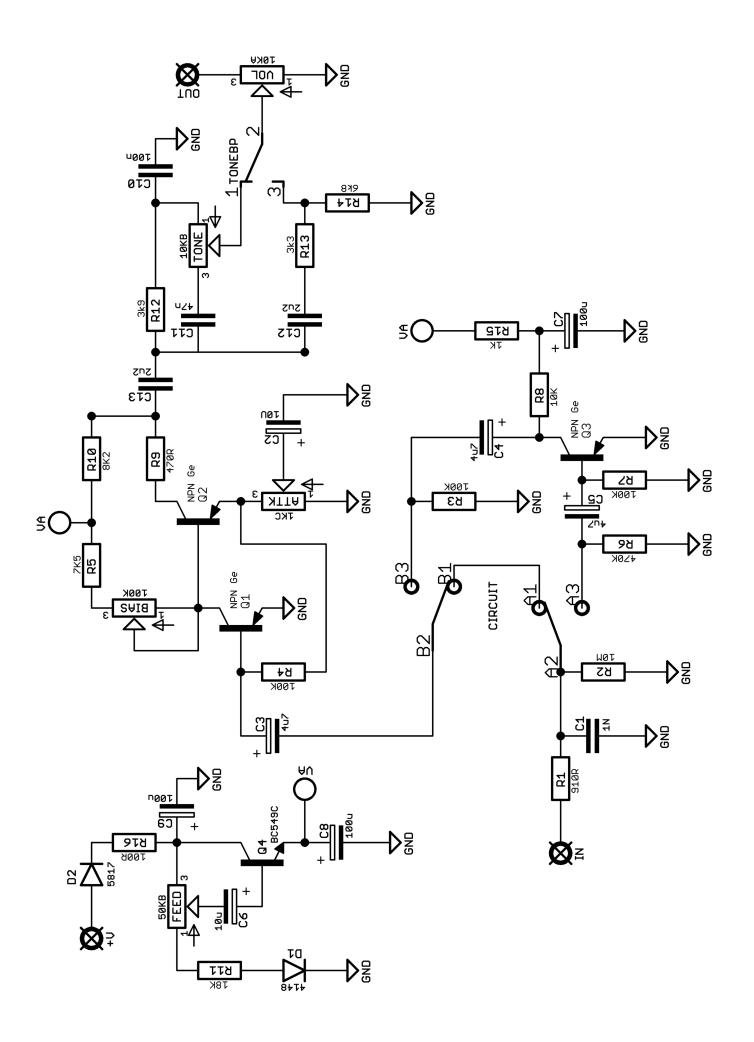


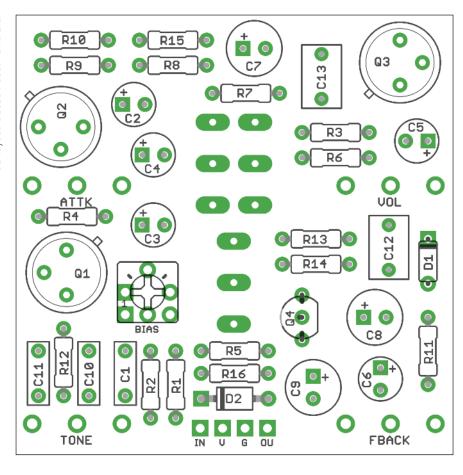
## Schematic + BOM



| R1  | 910R | C1  | 1n        | D1    | 1N4148          |
|-----|------|-----|-----------|-------|-----------------|
| R2  | 10M  | C2  | 10u elec  | D2    | 1N5817          |
| R3  | 100K | C3  | 4u7 elec  |       |                 |
| R4  | 100K | C4  | 4u7 elec  | Q1    | NPN Ge <>70hFE  |
| R5  | 7K5  | C5  | 4u7 elec  | Q2    | NPN Ge <>120hFE |
| R6  | 470K | C6  | 10u elec  | Q3    | NPN Ge <>50hFE  |
| R7  | 100K | C7  | 100u elec | Q4    | BC549C          |
| R8  | 10K  | C8  | 100u elec |       |                 |
| R9  | 470R | C9  | 100u elec | BIAS  | 100K trimmer    |
| R10 | 8K2  | C10 | 100n      |       |                 |
| R11 | 18K  | C11 | 47n       | ATTAC | K 1KC           |
| R12 | 3K9  | C12 | 2u2       | FEED  | 50KB            |
| R13 | 3K3  | C13 | 2u2       | TONE  | 10KB            |
| R14 | 6K8  |     |           | VOL   | 10KA            |
| R15 | 1K   |     |           |       |                 |
|     |      |     |           | CIRCU | IT DPDT ON-ON   |

TONE BP SPDT ON-ON





Snap the small metal tags 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.

#### **SWITCHES**

Circuit DOWN takes Q3 out of the circuit, giving you Mk 1-1.5. Tone DOWN is tone bypass.

We labelled the FEED control FBACK by mistake. This controls the voltage hitting the circuit. Fully CW is your full 9V.

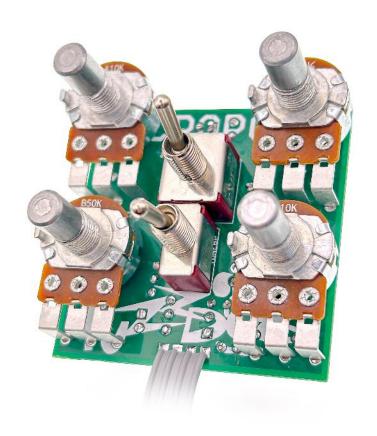
#### **BIASING**

Don't get too hung up on numbers. A typical Tone Bender MkII will have around 7-8V on the collector of Q2 (Q1 on this board). Turn the FEED and FUZZ pots fully up, and adjust your trimmer until you get the fuzz you're looking for. Flip the upper toggle switch to kick Q3 in and out of the circuit and compare fuzz tones. Tweak until you get the balance right. There are no rules. Once you start turning the FEED pot down you're reducing the voltage, so things are going to change anyway.

#### **TONE BYPASS**

This is a second footswitch on the original, but we question how useful that'd be on the fly in real-world use so we made it a toggle to keep this in a useable 1590B.

If you want to make it a footswitch simply wire the three switch pads to one column of a DPDT or 3PDT footswitch.

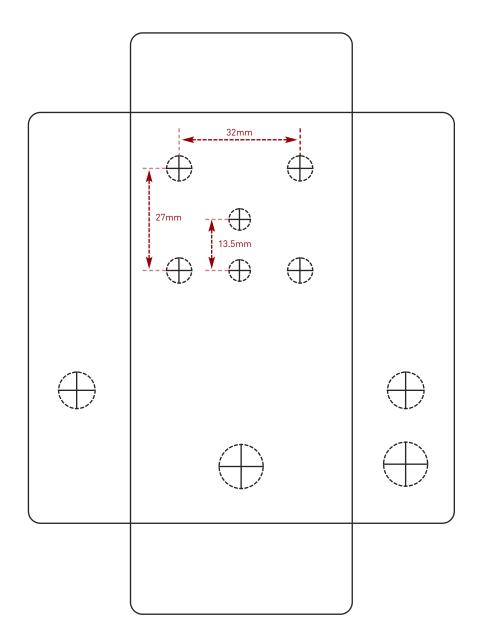


### **Drilling template**

#### 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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