

Spluffer

Split your signal into two with
the AMZ Splitter Buffer



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:

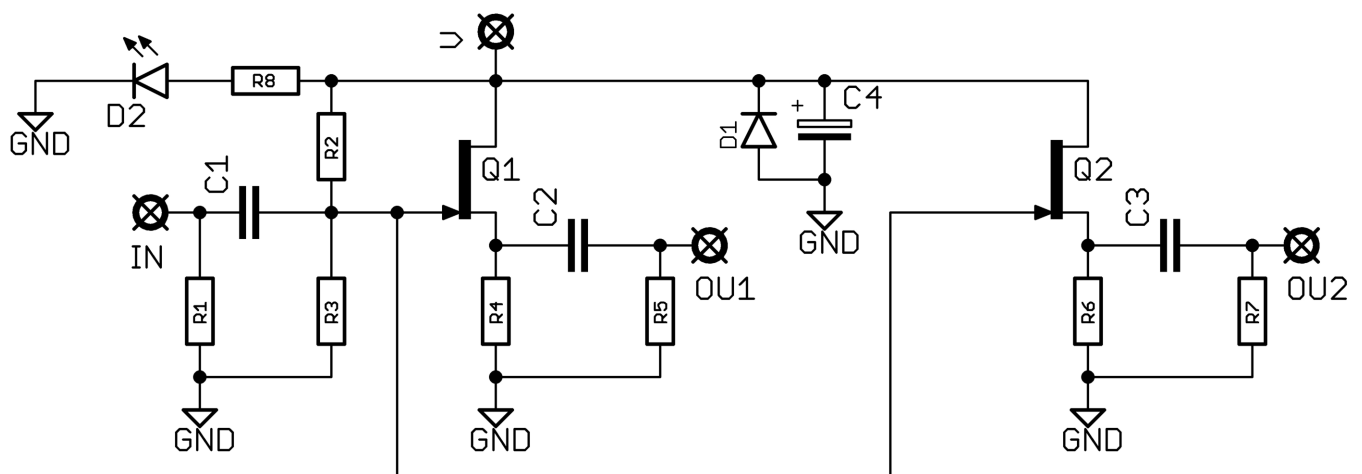
- Resistors should be 0.25W. You can use those with higher ratings but check the physical size of them.
- Electrolytics caps should be at least 25V for 9V circuits, 35V for 18V circuits. Again, check physical size if using higher ratings.

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 10M
R2 2M2
R3 2M2
R4 10K
R5 100K
R6 10K
R7 100K
R8 2K2 (CLR)*

C1 1u**
C2 1u
C3 1u
C4 100u elec

D1 1N4001
D2 LED*
Q1 2N5457***
Q2 2N5457***

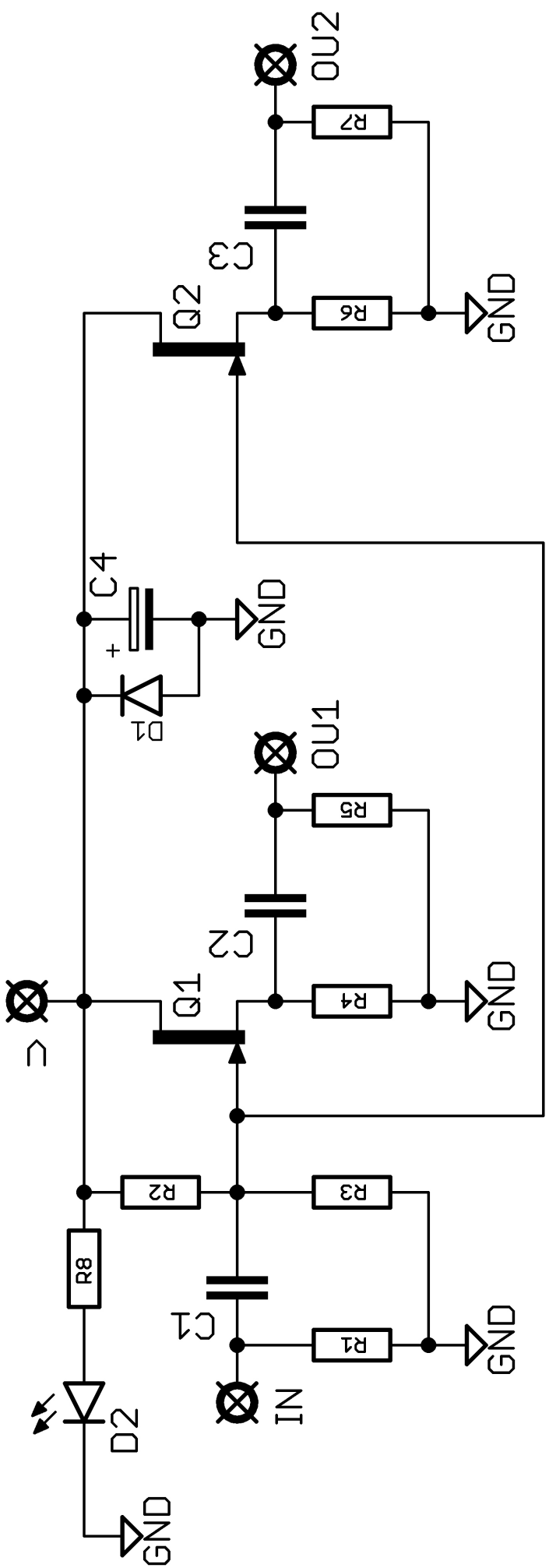
*Optional. You don't have to include the LED if you want one less glowing light on your pedalboard.

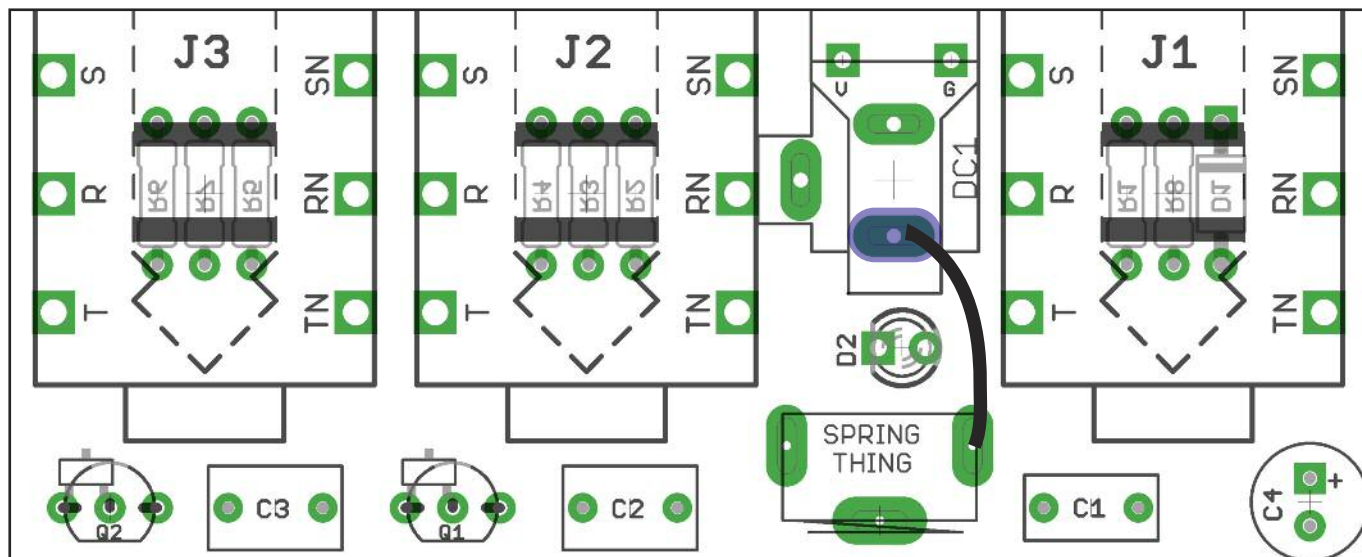
**The input cap can be altered to suit your needs. The original design has it at 100nf, which will normally allow all frequencies produced by a guitar into the circuit. We've increased it to 1uf to increase the range, since drop tuning is more popular nowadays.

***Other FETs will work, for example J201.

All the resistors and D1 go on the underside of the PCB.

The 'Spring Thing' is Keystone part no. 629





PCB layout ©2021 Pedal Parts Ltd.

Be very careful when soldering the FETs and LED. 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).

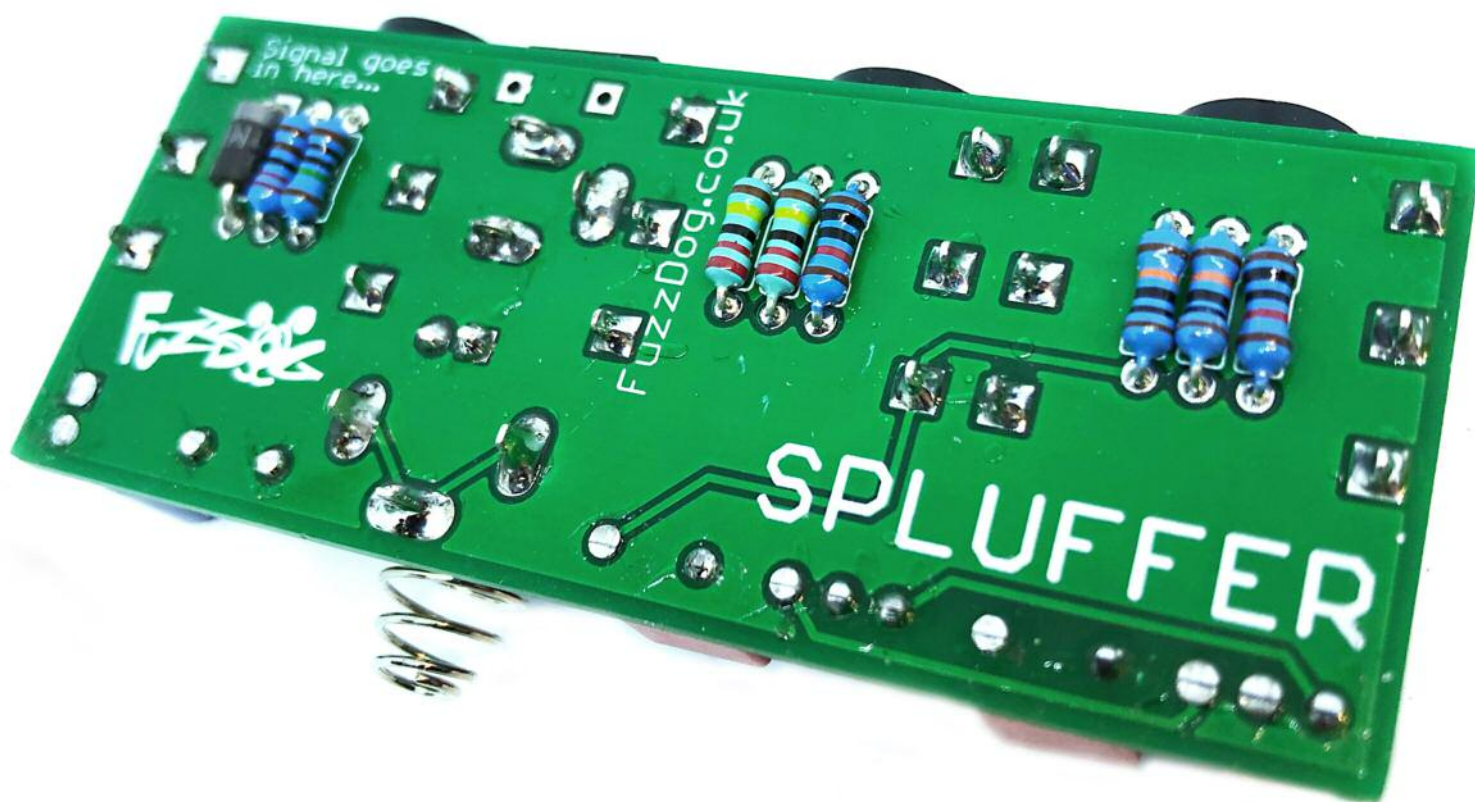
You should solder the resistors and diode before you add the jacks, as you'll have no access to those pads once the unit is fully assembled. Keep your joints nice and neat (you always should, surely...) so you don't have any solder blobs interfering with the underside of the jacks.

You can use a board-mounted DC socket, or wire one up. If wiring, use the V and G pads. The long pin of the wired socket is the positive.

SMALL OOPS! HACK REQUIRED

Of course, adding the battery spring to ground the circuit to the enclosure is pure genius. Forgetting to connect that spring to the ground plane on the circuit board balances that out.

You need to run a wire from a ground point to one of the spring legs. If you're board mounting the DC, use the spare G pad. If you're wiring the DC, use the pad marked in blue above.



Drilling template

Hammond 1590A

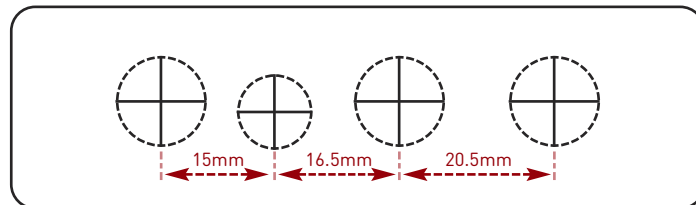
Recommended drill sizes:

Jacks 12mm

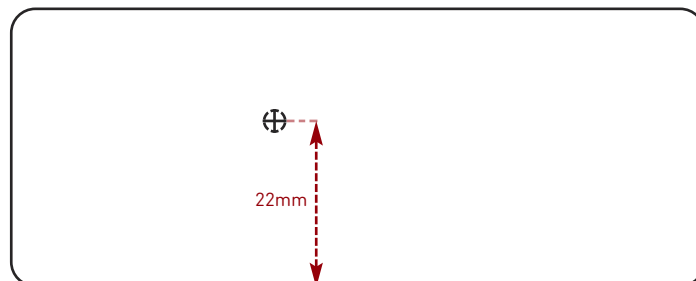
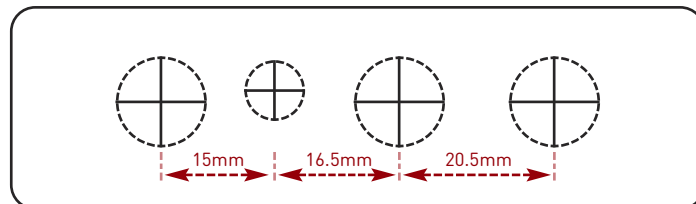
Board mount DC Socket 10mm

Wired DC Socket 8mm

The hole for the board-mounted DC socket should offset 1.5mm down



The hole for the wired DC socket should offset 1.5mm up



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