

# **SRS EQ Exciter**

Heavy vintage fuzz fun



### 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.

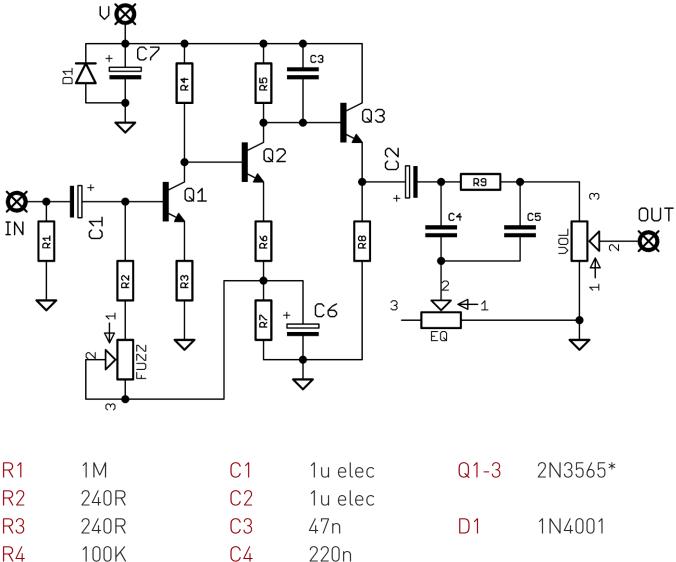
#### • Diodes/LEDs:

Striped leg (cathode) to square pad. Short leg to square pad for LEDs.

#### • ICs:

Square pad indicates pin 1.

## Schematic + BOM



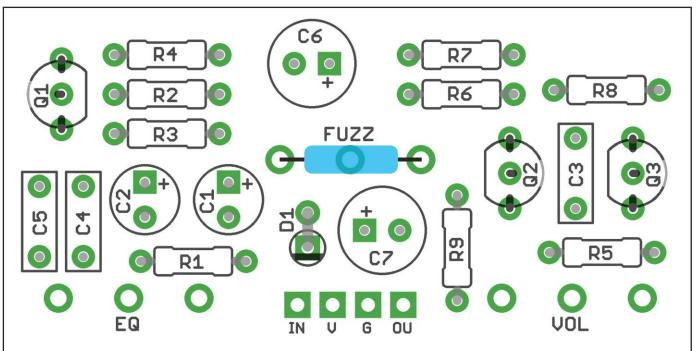
ΚI			ru etec	W1-3	ZIN3060'
R2	240R	C2	1u elec		
R3	240R	C3	47n	D1	1N4001
R4	100K	C4	220n		
R5	10K	C5	220n	VOL	25KA
R6	68R	C6	220u elec	EQ	1KB
R7	1K	C7	47u elec	FUZZ	50KA**
R8	4K7				

4K7

R9

<sup>\*</sup>Try other BJTs. The pinout is standard E B C.

<sup>\*\*</sup>If you aren't adding the optional FUZZ pot you need to place a resistor across the pads in its place. See next page.



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. Check the separate daughterboard document for details.

Be very careful when soldering the transistors and diode. 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 tags off the pots so they can be mounted flush in the box.

Solder the pots last as once they're in place they'll cover some of the pads.

The original pedal has a fixed value for fuzz. We've give you the option to add a pot instead, but to be honest this circuit sounds best at full tilt. If you aren't including the pot you need to solder a resistor to the two outer pads where the Fuzz pot would have been. Use 47-51K.



### Test the board!

Check the relevant daughterboard document for more info before you undertake this stage.

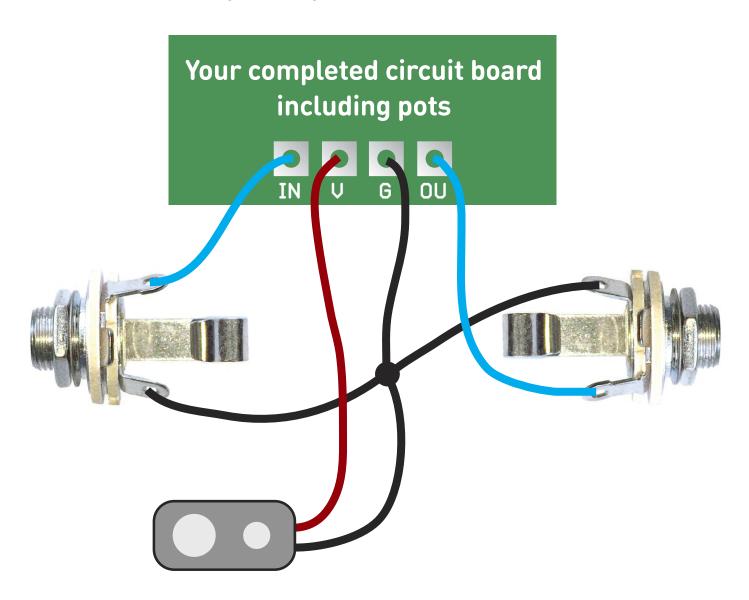
## UNDER NO CIRCUMSTANCES will troubleshooting help be offered if you have skipped this stage. No exceptions.

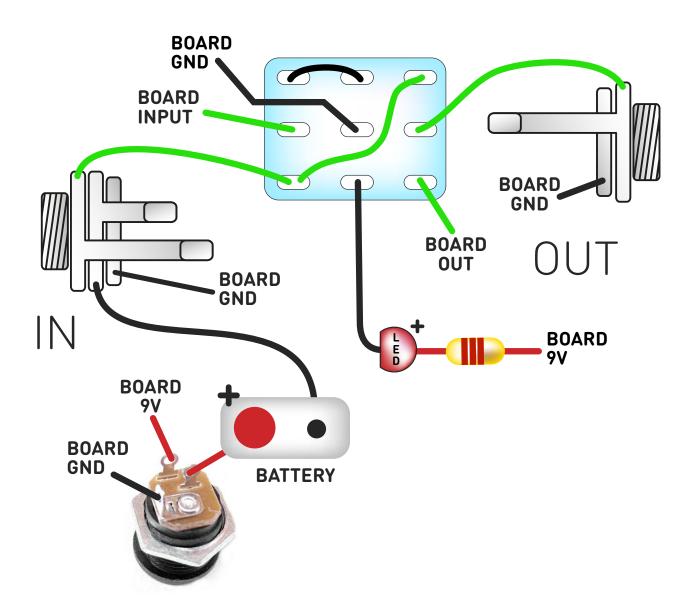
Once you've finished the circuit it makes sense to test is before starting on the switch and LED wiring. It'll cut down troubleshooting time in the long run. If the circuit works at this stage, but it doesn't once you wire up the switch - guess what? You've probably made a mistake with the switch.

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 you're using a ribbon cable you can tack the wires to the ends of that. It's a lot easier to take them off there than it is do desolder wires from the PCB pads.

If it works, carry 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.





Wiring shown above will disconnect the battery when you remove the jack plug from the input, and also when a DC plug is inserted.

The Board GND connections don't all have to directly attach to the board. You can run a couple of wires from the DC connector, one to the board, another to the IN jack, then daisy chain that over to the OUT jack.

It doesn't matter how they all connect, as long as they do.

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.

### **Drilling template**

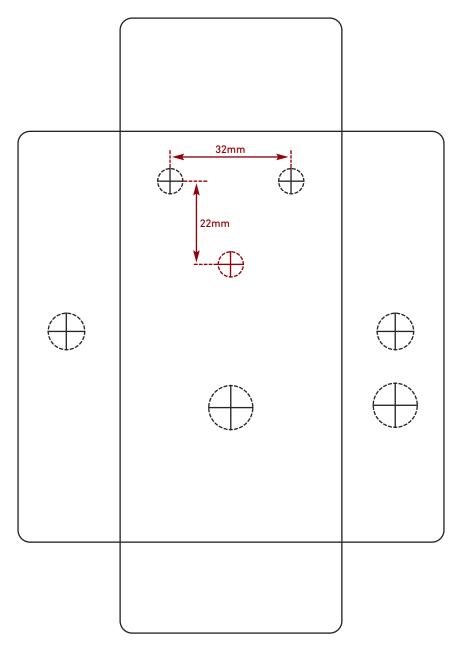
60 x 111 x 31mm

Hammond 1590B

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

#### Recommended drill sizes:

Pots 7mm 10mm Jacks Footswitch 12mm DC Socket 12mm



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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