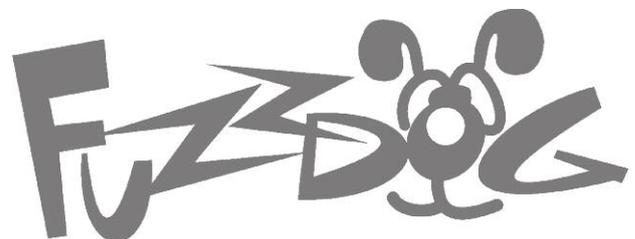
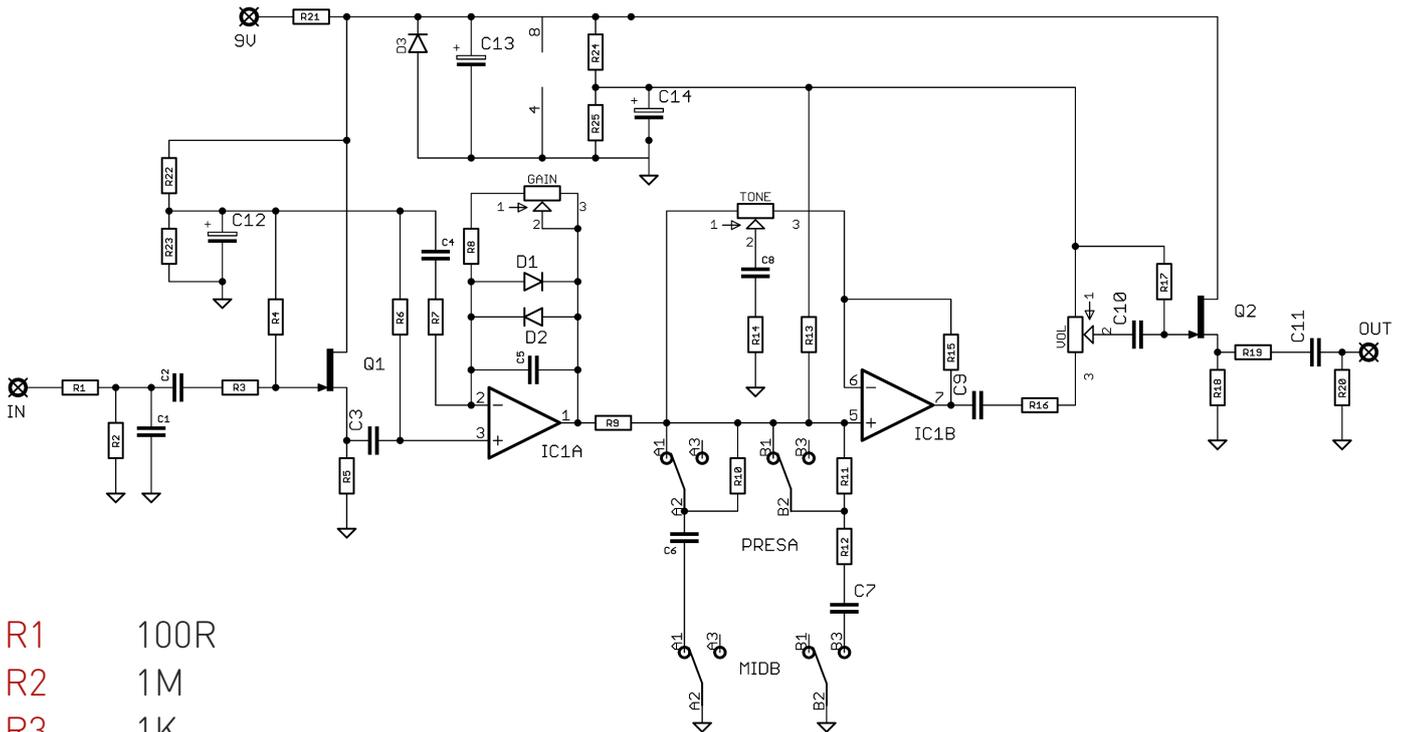


Country Crunch

Some spanking drive for
your country licks



Schematic + BOM



R1	100R
R2	1M
R3	1K
R4	510K
R5	10K
R6	10K
R7	2K2
R8	10K
R9	1K
R10	300R*
R11	200R*
R12	240R*
R13	10K
R14	220R
R15	1K
R16	1K
R17	510K
R18	10K
R19	100R
R20	10K
R21	100R
R22	10K
R23	10K
R24	10K
R25	10K

C1	100p
C2	22n
C3	1u
C4	220n
C5	51p*
C6	220n
C7	470n
C9	1u
C10	1u
C11	1u
C12	100u elec
C13	100u elec
C14	100u elec

Q1-2	J201
IC1	4580
D1-2	1N4148
D3	1N4001
GAIN	500KA
TONE	25KC**
VOL	100KB
PRES	DPDT ON-ON
MIDS	DP3T ON-ON-ON‡

*It's unlikely you'll notice much difference if you use more common near-as-dammit values.

**25KC = hen's teeth. Good luck finding one. The best results we could get using more common values come from a 50KC pot with a 51K resistor tacked across pins 1 and 3. See later in the doc.

‡See overleaf for more details.

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 diodes and transistors. 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).

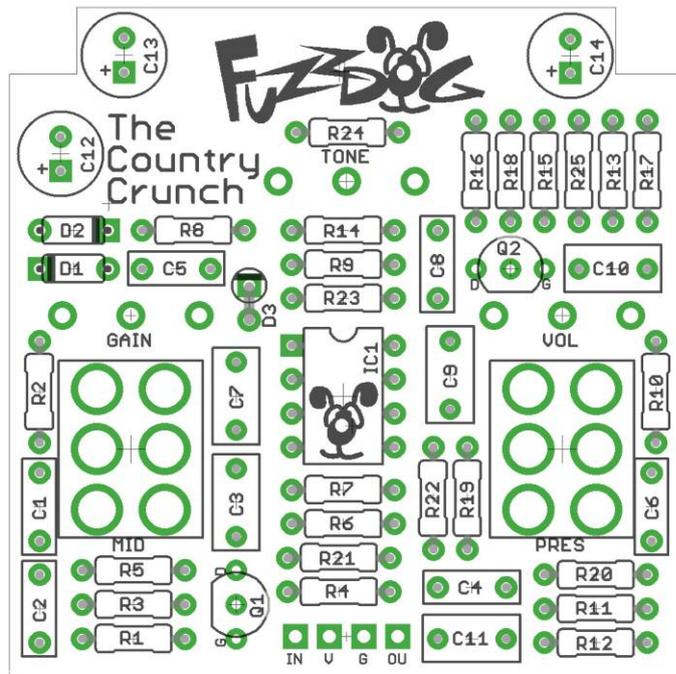
Snap the small metal tag off the pots so they can be mounted flush in the box.

Positive (anode) legs of the electrolytic caps go to the square pads.

Negative (cathode) legs of the diodes go to the square pads.

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. The best way to do that is to solder a single pin of each pot in place then melt and adjust if necessary before soldering in the other two pins. If your pots don't have protective plastic jackets ensure you leave a decent gap between the pot body and the PCB otherwise you risk shorting out the circuit.

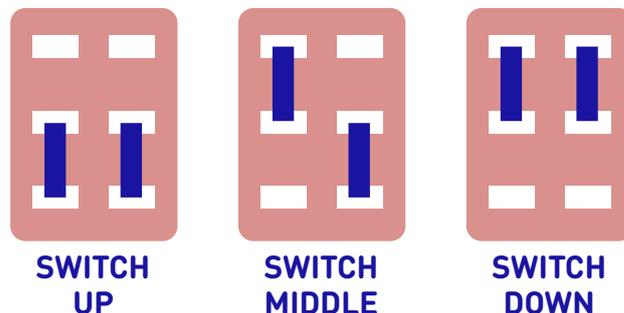
Same goes for the toggle switches. Use your enclosure as a guide for positioning them to ensure they line up properly. Solder one lug, then melt it and adjust to get it straight before soldering any others.



PCB layout ©2016 Pedal Parts Ltd.

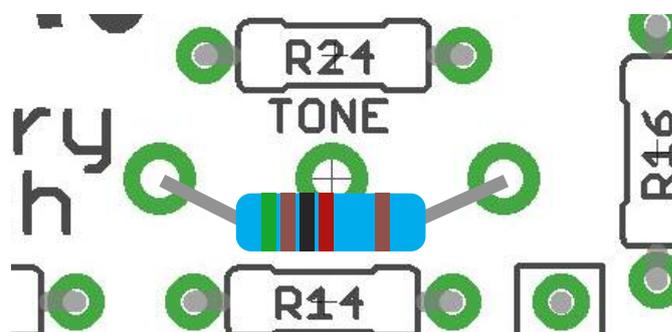
Mids Switch

This requires a DP3T ON-ON-ON. These come in different configurations, but the one you need for our PCB is this type:

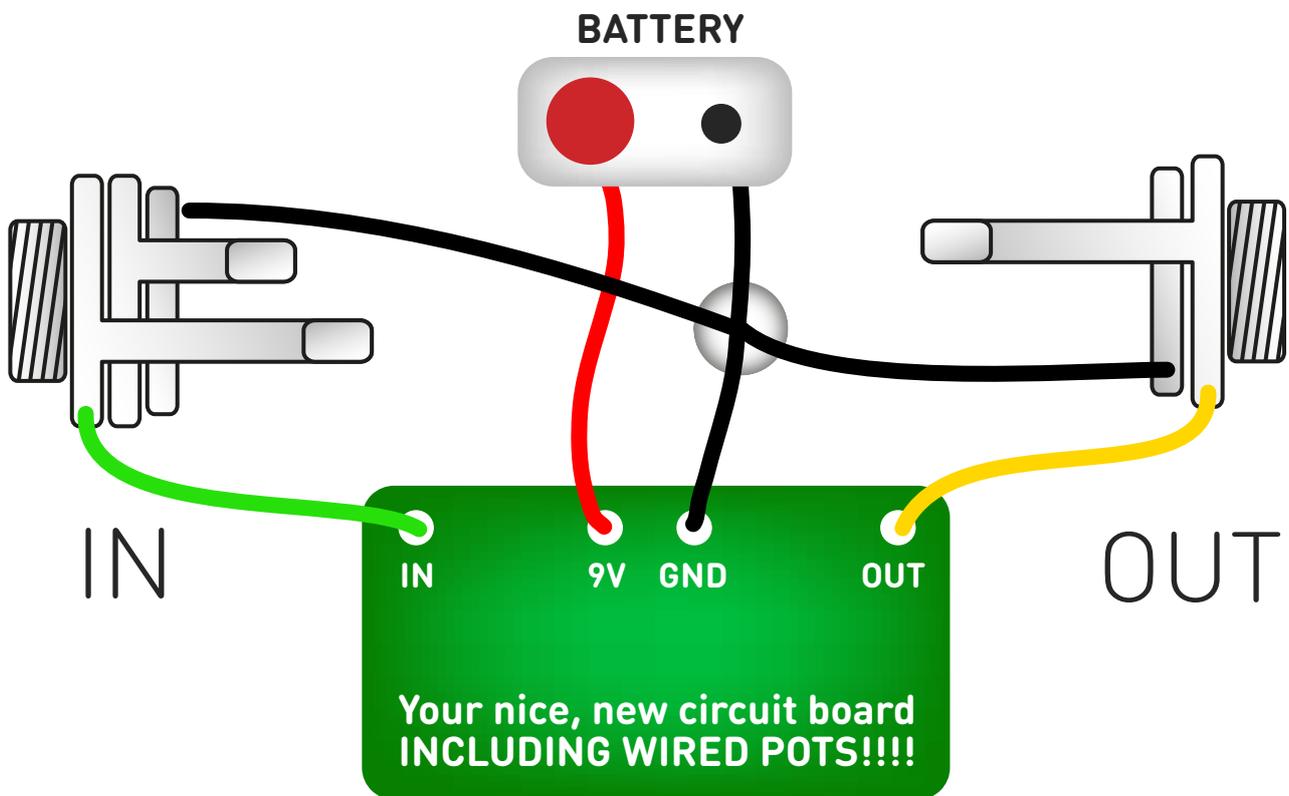


Hacking that Tone pot

Once you've got your tone pot soldered in simply tack your 51K resistor across pins 1 and 3. You can do this on the pot itself on the underside of the board, or across the protruding pins on the top side. See below.



Test the board!



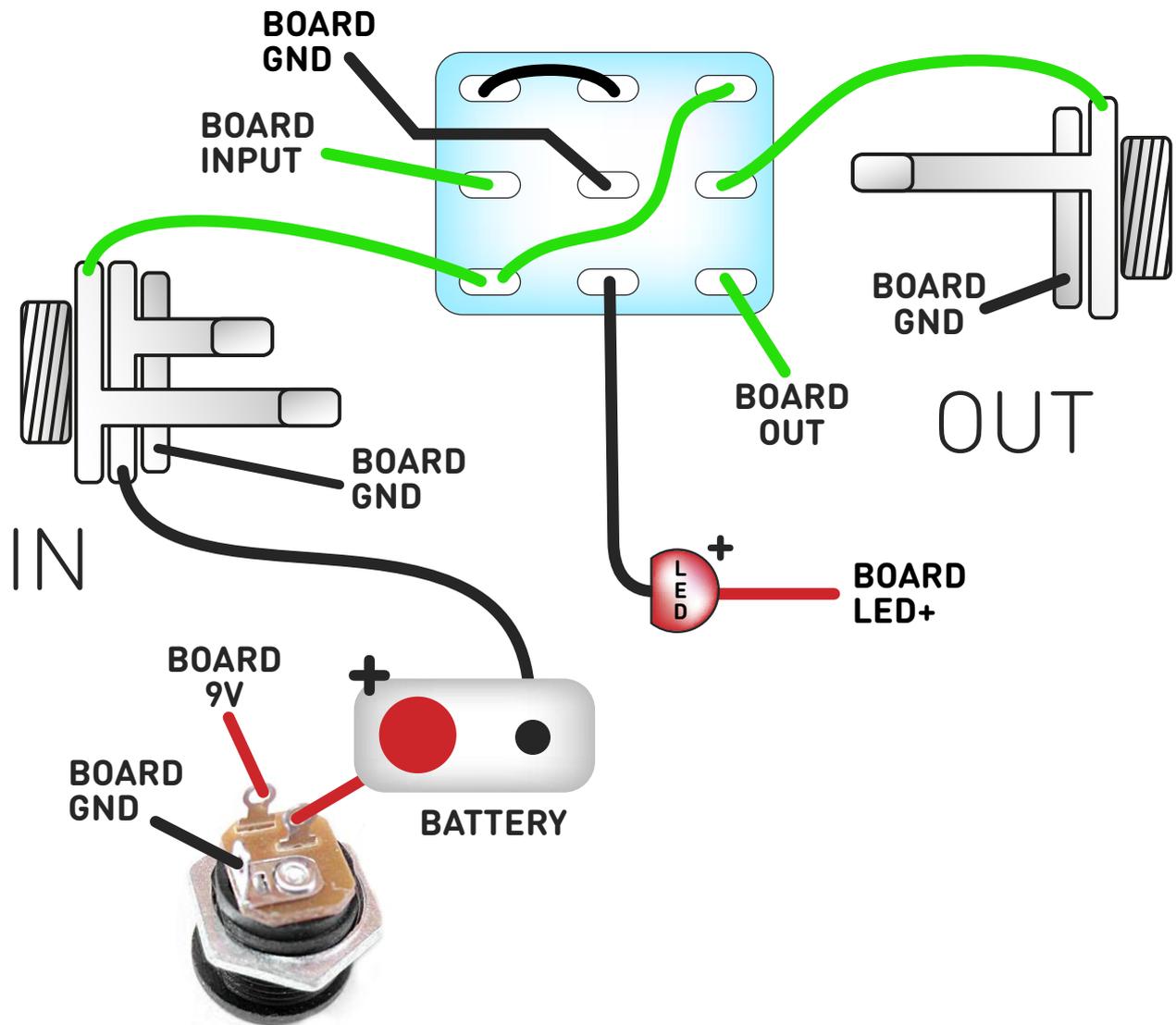
UNDER NO CIRCUMSTANCES will troubleshooting help be offered if you have skipped this stage. No exceptions.

Once you've finished the circuit it makes sense to test it 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 it works, crack 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.

Wire it up (if using a daughterboard please refer to the relevant document)



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.

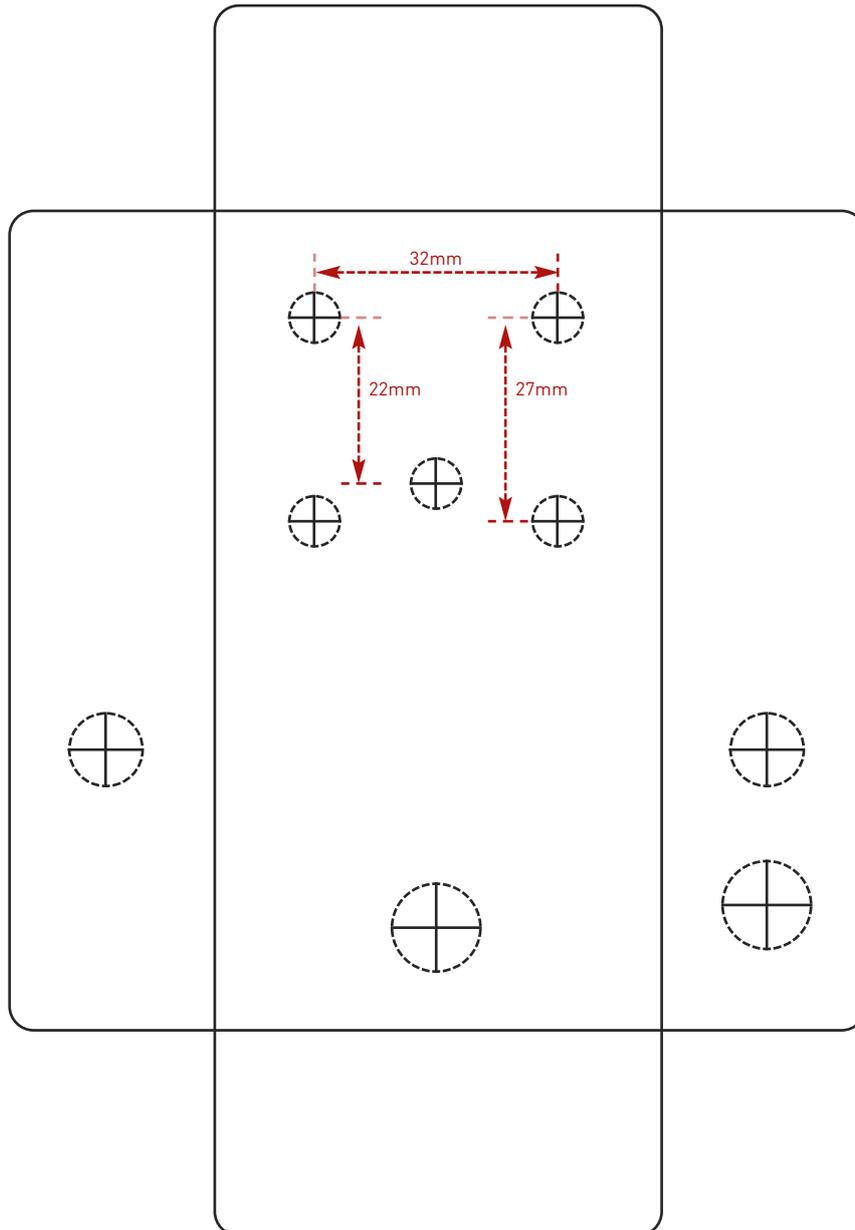
Drilling template

Hammond 1590B
60 x 111 x 31mm

Recommended drill sizes:

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

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



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