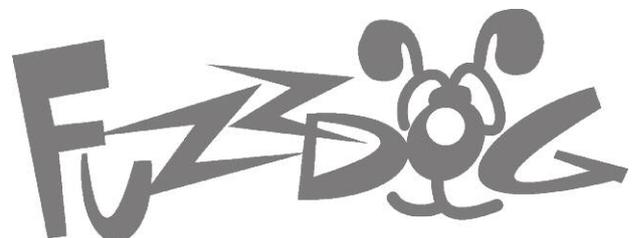


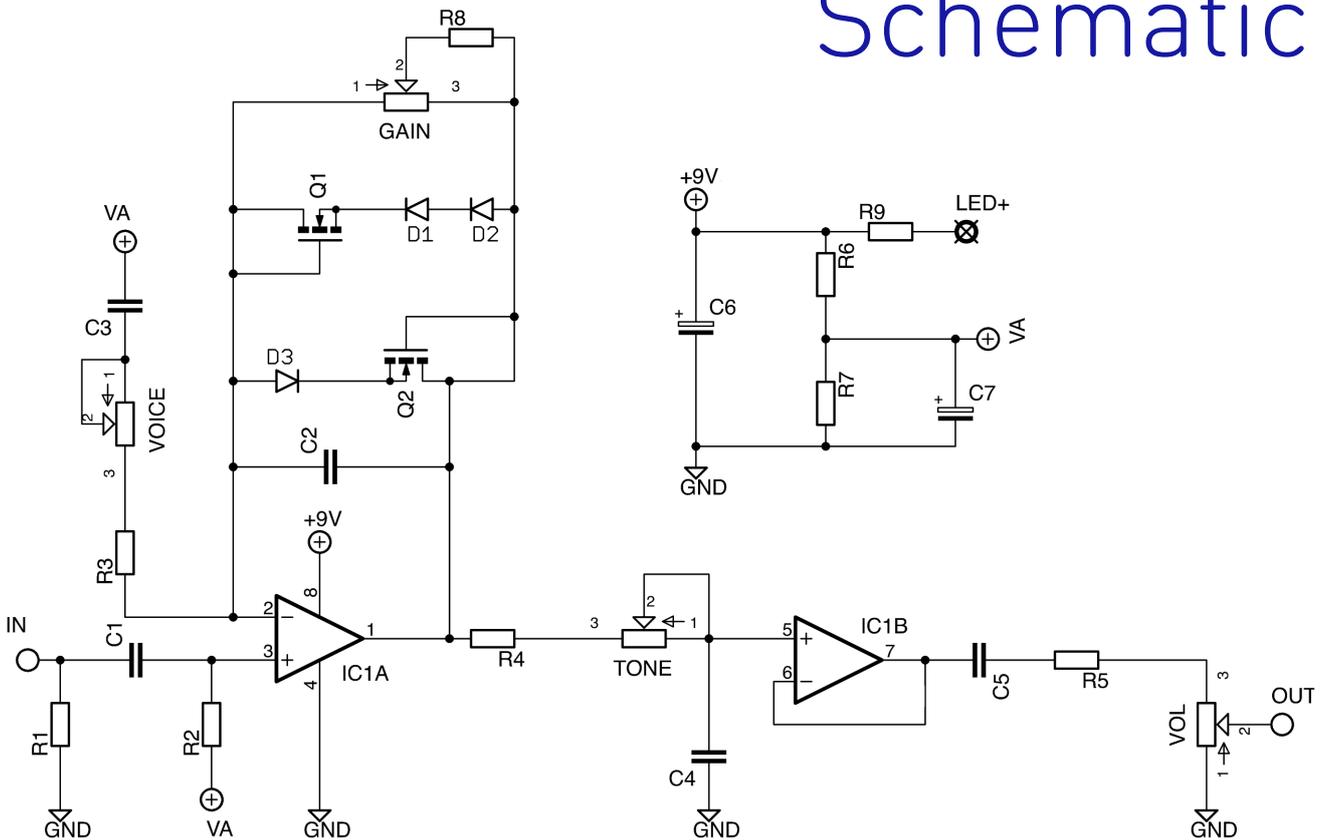
# Enlightened Drive

v2.0

Highly Responsing Overdrive  
"Dumble-in-a-Box"!



# Schematic

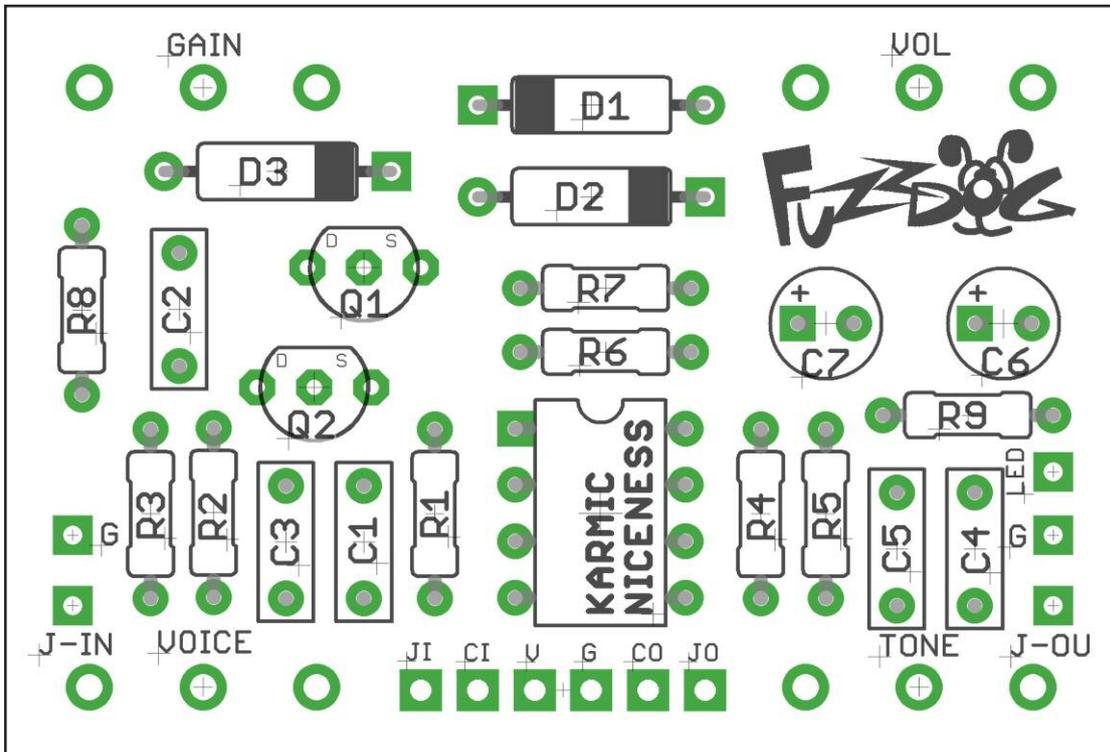


## BOM

R1	2M2			D1-3	BAT 41
R2	470K			Q1-2	2N7000**
R3	1K	C1	470n	IC	*
R4	10K	C2	100p	GAIN	500KB
R5	1K	C3	100n	VOICE	10KB
R6	10K	C4	3n3	TONE	50KB
R7	10K	C5	470n	VOL	100KA
R8	1K	C6	100u elec		
R9	2K2 (CLR)	C7	47 u elec		

\*Originals have been traced with AD712 and NE5532, both of which are still readily available. No rules here - find the one you like the best. OPA2604 are good, but you may like a nice, simple 2262, 4558 or 072.

\*\*Other FETs may work well, but original uses these.



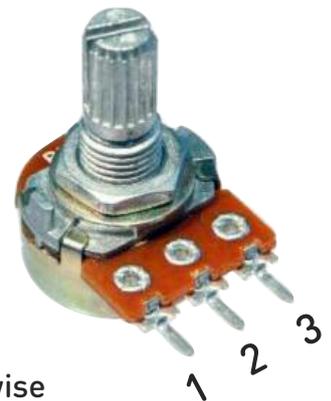
PCB Layout ©2014 Pedal Parts Ltd.

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

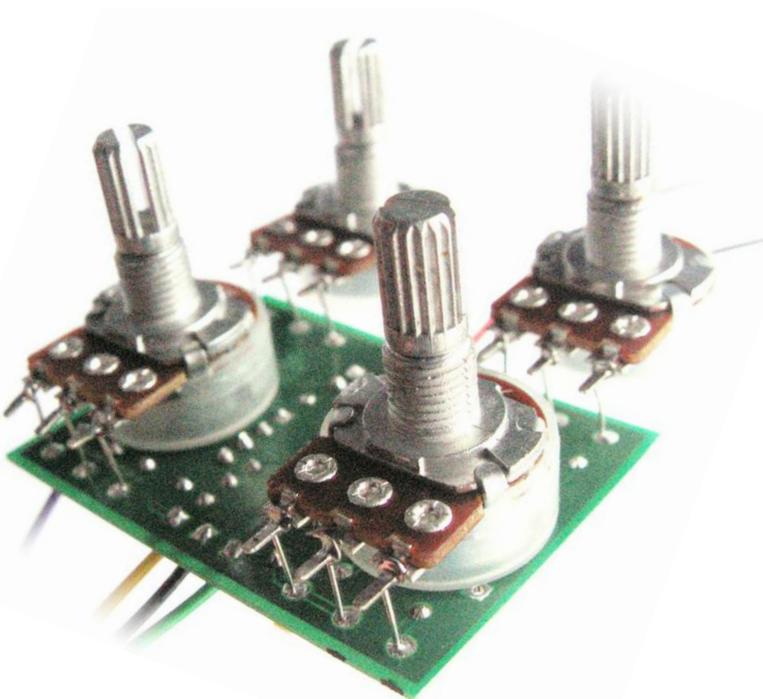
Snap the little metal tag off the pots to mount them flush in the box.

You should use some kind of heat sink on the legs of the diodes when soldering. They aren't keen on heat. Any more than 3-4 seconds of iron and they're toast.

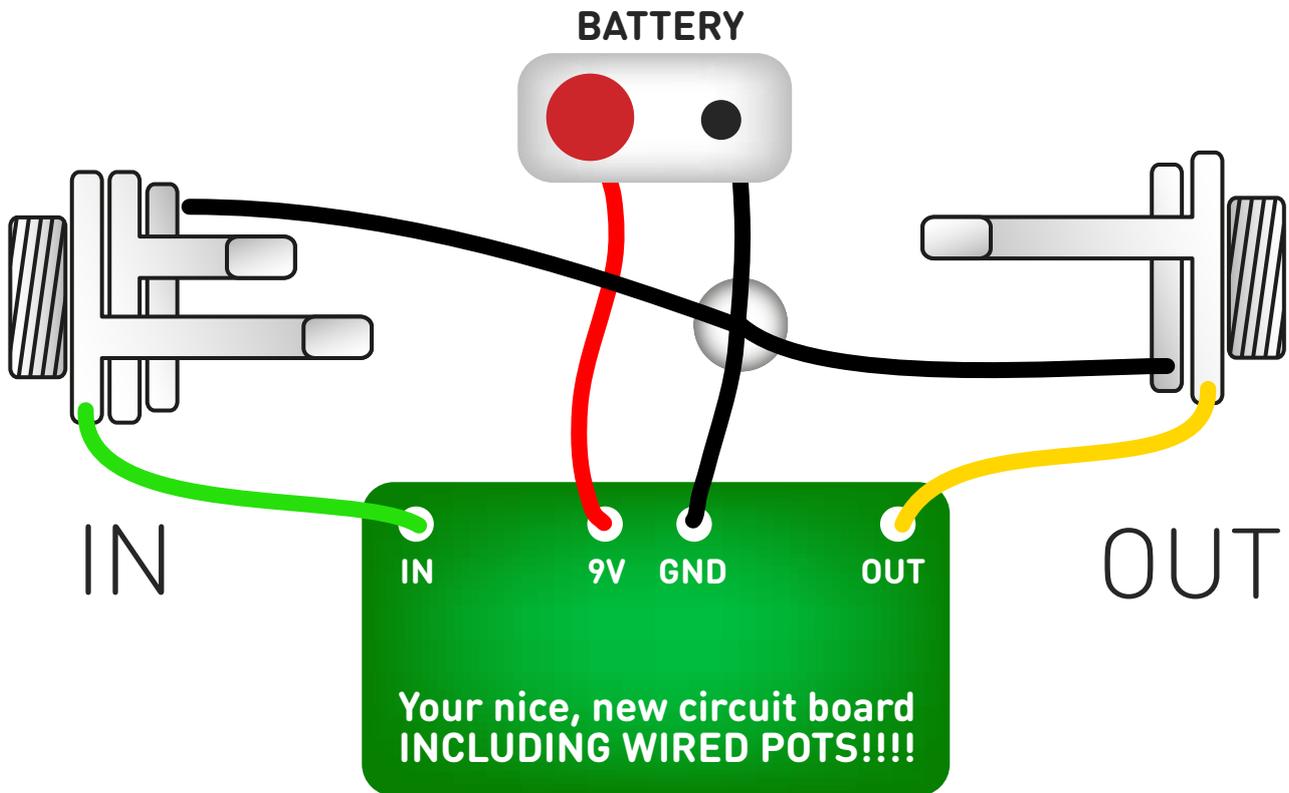
There are multiple pads for GND as well as pads for Jack-IN and Jack-OUT. These are used when combined with a Direct-Connect Daughterboard. If you aren't using a daughterboard just ignore J-IN, JI, JO and J-OU, otherwise please refer to the daughterboard document for more details.



The pads for the pots are spaced so you can use vertical pots if you wish. Why not try "Cheating Verticals" by soldering snipped component legs to the pots as shown left. You can just wire them normally though.



# Test the board!



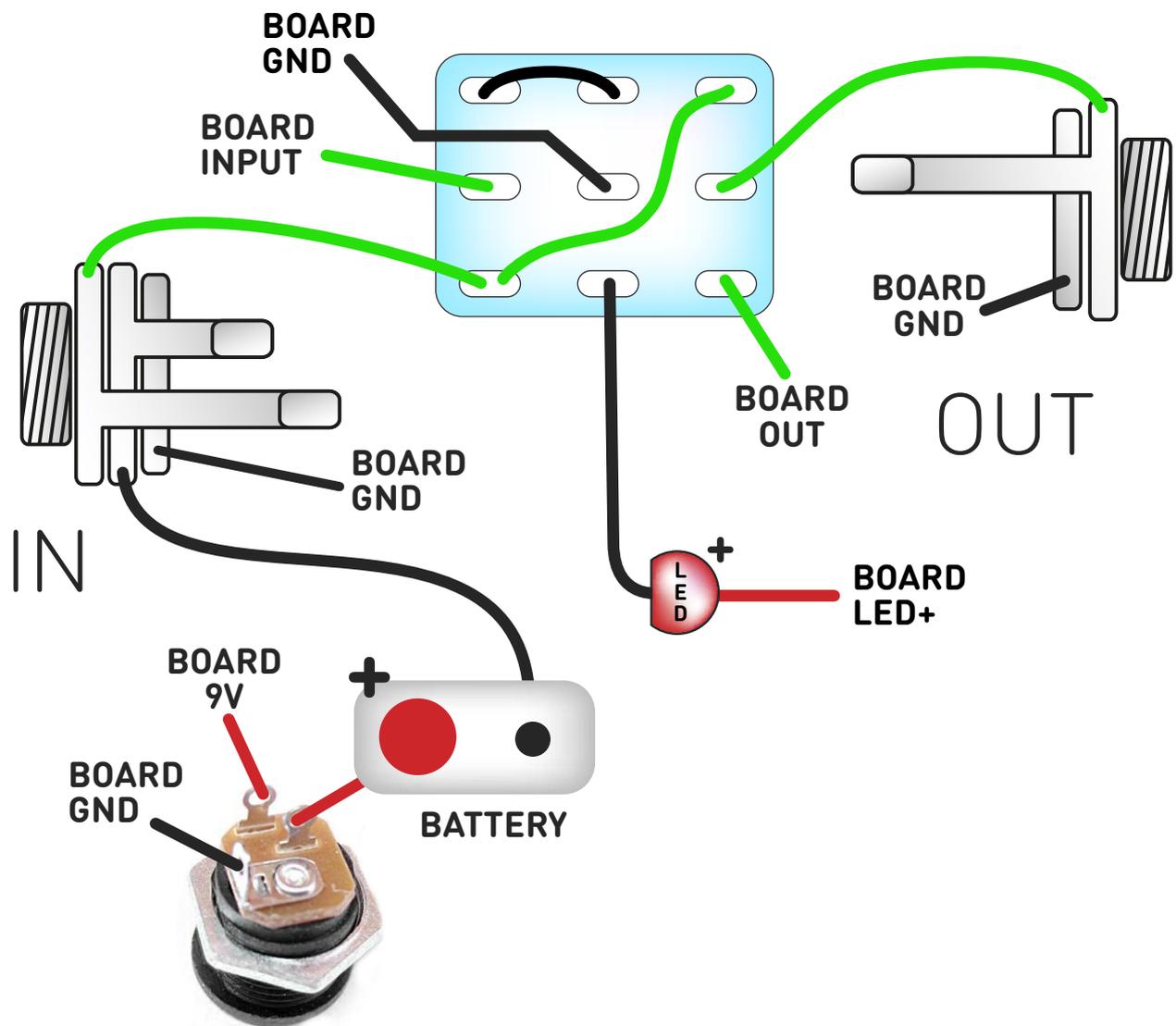
Once you've finished the circuit it makes sense to test it before starting on the switch and LED wiring. It'll cut down troubleshooting time in the long run. If the circuit works at this stage, but it doesn't once you wire up the switch - guess what? You've probably made a mistake with the switch.

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)



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. Now... do some overdriven meditation!

# PedalParts.co.uk

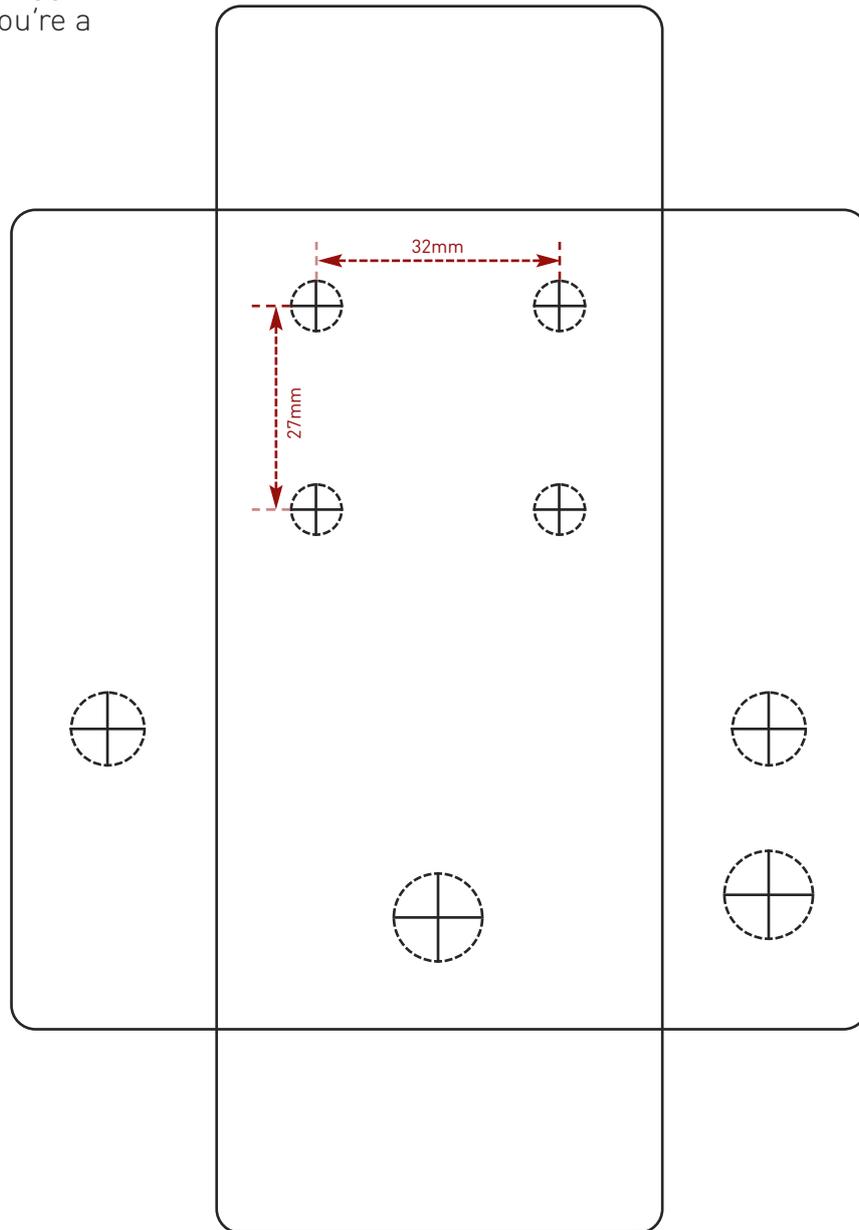
# Drilling template

Hammond 1590B  
60 x 111 x 31mm

Recommended drill sizes:

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

It's a good idea to drill the holes for the pots 1mm bigger to give yourself some wiggle room, unless you're a drill ninja.



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.