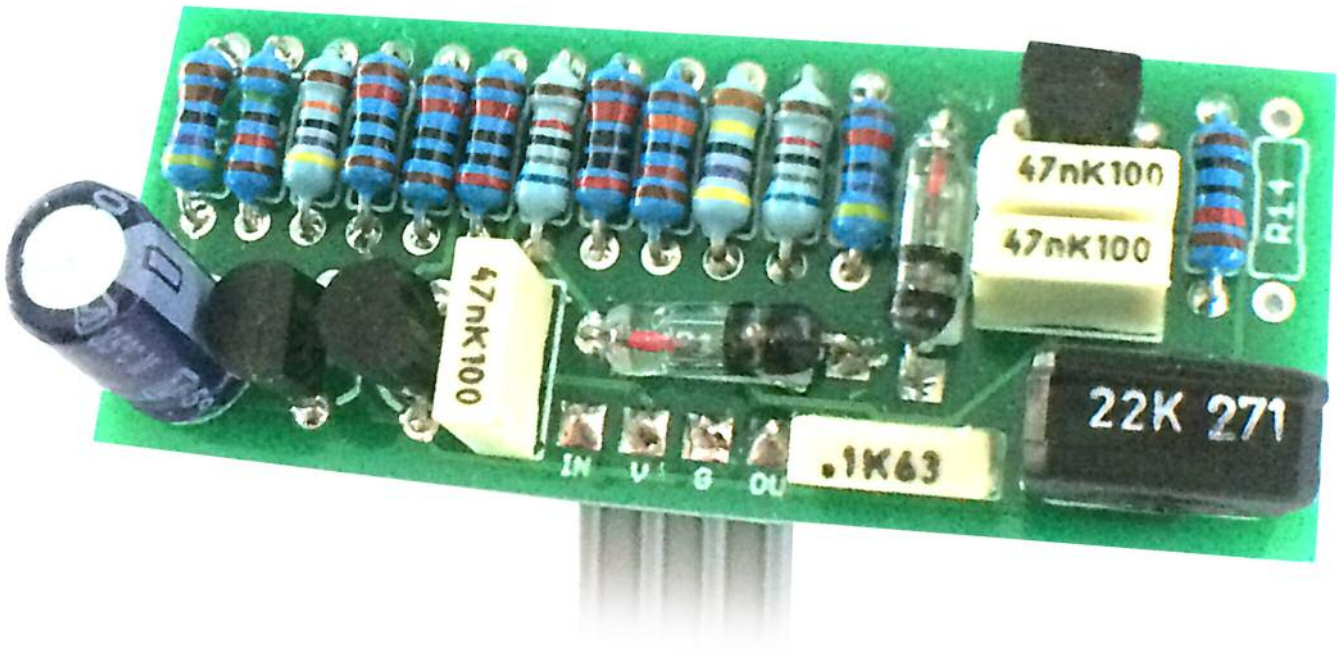
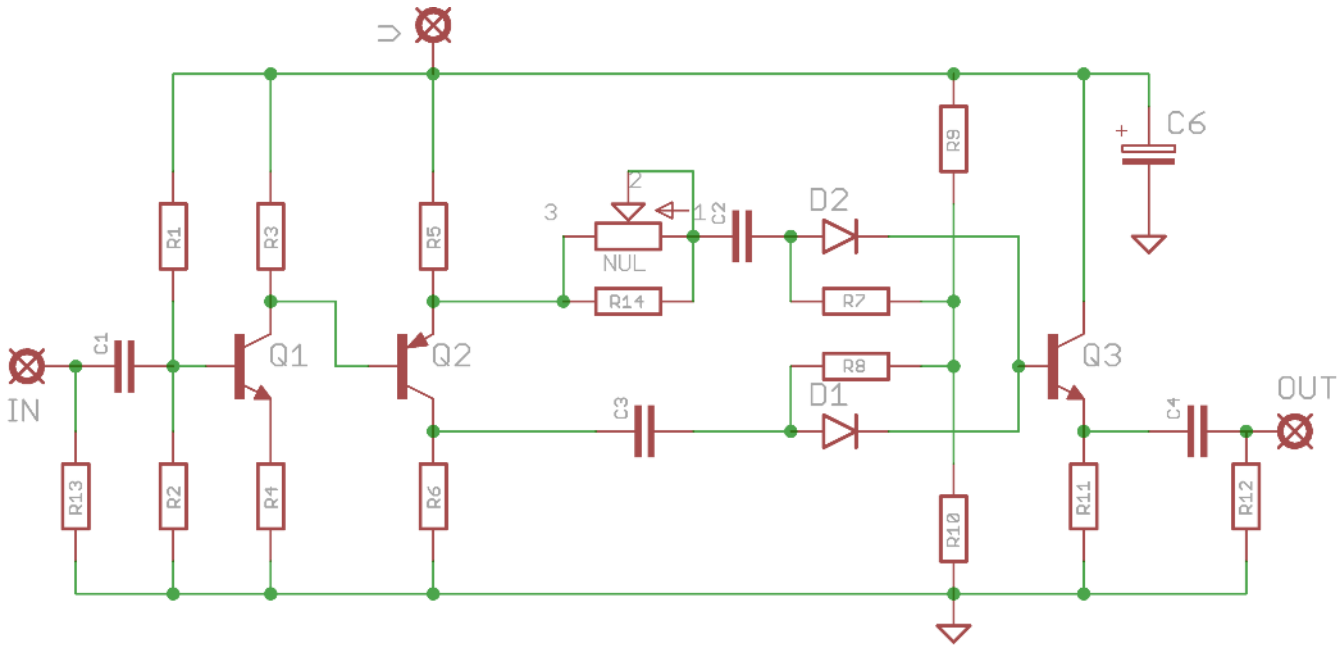


GREEN STINGER

Dan Armstrong's Octave upper

Schematic + BOM



R1	470K
R2	120K
R3	15K
R4	4K7
R5	10K
R6	10K
R7	68K
R8	68K
R9	22K
R10	22K
R11	10K
R12	47K
R13	4M7
R14	7K4*
C1	47n
C2	47n
C3	47n
C4	100n
C6	100u elec
Q1	2N5088
Q2	2N3906
Q3	2N5088
D1-2	1N4148 / 1N34A**
NUL	22K TRIMMER*

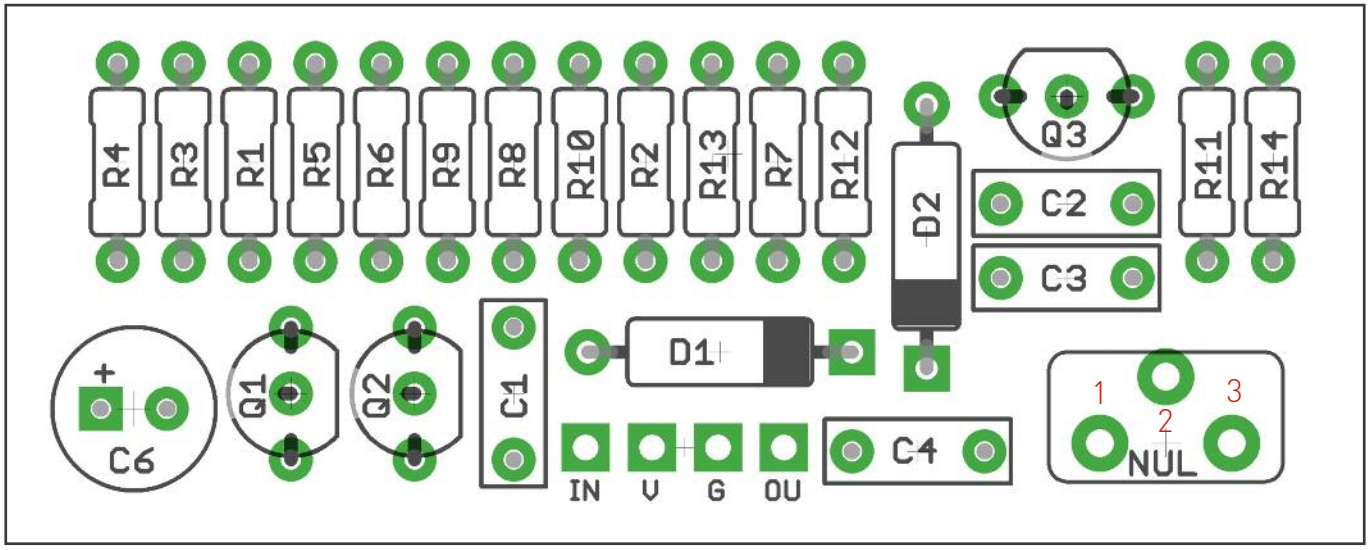
*R14 and the 'NUL' trimmer aren't in the original circuit. They are an optional addition by JD Sleep which allow you to reduce the fundamental in the signal, which in turn will accentuate the octave. For more info have a read through this:

diystompboxes.com/smfforum/index.php?topic=1440.0

We recommend a 22K trimmer so you can tweak to perfection. Use R14 or a trimmer, not both. If you want to build the stock circuit place a jumper across R14.

To add a switch to flip between Stock and Nulled circuits, add a SPST toggle switch using whichever pads aren't used for your nulling. So, if you've used a trimmer for NUL, attach your switch lugs to the pads of R14. If you've used a fixed resistor in R14, attach your switch lugs to the two outer pads of the NUL trimmer spots.

**Diodes should be matched for forward voltage or you're unlikely to get a good octave signal.



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.

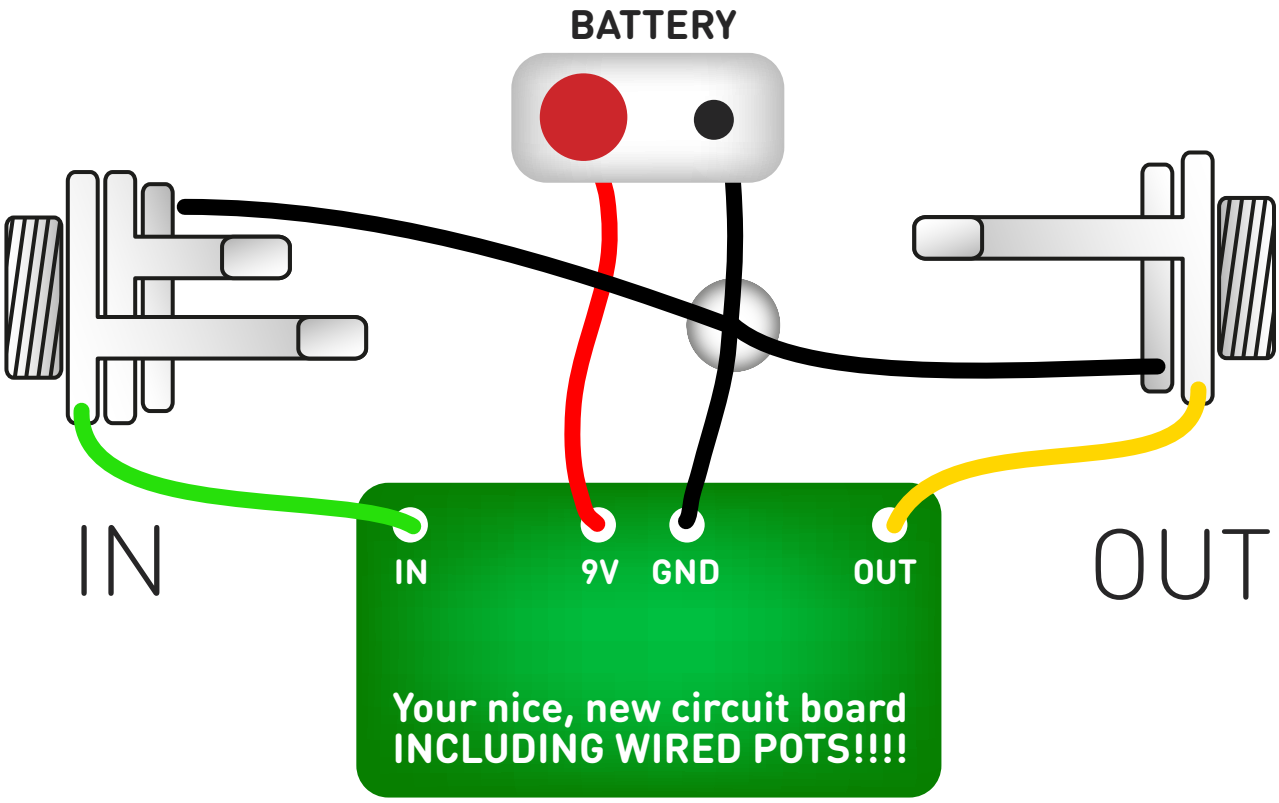
Be very careful when soldering the transistors and diodes. They're very sensitive to heat. You should use some kind of heat sink (crocodile clip or reverse action tweezers) on each leg as you solder them. Keep exposure to heat to a minimum (under 2 seconds).

If you're using germanium diodes in D07 cases be very careful when bending the legs. The glass casing is very brittle where the leg enters it. You should grip the leg with some fine needle-nosed pliers pushed right against the glass body, then bend the leg with your fingers. The pliers will take the strain away from the body.

The cathode (striped end) of the diodes go into the square pads. The anode (long leg) of electrolytic capacitors go into the square pads.

If you come from the school of 'everything on the outside' you can add the nulling mod as an external pot. Just attach a 20-25KB pot in place of the NUL trimmer. Pins are marked above.

Test the board!



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

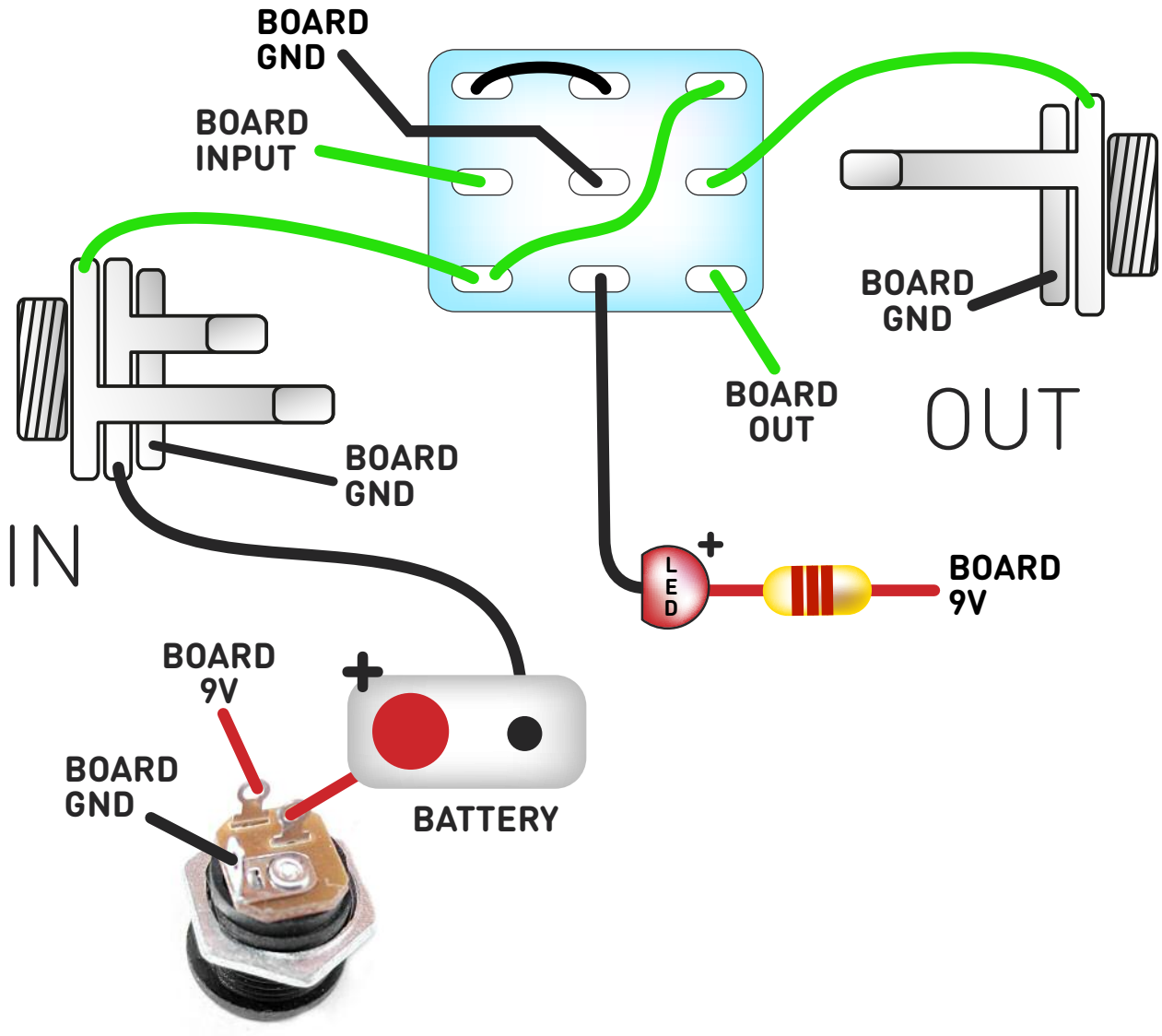
Once you've finished the circuit it makes sense to test is before starting on the switch and LED wiring. It'll cut down troubleshooting time in the long run. If the circuit works at this stage, but it doesn't once you wire up the switch - guess what? You've probably made a mistake with the switch.

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 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 - with battery

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



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.

The BOARD GND connections don't all have to connect to one point. They can be daisy-chained around the circuit, using larger connection points (such as jack socket lugs) for multiple connections. As long as they all connect together in some way.

PedalParts.co.uk