

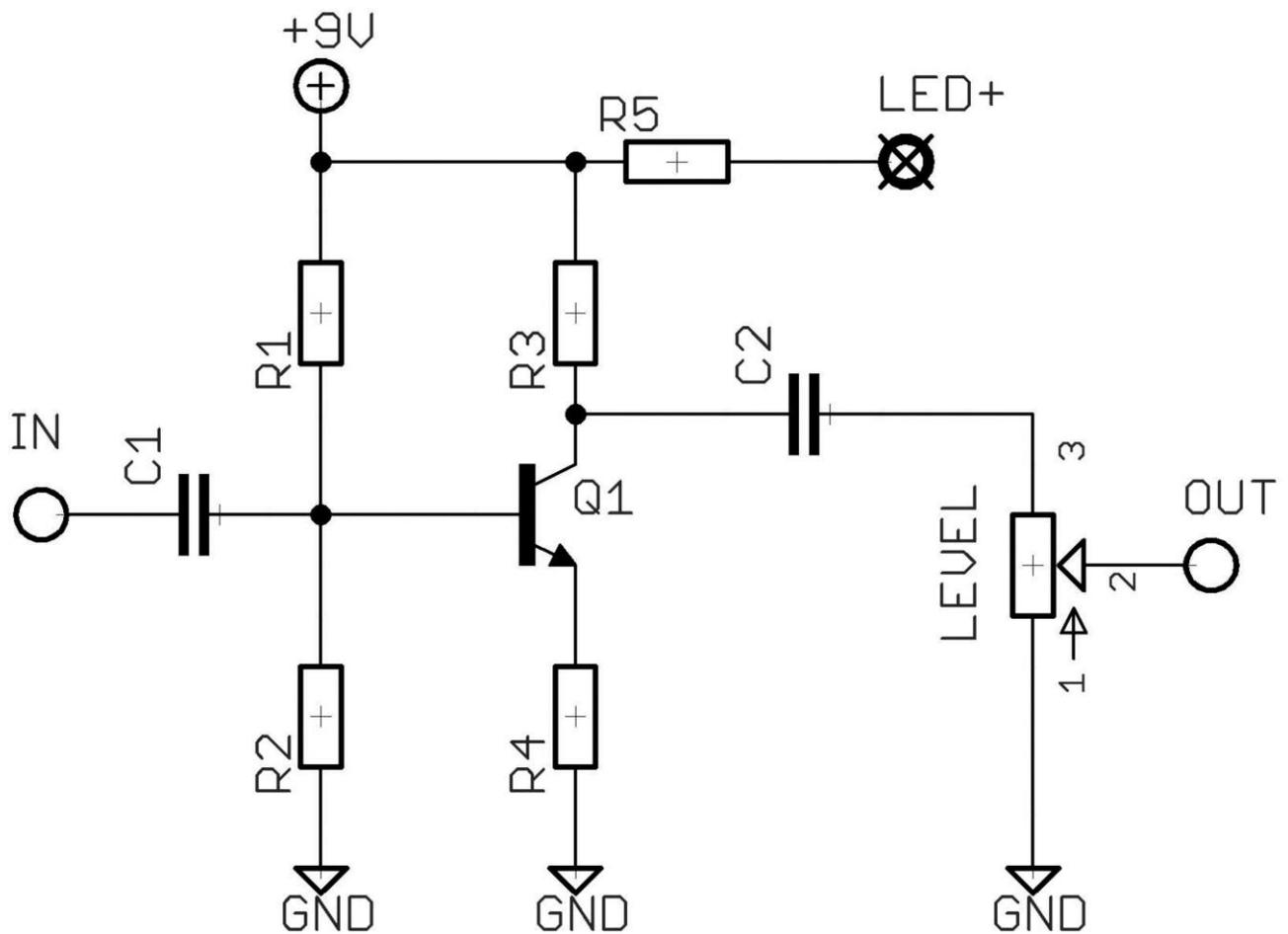


# LPB

Linear Power Boost  
(or Treble Boost, or Screaming Bird)



# Schematic + BOM



R1	1M
R2	100K
R3	10K
R4	390R
R5	2K2 (CLR)
C1	100n
C2	100n
Q1	2N5088/9
VOL	100KA

Variations:

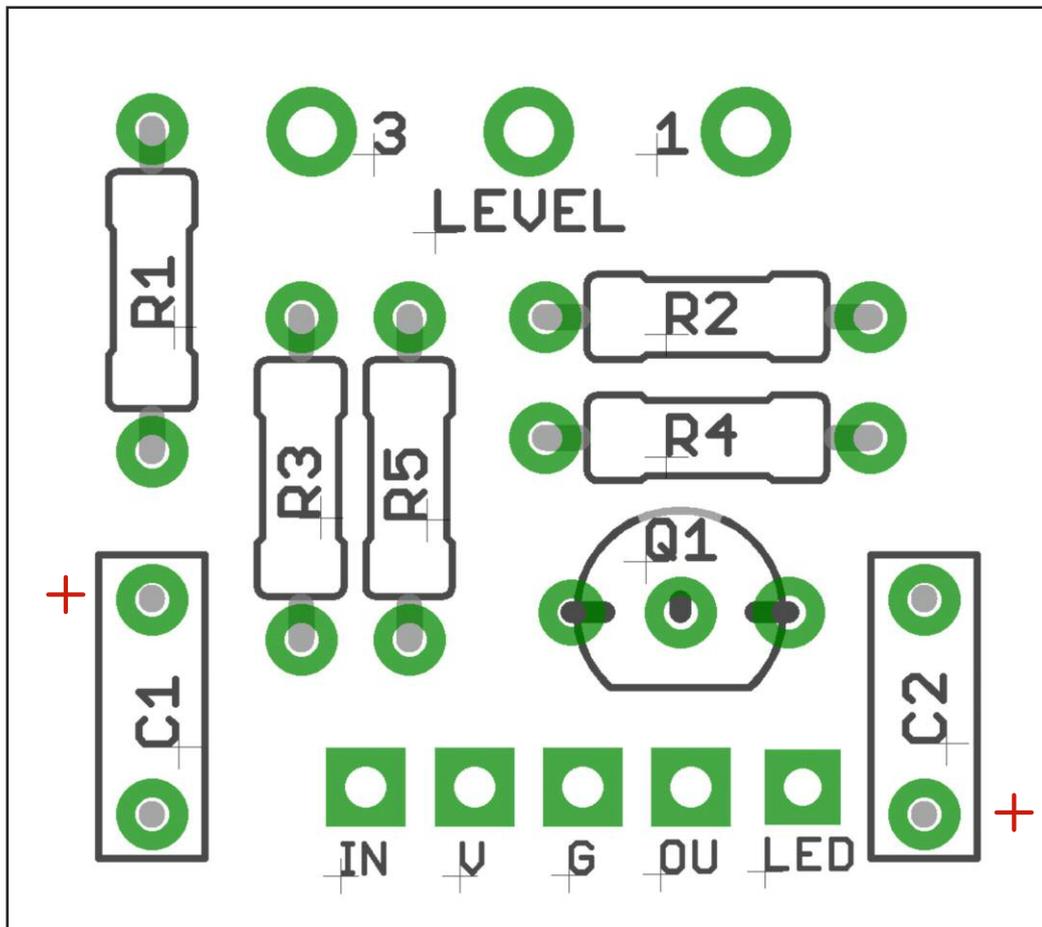
Treble Boost

C1 + 2 10n

Shouting Bird

C1 + 2 2.2n

You can increase C1 + C2 if you want to allow more bass through the circuit.



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 LED and Q1. 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 pot so it can be mounted flush in the enclosure. Pot mounts on the same side of the PCB as the other components, and should be fitted last.

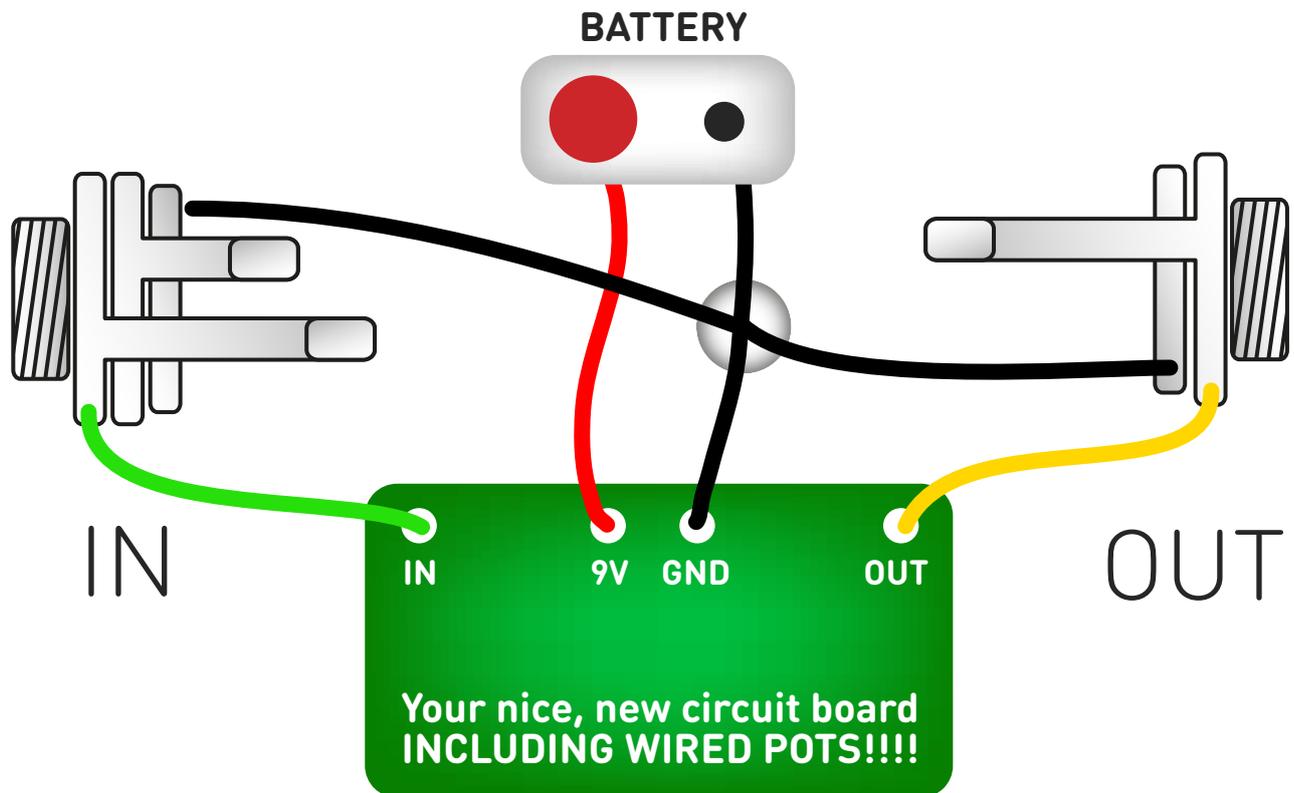
If you're using a footswitch daughterboard don't bother soldering R5. You'll use that on the daughterboard instead.

## Baby got back...

If you want more bottom end you can increase the capacitor values. This is a transparent boost, so there's no reason you shouldn't be able to use it successfully for bass. Cap values are up to you.

If you're using electrolytic caps place the anode (longer leg) in the pads marked + in the image above. Cathode (shorter leg, usually marked with a stripe) into the other.

# Test the board!



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

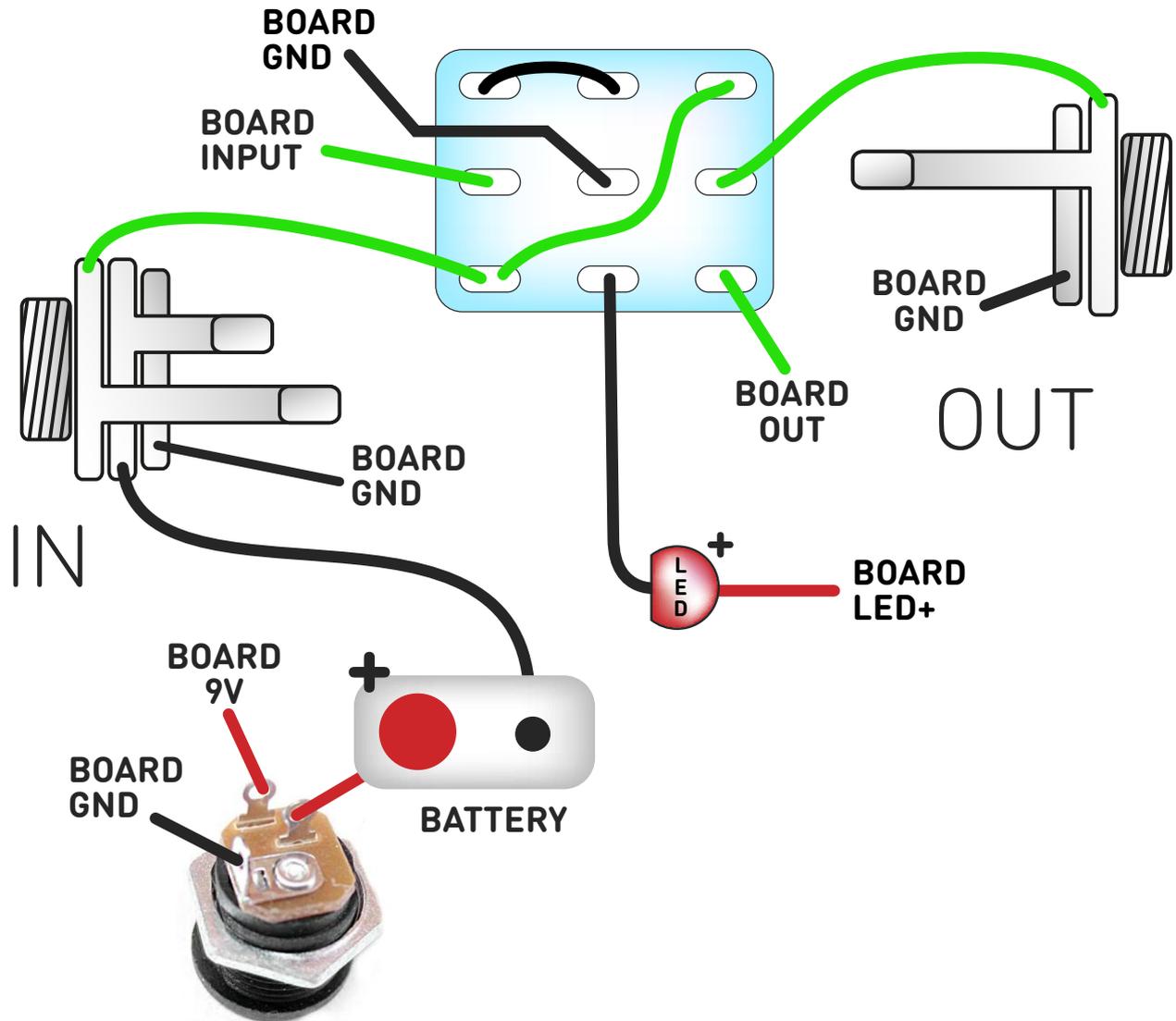
Once you've finished the circuit it makes sense to test it before starting on the switch and LED wiring. It'll cut down troubleshooting time in the long run. If the circuit works at this stage, but it doesn't once you wire up the switch - guess what? You've probably made a mistake with the switch.

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 - with battery

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

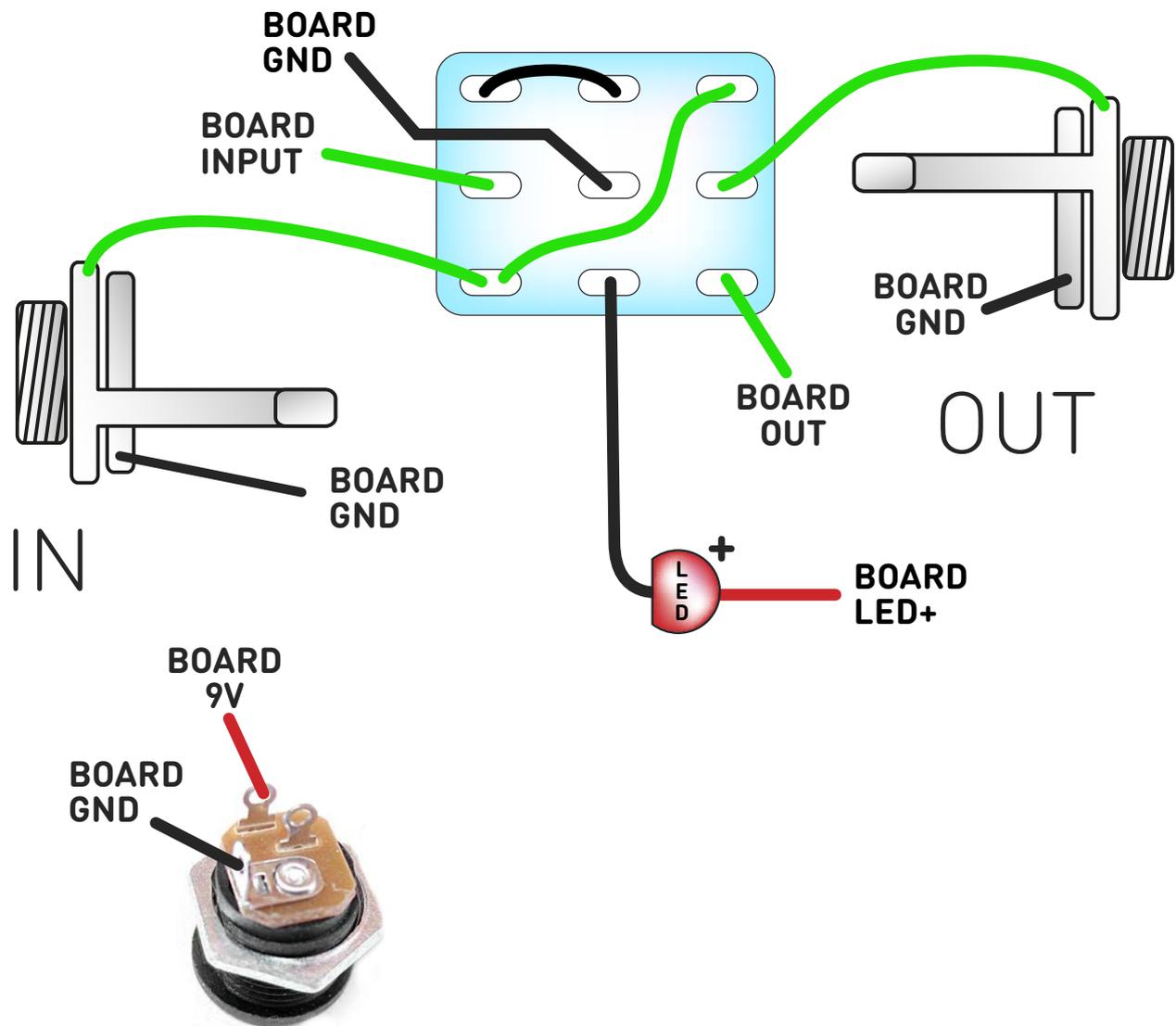


This circuit is standard, Negative GND. Your power supply should be Tip Negative / Sleeve Positive. That's the same as your standard pedals (Boss etc), and you can safely daisy-chain your supply to this pedal.

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.

# Wire it up - DC only version

(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.