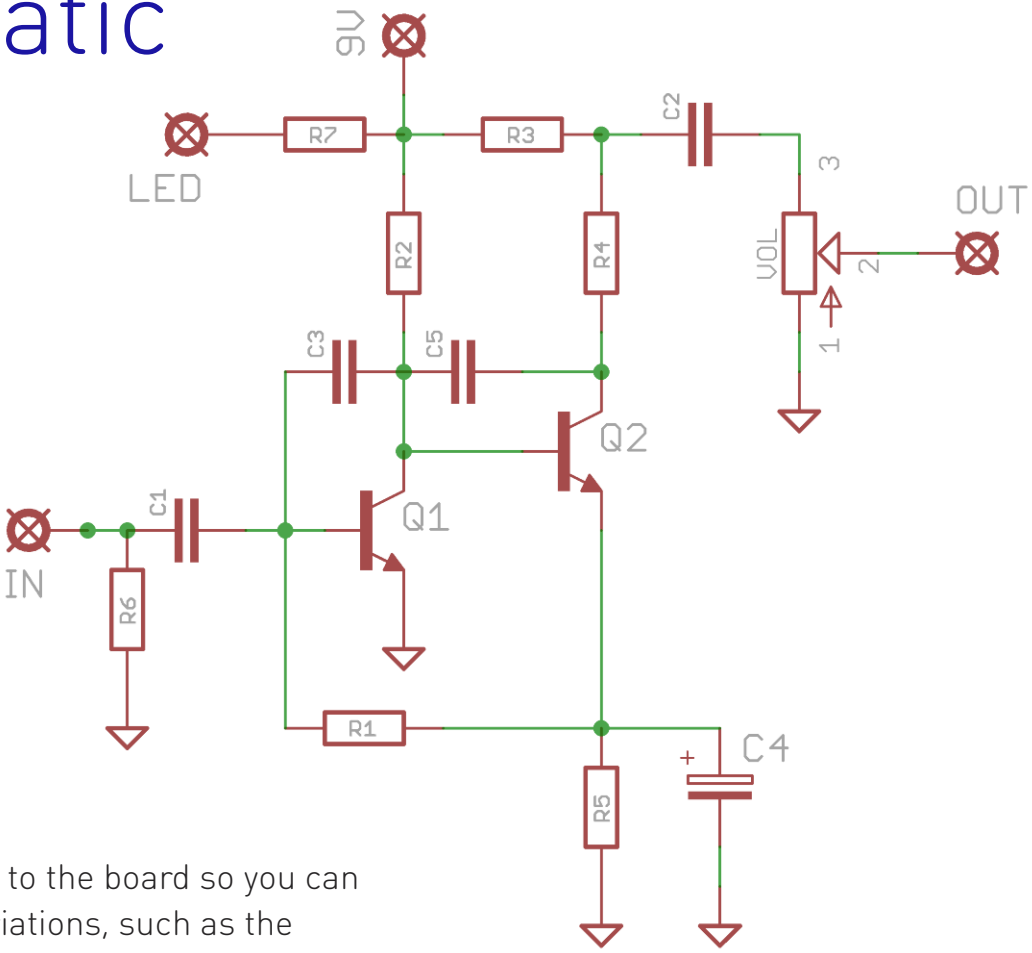
One-Knob Fuzz(es)

A lot of fuzz, a little build

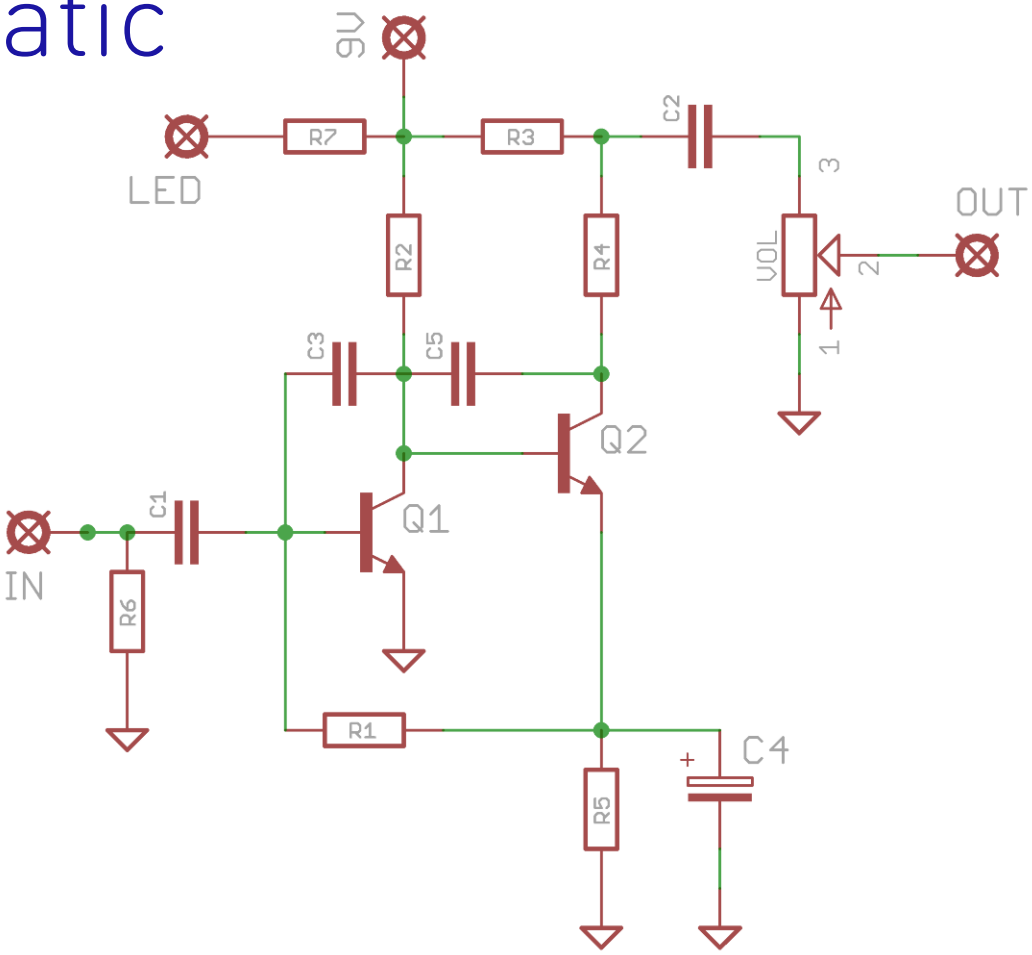
Schematic + BOM



*C5 has been added to the board so you can make even more variations, such as the THUG, or just to tame some top end fizz on any of the circuits below. Add your choice of small cap - (47p - 470p).

COLORSOUND		66BALLS		FUZZBLOOD		CEREMONY	
R1	150K	R1	47K	R1	100K	R1	150K
R2	10K	R2	10K	R2	47K	R2	10K
R3	820R	R3	1K	R3	100R	R3	820R
R4	2K2	R4	8K2	R4	5K6	R4	2k
R5	1K	R5	1K	R5	1K	R5	1K
R6	1M	R6	1M	R6	1M5	R6	1M
R7	2K2 (CLR)	R7	2K2 (CLR)	R7	2K2 (CLR)	R7	2K2 (CLR)
C1	100n	C1	220n	C1	100n	C1	680n
C2	220n	C2	6n8	C2	100n	C2	220n
C3	220p	C3	220p	C3	220p	C3	150p
C4	10u	C4	22u	C4	10u	C4	10u
Q1	BC109	Q1	BC109	Q1	2N2222A	Q1	2N2222A
Q2	BC108	Q2	BC108	Q2	2N2222A	Q2	2N2222A
VOL	500KA	VOL	500KA	VOL	500KA	VOL	500KA

Schematic + BOM



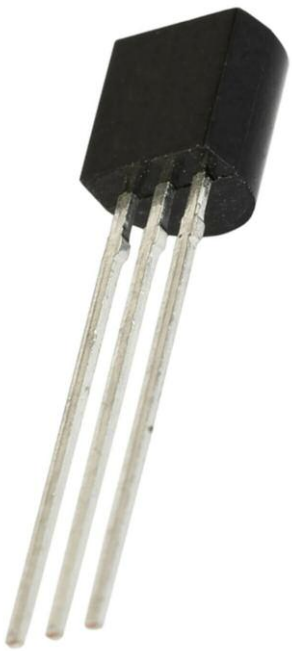
THUG

R1	120K
R2	18K
R3	820R
R4	4K7
R5	1K
R6	1M
R7	2K2 (CLR)
C1	10n
C2	22n
C3	470p
C4	10u
C5	47p
Q1	2N3904
Q2	BC182L*
VOL	500KB

THUG DARK

R1	120K
R2	18K
R3	820R
R4	4K7
R5	1K
R6	1M
R7	2K2 (CLR)
C1	47n
C2	100n
C3	470p
C4	10u
C5	47p
Q1	2N3904
Q2	BC182L*
VOL	500KB

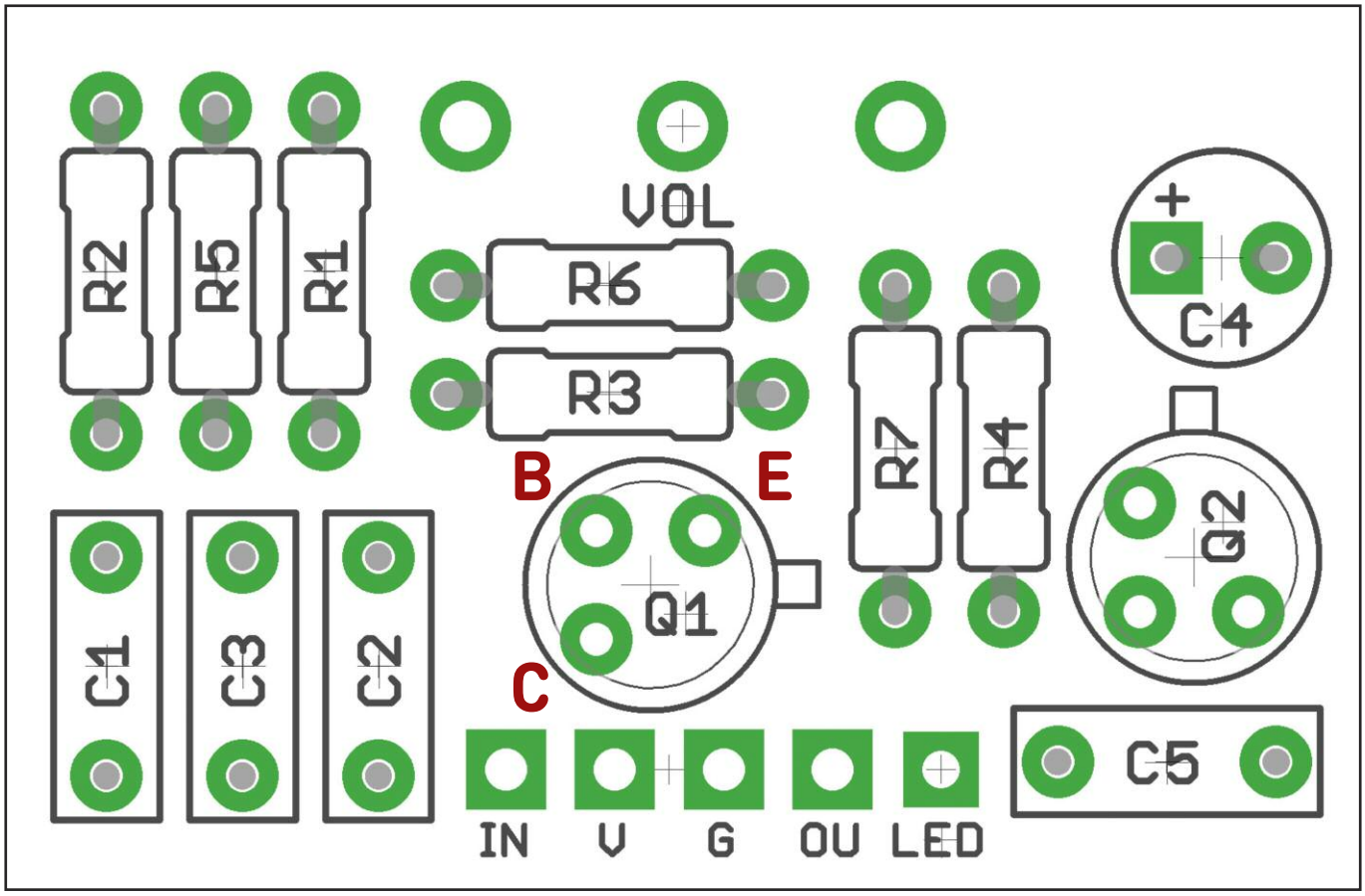
The BC182L has a different pinout to most of the other transistors used in the OKF circuits. You'll have to twist the legs to swap the Base and Collector >>>>



E C B

needs to be

E B C



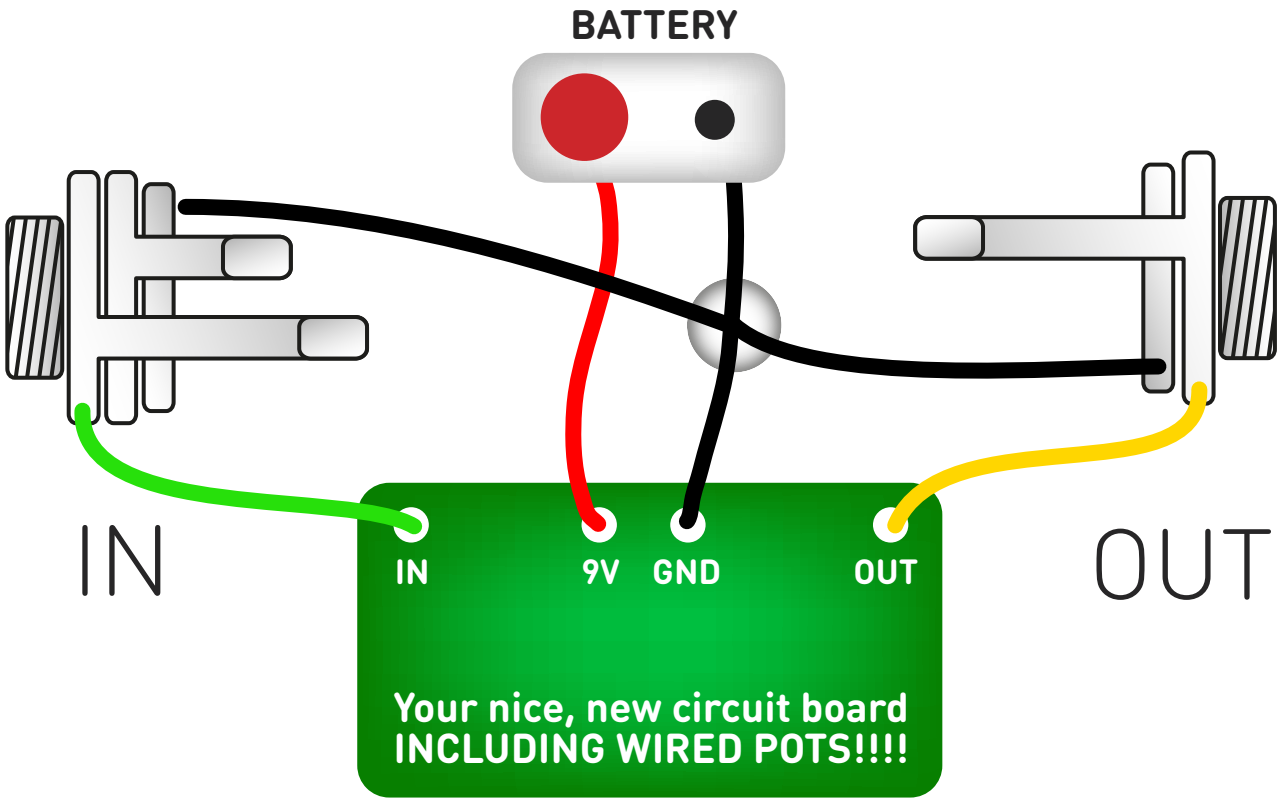
The power and signal pads on the PCB conform to the FuzzDog Direct Connection format, so can be paired with the appropriate daughterboard for quick and easy offboard wiring.

Be very careful when soldering the transistors. 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). Check your pinout if you're using transistors different to those listed overleaf. Pins are marked above.

The long leg (anode) of the electrolytic capacitor goes into the square pad.

Snap the small metal tag off the pot so it can be mounted flush in the box.

Test the board!



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

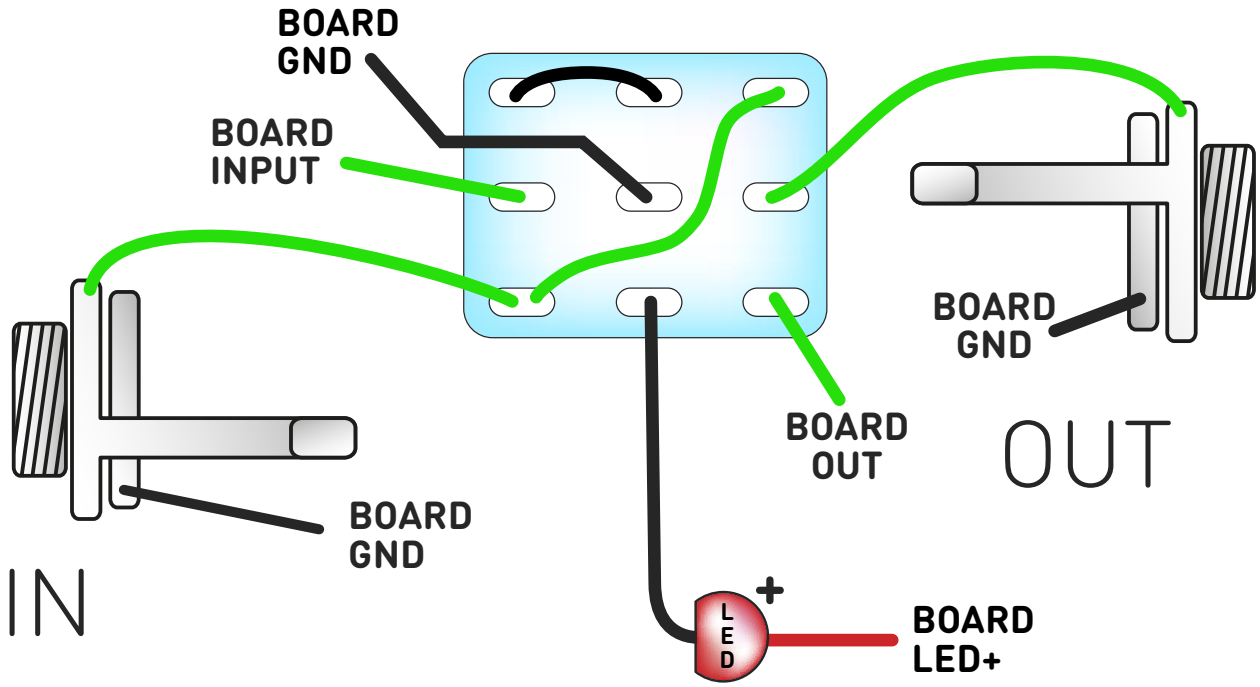
Once you've finished the circuit it makes sense to test is before starting on the switch and LED wiring. It'll cut down troubleshooting time in the long run. If the circuit works at this stage, but it doesn't once you wire up the switch - guess what? You've probably made a mistake with the switch.

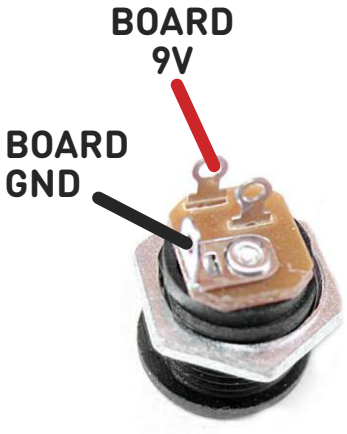
Solder some nice, long lengths of wire to the board connections for 9V, GND, IN and OUT. Connect IN and OUT to the jacks as shown. Connect all the GNDs together (twist them up and add a small amount of solder to tack it). Connect the battery + lead to the 9V wire, same method. Plug in. Go!

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 - DC only version

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



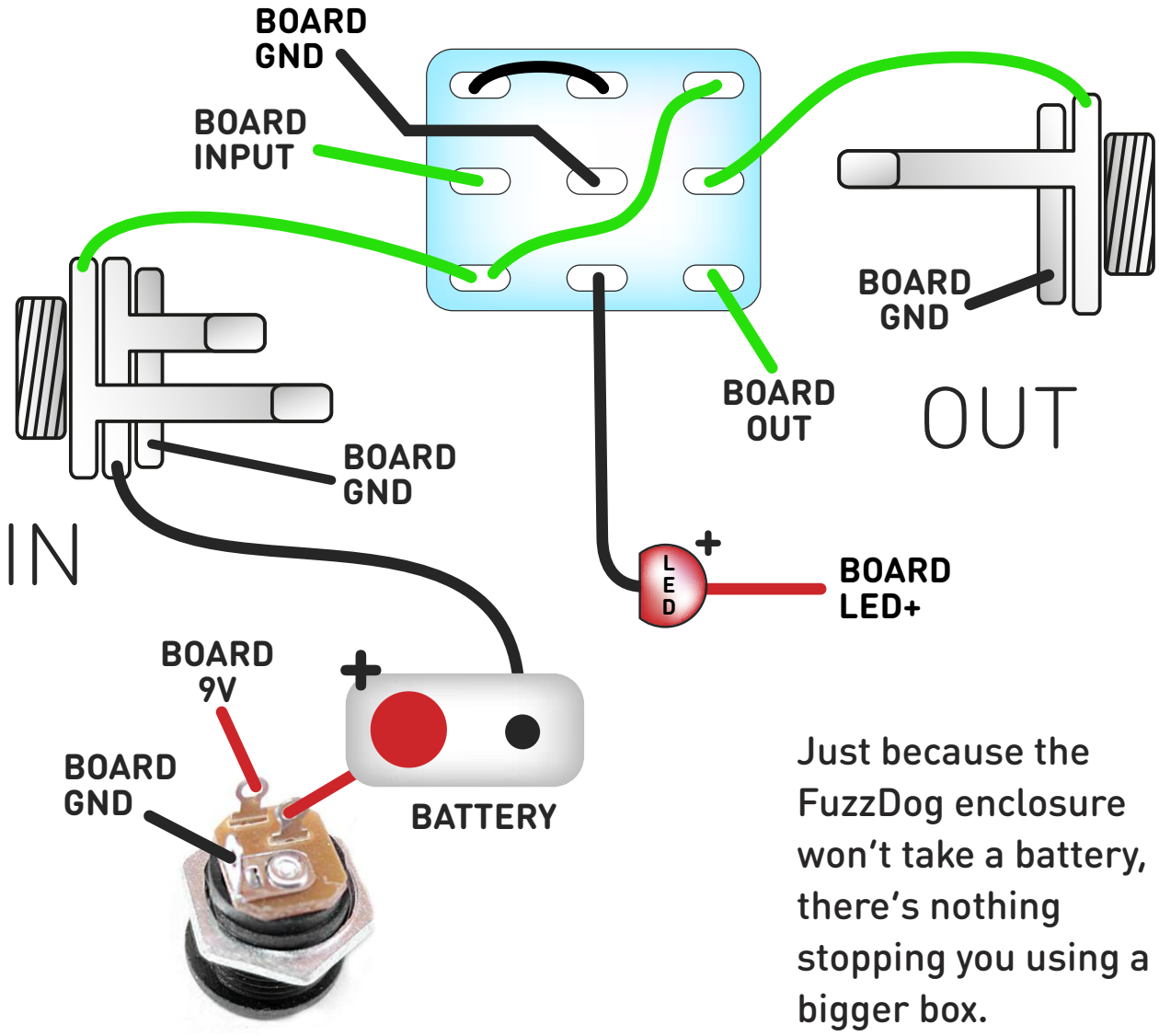


This circuit is standard, Negative GND. Your power supply should be Tip Negative / Sleeve Positive. That's the same as your standard pedals (Boss etc), and you can safely daisy-chain your supply to this pedal.

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.

Wire it up - with battery

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



Just because the FuzzDog enclosure won't take a battery, there's nothing stopping you using a bigger box.

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