

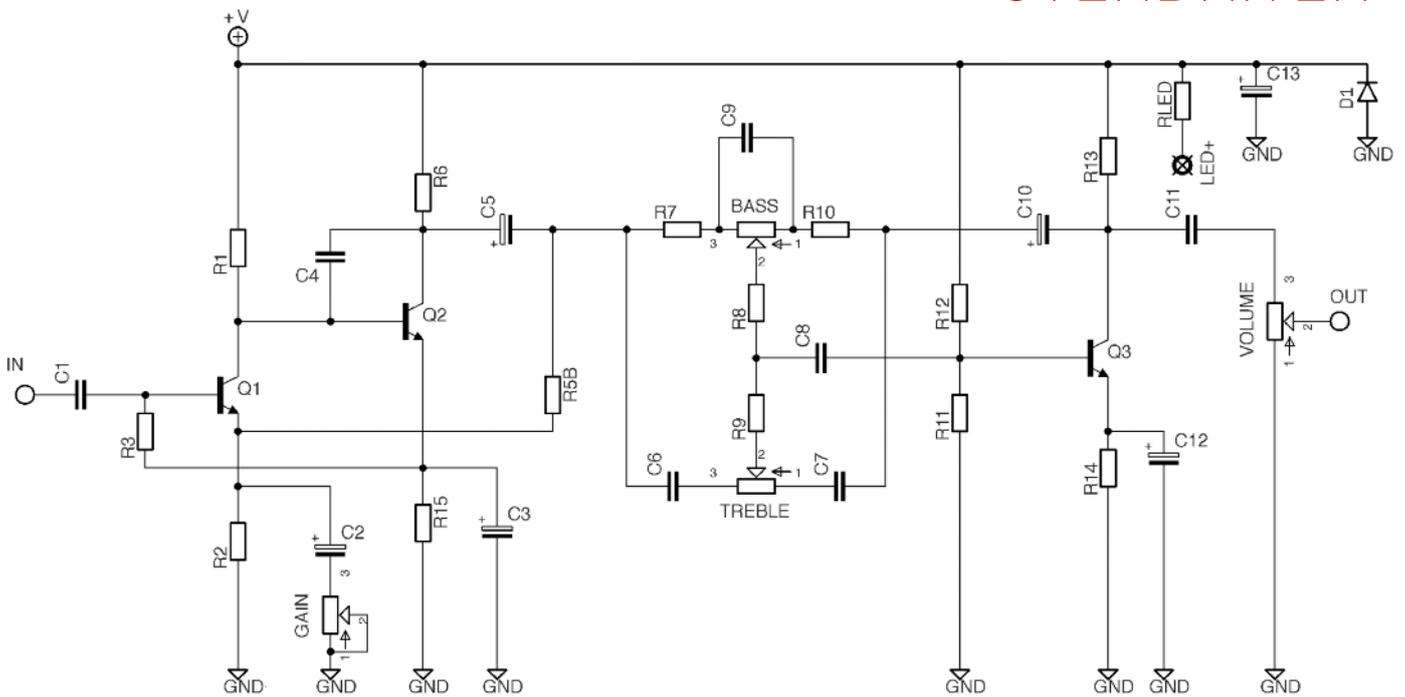
# Vintage POW!

Clone of Colorsound's  
Overdriver / Power Boost

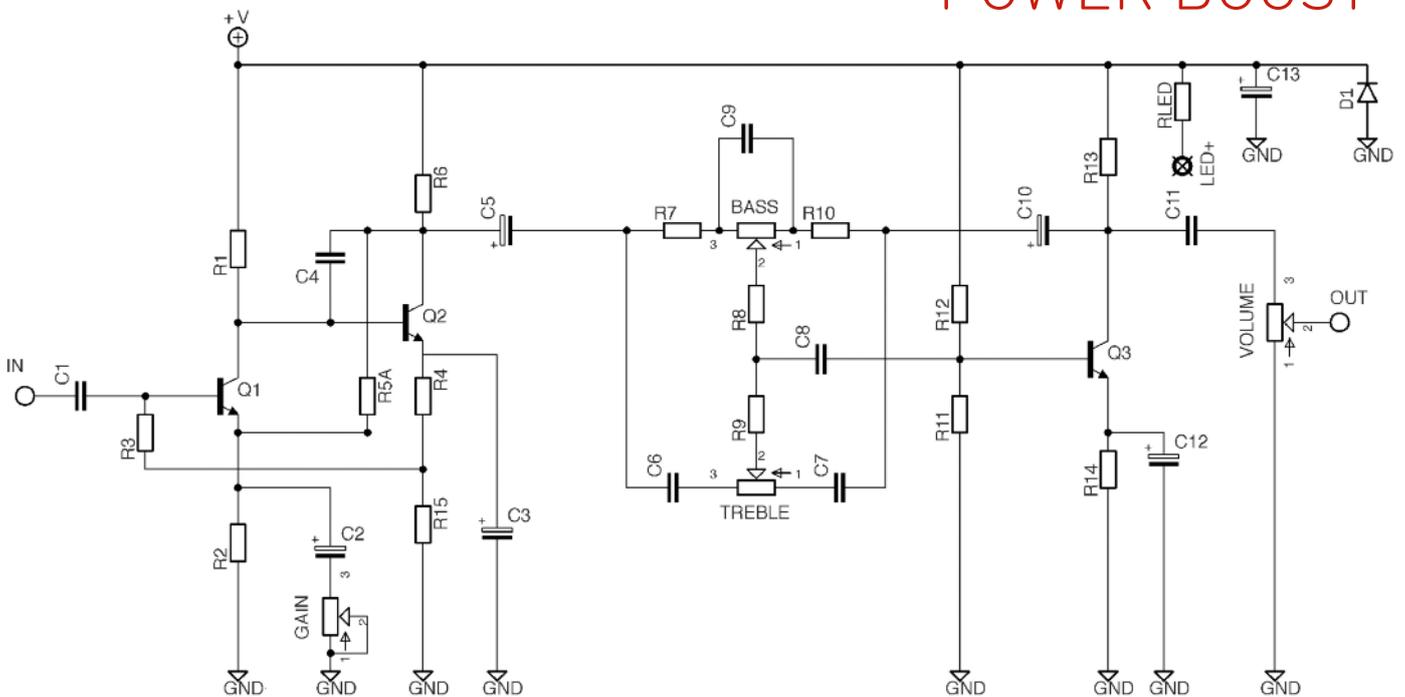
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# Schematics

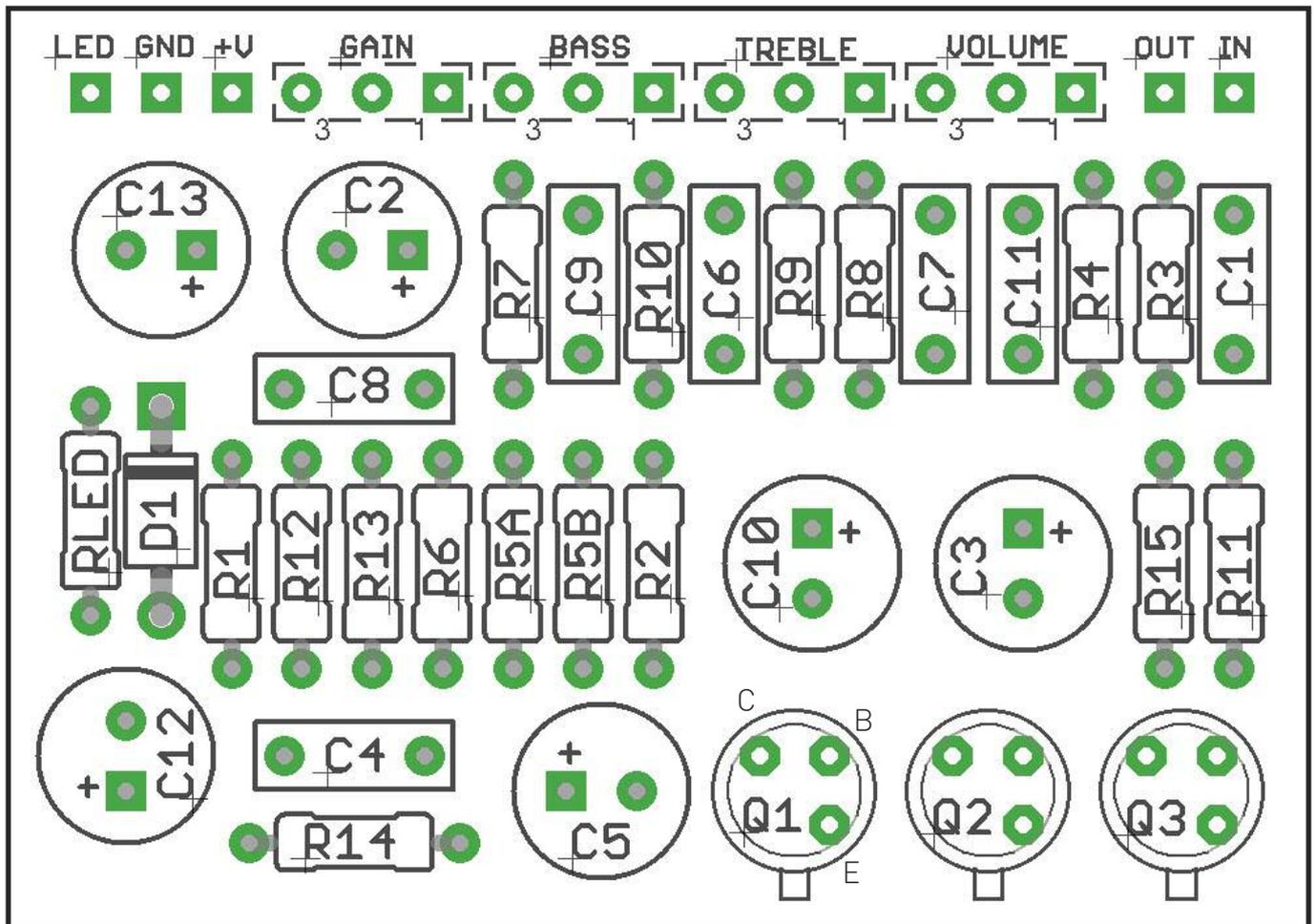
## OVERDRIVER



## POWER BOOST



Subtle differences between the two, in the connections from Q1 and Q2 emitters. Overdriver runs at 9v, Power Boost at 18v (though it works ok at 9v).



\*\*Note position of Base, Emitter and Collector for Q1-3. More about that overleaf.

## BOM

|      | OD     | PB    |     | OD   | PB   |  |
|------|--------|-------|-----|------|------|--|
| R1   | 120K   | 120K  | C1  | 220n | 220n | For R4 in the Overdriver, place a wire across the two pads to join them together |
| R2   | 6K8    | 4K7   | C2  | 22u  | 22u  |  |
| R3   | 150K   | 150K  | C3  | 22u  | 22u  |  |
| R4   | Jumper | 470R  | C4  | 220p | 220p | Q1-3 BC109 or BC169C   |
| R5A  | Empty  | 12K   | C5  | 10u  | 10u  |  |
| R5B  | 12K    | Empty | C6  | 10n  | 10n  |  |
| R6   | 1K8    | 1K8   | C7  | 10n  | 10n  | D1 1N4001  |
| R7   | 4K7    | 4K7   | C8  | 100n | 100n |  |
| R8   | 39K    | 39K   | C9  | 100n | 100n |  |
| R9   | 5K6    | 5K6   | C10 | 10u  | 22u  | DRIVE 5KC*<br>TREB 100KB<br>BASS 100KB<br>VOL 100KA                              |
| R10  | 4K7    | 4K7   | C11 | 220n | 220n |  |
| R11  | 33K    | 33K   | C12 | 22u  | 10u  |  |
| R12  | 150K   | 180K  | C13 | 47u  | 47u  |  |
| R13  | 1K8    | 3K9   |     |      |      |  |
| R14  | 470R   | 1K    |     |      |      |  |
| R15  | 470R   | 1K2   |     |      |      |  |
| RLED | 2K2    | 4K7   |     |      |      |  |

\*Originally 10KB but all the control is bunched in the last couple of degrees of turn. 5KC works much better.

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

Recommended assembly order:  
Resistors, Caps, Transistors, Wires, Pots

I've incorporated the Current Limiting Resistor for the LED into the board for your pleasure.



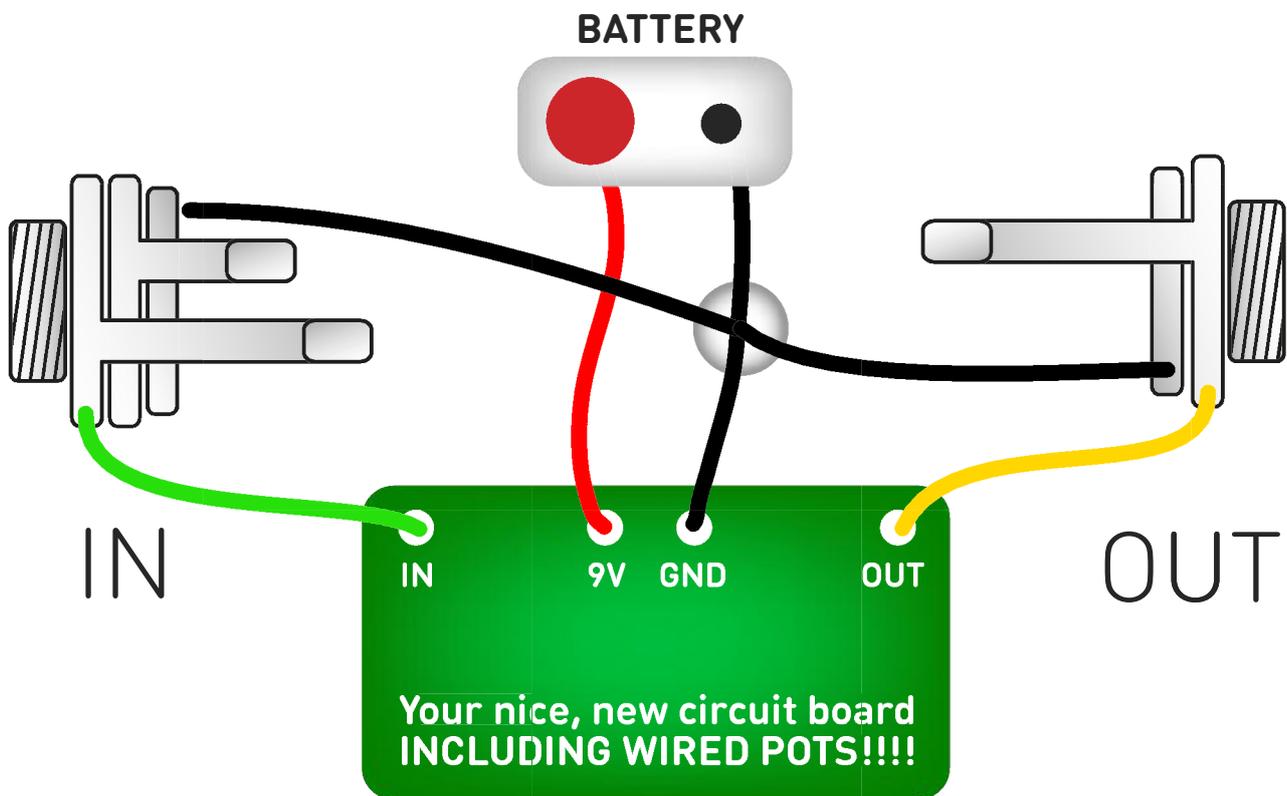
## TRANSISTORS

The board was designed to accommodate BC109 transistors. To use BC169C you'll have to do some leg twisting.

**BC169C pinout >>>>>**



# Test the board!

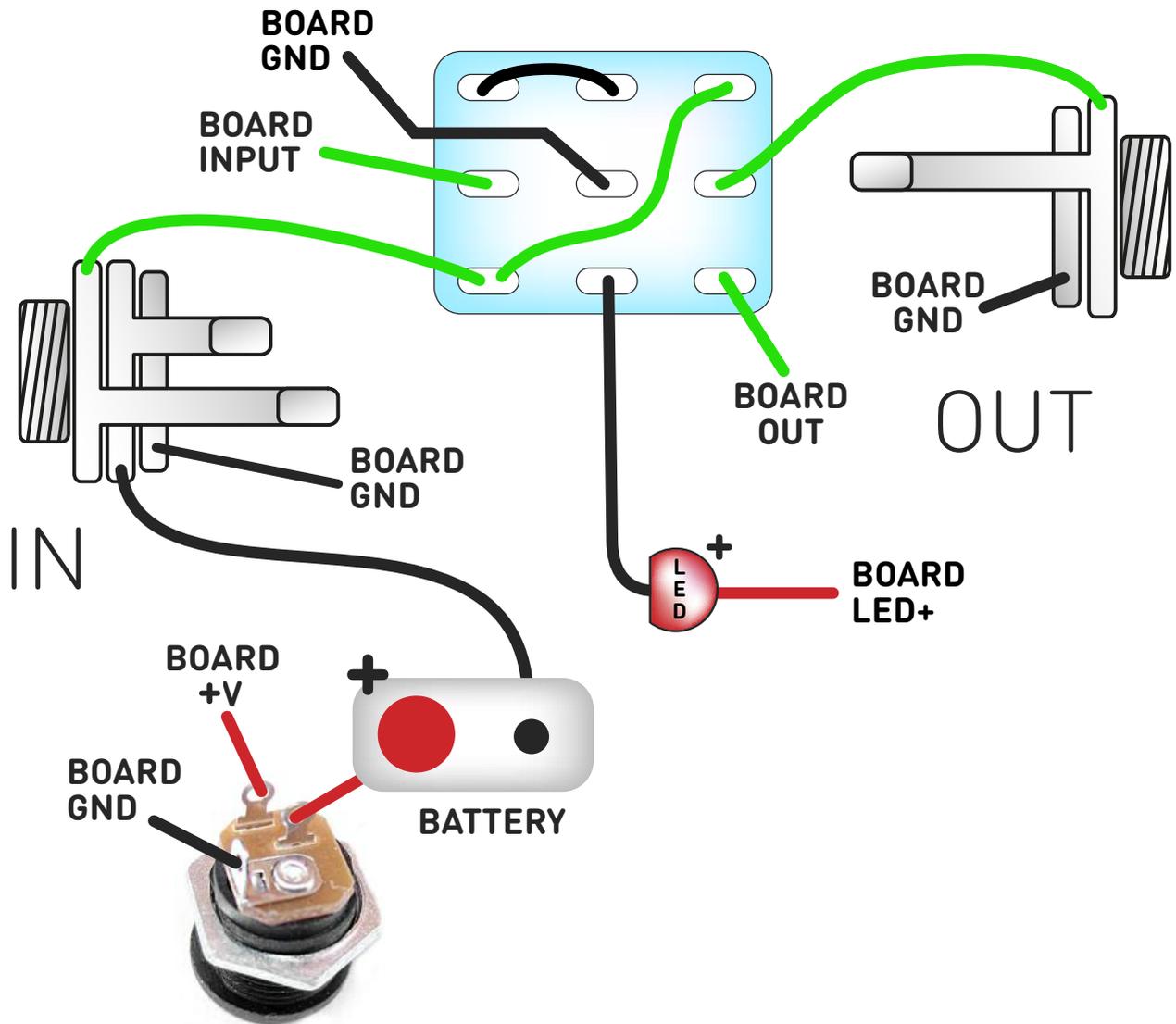


Once you've finished the circuit it makes sense to test it before starting on the switch and LED wiring. It'll cut down troubleshooting time in the long run. If the circuit works at this stage, but it doesn't once you wire up the switch - guess what? You've probably made a mistake with the switch.

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 - Overdriver 9V



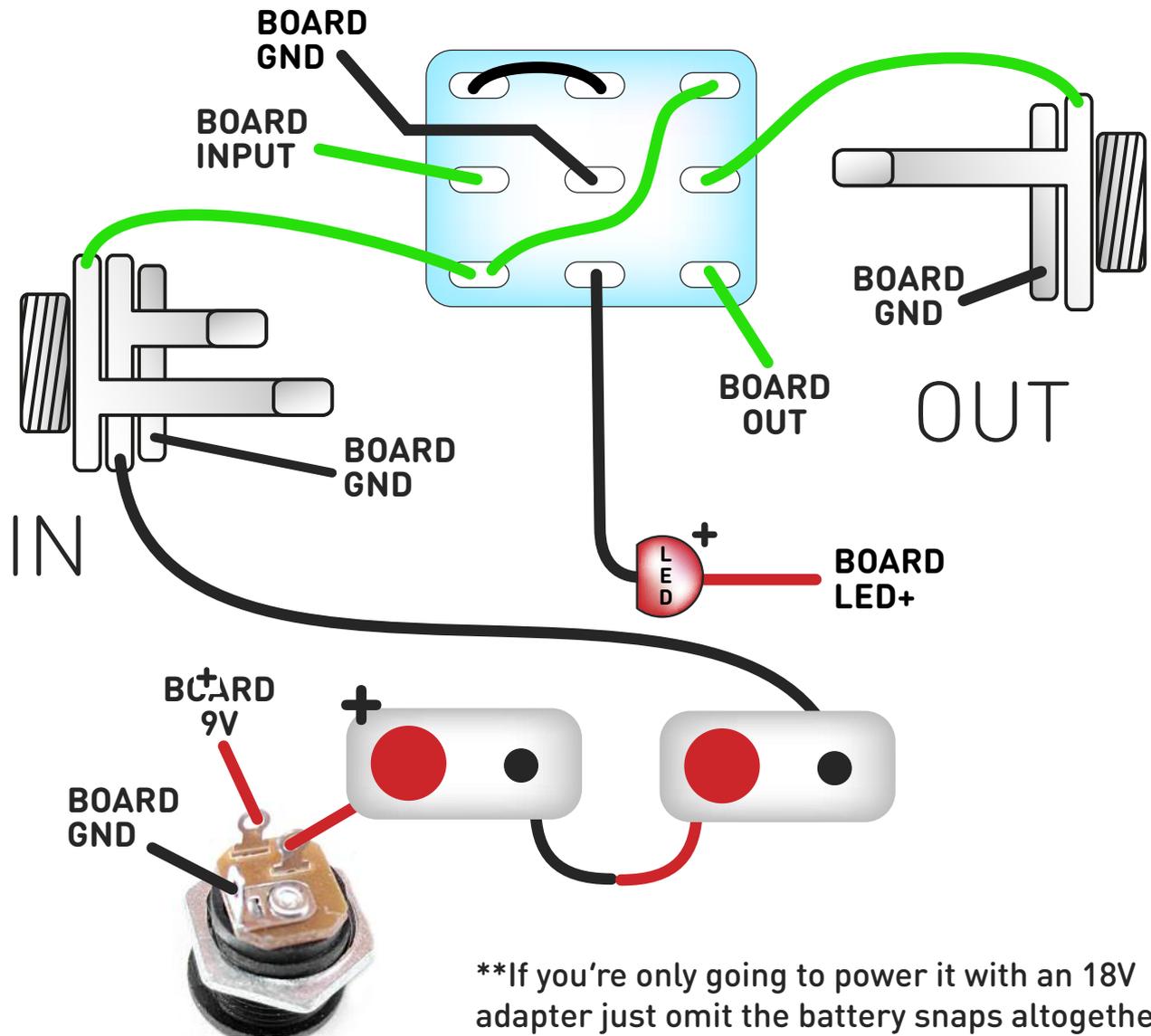
The Board GND connections don't all have to directly attach to the board. You can run a couple of wires from the DC connector, one to the board, another to the IN jack, then daisy chain that over to the OUT jack.

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... GO GET BOOSTED!

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# Wire it up - Power Boost 18V



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... GO GET BOOSTED!

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