

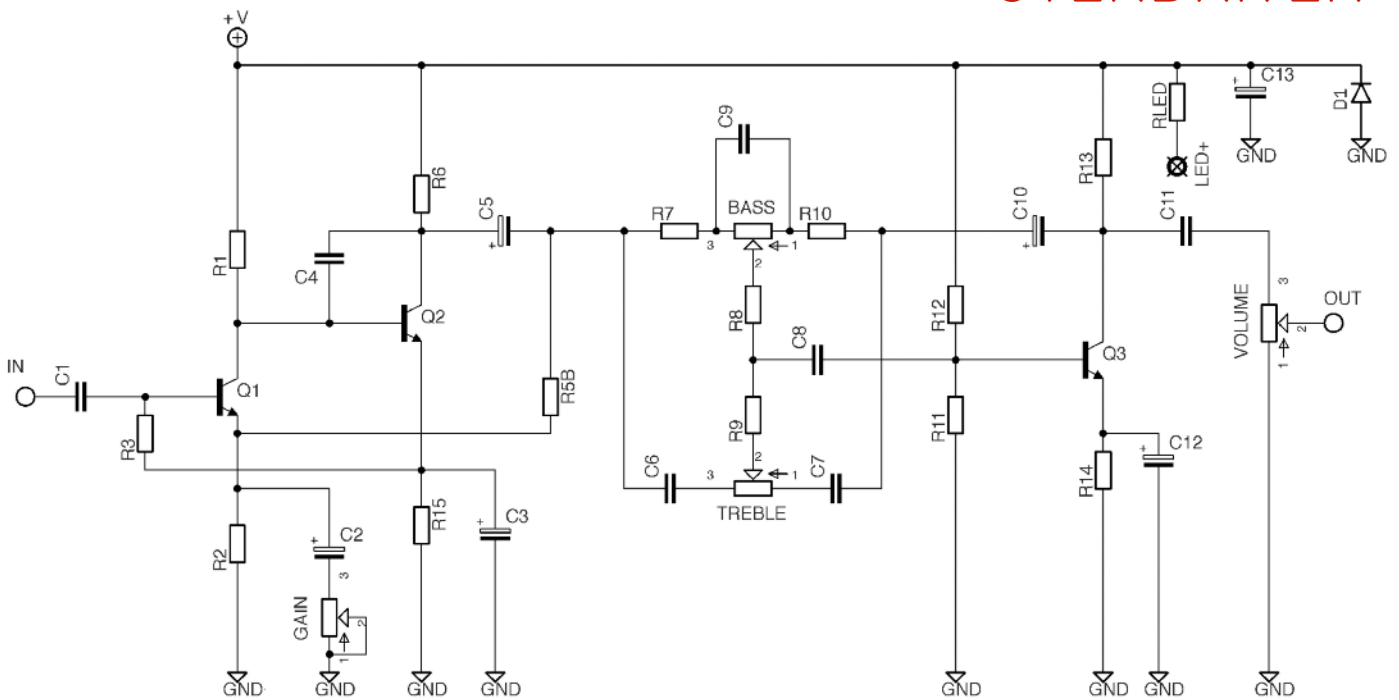
# Vintage POW!

Clone of Colorsound's  
Overdriver / Power Boost

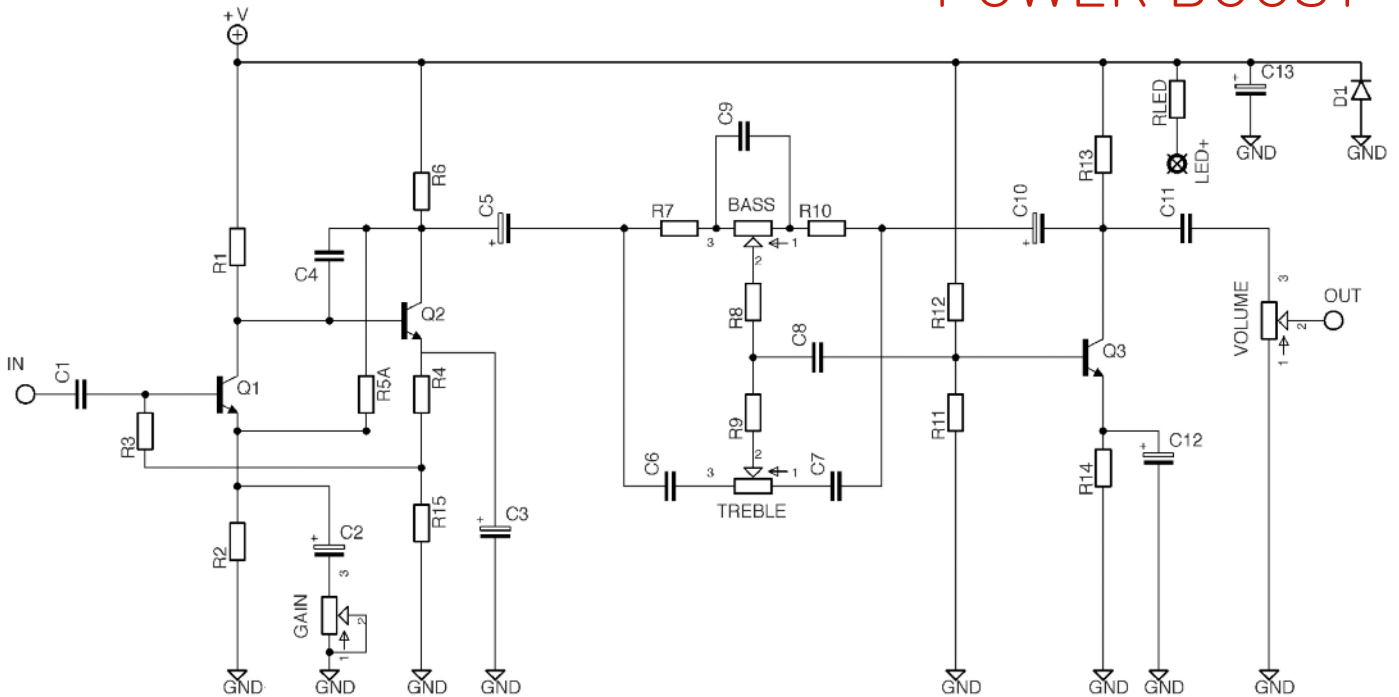
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# Schematics

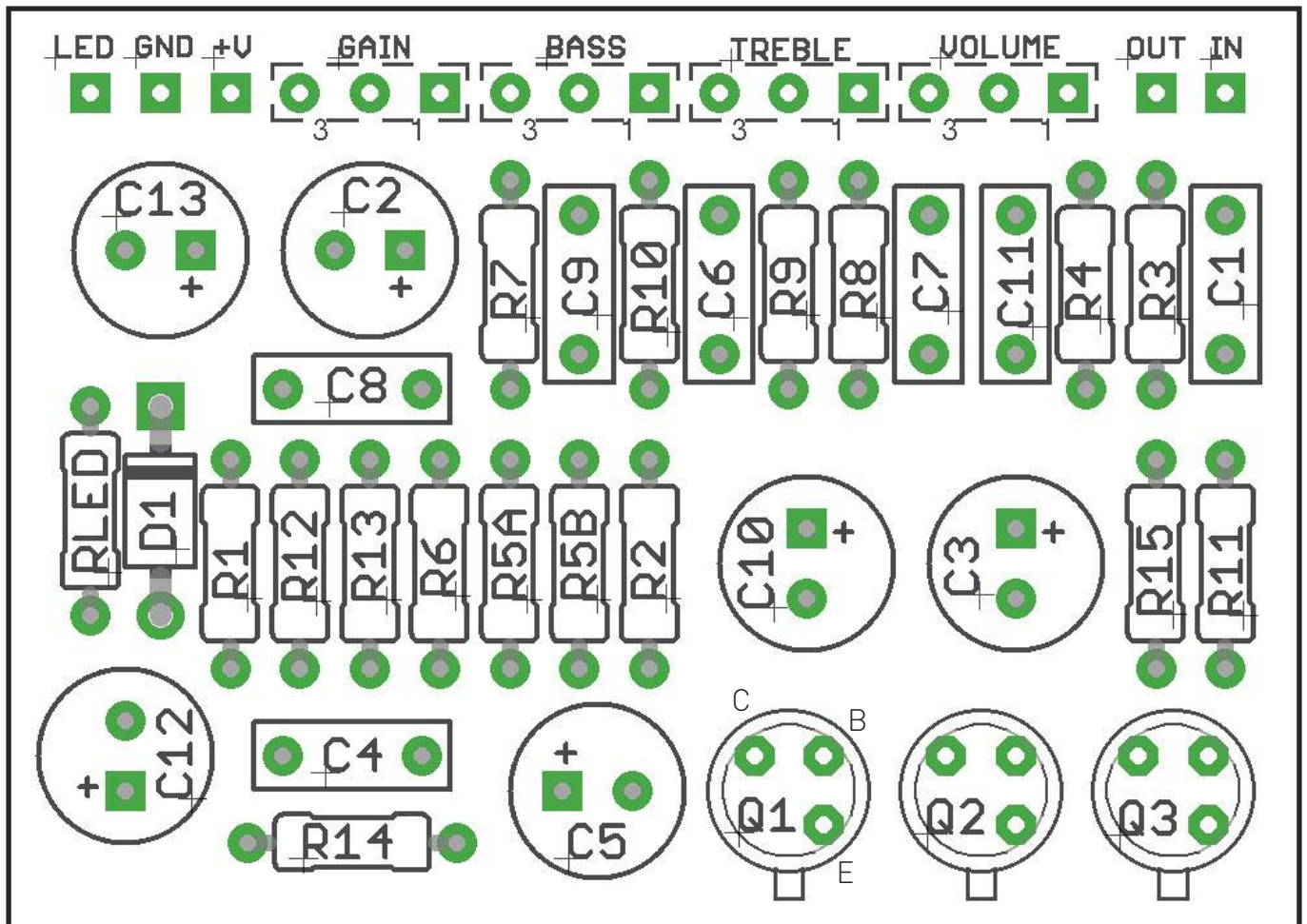
## OVERDRIVER



## 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	Q1-3 BC109 or BC169C
R4	Jumper	470R	C4	220p	220p	
R5A	Empty	12K	C5	10u	10u	D1 1N4001
R5B	12K	Empty	C6	10n	10n	
R6	1K8	1K8	C7	10n	10n	DRIVE 5KC*
R7	4K7	4K7	C8	100n	100n	
R8	39K	39K	C9	100n	100n	TREB 100KB
R9	5K6	5K6	C10	10u	22u	BASS 100KB
R10	4K7	4K7	C11	220n	220n	VOL 100KA
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.

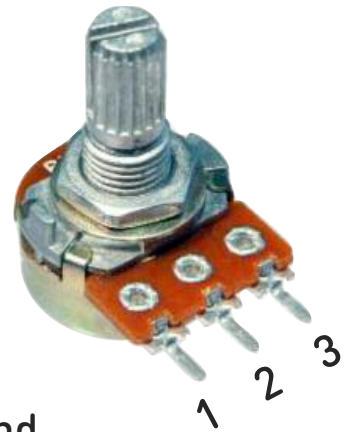
Wiring shown overleaf will disconnect the battery when you remove the jack plug from the input, and also when a DC plug is inserted.

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.



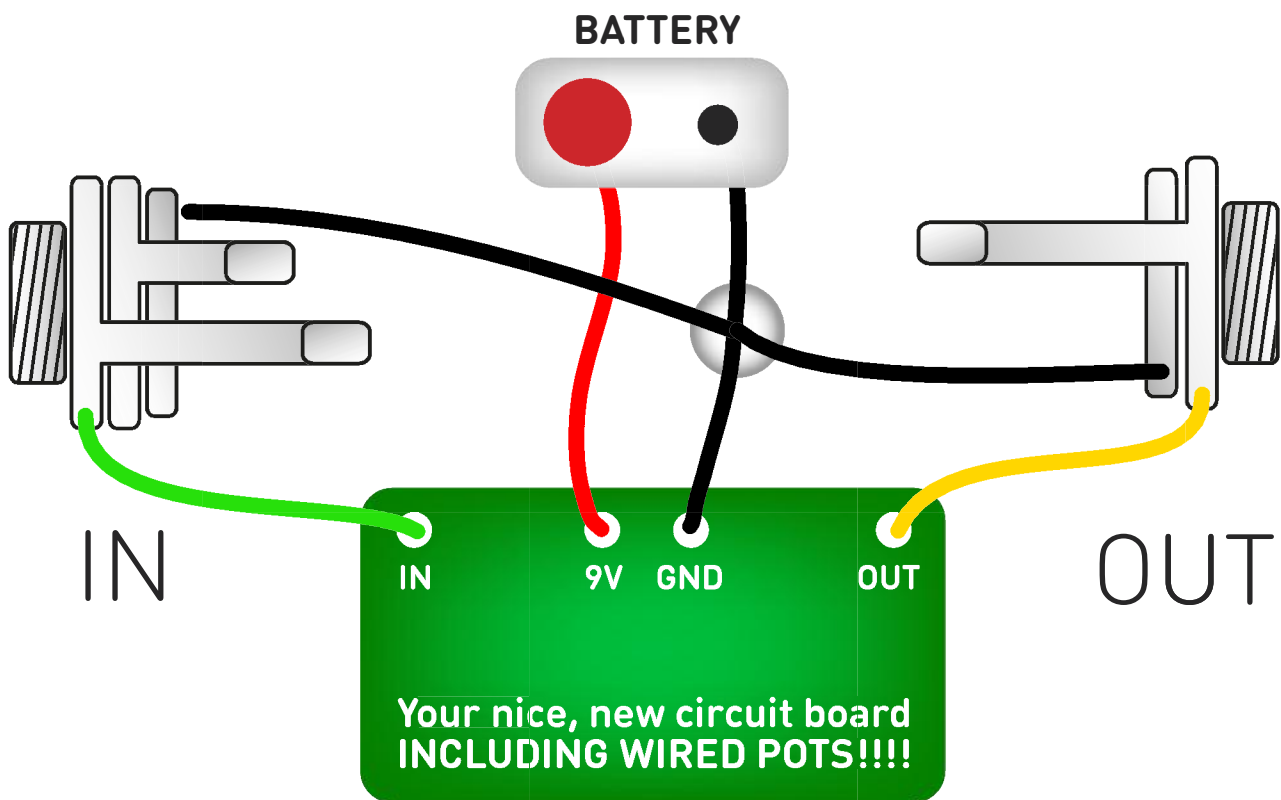
## TRANSISTORS

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

**BC169C pinout >>>>>**



# Test the board!

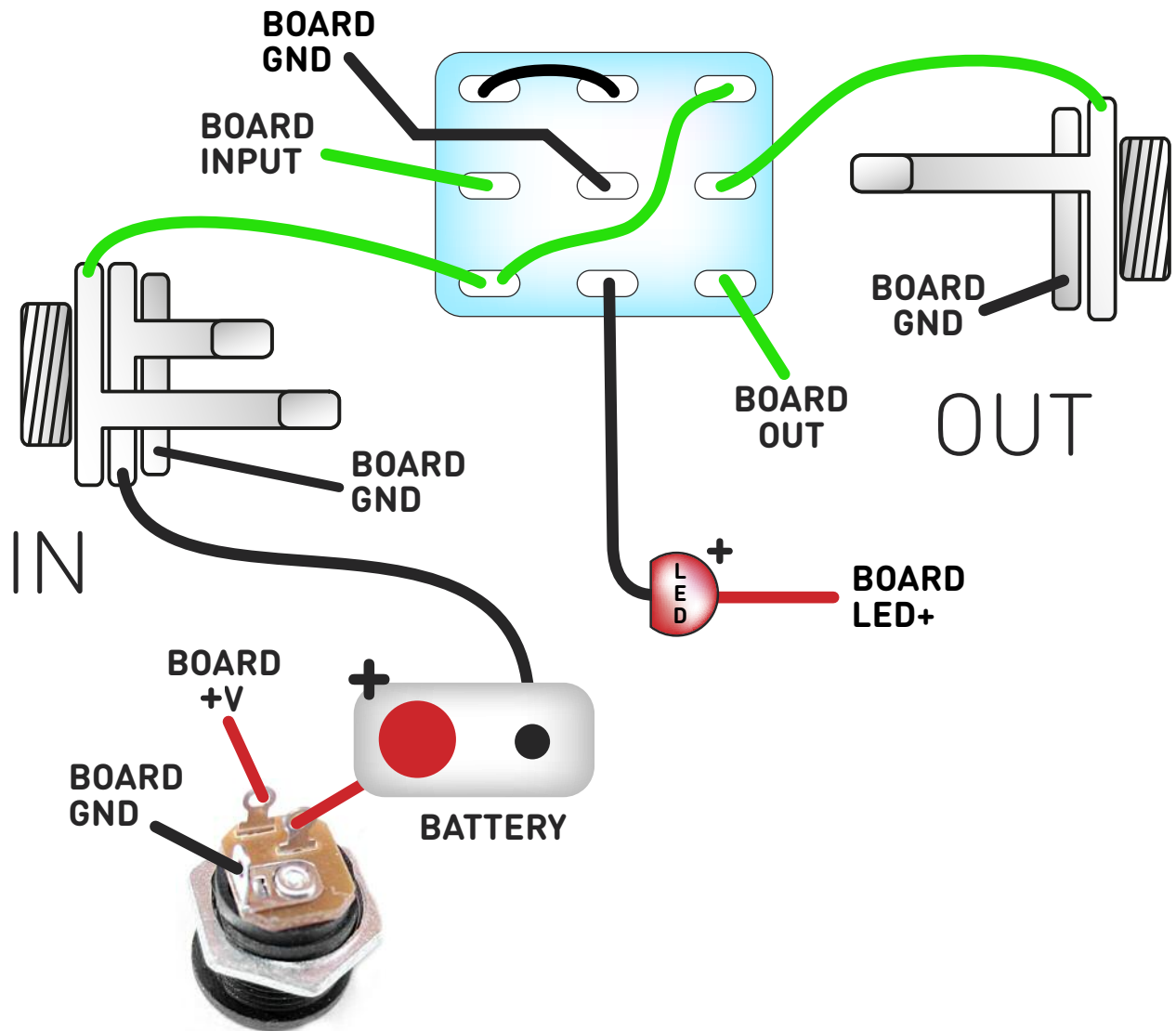


Once you've finished the circuit it makes sense to test it before starting on the switch and LED wiring. It'll cut down troubleshooting time in the long run. If the circuit works at this stage, but it doesn't once you wire up the switch - guess what? You've probably made a mistake with the switch.

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



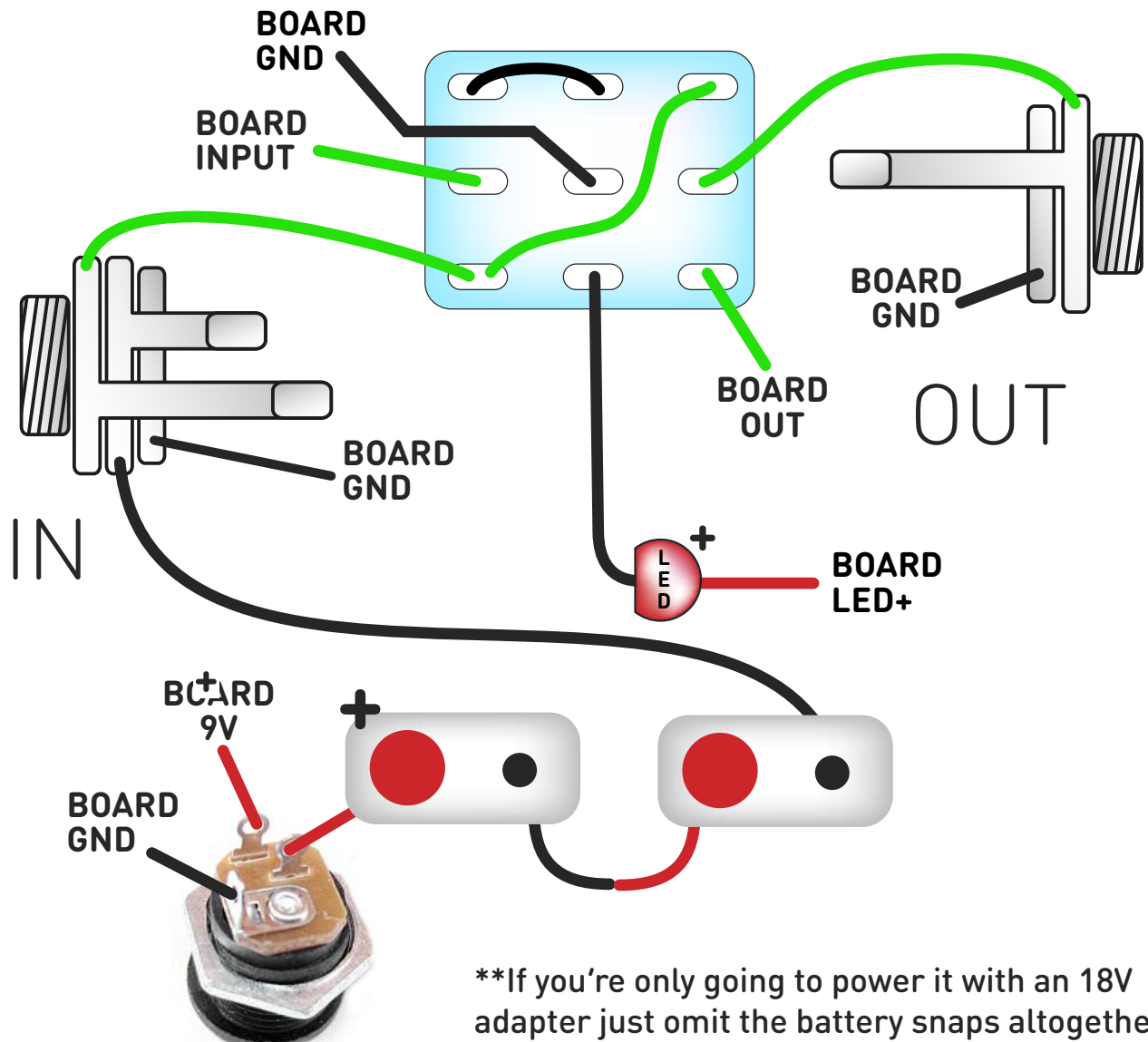
The Board GND connections don't all have to directly attach to the board. You can run a couple of wires from the DC connector, one to the board, another to the IN jack, then daisy chain that over to the OUT jack.

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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