

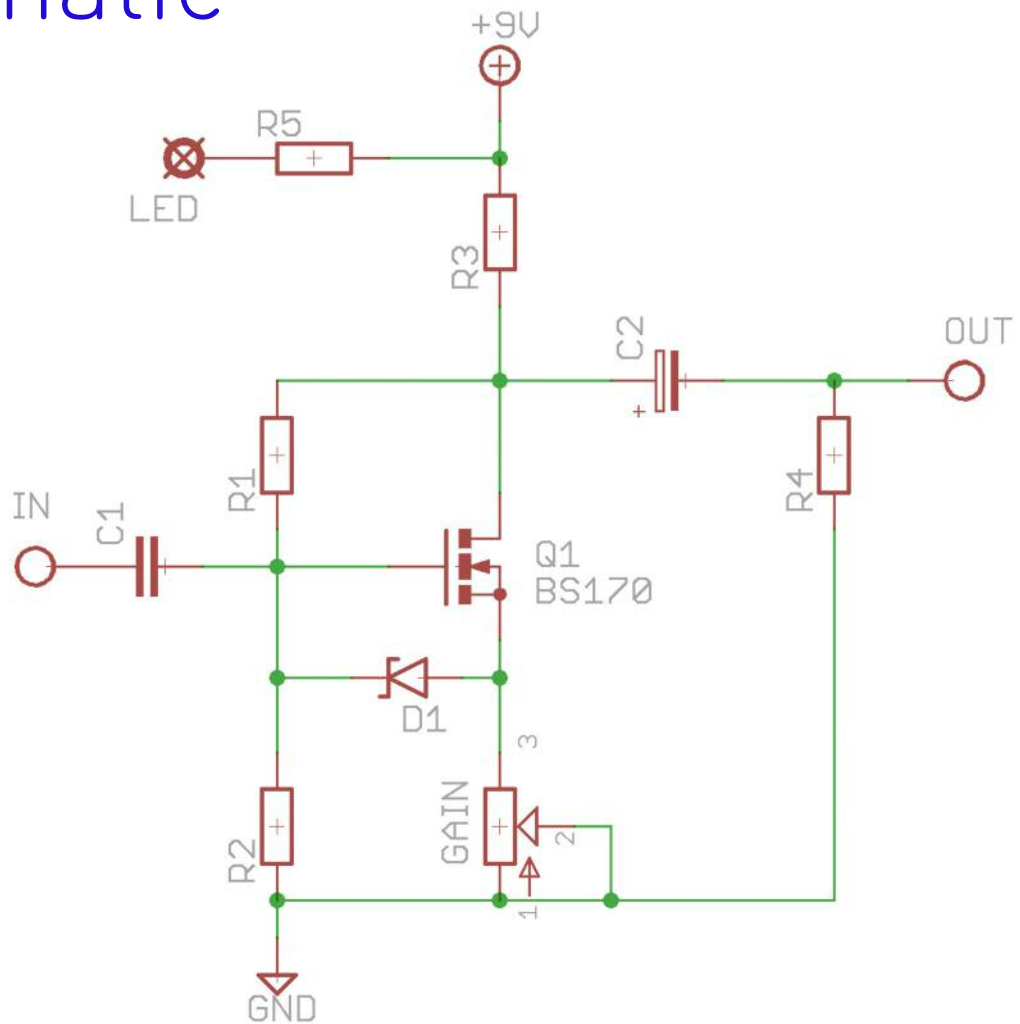


# Boner Boost v2.0

World's best guitar boost?



# Schematic



## BOM

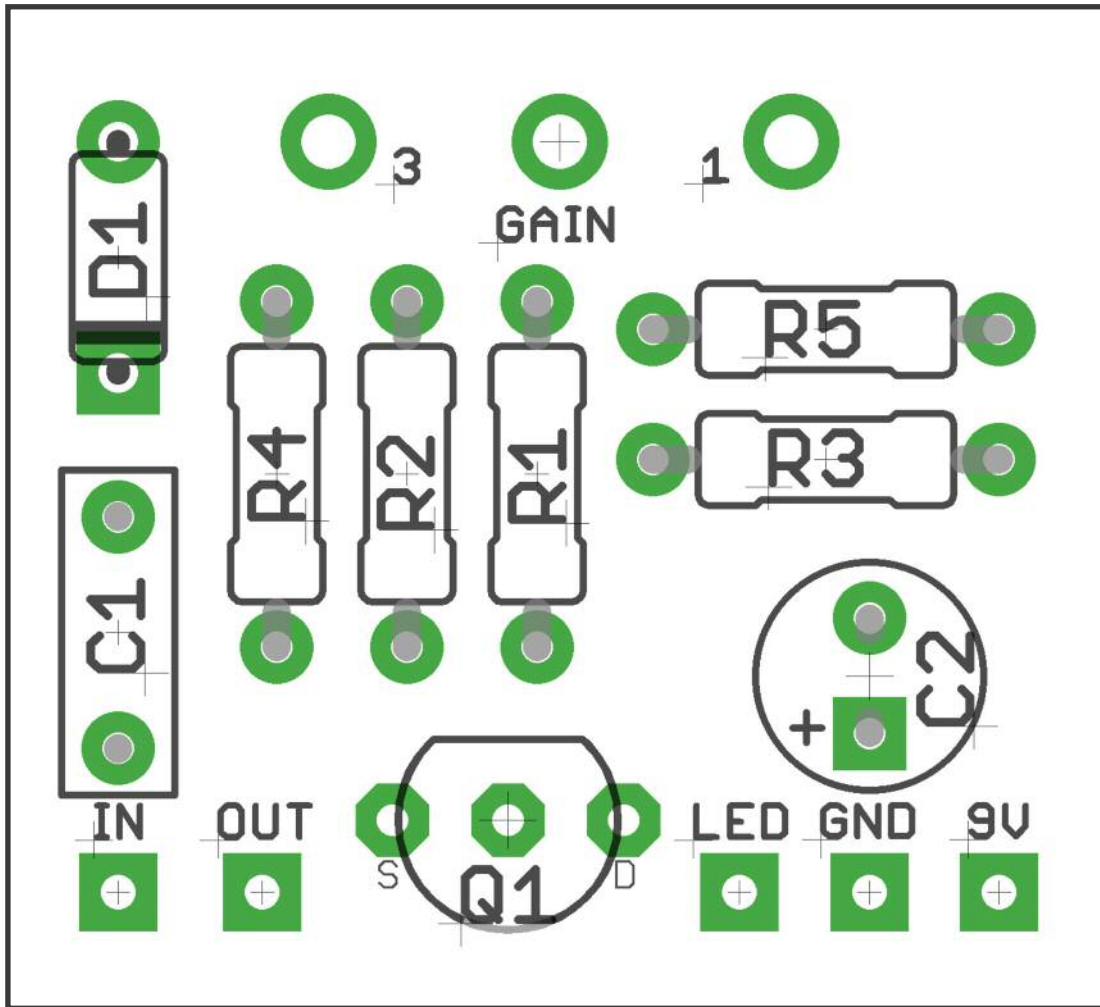
R1,2	10M
R3	5K1
R4	100K
R5	2K2 (CLR)
C1	100n
C2	10u
D1	9.1v zener
Q1	BS170
GAIN	5KC

This lovely little boost can do a lot of things. It'll breath life into tired, weak pickups, and add a bit of zonk to pretty much anything you run through it. From adding a layer of presence to the signal, to full-on overdrive.

The circuit will produce an audible 'crackle' when the knob is turned. That's ok. The BS170 is rebiasing.

Please, please turn it right down when you first plug it in. This babe is capable of some HOT signal output.

V2.0 is the revised version which is less susceptible to static problems.



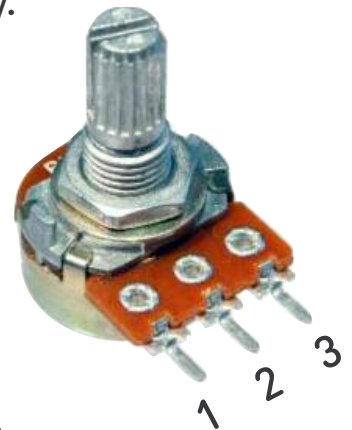
The PCB is designed to have the 'Crackle' pot mounted directly. You can use wire if you like - simply connect the board pads to the corresponding pins on the pot.

At full crank this circuit puts out a LOT of signal, so always start off with the 'crackle' turned right back.

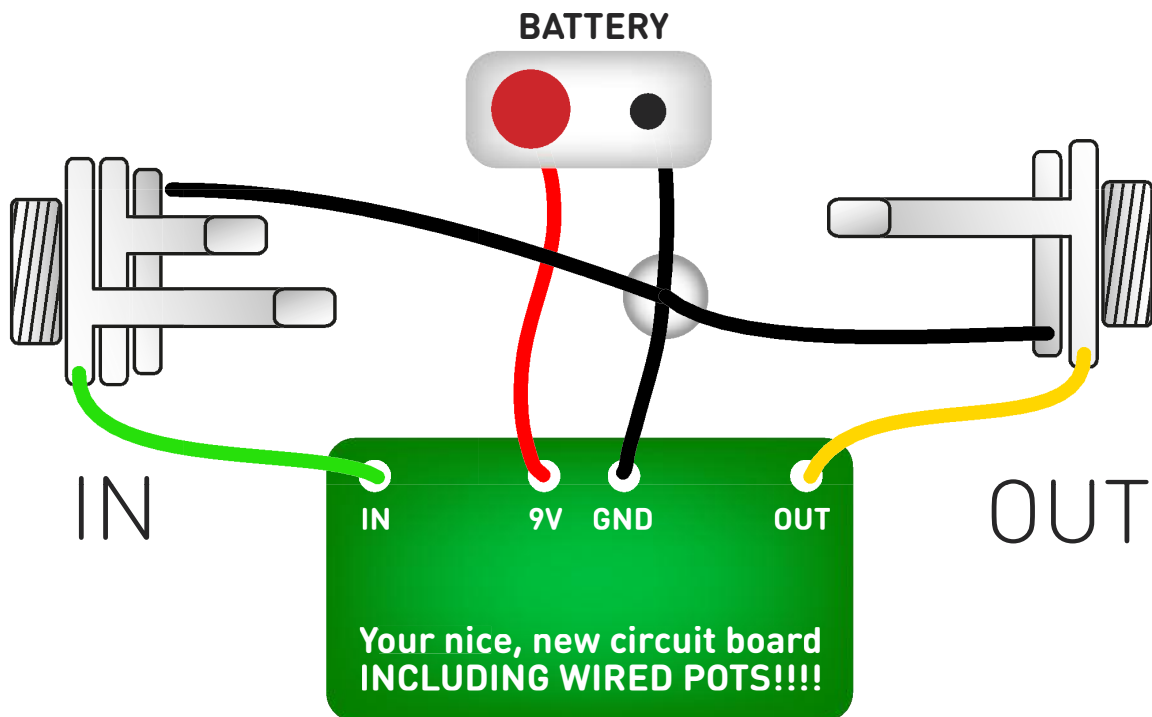
Wiring shown overleaf will disconnect the battery when you remove the jack plug from the input, and also when a DC plug is inserted.

Snap the little metal tag off the pot to mount it flush in the box.

You MUST use some kind of heat sink on the legs of the diode and the BC170 when soldering. They aren't keen on heat. Any more than 3-4 seconds of iron and they're toast.



# Test the board!



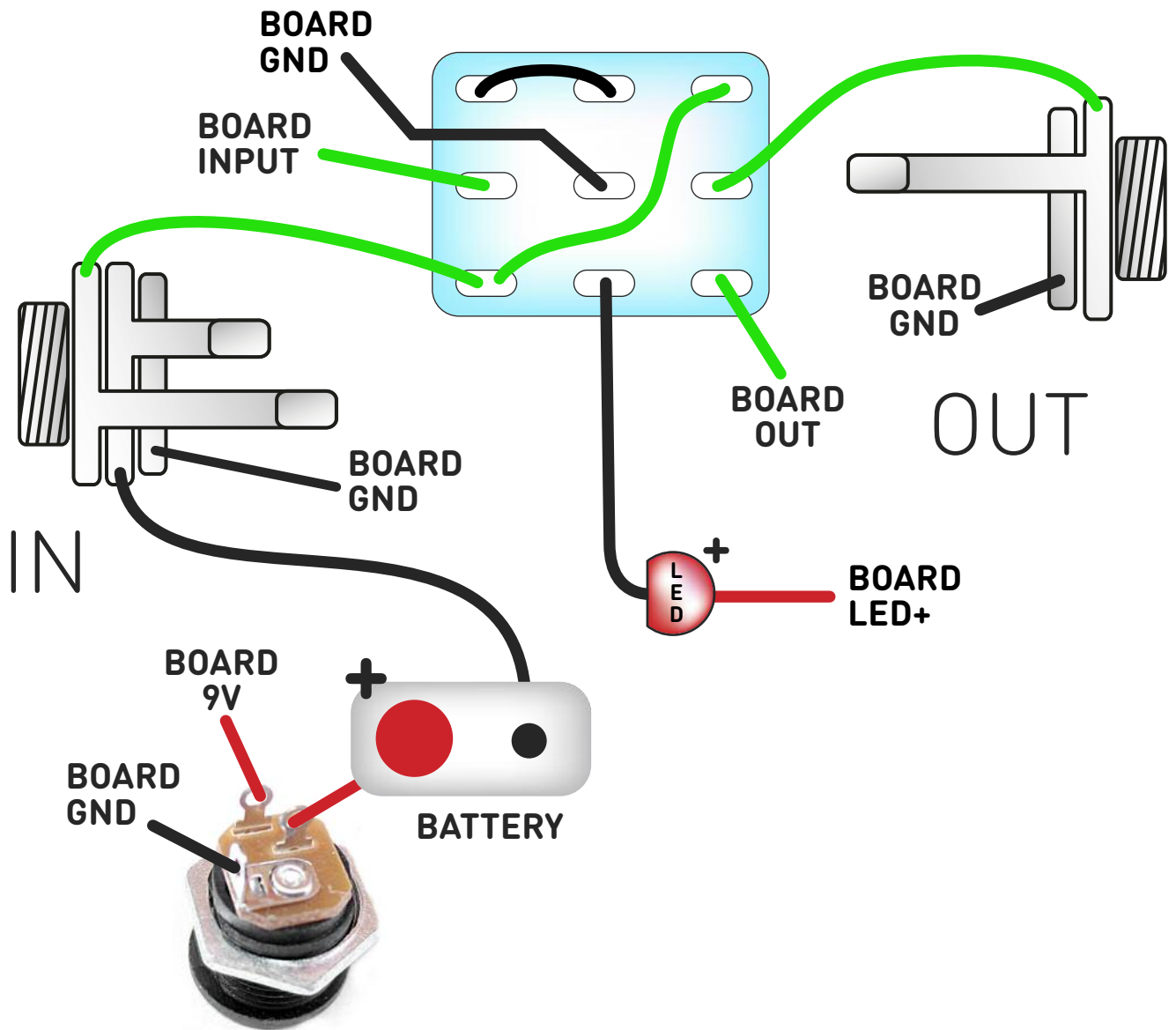
**UNDER NO CIRCUMSTANCES** will troubleshooting help be offered if you have skipped this stage. No exceptions.

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.

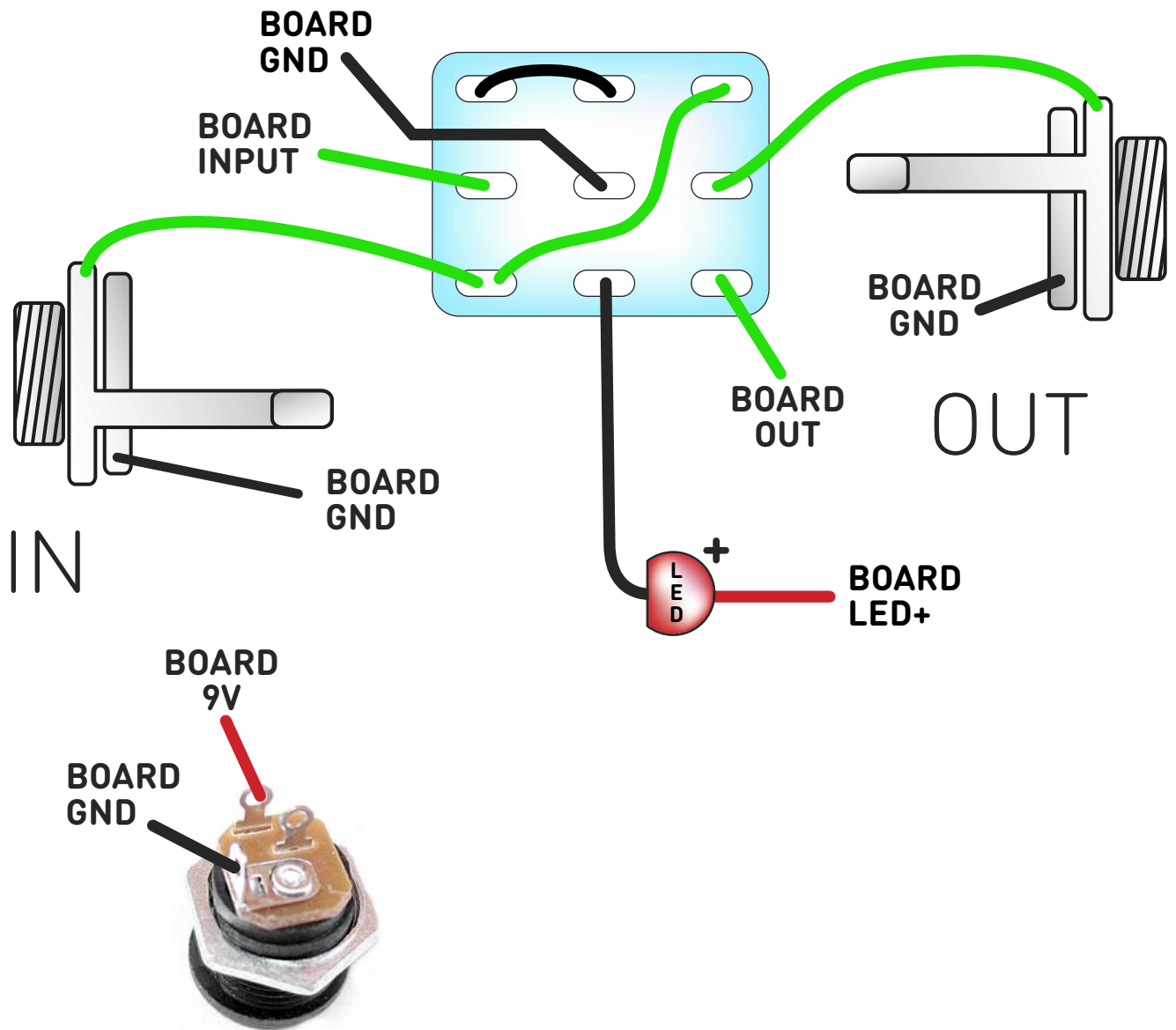
# Wire it up - with battery



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.

[PedalParts.co.uk](http://PedalParts.co.uk)

# Wire it up - DC only



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.

[PedalParts.co.uk](http://PedalParts.co.uk)