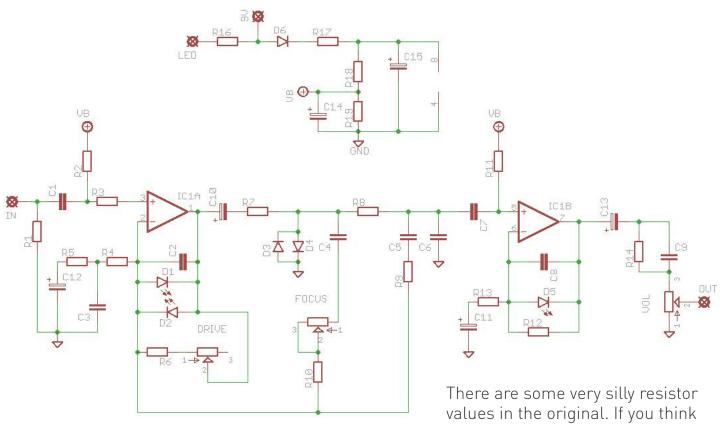


Bee Juice

Dynamic, highly responsive transparent overdrive

PedalParts.co.uk

Schematic



BOM

R1	1 M
R2	360K
R3	6K8
R4	1K
R5	5K6
R6	2K7*
R7	2K
R8	10K
R9	150K
R10	12K**
R11	1M
R12	5K6
R13	2K7***
R14	47K
R16	2K2 (CLR)
R17	51R
R18	47K
R19	47K

4n7
100p
220n
22n
4n7
22n
22n
1n
4n7
1u elec
22u elec
22u elec
1u elec
22u elec
100u elec

*	3K
**	13K7
***	2K61

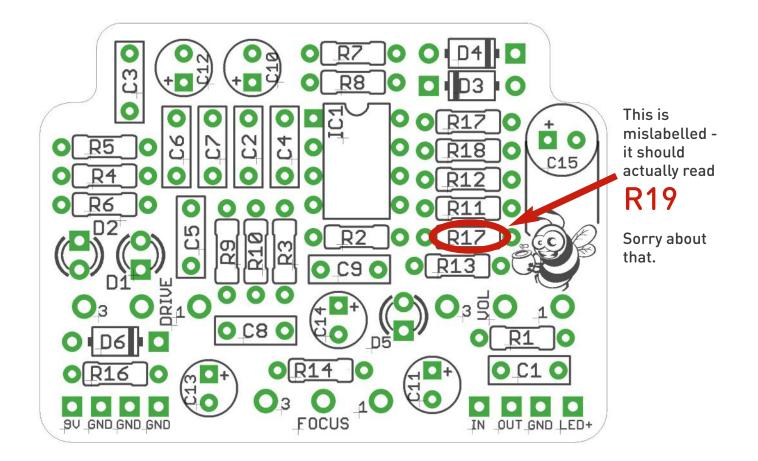
understand why:

R10 should not be placed on the PCB. See overleaf.

it'll make any difference feel free to source them, but since two of them

are in series with pots I can't

IC1	0P275
D1,2	RED 3MM LED
D3,4	1N4007
D5	RED 3MM LED
D6	1N4007
DRIVE	500KA
FOCUS	50KB
VOL	50KB



There is an error on the PCB which requires a small off-board hack.

The spot on the PCB for R10 should be filled with a wire jumper.

R10 should actually be attached between FOCUS pad 2 and pin 2 of the focus pot, as shown on the image on the front page.

Its a good idea to solder in the wires or header pins (if using them) for DRIVE and VOL befor eyou start putting in the LEDs and caps. They'll be easier to get at.

C15 doesn't have to sit flat against the PCB as shown in the picture, but it does give more clearance in the enclosure.

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

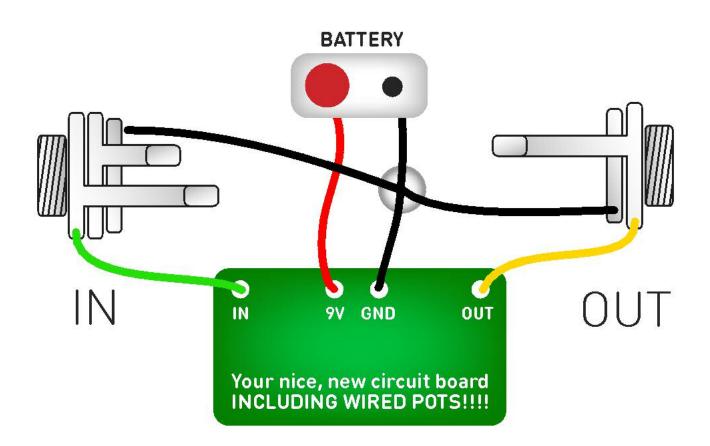
Snap the little metal tag off the pots to mount them flush in the box.

You should use some kind of heat sink on the legs of the LEDs and diodes when soldering. They aren't keen on heat. Any more than a couple of seconds of iron and they're toast.

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



Test the board!



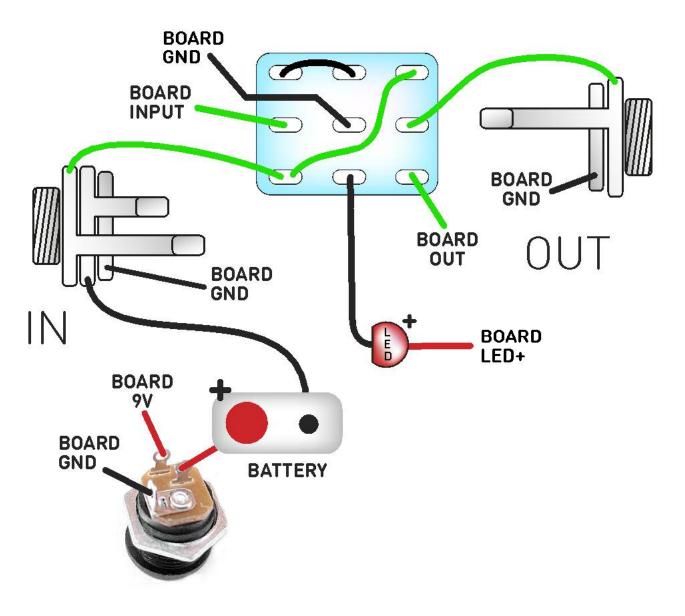
UNDER NO CIRCUMSTANCES will troubleshooting help be offered if you have skipped this stage. No exceptions.

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



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... BBBBBBZZZZZZZZZ!

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