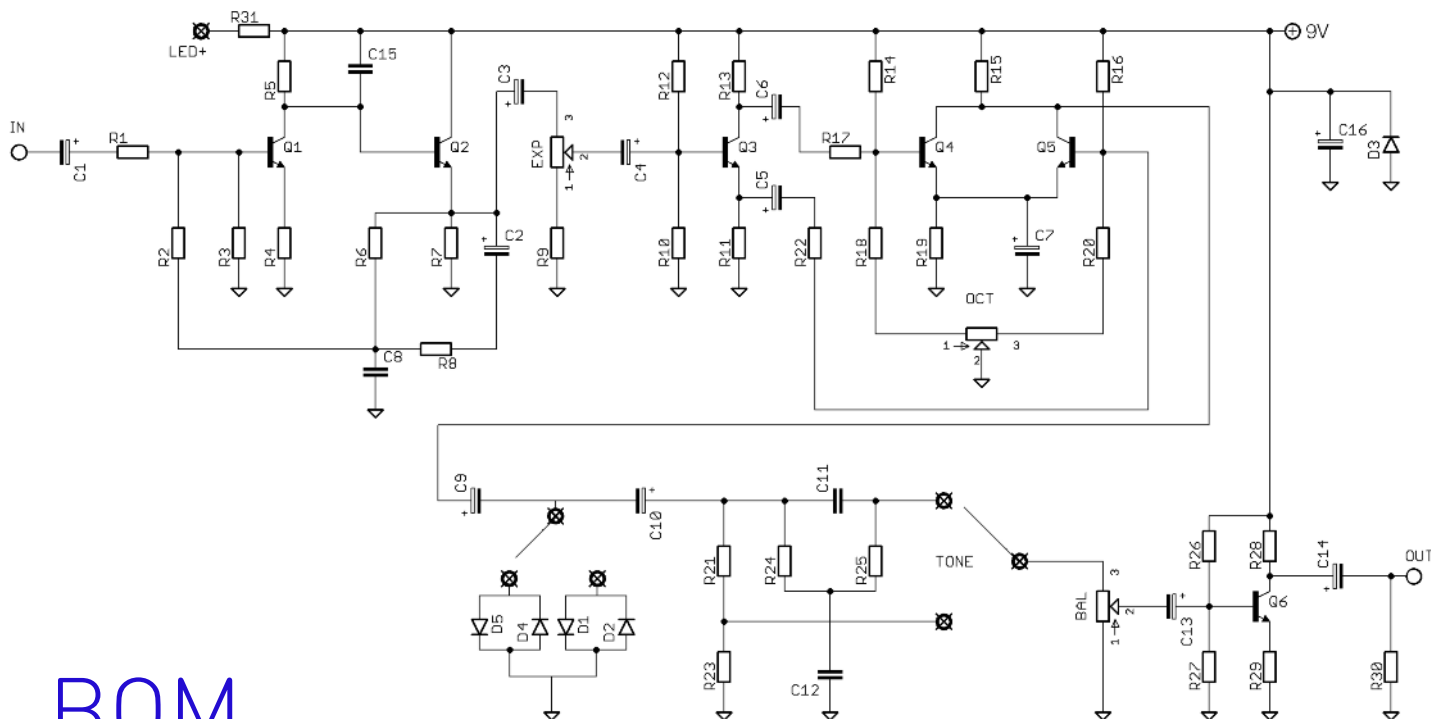


Super Fuzz

Uncompromising
Octave Fuzz

PedalParts.co.uk

Schematic



BOM

R1	22K	R17	470R	C1	10u		
R2	100K	R18	22K	C2	10u		
R3	100K	R19	1K8	C3	10u		
R4	1K8	R20	22K	C4	10u		
R5	47K	R21	47K	C5	10u	Q1-6	2N5088**
R6	470K	R22	470R	C6	10u	D1,2	1N34A
R7	10K	R23	10K	C7	10u	D3	1N4001
R8	47K	R24	22K	C8	100n	D4,5	1N4148***
R9	3K3	R25	10K	C9	10u	OCT	10K TRIM
R10	150K	R26	100K (750K)	C10	10u	EXP	50KB
R11	10K	R27	15K (75K)	C11	1n	VOL	50KB
R12	220K	R28	10K (24K)	C12	100n	TONE	SPDT ON-ON
R13	10K	R29	1K (1K2)	C13	10u	DIODE	SPDT ON-ON
R14	100K	R30	100K	C14	10u		
R15	10K	R31	CLR (2K2)	C15	2n2*		
R16	100K			C16	100u		

Alternative values shown in blue are from the Wattson EFY-6 version of the Superfuzz, giving higher output.

*sometimes shown as 1n

**any low-ish gain NPN silicon transistors can be experimented with, i.e. 2N222A, 2N3904, BC107

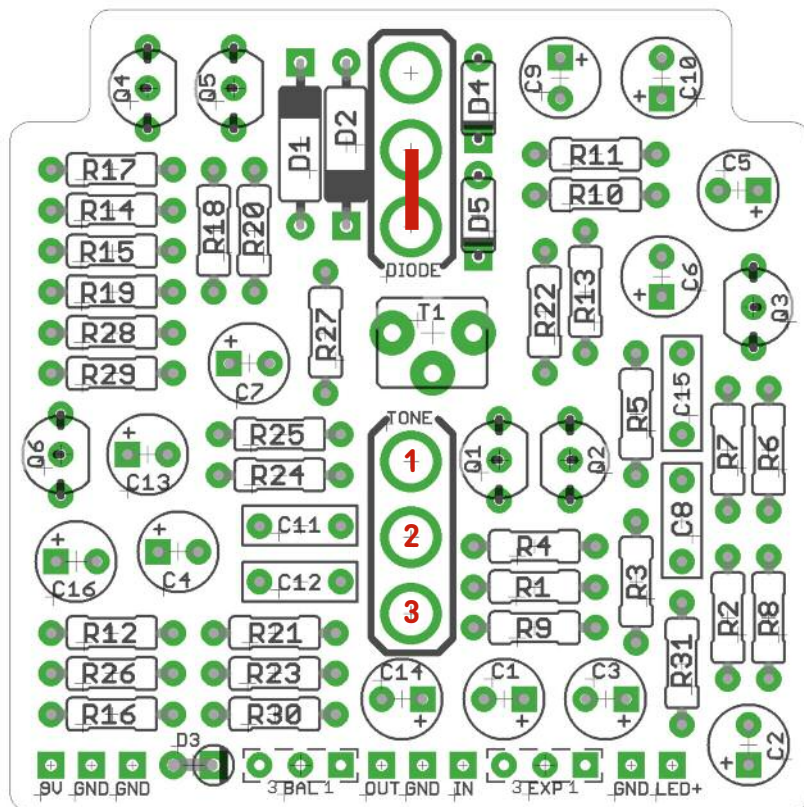
***optional. Don't bother putting them in if you're not using the diode selection switch. Other diodes can be experimented with.

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 transistors and diodes when soldering. They aren't keen on heat. Any more than a couple of seconds of iron and they're toast.

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



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

Be VERY careful when bending the legs of the 1N34A. The glass case is very fragile and likely to break. Best to hold the leg with some needle-nosed pliers against the case, and bend the leg with your finger so the pliers are taking any strain away from the diode.

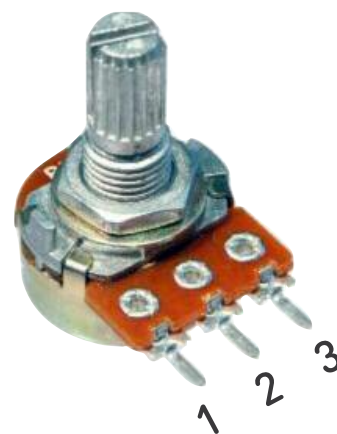
If you aren't using a diode selection switch, don't bother soldering in D4 and D5, connect the two switch pads as shown above (red line).

NOTE: this is a fairly noisy circuit. There's a LOT of gain going on. Expect some hiss and fizz.

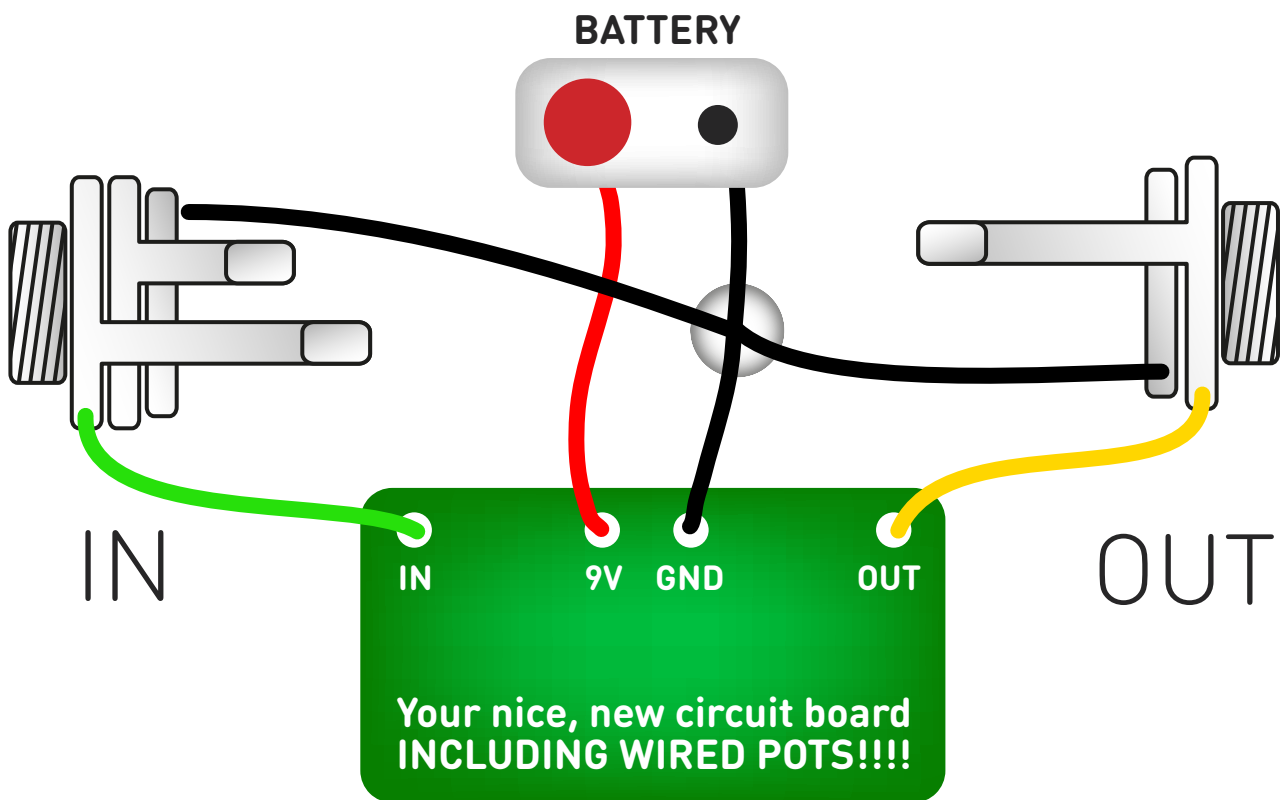
TONE BLEND MOD

You can add a pot to blend between the two different tone modes, just like in the Wattson EFY-6. We don't really like it, but what the hey? You'll still have the two different tone settings at either end of the sweep.

Simply wire up a 100KB pot instead of the tone switch, numbered as shown above.



Test the board!



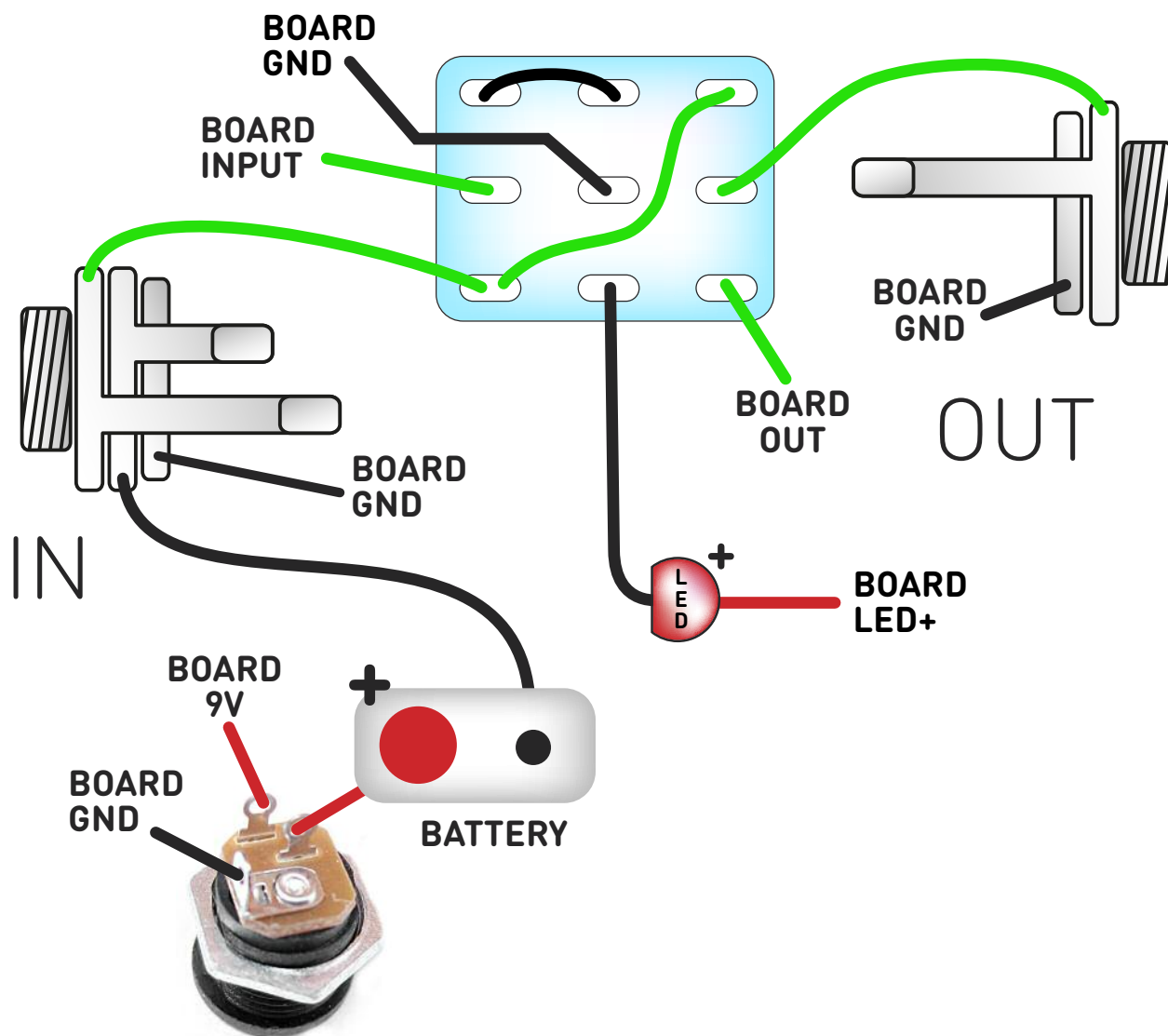
UNDER NO CIRCUMSTANCES will troubleshooting help be offered if you have skipped this stage. No exceptions.

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



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... FFFUUUUZZZZZZZZ!

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