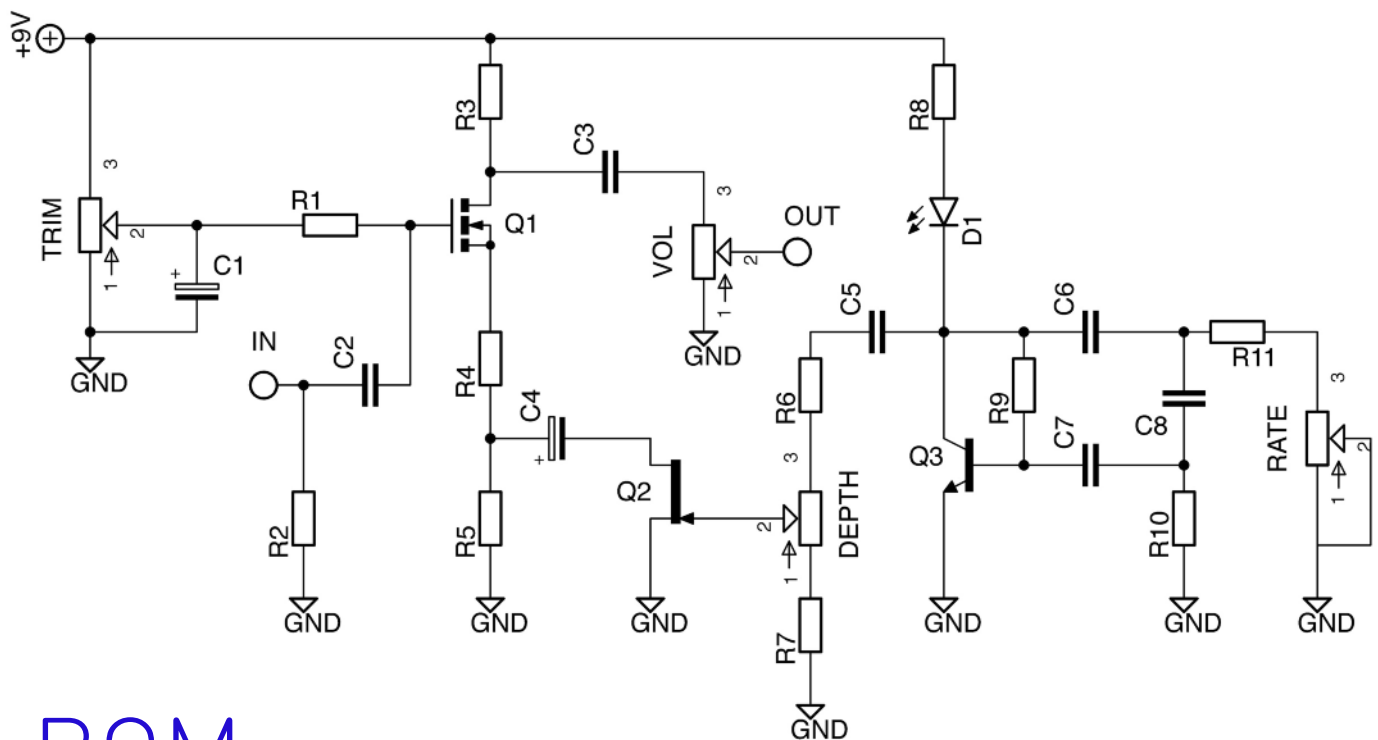


The Wobbler

EA Tremelo incorporating
runoffgroove improvements

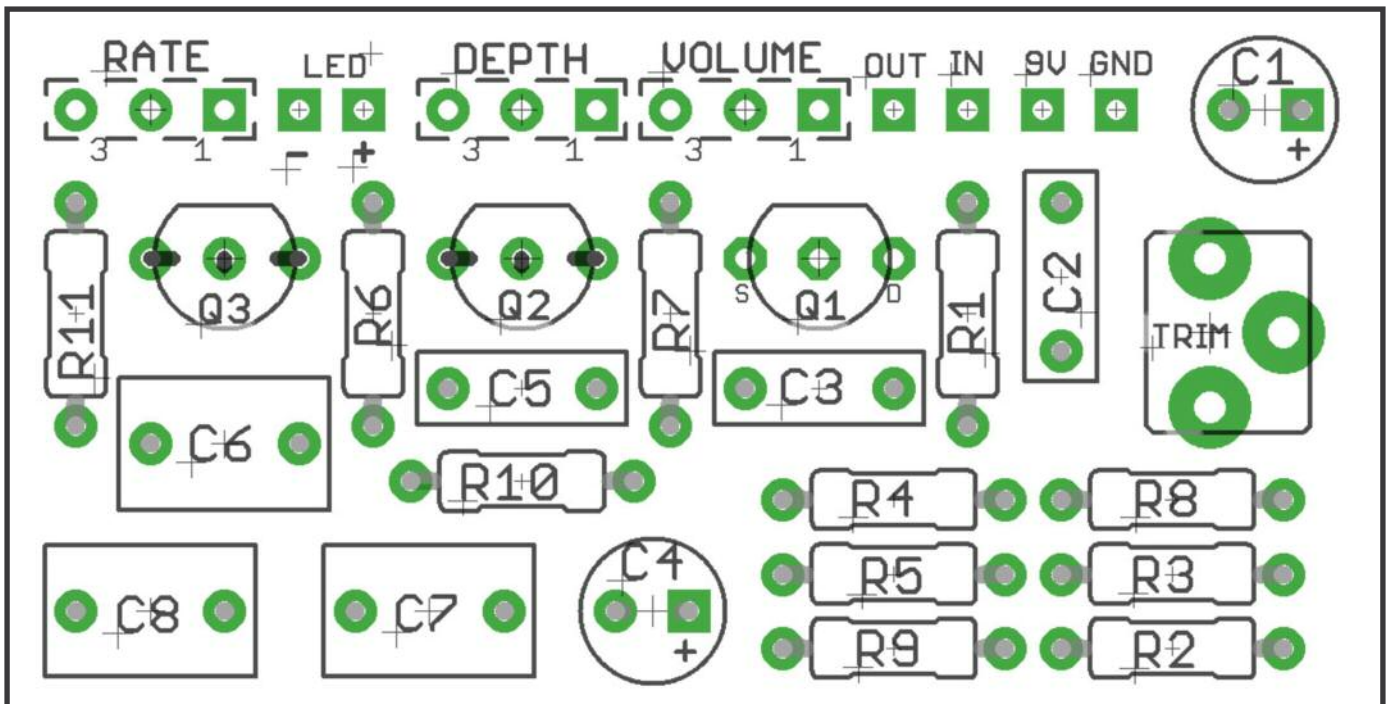
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Schematic



BOM

R1	1M		
R2	1M		
R3	4K7	C1	47u
R4	180R	C2	100n
R5	1K2	C3	470n
R6	120K	C4	22u
R7	68K	C5	470n
R8	10K	C6	1u
R9	2M2	C7	1u
R10	15K	C8	1u
R11	1K		
Q1	BS170	TRIM	100K trim
Q2	J201	RATE	100KB
Q3	2N5088	DEPTH	220-250KB
		VOL	100KA



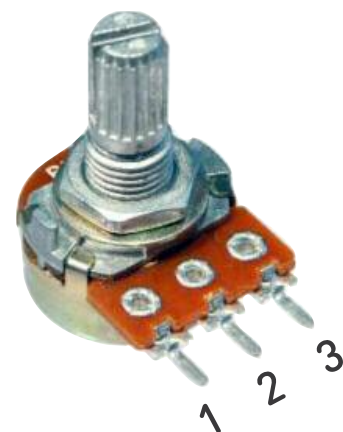
Wiring shown overleaf will disconnect the battery when you remove the jack plug from the input, and also when a DC plug is inserted.

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 LED and the transistors 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, Diode, Transistor, Pot, Wires

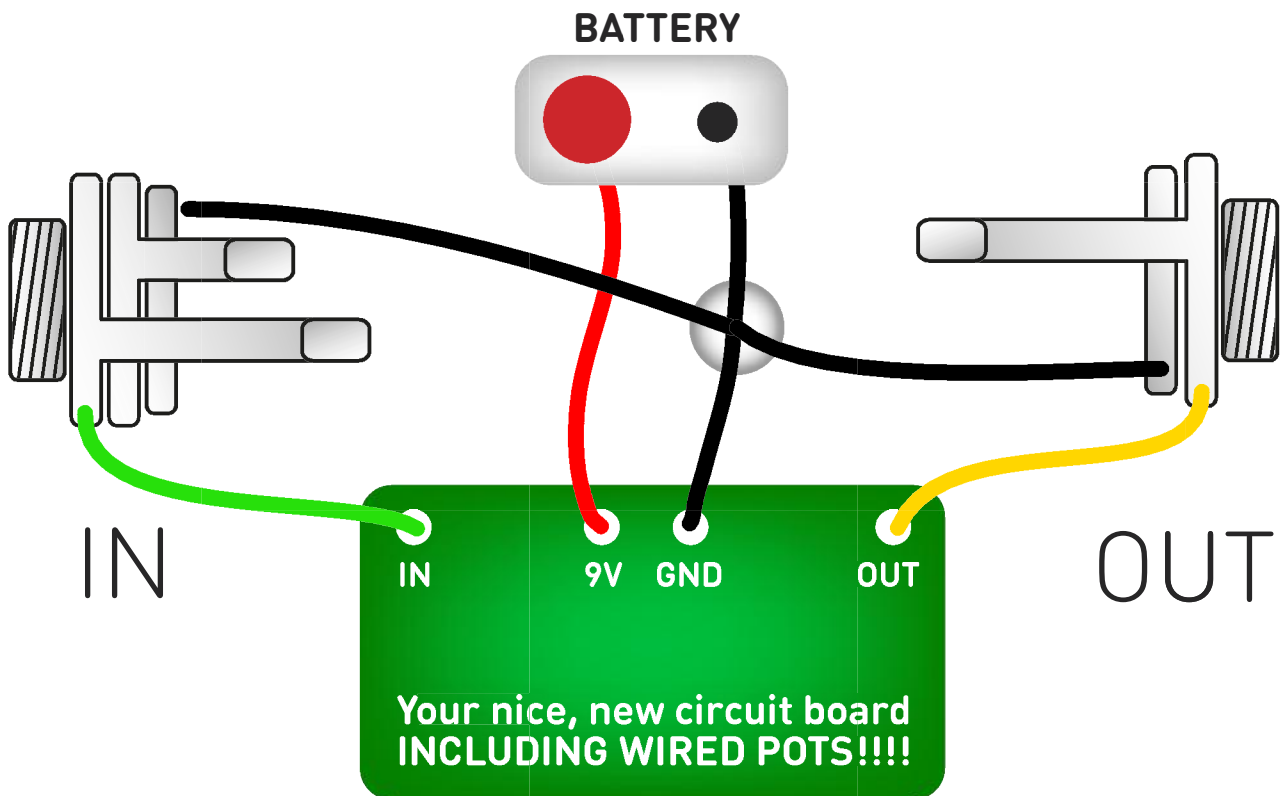
When assembled adjust the trim until you have around 4.5V at Q1 drain.



Original circuit was improved by chaps at runoffgroove.com

Input stage by Gez Paton, pulsing LED by Darren Inwood and Rob Strand

Test the board!

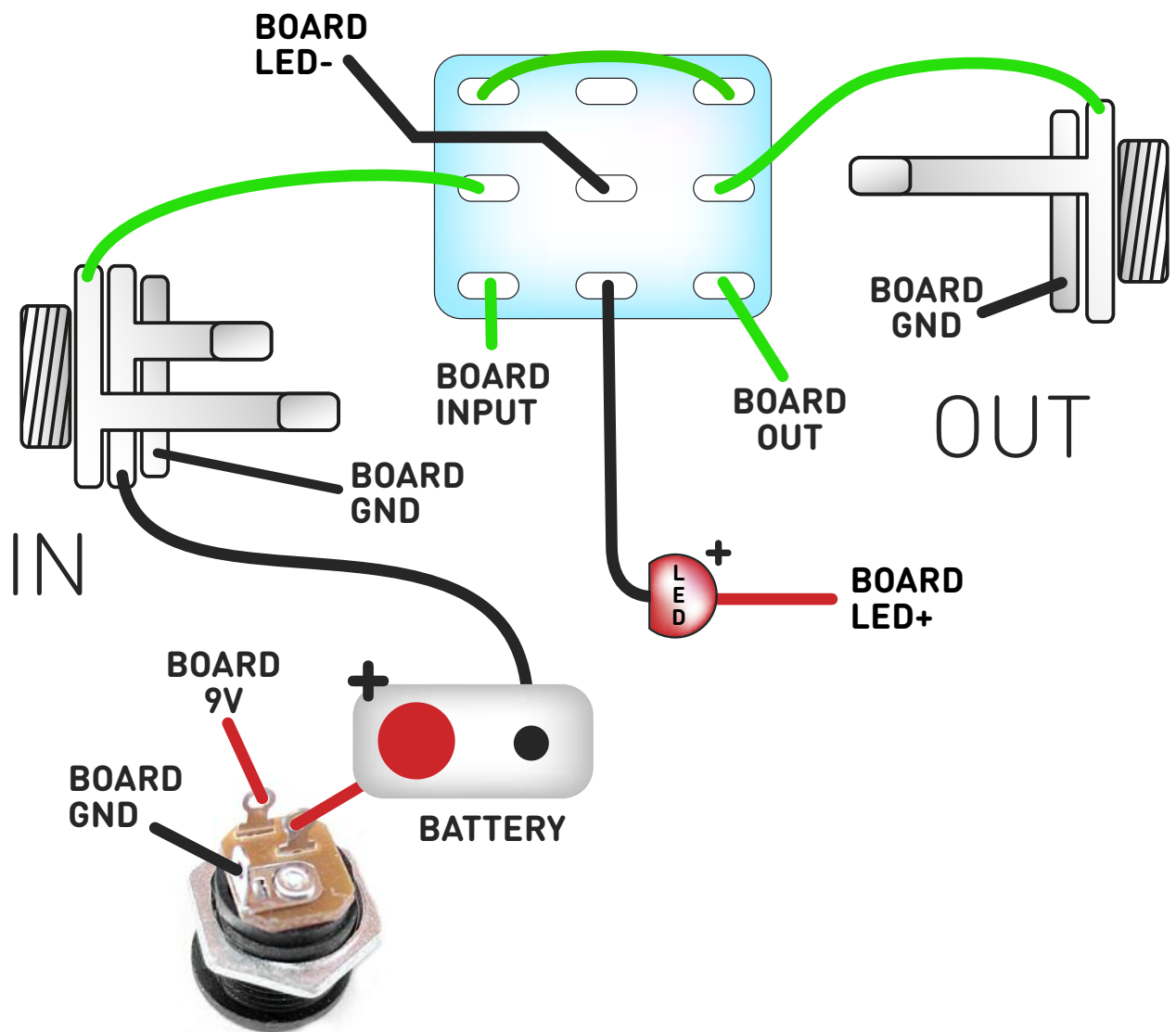


Once you've finished the circuit it makes sense to test it before starting on the switch and LED wiring. It'll cut down troubleshooting time in the long run. If the circuit works at this stage, but it doesn't once you wire up the switch - guess what? You've probably made a mistake with the switch.

Solder some nice, long lengths of wire to the board connections for 9V, GND, IN, OUT, LED+, LED-. 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. You can either solder the leads to the LED (you'll snip the negative one in half later), or connect them to the LED with crocodile clips. 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.

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