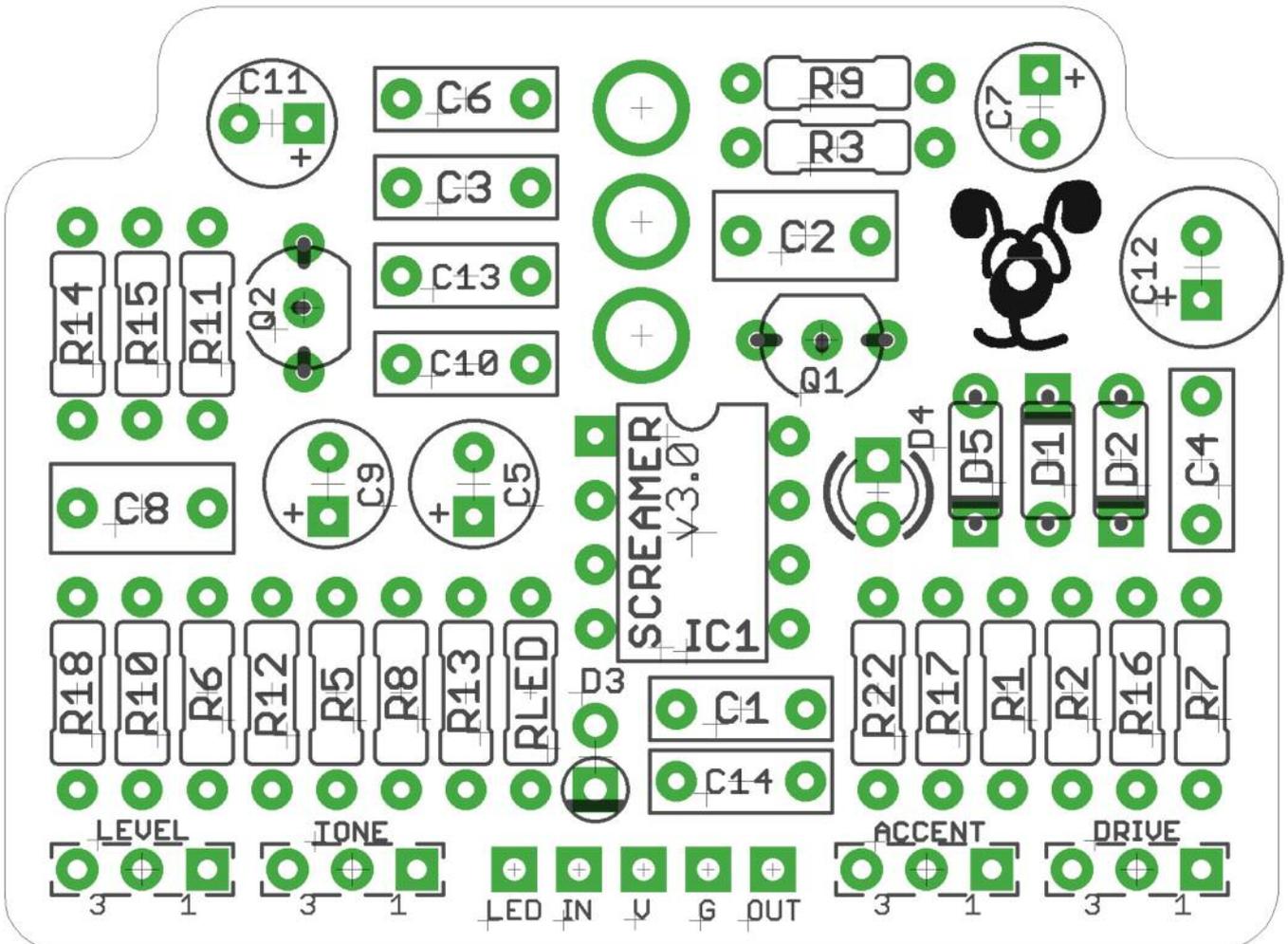
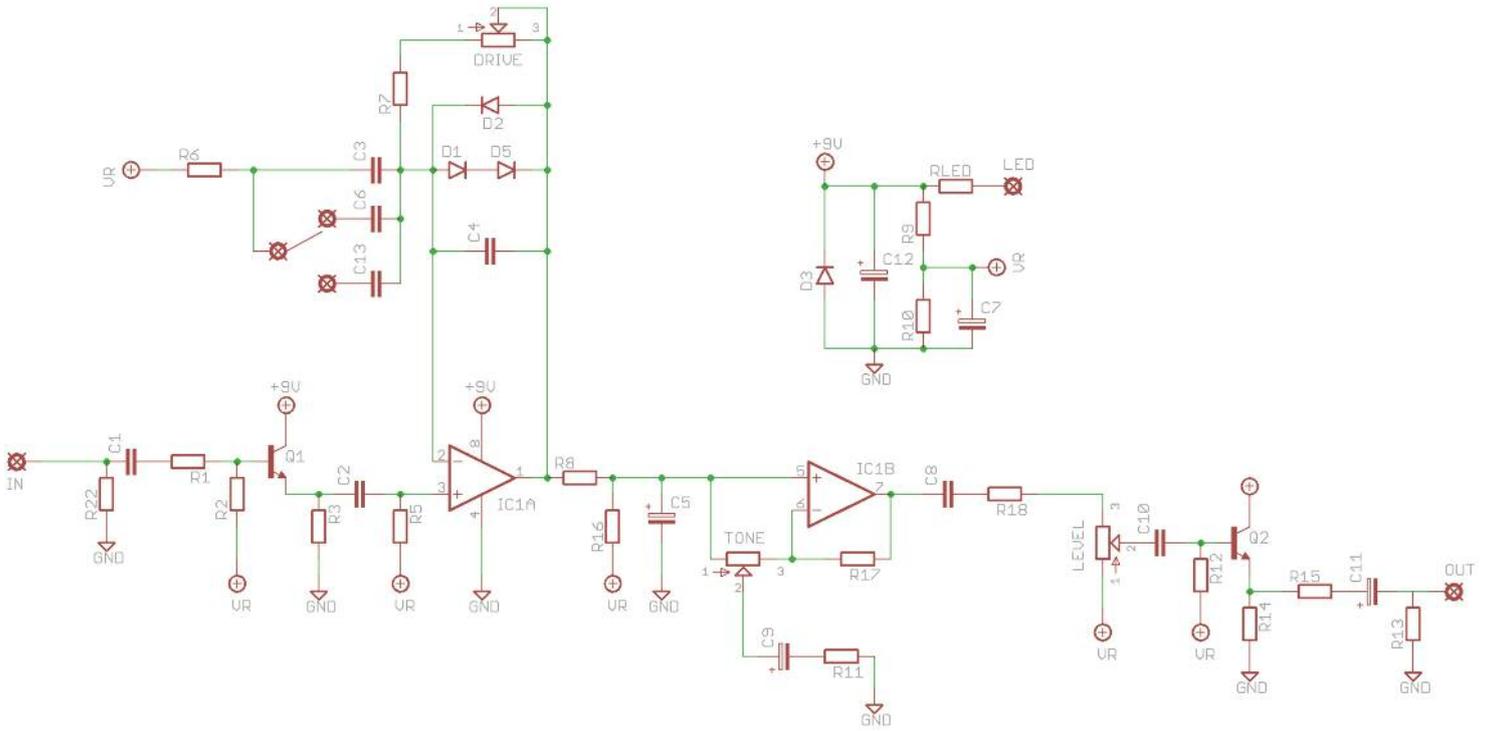


Tube Screamer v2.0

Tube Screamer
TS808 / TS9



Schematic + Layout



BOM

R1	1K	C1	22n	IC	4558
R2	510K	C2	1u	Q1,2	2N3904
R3	10K	C3	47n	D1,2	1N4148
R5	10K	C4	47p	D3	1N4001
R6	4K7	C5	.22u tant	D4	Empty
R7	51K	C6	See bass mod	D5	Jumper*
R8	1K	C7	47u (4.7u)	TONE	20KB/W
R9	10K	C8	1u	DRIVE	500KA
R10	10K	C9	.22u tant	LEVEL	100KA
R11	220R	C10	100n	Place a jumper between ACCENT pads 1 and 2	
R12	510K	C11	10u		
R13	10K (100K)	C12	100u		
R14	10K	C13	See bass mod		
R15	100R (470R)	C14	Empty		
R16	10K				
R17	1K				
R18	1K				
R22	1M				
RLED	1K - 2K2				

Parts listed are for the TS808 version.

For TS9 substitute parts in blue.

More Bass mods

C6 and C13 are extra caps for the More Bass mod. Use one cap spot along with a SPDT ON-ON switch for a single extra bass setting. If you use C6, the extra bass will be engaged when the switch is up. Use C13 for extra bass in the down position.

For two extra settings use both cap spots and a SPDT ON-OFF-ON switch.

Recommended values are 47n for much more bass, 22n for a little more bass, or use both if you're going for two settings.

Clipping

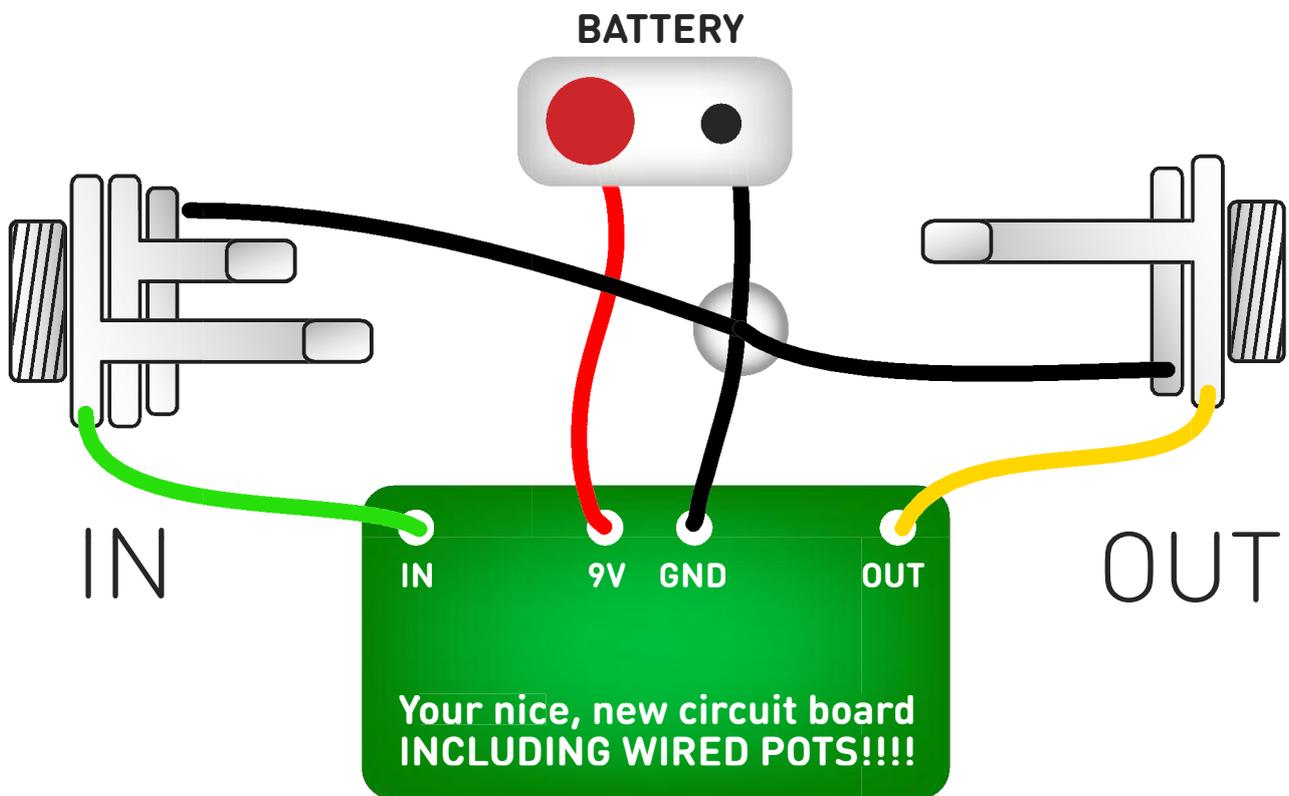
D5 is included so you can easily add asymmetrical clipping which changes the nature of the tone. If you want this, just put a 1N4148 in D5 instead of a jumper wire.

I've got lots of empty pads!

You sure have. The board is designed so you can make a Dumb Lloyd on it. That has parts that aren't on the TS. Don't worry about it.

C7 and C12 can lay flat as shown on the image so there's more clearance in the box.

Test the board!



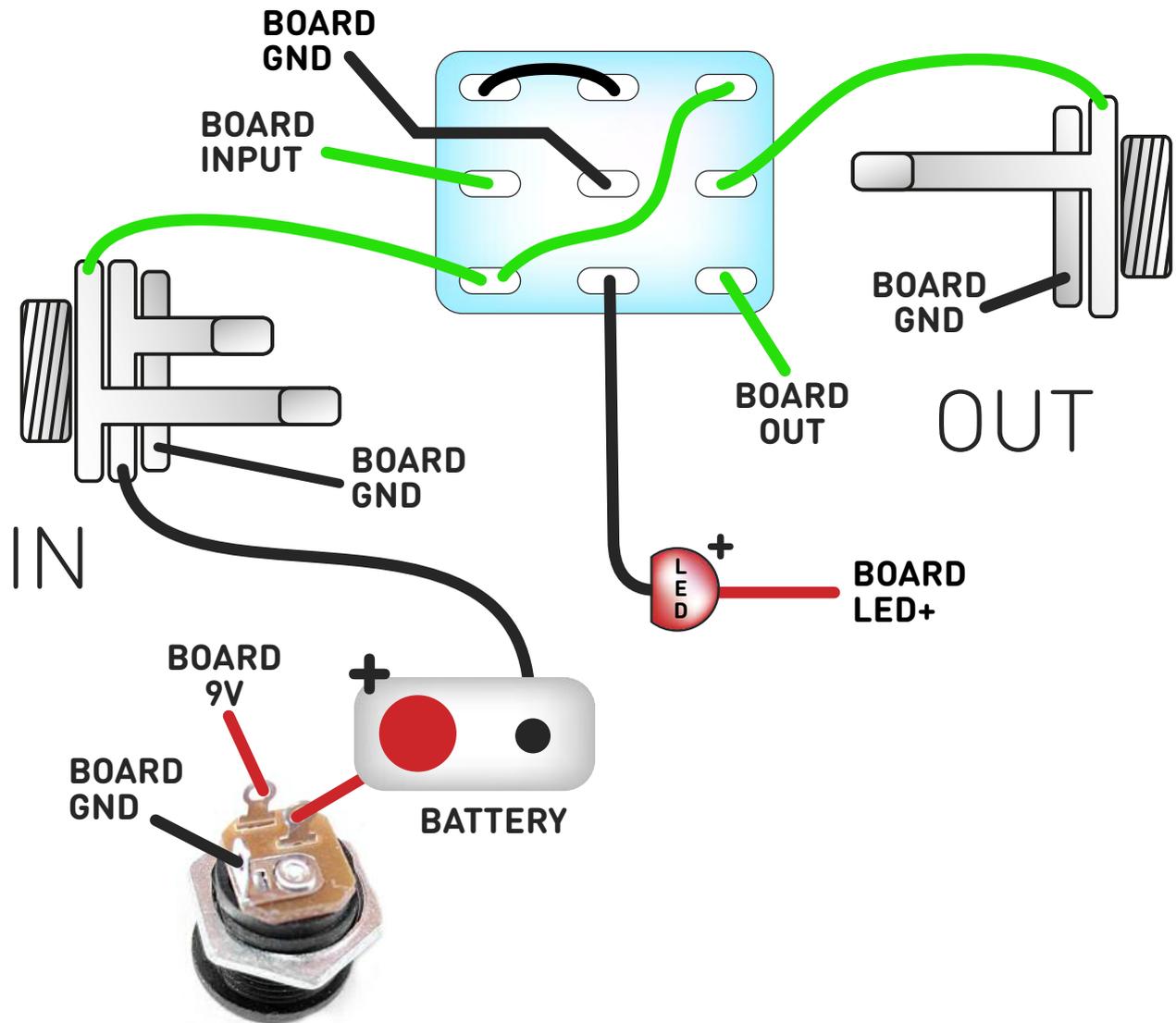
UNDER NO CIRCUMSTANCES will troubleshooting help be offered if you have skipped this stage. No exceptions.

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



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

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.

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