

# Tube Screamer v2.0

Tube Screamer  
TS808 / TS9





# BOM

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

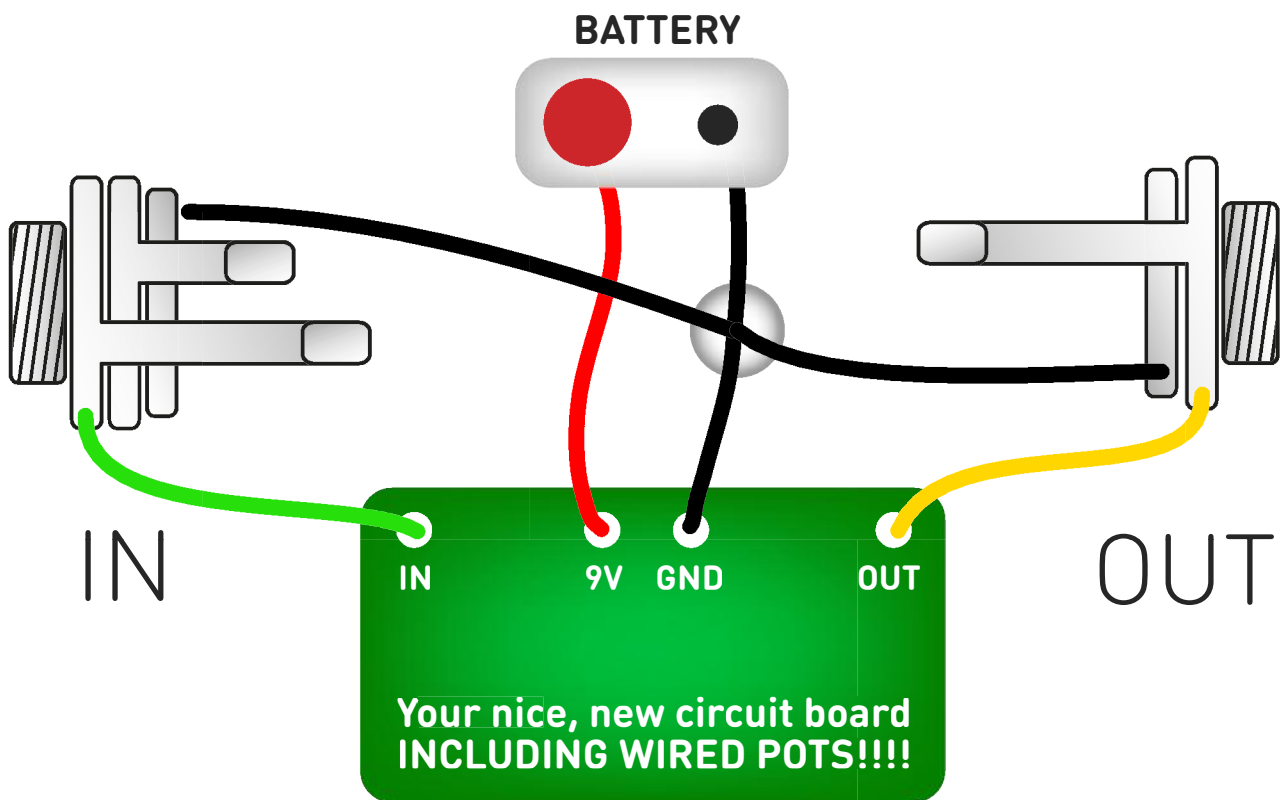
D5 is included so you can easily add asymmetrical clipping which changes the nature of the tone. If you want this, just put a 1N4148 in D5 instead of a jumper wire.

### 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!



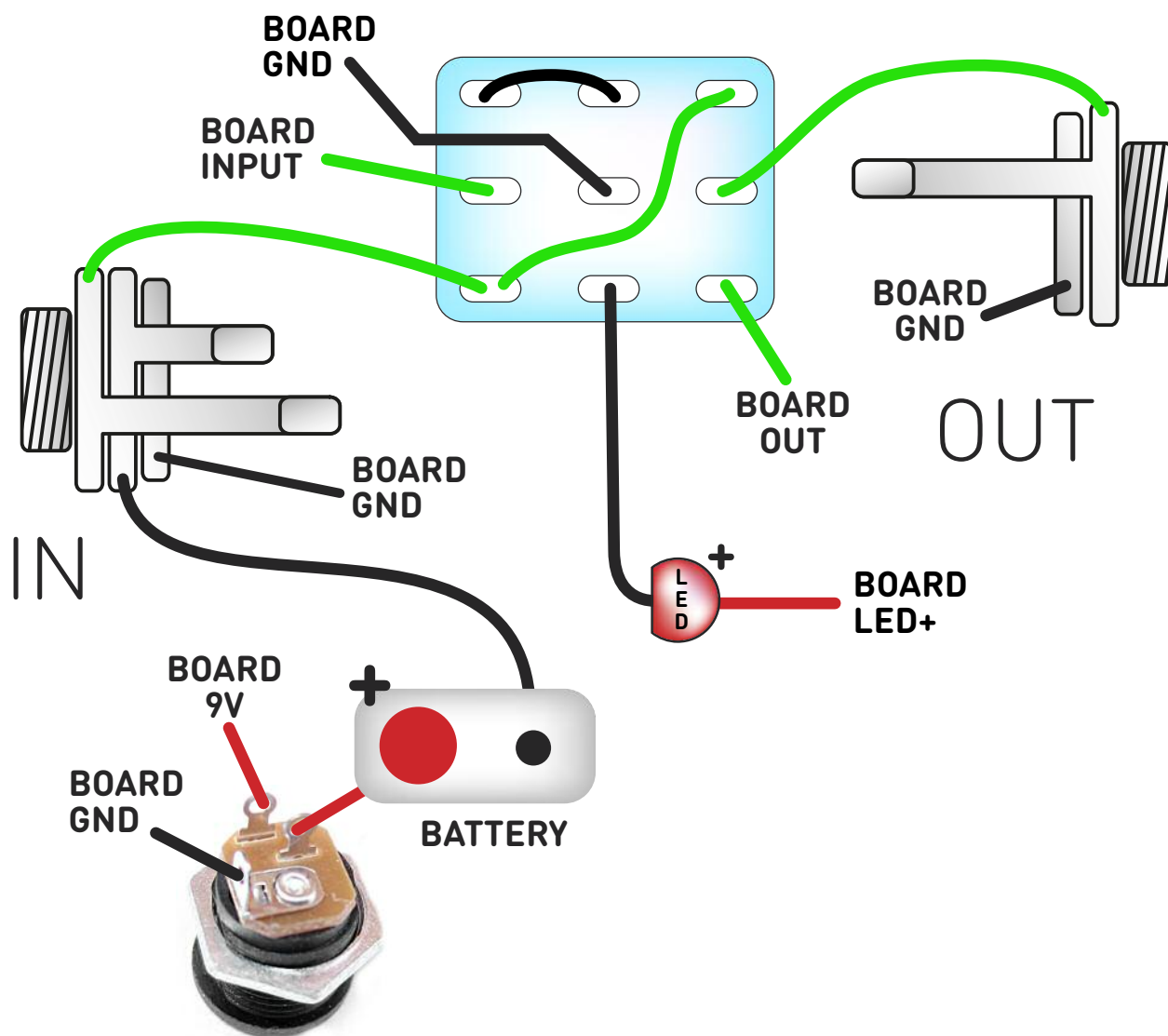
**UNDER NO CIRCUMSTANCES** will troubleshooting help be offered if you have skipped this stage. No exceptions.

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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