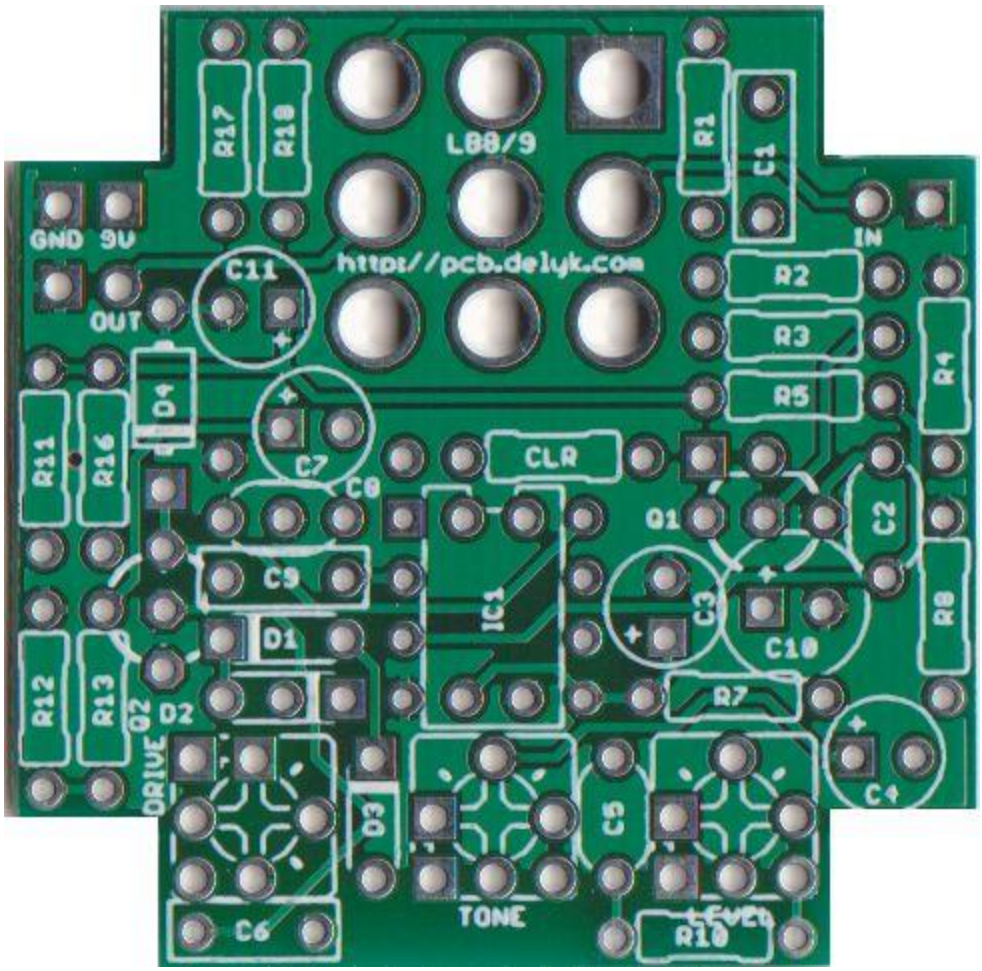

LB8/9

Build Document

Introduction

A screamer of an overdrive in a tiny enclosure.

Bill of Materials

Resistors

P/N	Value	Notes
R1	1M	
R2	1k	
R3	510k	
R4	10k	
R5	10k	
R6	1k	
R7	10k	
R8	220R	
R9	1k	
R10	1k	
R11	510k	
R12	10k	
R13	100R (470R)	Value in parentheses for TS9.
R14	10k (100k)	Value in parentheses for TS9.
R15	51k	
R16	4k7	
R17	10k	
R18	10k	
CLR	6k8	CLR for the power LED (you can pick your own value)

Diodes

I obtained all of my diodes from Tayda. That's what the layout was setup for.

P/N	Value	Notes
D1	1N4148	Clipping diode
D2	1N4148	Clipping diode
D3	1N4148	Clipping diode
D4	1N400x	Polarity protection.
D5	LED	Power LED

Capacitors

I obtained all of my caps from Tayda. That's what the layout was setup for.

Either get low profile aluminum electrolytics or you'll have to be original with how to lay them down.

P/N	Value	Type	Notes
C1	22n	Film Box	
C2	1u	MLCC	
C3	220n	MLCC	Originally a tant.
C4	220n	MLCC	Originally a tant.
C5	1u	MLCC	
C6	100n	Film Box	
C7	10u	Alum. Electro	
C8	47p	Ceramic	
C9	47n	Film box	
C10	100u	Alum. Electro	
C11	47u (4u7)	Alum. Electro	Value in parentheses for TS9.

Integrated Circuits

P/N	Value	Notes
IC1	4558	

Transistors

P/N	Value	Notes
Q1	2N3904	
Q2	2N3904	

Potentiometers

I obtained all my potentiometers from Tayda. That's what the layout was setup for.

P/N	Value	Notes
DRIVE	A500k	Trimpot. I recommend this one.
LEVEL	A100k	Trimpot. I recommend this one.
TONE	W20k	Trimpot. I recommend this one.

Transistors

P/N	Value	Notes
Q1	BS170	
Q2	2N5457	
Q3	2N5088	

Potentiometers

I obtained all of my potentiometers from Tayda. That's what the layout was setup for.

P/N	Value	Notes
DEPTH	250k	Trimpot.
RATE	100k	Trimpot.
TRIM	100k	Trimpot.
VOL	100k	Trimpot.

Switches

I obtained all of my switches from Tayda. That's what the layout was setup for.

P/N	Value	Notes
SW1	3PDT	Footswitch

Modifications

When I built mine, I felt as though the depth wasn't enough. Some people recommend omitting R8 and D2. I didn't get a chance to try this.

Build Notes

The TRIM pot is used to adjust the voltage to Q1. The best way to bias this is to adjust by ear until you find a sweet spot.

Schematic