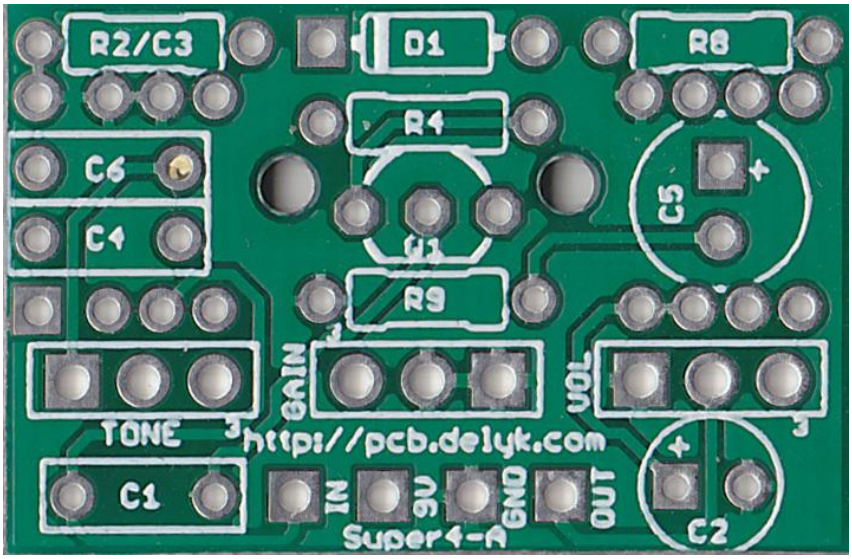


Super4-A

Build Document

Introduction

Look guys. I **love** the AMZ MOSFET Booster by Jack Orman. LOVE it. It's one of the cleanest boosts around. However, I quickly found there are other schematics that are very similar. They all are based around the BS170 MOSFET.

After analyzing the schematics for four different pedals, I found that, with a few minor tweaks, we could use the same PCB for any of those four. This gave birth to both the Super4-A and Super4-LB.

Why the A vs. LB? Well, I love LB's. I know there's not much of a market for them; it is something many people aren't doing or offering, so I wanted to try and offer it as an option.

LB's are a scary, and if you have big feet like mine, perhaps a bit too difficult to stomp. That's why there's the A variant, too.

Bill of Materials

Resistors

P/N	AMZ MOSFET	SHO	Super 6	Deluxe 60	Notes
R1	1M	*Omit*	2M2	*Omit*	This is a pulldown resistor. Even if omitted, you can add it if needed.
R2/C3	*Cap*	10M	1M	3M3	
R3/C8	100k	*Omit*	*Cap*	*Omit*	
R4	*Omit*	10M	1M5	3M3	
R5	10M	*Omit*	*Omit*	*Omit*	
R6	62k	*Omit*	Jumper	*Omit*	
R7	2k7	5k1	3k3	3k3	
R8	2k7	*Omit*	510R	330R	
R9					Optional resistor to bring down the value of GAIN. For example, if you order a C10k pot but you want a C5k, add a 5k resistor here.
R10	*Omit*	*Omit*	*Omit*	47k	
R11	Jumper	Jumper	330R	Jumper	

Diodes

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

P/N	AMZ MOSFET	SHO	Super 6	Deluxe 60	Notes
D1	9v1 zener	9v1 zener	9v1 zener	*Omit*	
D2	1N400x	1N400x	1N400x	1N400x	Polarity protection.

Capacitors

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

P/N	AMZ MOSFET	SHO	Super 6	Deluxe 60	Type	Notes
C1	1nF	100nF	100nF	22nF	Film Box	
C2	10uF	*Omit*	47uF	47uF	Aluminum Electrolytic	
R2/C3	47pF	*Resistor*	*Resistor*	*Resistor*	Ceramic	
C4	100nF	10uF	10nF	100nF	Film Box	Aluminum Electrolytic for SHO.
C5	100uF	Jumper	10uF	*Omit*	Aluminum Electrolytic	
C6	Jumper	Jumper	10nF	Jumper	Film Box	
R3/C8	*Resistor*	*Omit*	100nF	*Omit*	Film Box	Probably need to lay this down. You may also be able to put this on the other side of the board, next to the electrolytic. Some people also omit this since they deem it as an unnecessary filter cap.

Transistors

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

P/N	Value	Notes
Q1	BS170	

Potentiometers

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

P/N	AMZ MOSFET	SHO	Super 6	Deluxe 60	Notes
GAIN	C5k	C5k	B1k	*Omit*	
TONE	*Omit*	*Omit*	B100k	*Omit*	
VOL	Jump 3 and 2	Jump 3 and 2 Add 100k resistor from 2 to 1 (GND)	B100k	B100k	

Modifications

Have fun with the SHO. Feel free to mod just about any resistor/cap.

One person recommends trying the following with the Super 6:

1. R8: 390R (a bit more gain)
2. C1: 22nF

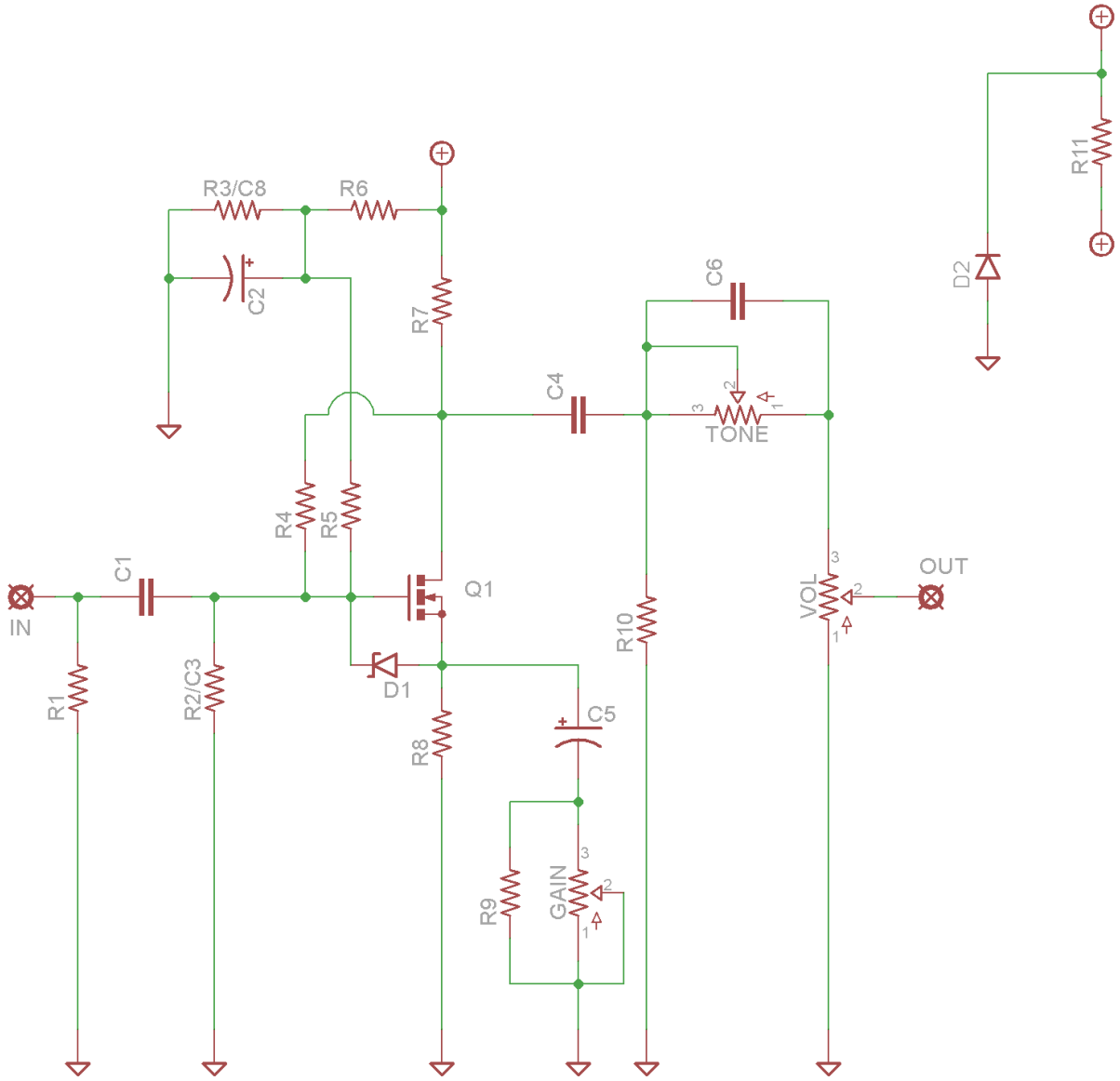
3. C4: 100nF

Build Notes

Suggested Solder Order

1. C4, C6
2. C5
3. D2, R1, R3/C8, R5, R6, R7, R10, R11
4. D1, R2/C3, R4, R8, R9
5. C1, C2
6. Q1
7. TONE, GAIN, VOL
8. IN, 9V, GND, OUT

Schematic



Images