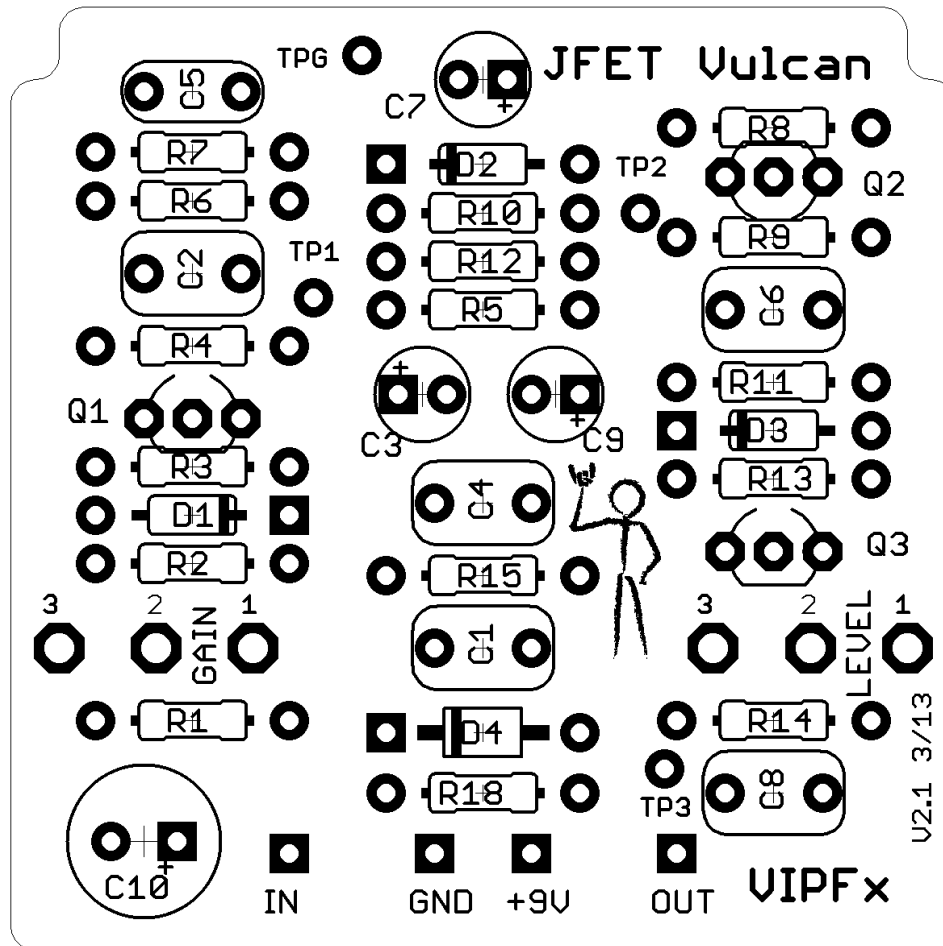


# JFET VULCAN OVERDRIVE

BY JOE DAVISSON

<http://diystompboxes.com/analogalchemy/sch/jfetvulcan.html>



## Parts Guide

Resistors: 1/4 watt metal film

Film Caps: The board is laid out for standard box type caps. Any 5mm caps will fit.

Electrolytic Caps: 16v or better

pF Caps: Ceramic or other 5mm caps

Pots: Layout is for Alpha PCB mount pots, RV16AF-41-15R1-Value, but any pots will work.

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## BOM

Resistors		Caps		Diodes	
R1	1M	C1	100nF	D1	1N914
R2	1M	C2	100nF	D2	1N914
R3	10M	C3	1uF	D3	1N914
R4	100K	C4	100nF	D4	1N5818
R5	33K	C5	100pF		
R6	2.2M	C6	100nF	Transistors	
R7	1M	C7	1uF	Q1	J201
R8	10M	C8	100nF	Q2	J201
R9	100K	C9	1uF	Q3	J201
R10	33K	C10	220u		
R11	470K			Pots	
R12	1M			GAIN	1M-A
R13	10M			LEVEL	100K-A
R14	100K				
R15	33K				
R18	91R				

## Notes

### Transistors

There doesn't seem to be a lot of information available regarding the selection of transistors for this project. There also seems to be a lot of mixed results from builders. With the variable nature of J201's it's not surprising that the bias would be all over the place if the builder grabs any three transistors without concern for the resulting bias.

Based on the experiences with the other J201 projects like the Blackbird and Tweedy Bird, it seems to make sense that a similar biasing technique would work just as well here.

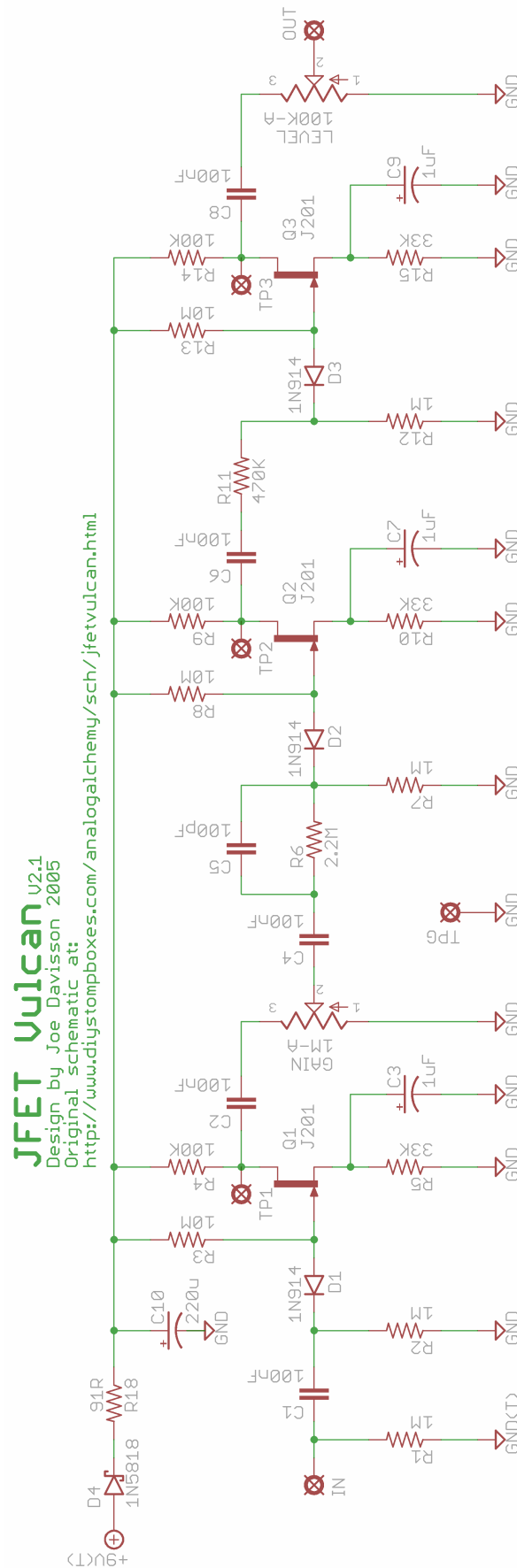
- 1) Locate 3 matched J201's using a JFET matcher circuit
- 2) Adjust R4, R9, and R14 so that the test points all read 4.5 to 4.7 volts.
  - a. Ideally, R4, R9, and R14 should be the same value.

My personal build wound up with 100k resistors anyway. You may want to socket and tune.

### Gain

From the schematic posted at DIY Stompboxes: For higher gain, change R6/C5 from 2.2M/100pF to 470k/470pF

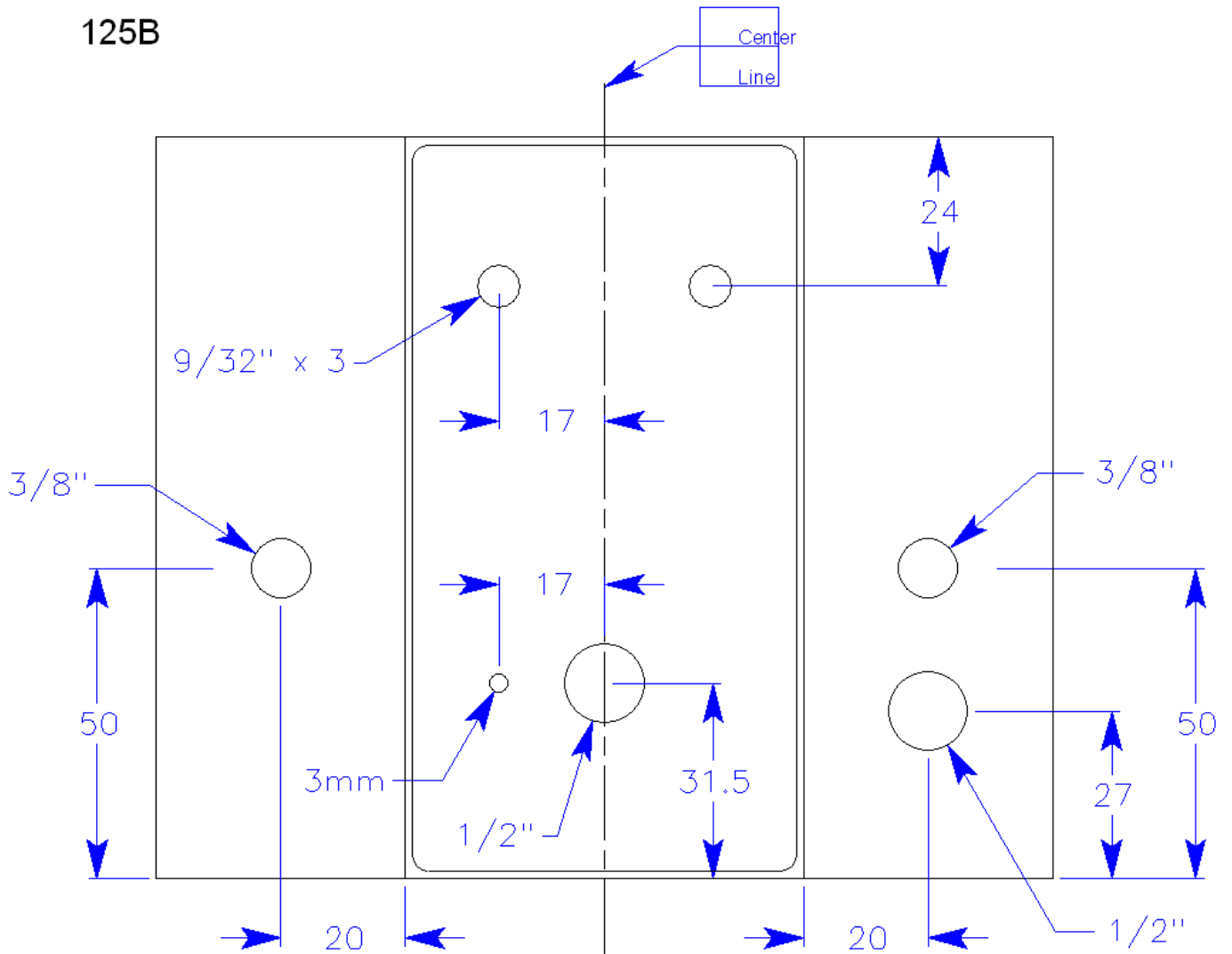
# Schematic



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## Drill Template

This is the drill template I used to order my box from Pedal Parts Plus. The box I specified was their standard 125B, code 1400.



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