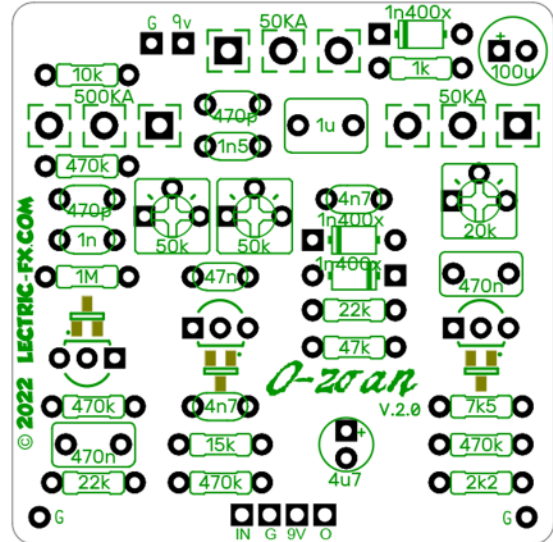
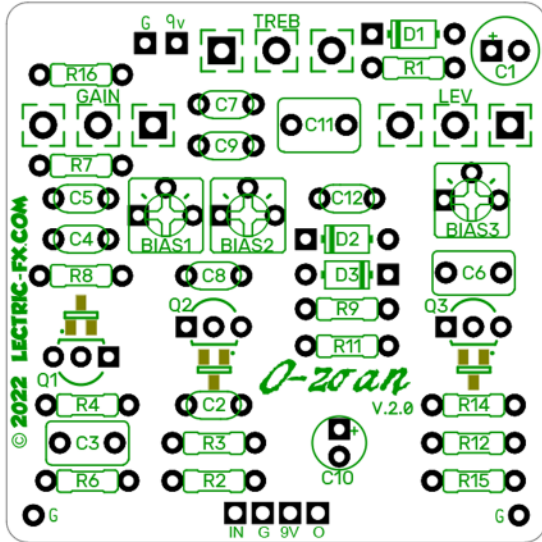


O-20an V.2.0

JFET Overdrive, based on the bfx baby blue od

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CONTROLS:

LEVEL: Controls the output level

TREBLE: Adds brightness to the tone

GAIN: Controls how much drive is added

The through hole FJET footprint on the pcb is for 2n5952, which sound great. The pinout is G-S-D.



FWIW, 2n5457 and 2n5485 also sound good in these spots, but are different flavors. Remember to mind the pinout.

SMD pads have also been provided for the 3 JFETs as an alternative to through hole.

Through some testing, I've detmined that mmbf4393 sound best and bias up closest to the original resistor values, so I will offer V2.0 as a plain pcb OR with 3 of the smd 4393 pre-soldered onto the board.

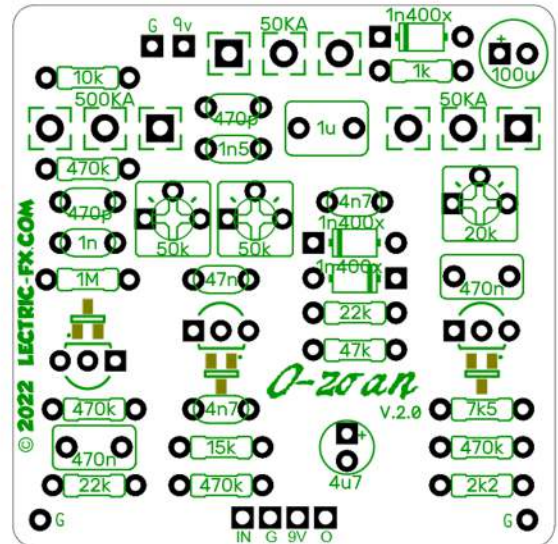
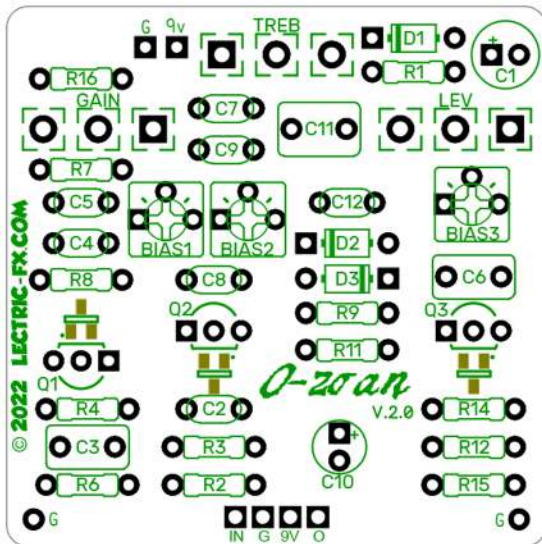
New for V2.0 are 3x bias trimmers that replace R5, 10 & 13 in the V1.0 project. BIAS1, BIAS2, BIAS3 correspond directly to Q1, Q2, Q3. Measure the drain of each JFET & set for 4.5V by adjusting its corresponding BIAS trimmer. There is a small silkscreen dot on the drain side of each JFET transistor.

O-zoan BOM

Resistor #	Value
R1	1k
R2	470k
R3	15k
R4	470k
R5	47k
R6	22k
R7	470k
R8	1M
R9	22k
R10	47k
R11	47k
R12	470k
R13	15k
R14	7k5
R15	2k2
R16	10k

Capacitor #	Value
C1	100u
C2	4n7
C3	470n
C4	1n
C5	470pf
C6	470n
C7	470pf
C8	47n
C9	1n5
C10	4u7
C11	1u
C12	4n7

Pot Name	Value
TREB	50KA
GAIN	500KA
LEV	50KA
Trimmer	Value
BIAS1	100k tr
BIAS2	100k tr
BIAS3	50k tr
Diode #	Value
D1	1n400x
D2	1n400x
D3	1n400x
Part #	Value
Q1	JFET
Q2	JFET
Q3	JFET



1

2

3

4

5

6

A

B

C

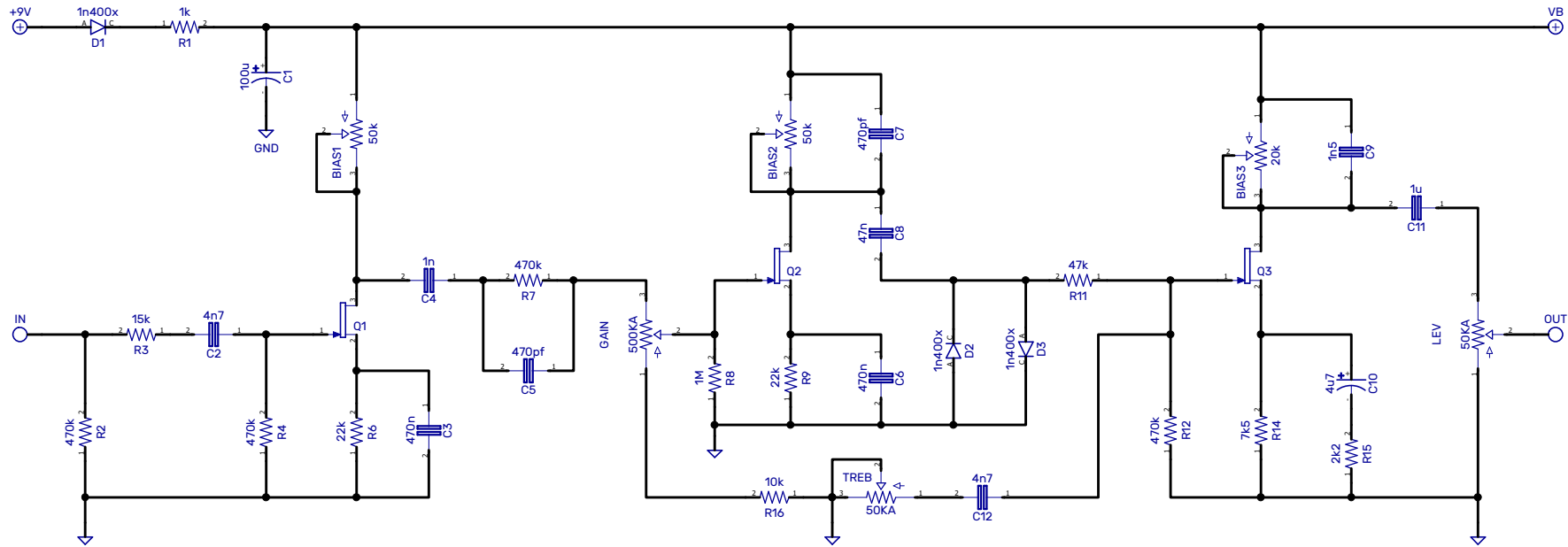
D

A

B

C

D



Title: O-zoan JFET Overdrive		
Size	Number	Rev
	000001	2.0
Date: 11/09/2022	Drawn by Haberdasher	
LECTRIC-FX	Sheet 1 of 1	

1

2

3

4

5

6

O-zoan Template

