

1	2	3	4	5	6
A					A
B					B
C					C
D					D
1	2	3	4	5	6

Board_A

File: Multi_Saturation_Board_A.kicad_sch

Board_B

File: Multi_Saturation_Board_B.kicad_sch

This version is a prototype.
DIYSynthManila

Sheet: /
File: Multi saturation module.kicad_sch

Title: Eurorack Multi Saturation Module

Size: A4

Date: 2023-12-28

Rev: 0.6

KiCad E.D.A. kicad 7.0.9

Id: 1/3

Double check phase on xformer output. Wire it correctly!
R4 and R8 should be equivalent or close to the impedance of the xformer.

C1 and R6 is a high pass filter with a cut off frequency of 15Hz

C2: If smaller than 1 uF, less "wet" distortion.

I took this circuit from Music Thing Modular's Spring module. I switched out the TL074 with two NE5532's.

Wet/Dry Mix
Mix trim moves the cv waveform up or down +/- 12v. This tunes the vactrol response.

U4 amplifies the wet and dry signal. Trim it so its amplitude is similar to the dry signal.

Clipping diodes

Mix_audio_out

VTL5C3 R18 = 47k
Silonex 32SR3 R18 = 470R
Handmade Vactrol with 5mm led and LDR R18 = 47k

Power

Op Amp bypass caps

This version is a prototype.

DIYSynthManila

Sheet: /Board_A/

File: Multi_Saturation_Board_A.kicad_sch

Title: Eurorack Multi Saturation Module Board A

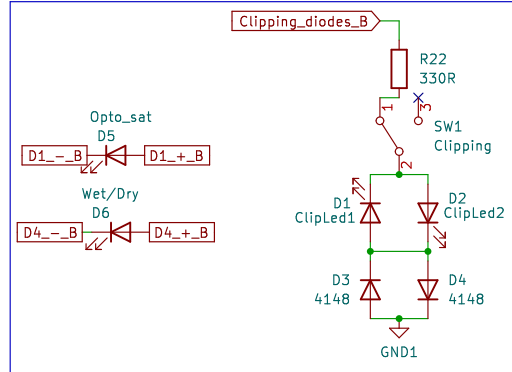
Size: A4 Date: 2023-12-28

KiCad E.D.A. kicad 7.0.9

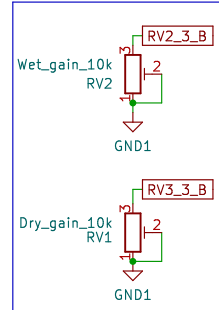
Rev: 0.6

Id: 2/3

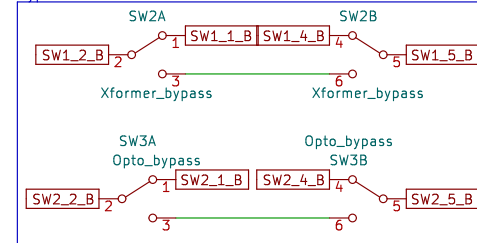
Indicator Leds



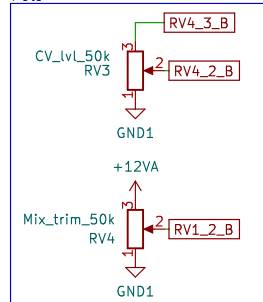
Gain trimmers



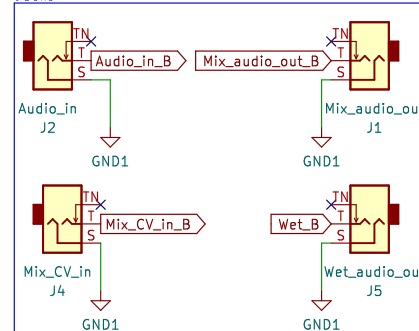
Bypass Switches



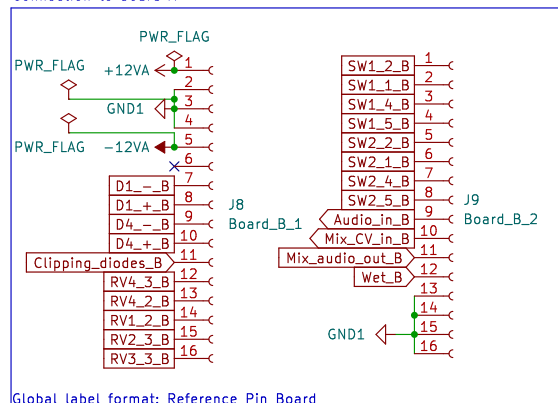
Pots



Jacks



Connection to board A



This version is a prototype.

DIYSynthManila

Sheet: /Board_B/

File: Multi_Saturation_Board_B.kicad_sch

Title: Eurorack Multi Saturation Module Board B

Size: A4 Date: 2023-12-28

KiCad E.D.A. kicad 7.0.9

Rev: 0.6

Id: 3/3