

123456

A

B

C

D

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: 2023-12-24

Rev: 0.5

KiCad E.D.A. kicad 7.0.9

Id: 1/3

123456

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.

dry gain compensation

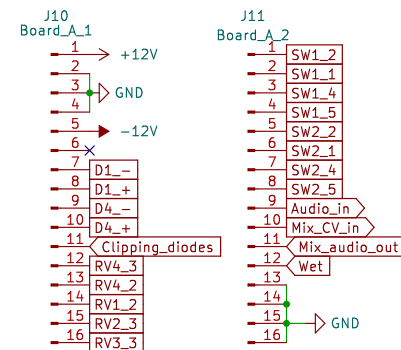
wet gain compensation

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

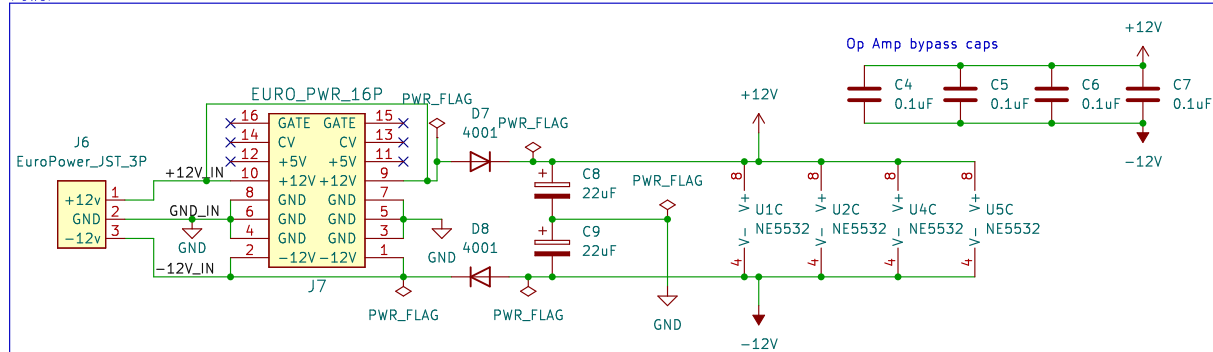
Clipping diodes

Mix_audio_out

Connection to board B



Power



This version is a prototype.

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Sheet: /Board_A/

File: Multi_Saturation_Board_A.kicad_sch

Title: Eurorack Multi Saturation Module Board A

Size: A4 Date: 2023-12-24

KiCad E.D.A. kicad 7.0.9

Rev: 0.5

Id: 2/3

