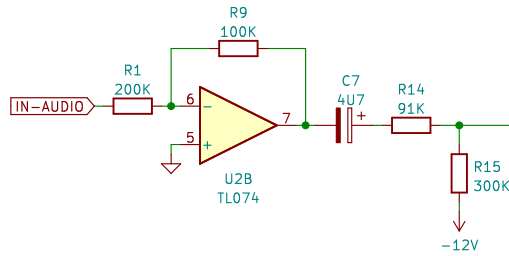


# State-Variable Filter

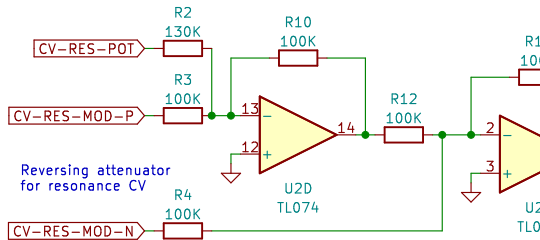
## Audio Input

Nominal max input level 10 Vp-p



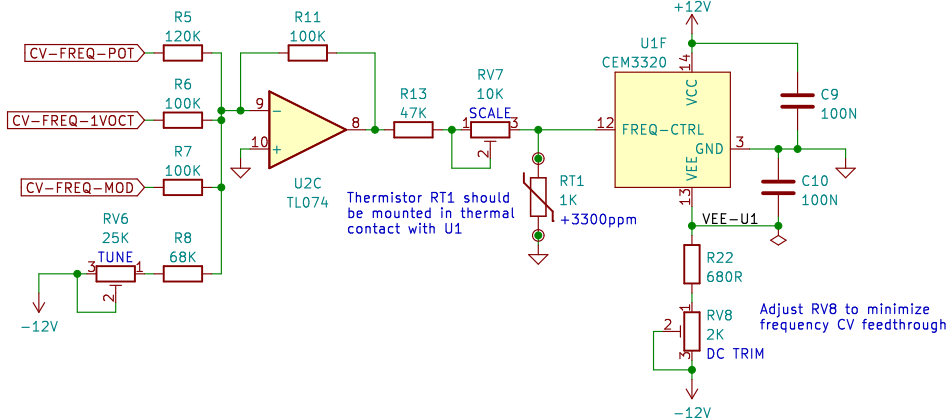
## Resonance CV

Turning the resonance pot fully CW should provoke oscillation. The resonance CV goes through a reversing attenuator pot.



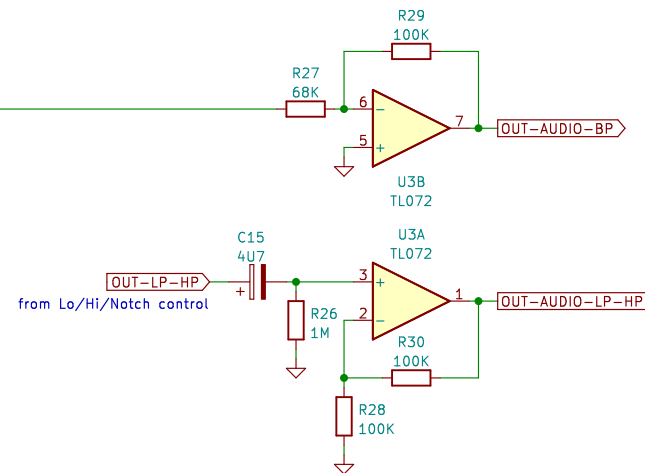
## Frequency CV

Can be trimmed so the 1V/octave CV input tracks pitch. If that doesn't matter, the trimmers and the thermistor may be replaced by fixed resistors.



## Audio Output

Output level varies with resonance and waveform. The gain settings here are a compromise.



All fixed resistors are 1% tolerance unless otherwise specified.  
All electrolytic capacitors are rated for 25VDC unless otherwise specified.

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CEM3320 state-variable VCF module – Eurorack 10HP  
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Sheet: /  
File: VCF-SV.kicad\_sch

**Title: Eurorack State-Variable Filter**

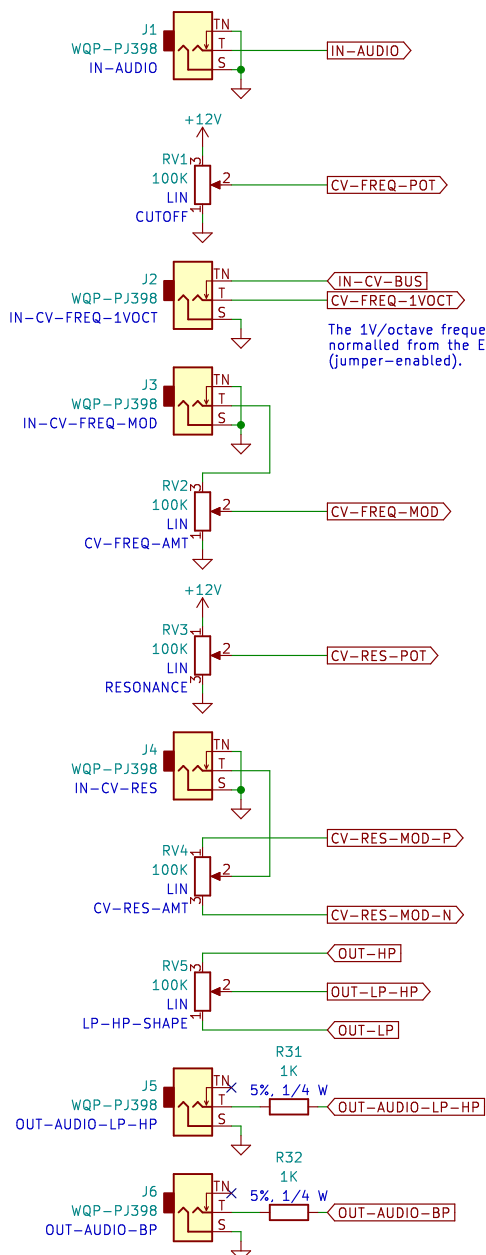
Size: A4 Date: 2022-11-11

KiCad E.D.A. kicad (6.0.9)

**Rev: 1.2**

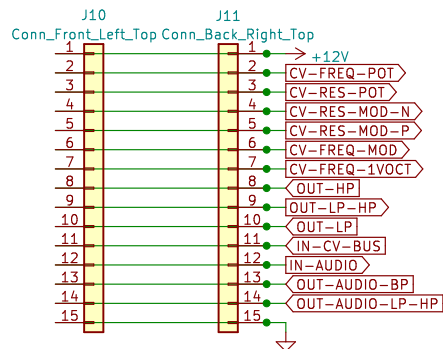
Id: 1/2

## Front Panel Controls

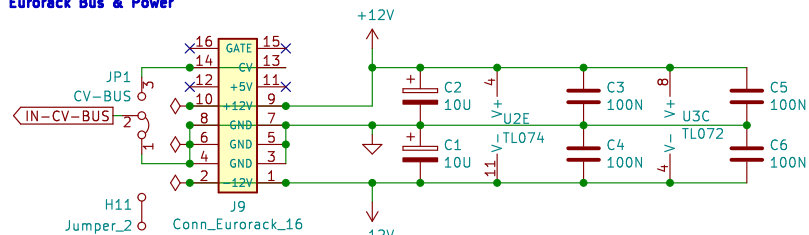


## Board Connectors

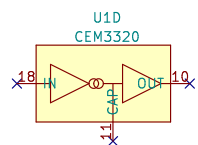
TODO: correct connector assignments



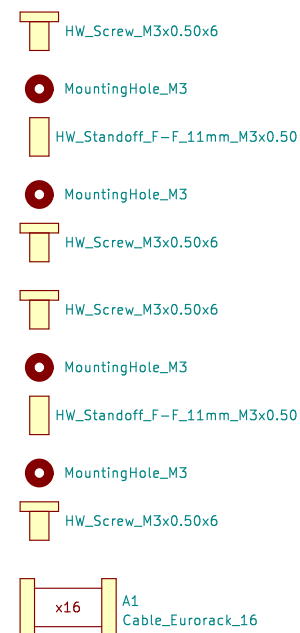
## Eurorack Bus & Power



## Leftovers



## Hardware



All fixed resistors are 1% tolerance unless otherwise specified.  
All electrolytic capacitors are rated for 25VDC unless otherwise specified.

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Sheet: /PanelPower/  
File: PanelPower.kicad\_sch

**Title: Front Panel & Power – Eurorack State-Variable Filter**

Size: A4  
KiCad E.D.A. kicad (6.0.9)

Date: 2022-11-11

Rev: 1.2  
Id: 2/2

