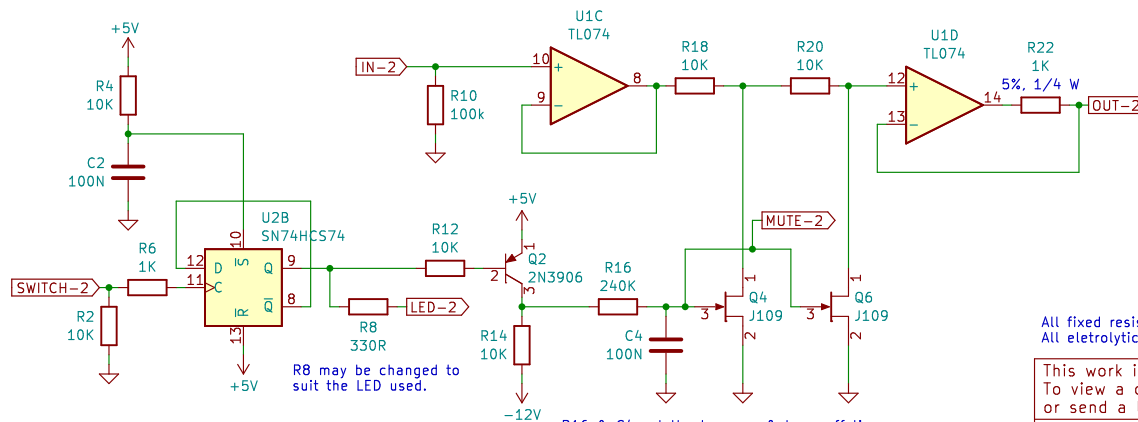


Switching circuit makes a momentary push of the button change the on/off state.  
It's important that the flip-flop has Schmitt-trigger inputs to prevent multiple transitions due to switch bouncing (even with a capacitor for de-bouncing).

Q1 converts the "on" state from +5 V to -12 V to turn off the JFETs.

The signal is muted by shunting it to ground.  
The JFET's on resistance prevents it from completely  
muting the signal, so two JFETs are used in parallel  
to give  $\geq 60$  dB of muting.



R8 may be changed to suit the LED used.

R16 & C4 set the turn-on & turn-off time. They can be changed to adjust the "soft switching" behaviour. They also may need to be changed if different JFETs are used.

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

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Eurorack muting module module – 8HP

**Len Popp**

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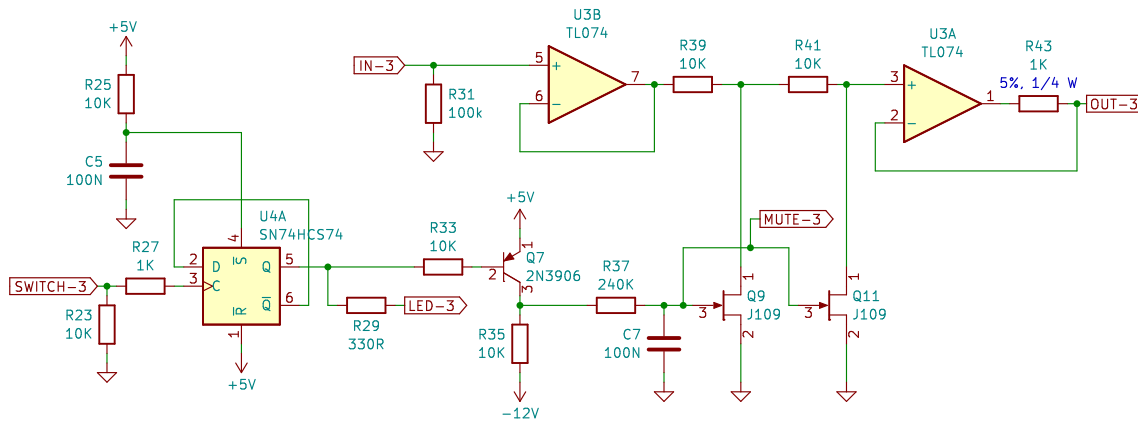
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Size: A4	Date: 11/01/2025
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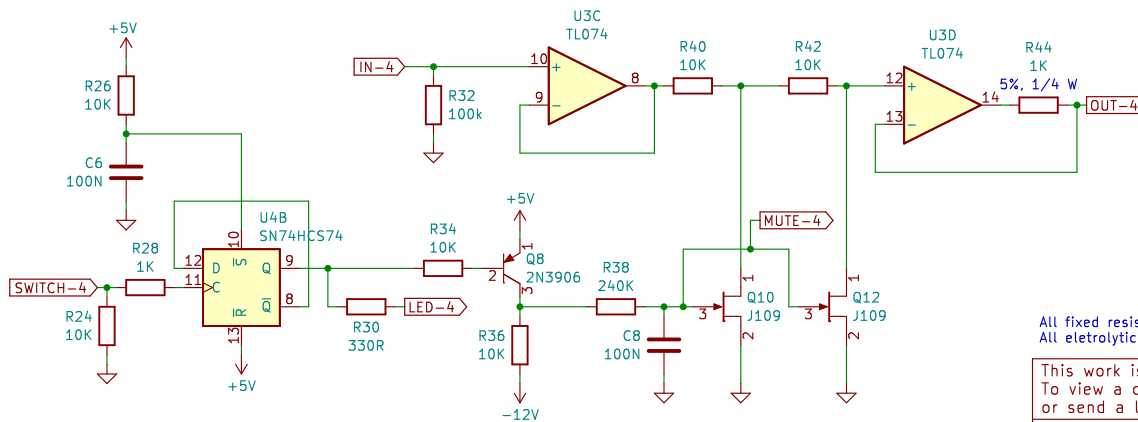
Rev: 1.0

Id: 1/3

Channel 3



Channel 4



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

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Sheet: /Channels34/

File: Channels34.kicad\_sch

**Title: Switches – Channels 3 & 4**

Size: A4 Date: 2023-10-19

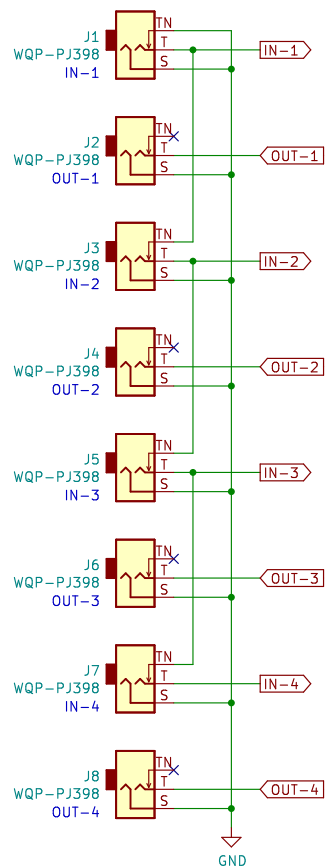
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Rev: 1.0

Id: 2/3

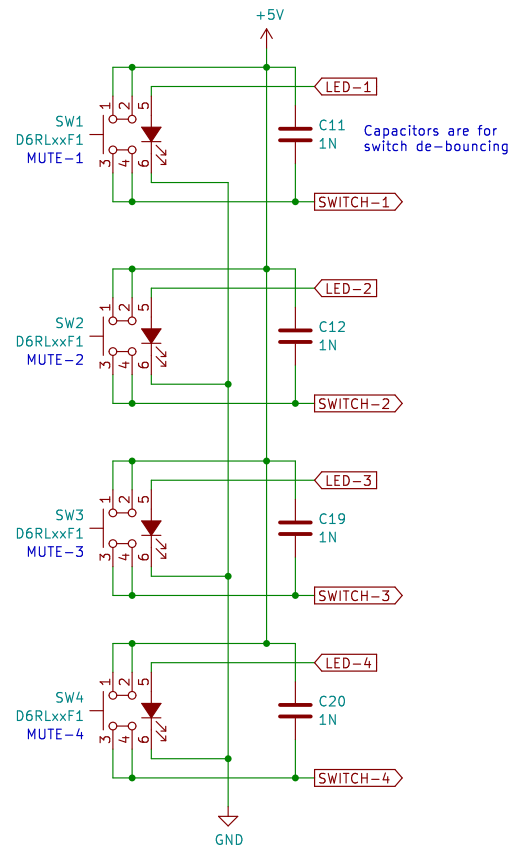


## In/Out Jacks

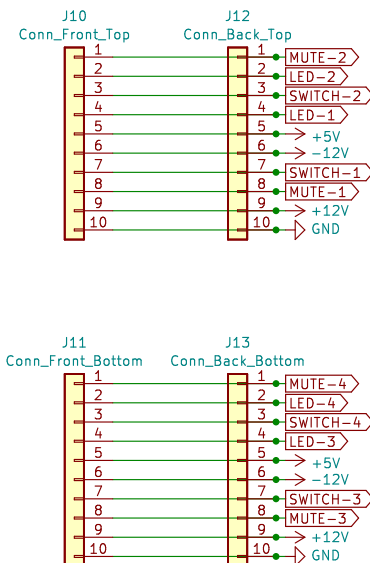


## Mute Switches

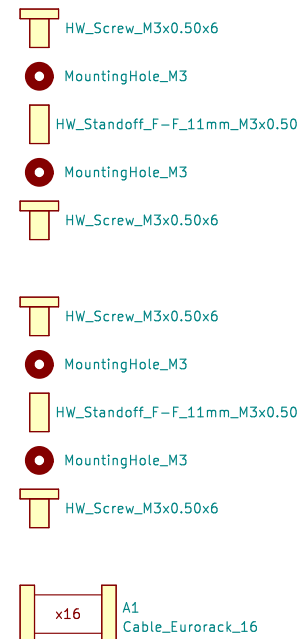
Illuminated momentary pushbuttons



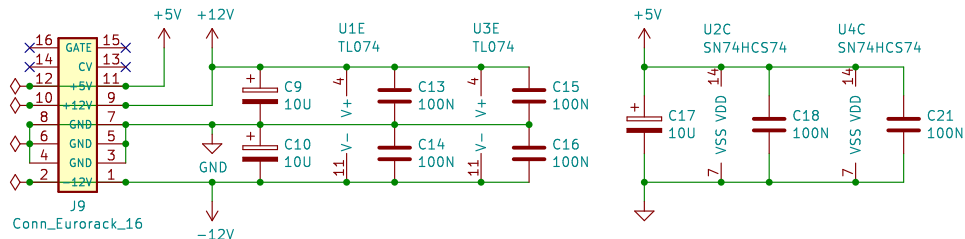
## Board Connectors



## Hardware



## Eurack Bus & Power



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: Switches - Front Panel & Power**

Size: A4  
KiCad E.D.A. kicad 7.0.8

Rev: 1.0  
Id: 3/3