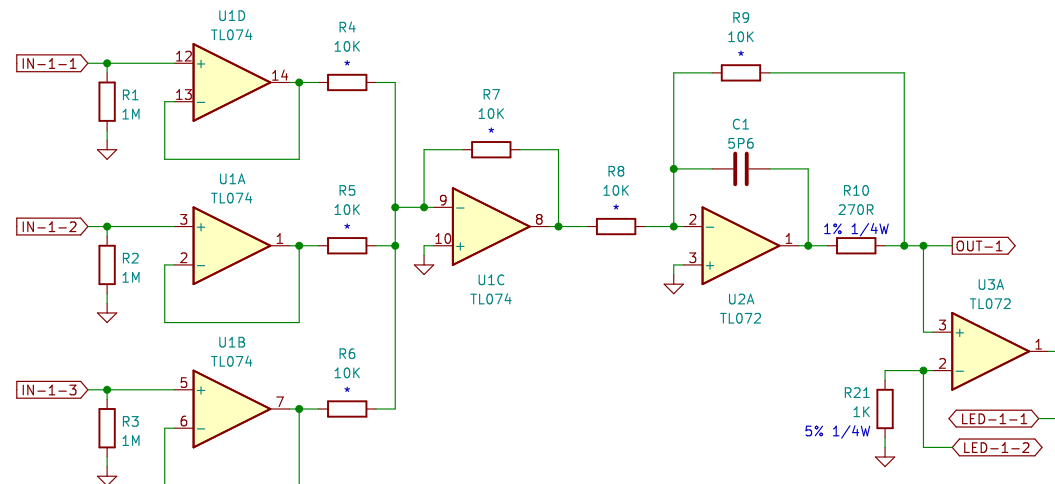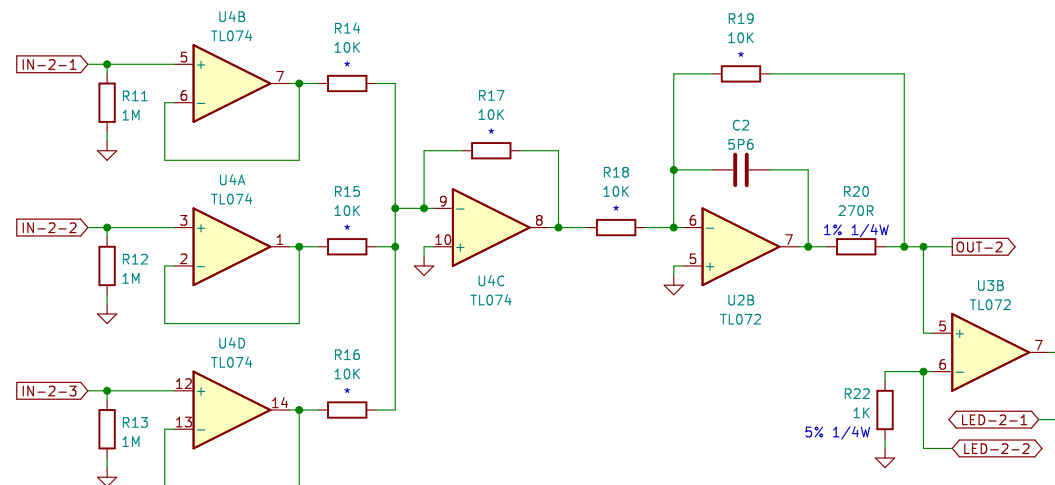**Channel 1**

For a high-precision adder, use 0.1% tolerance for all resistors marked *
and replace U1, U2, and U4 with precision op-amps (e.g. LT1013/4).

Note that some precision op-amps are slower and so are only suitable for
control voltages, not audio-frequency signals.

Channel 2

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

Eurorack precision adder & unity-gain mixer module — 4HP
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Sheet: /
File: Adder.kicad_sch
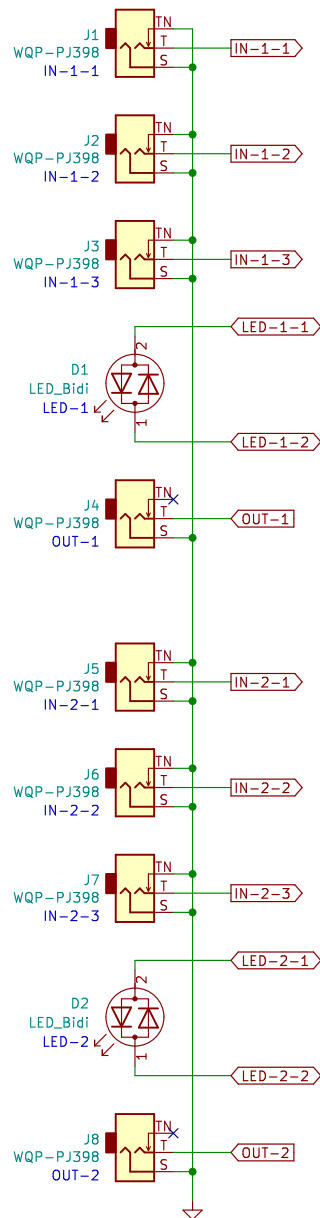
Title: Eurorack Adder / Mixer

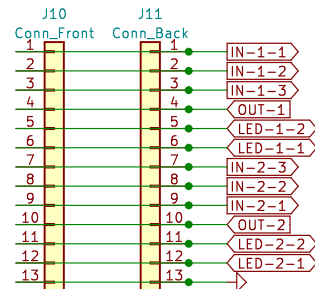| Size: A4	Date: 2022-09-11	**Rev: 1.0**
KiCad E.D.A. kicad (6.0.8)		Id: 1/2

Front Panel Controls

J1 WQP-PJ398 IN-1-1 → IN-1-1
J2 WQP-PJ398 IN-1-2 → IN-1-2
J3 WQP-PJ398 IN-1-3 → IN-1-3

D1 LED_Bidi LED-1 → LED-1-1, LED-1-2

J4 WQP-PJ398 OUT-1 → OUT-1

J5 WQP-PJ398 IN-2-1 → IN-2-1
J6 WQP-PJ398 IN-2-2 → IN-2-2
J7 WQP-PJ398 IN-2-3 → IN-2-3

D2 LED_Bidi LED-2 → LED-2-1, LED-2-2

J8 WQP-PJ398 OUT-2 → OUT-2

Board Connectors

J10 Conn_Front
J11 Conn_Back

Pin	Signal
1	IN-1-1
2	IN-1-2
3	IN-1-3
4	OUT-1
5	LED-1-2
6	LED-1-1
7	IN-2-3
8	IN-2-2
9	IN-2-1
10	OUT-2
11	LED-2-2
12	LED-2-1
13	

Eurorack Bus & Power

J9 Conn_Eurorack_10

Pins: 10, 8 (+12V), 6 (GND), 4 (GND), 2 (-12V) / 9, 7, 5, 3, 1 (-12V)

+12V
-12V

C3 10U
C4 10U
C5 100N
C6 100N
C7 100N
C8 100N
C9 100N
C10 100N
C11 100N
C12 100N

U1E TL074
U2C TL072
U3C TL072
U4E TL074

A1 x10 Cable_Eurorack_10

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

Eurorack precision adder & unity-gain mixer module — 4HP
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Sheet: /PanelPower/
File: PanelPower.kicad_sch

Title: Front Panel & Power — Eurorack Adder / Mixer

Size: A4	Date: 2022-09-11	**Rev: 1.0**
KiCad E.D.A. kicad (6.0.8)		Id: 2/2