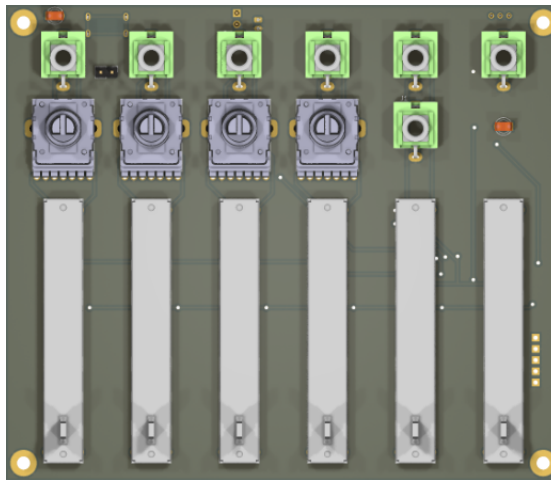


Mixerli

Battery powered 10 channel (4x2 + 1x2) stereo mixer featuring stereo input level control slider and stereo rotary aux send level control.

Builder's Guide for v2.0
Source Location: github.com/stahlnow/mixerli



SPDX-FileCopyrightText: 2023 Stahl office@stahlnow.com
SPDX-License-Identifier: CERN-OHL-S-2.0+

This source describes Open Hardware and is licensed under the CERN-OHL-S v2 or any later version.

You may redistribute and modify this source and make products using it under the terms of the CERN-OHL-S v2 or any later version (<https://ohwr.org/cern-ohl-s-v2.txt>).

This source is distributed WITHOUT ANY EXPRESS OR IMPLIED WARRANTY, INCLUDING OF MERCHANTABILITY, SATISFACTORY QUALITY AND FITNESS FOR A PARTICULAR PURPOSE. Please see the CERN-OHL-S v2 for applicable conditions.

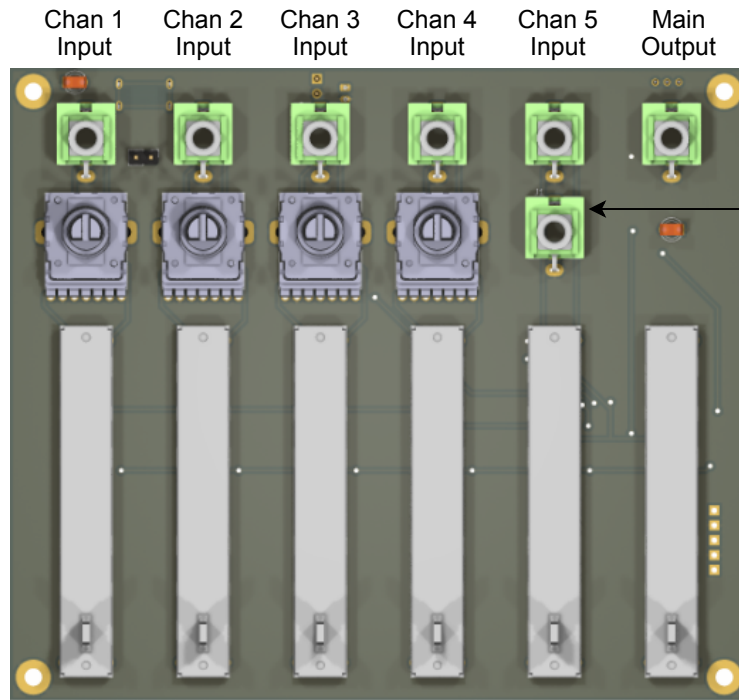
Source location: <https://github.com/stahlnow/mixerli>

As per CERN-OHL-S v2 section 4, should You produce hardware based on this source, You must where practicable maintain the Source Location visible on the printed circuit board of the mixerli or other products you make using this source.

Operation

USB-C charge port
& charge indicator LED

Aux send level



Aux Output

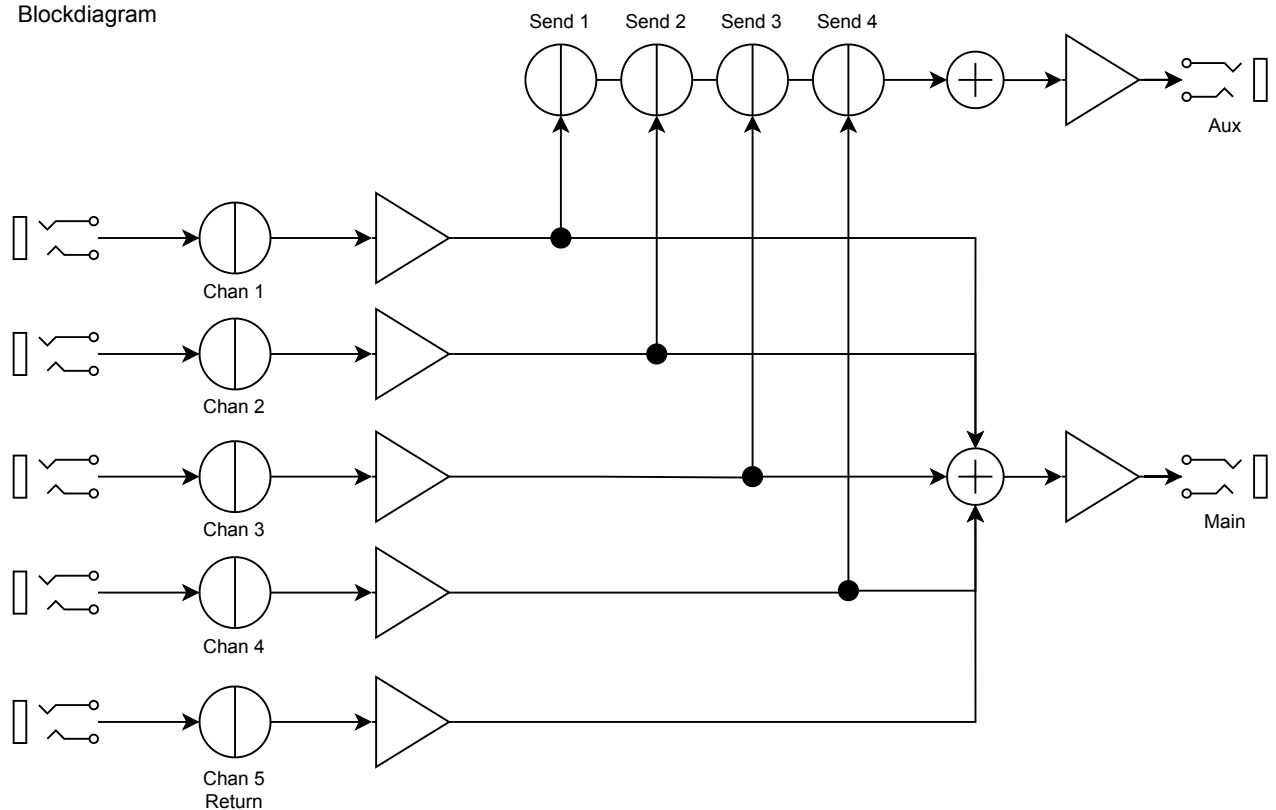
Power Switch

Power LED

Channel level faders

Main level fader

Blockdiagram



Pick & Place

JST connector for battery. Connect to a 3.7v lithium polymer battery.

Double check polarity before connecting the battery!

Power switch

4.7uF

USB-C for powering and battery charging & charging indicator LED

1k

charge controller MCP73831

100k

MOSFET ZXMP6A13FTA

Schottky diode NSR0320MW2T3G

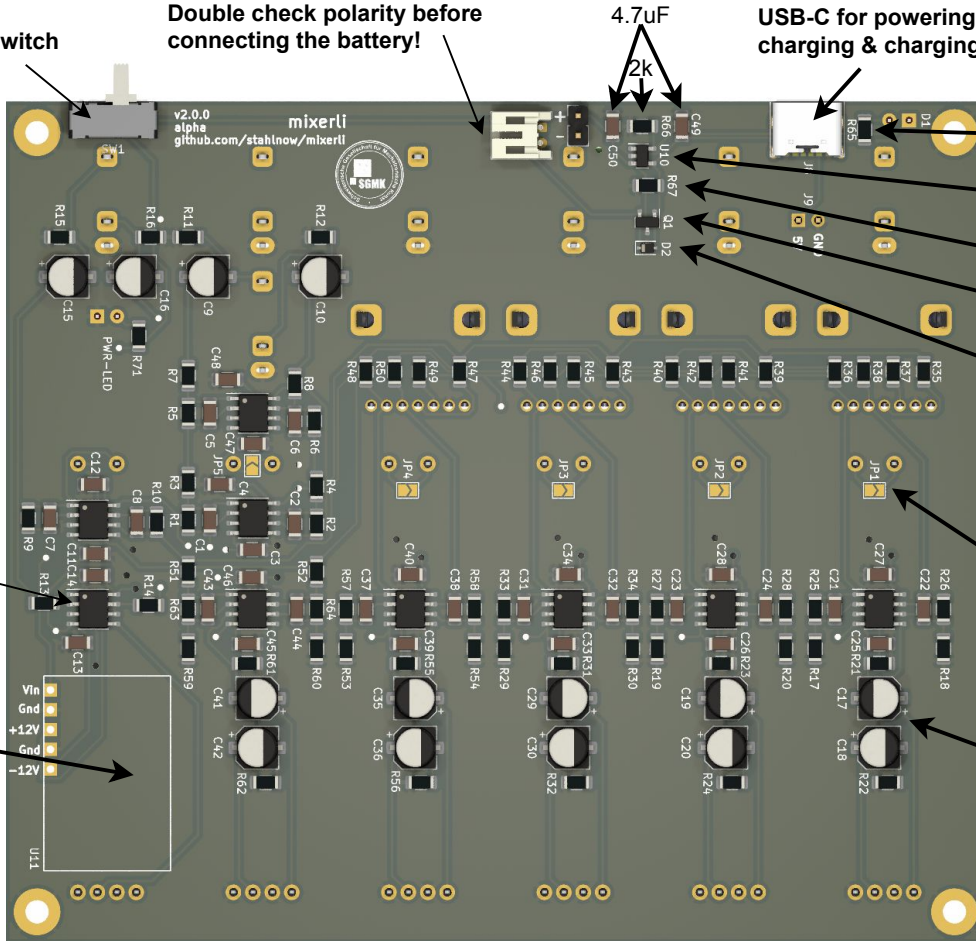
Mono solder pads (JP1, JP2, JP3, JP4):

Close pad X to convert the stereo input X to a (dual) monophonic input. Additionally, pin 2 (ring contact) needs to be pulled from the corresponding jack to prevent shorting to ground.

47uF

NJM4580

DC-DC-Boost-Converter-Positive-Negative-Dual-Output-Power-Supply



| # | Name | Value | Count |
|----|--|--|-------|
| 1 | C3, C4, C11, C12, C13, C14, C25, C26, C27, C28, C33, C34, C39, C40, C45, C46, C47, C48 | 100nF | 18 |
| 2 | C1, C2, C5, C6, C7, C8, C21, C22, C23, C24, C31, C32, C37, C38, C43, C44 | 47pF | 16 |
| 3 | C17, C18, C19, C20, C29, C30, C35, C36, C41, C42, C9, C10, C15, C16 | 47uF | 14 |
| 4 | C49, C50 | 4.7uF | 2 |
| 5 | R1, R2, R3, R4, R5, R6, R9, R10, R17, R18, R19, R20, R25, R26, R27, R28, R29, R30, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R43, R44, R45, R46, R47, R48, R49, R50, R51, R52, R53, R54, R57, R58, R59, R60, R63, R64, R71 | 10k | 47 |
| 6 | R21, R22, R23, R24, R31, R32, R55, R56, R61, R62 | 47k | 10 |
| 7 | R11, R12, R15, R16, R67 | 100k | 5 |
| 8 | R7, R8, R13, R14 | 100 | 4 |
| 9 | R65 | 1k | 1 |
| 10 | R66 | 2k | 1 |
| 11 | D2 | NSR0320MW2T3G | 1 |
| 12 | U1, U2, U3, U4, U5, U6, U7, U8, U9 | NJM4580 | 9 |
| 13 | U10 | MCP73831 | 1 |
| 14 | U11 | DC-DC-Boost-Converter-Positive-Negative-Dual-Output-Power-Supply | 1 |
| 15 | SW1 | SSSS916400 | 1 |
| 16 | Q1 | ZXMP6A13FTA | 1 |
| 17 | J8 | UJC-HP-3-SMT-TR | 1 |
| 18 | J10 | JST_PH_S2B-PH-K 1x02 P2.00mm Horizontal | 1 |