MIXER V4 – ASSEMBLY GUIDE

Something
MODULAR

This document will help you to build your module without any trouble! We will give the order in which the components should be placed on the boards to make your life easier during assembly.

If you want more information about how to build Eurorack modules and what tools you should have, go check our DIY electronics advice on our website: **somethingmodular.fr**

We also made an **online interactive BOM** so you can check components placement.

And again:

THANKS YOU FOR CHOOSING OUR KIT!! YOU'RE AWESOME!!

Now let's build this module, your module!

RESISTORS

Qty	Value	Color	Code	Reference designator
2	1k		Brown, black, black, brown, brown	R17, R31
4	10k		Brown, black, black, red, brown	R7, R9, R18, R19
1	22k		Red, red, black, red, brown	R12
2	47k		Yellow, violet, black, red, brown	R13, R14
11	100k		Brown, black, black, orange, brown	R1, R2, R3, R4, R5, R6, R8, R10, R11, R15, R16

DIODES

Diodes are **Polarized!**
The black or white line on the diode must match the white line on the diode symbol on the Silkscreen.

Qty	Value	Reference designator
2	1N5818	D4, D5
3	1N4148	D1, D2, D3

INTEGRATED CIRCUITS

ICs are oriented and so are sockets. Solder the sockets first, take care of orientation: the notch or dot on one end of the IC should match the silkscreen.
Before putting the ICs, **ground yourself** (you can touch the metal on your kitchen sink faucet).
Now, place the ICs, take care of orientation.

Qty	Value	Reference designator
1	TL074	U1
1	TL072	U2

CAPACITORS

Qty	Value	Code	Reference designator
3	100n	104	C3, C4, C5

ELECTROLYTIC CAPACITORS

Electrolytic Capacitors are **Polarized!**
Mind the polarity : the long leg is the positive lead, negative lead is denoted by a white line.

Qty	Value	Code	Voltage	Reference designator
3	10µF	10µF	≥ 25 V	C1, C2, C9

POWER CONNECTOR

This component should be soldered on the back of the PCB. Mind pin 1.

FEMALE AND MALE PIN HEADERS

Place the female pin header on the front side of board B, place the male pin headers on the back of board B.
Put them inside each other.
Secure the spacer between board A and B.
Solder both female and male pin headers.

Qty	Value	Reference designator
2	1x06 Female Pin Header	J20, J21
2	1x06 Male Pin Header	J10, J11

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Now that you have solder your pin headers, unscrew one of the M3 spacer screw. Put Board B aside. We will start by soldering potentiometers and jacks onto Board A.

READ THIS BEFORE SOLDERING ANYTHING:

Install potentiometers and jacks onto board A without soldering. Now place the front panel, secure few components. Check for any mechanical stress on components, PCB or panel. If there is none then you can solder.

Remember to do this little routine every time you put front panel components, soldering without putting the front panel components first you risk to have hard time to align the components to the panel holes.

3.5mm Jack Sockets

Qty	Value	Reference designator
6	PJ301M-12	J1, J2, J3, J4, J6, J7

Potentiometers - ALPHA 9MM POTS

Qty	Value	Reference designator
5	100k log	RV1, RV2, RV3, RV4, RV5

Now secure again the M3 spacer between Board A and B. Place the dual LED on the PCB. The shortest leg is the **Green LED**. Put back the panel as you did before. Place the LED and now you can solder.

Bicolor LED 3mm common cathode

Qty	Value	Reference designator
1	Red/green	D6

Now you can secure every jacks and pots nuts. Once you are done. Put the potentiometer knobs on.

CONGRATULATION, you've just finished building your new module!

FIRST POWER UP TEST:

Before powering up your module, use a multimeter to check that there is no short between +12V, -12V and Ground nets.

Now you can power up your module: Connect the power ribbon cable (the red wire on the power ribbon cable corresponds to -12V) and **Enjoy!**

YOU'RE READY TO ROLL ! ENJOY YOUR NEW MODULE !