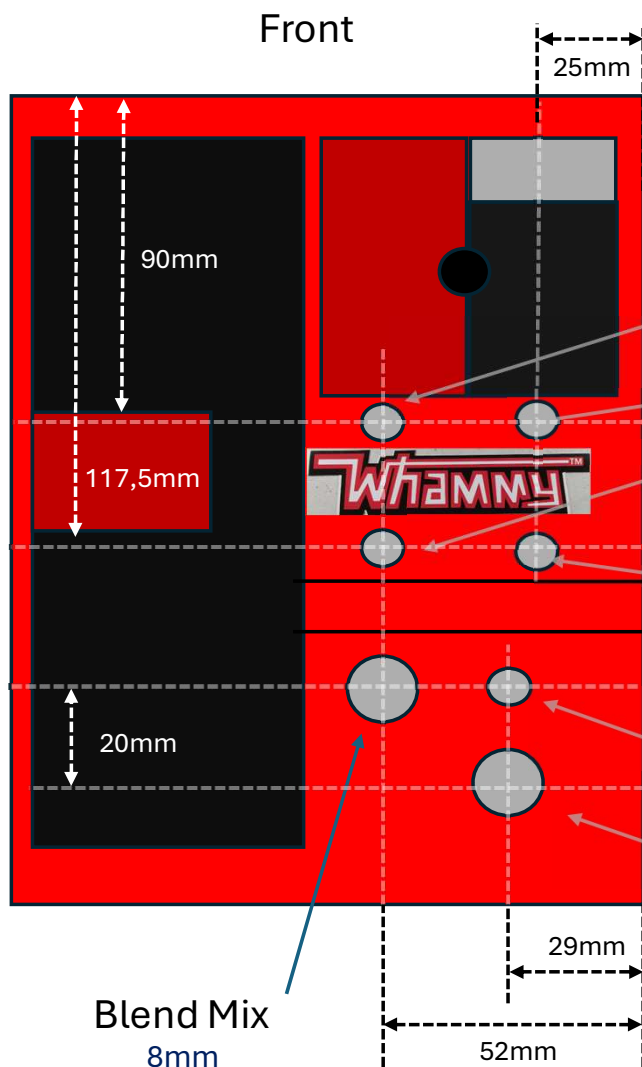Whammy 4 – NEO – Version 1.10
By melatroid

Working Pre-Final Version

melatroid@gmail.com

Calibration

Midi Access

Time

Momantary / Change Effects

Blend Mix

LED On/OFF

Effect On/OFF

Front

25mm

90mm

117,5mm

Whammy™

20mm

29mm

52mm

Blend Mix
8mm

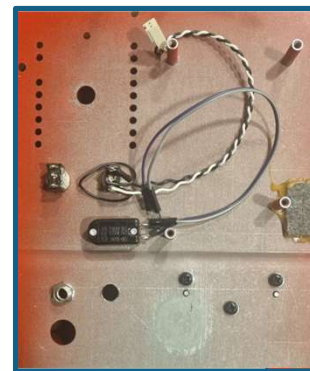Calibration Switch
6mm

Midi Access Switch
6mm

Momentary Switch
12mm

Poti 10KOhm
7mm

LED
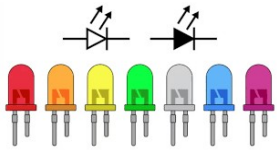7,5mm

3PDT
10mm

Back

Glue it!

Blend Mix
8mm

Glue it!

RP 2040 Zero
**USB TO THE TOP
FOR UPDATES**

AC/DC
Power

Parts

1kΩ 3x

1MΩ

220Ω 2x

22-47 uF

100 nF
47 nF

ELKO/Ceramic Condenser

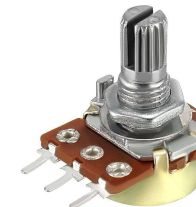Toogle Switch 2x
Midi Access /
Calibration

Momantary
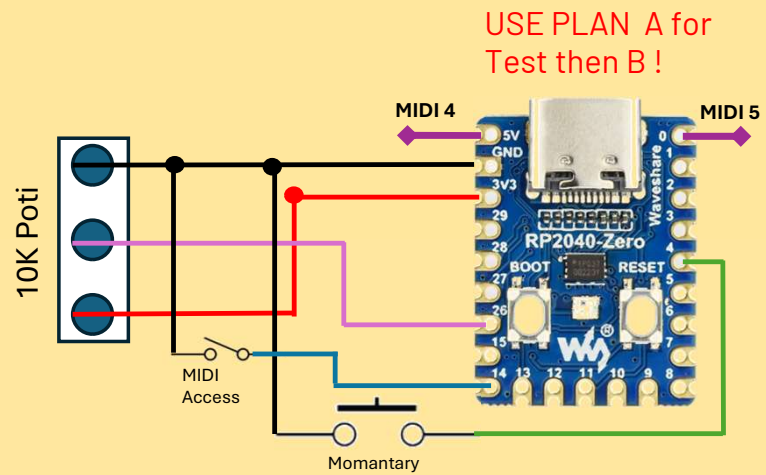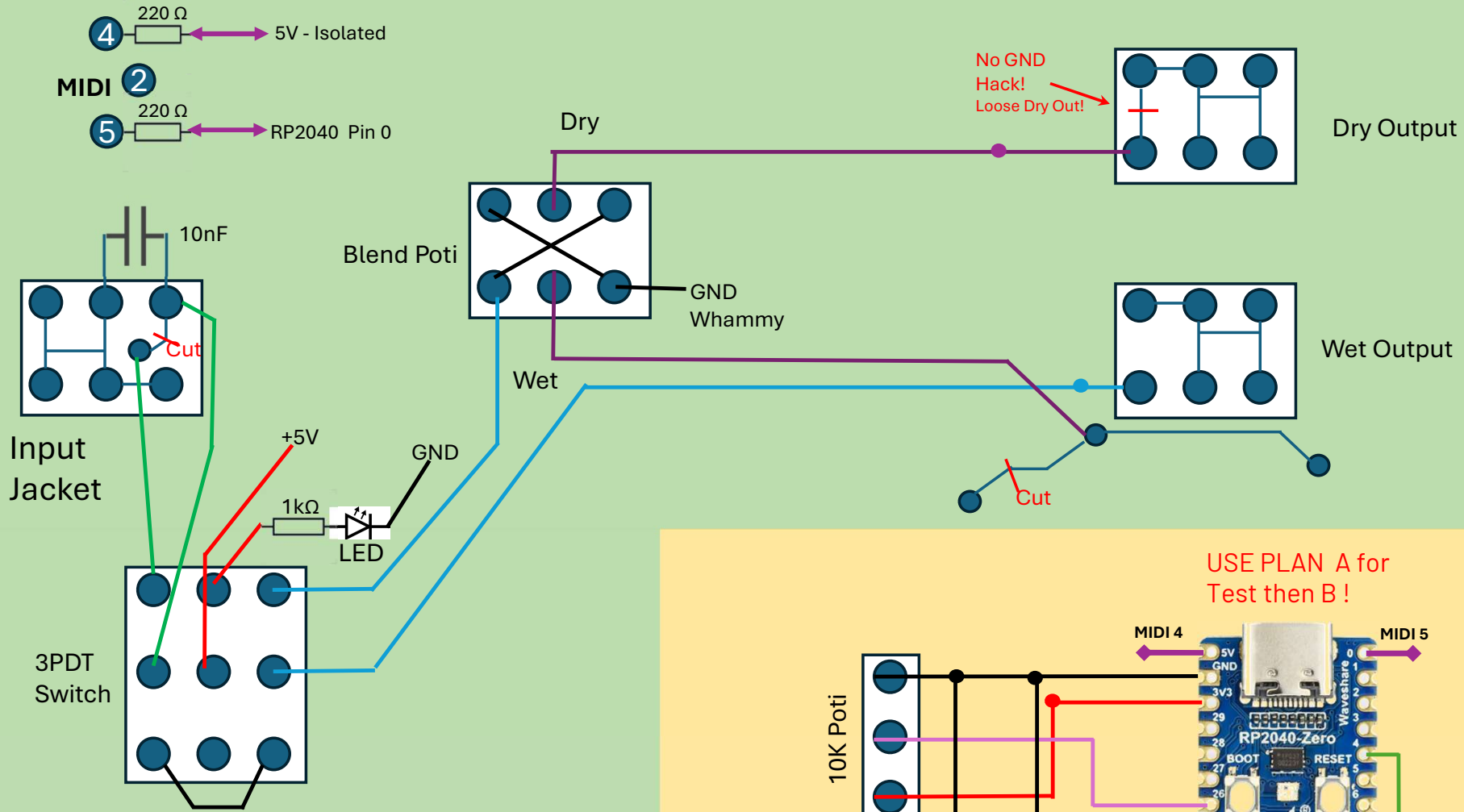(Original Part)
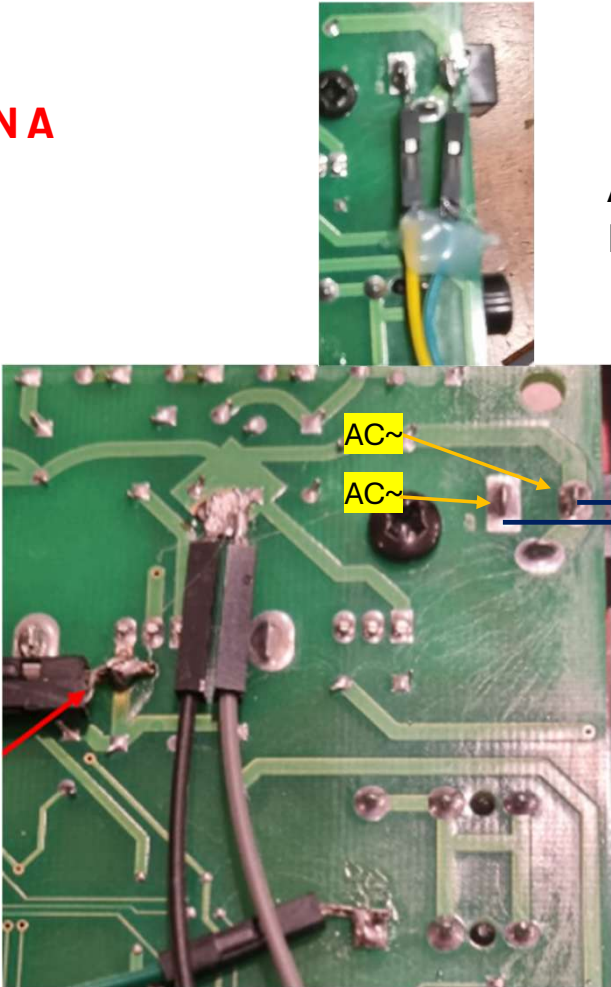
250kΩ
Blend

3PDT

B0505S-1W

AC/DC
LM2596HV

10KΩ

Raspberry Pi
2040 Zero

220 Ω
4 → 5V - Isolated

MIDI 2

220 Ω
5 → RP2040 Pin 0

No GND
Hack!
Loose Dry Out!

Dry Output

Dry

Blend Poti

GND
Whammy

10nF

Wet Output

Input
Jacket

Wet

Cut

+5V

GND

1kΩ

LED

3PDT
Switch

USE PLAN A for
Test then B !

MIDI 4

MIDI 5

10K Poti

RP2040-Zero

MIDI
Access

Momantary

**Power Supply PLAN A
TEST ONLY!**

AC/DC Converter
LM2596HV

Get a new fix!!!
Look Plan B/C

AC~
AC~

~9V

5V +/- !!!

USB Type-C

220 Ω   **MIDI 4**   **MIDI 5**   220 Ω

4   5

Dont connect
to Source DC
GND!!!
Separat DC !
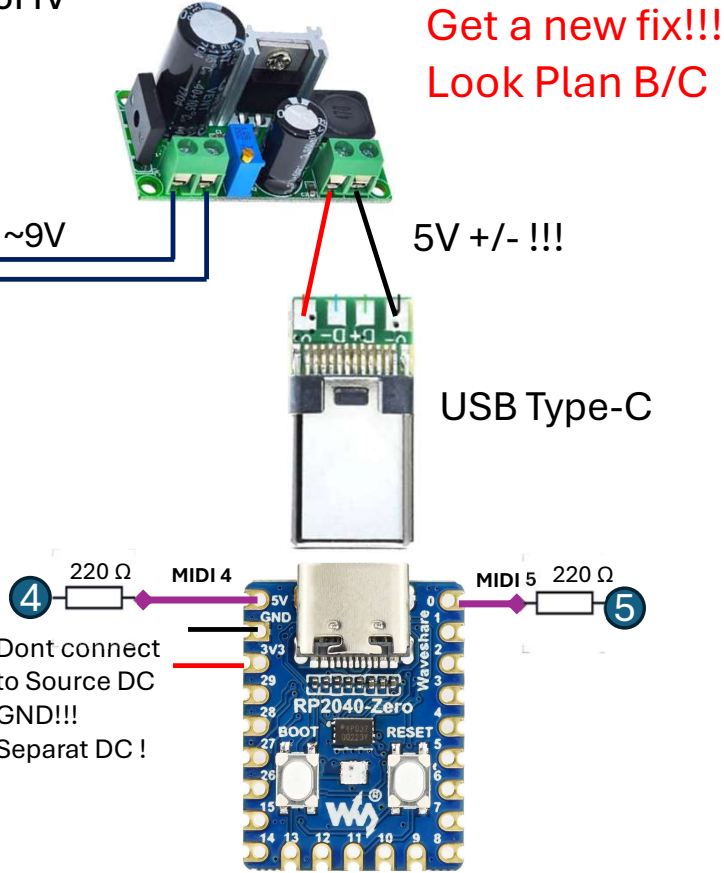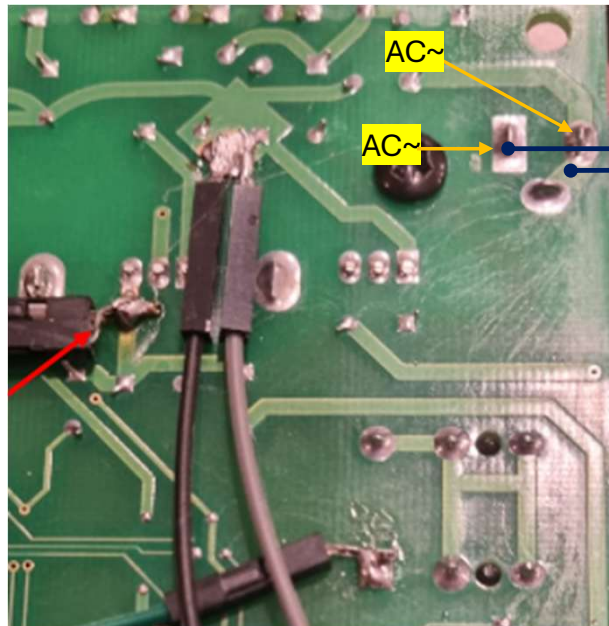
Power Supply PLAN B

AC/DC Converter
LM2596HV

B0505S-1W
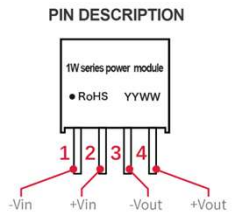
PIN DESCRIPTION

1W series power module
● RoHS   YYWW

-Vin   +Vin   -Vout   +Vout

Voltage here!

AC~

AC~

~9V

5V

47 uF

100 nF

47 nF

BLM21PG121SN1D
(Optional)

22-47 uF

100 nF

Dont connect to
Source DC GND!!!
Separat DC !

Check if 5V?

RP2040-Zero
Waveshare

BOOT

RESET

3V3   GND
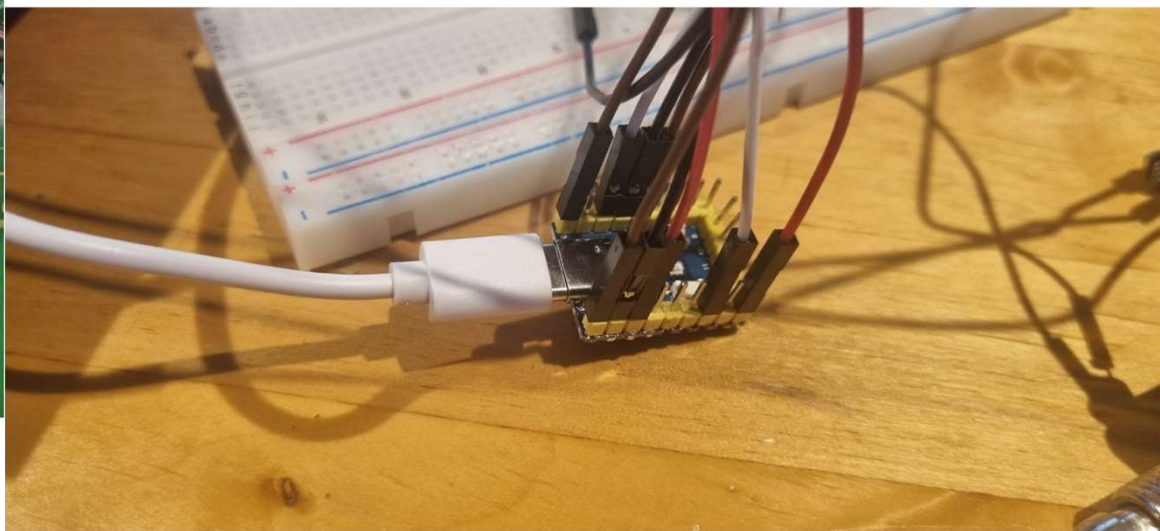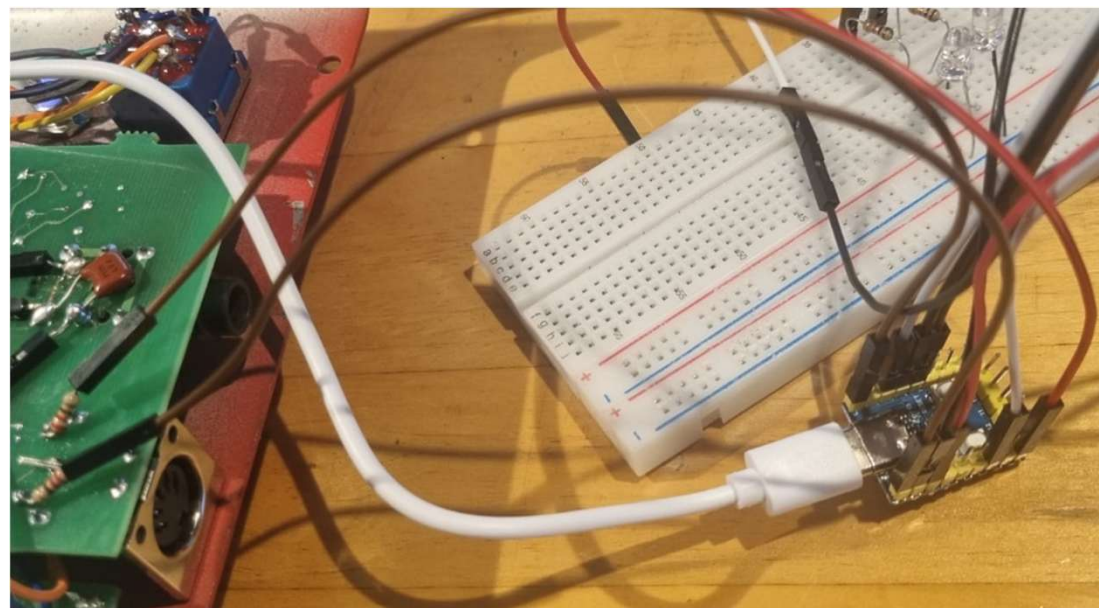
5V
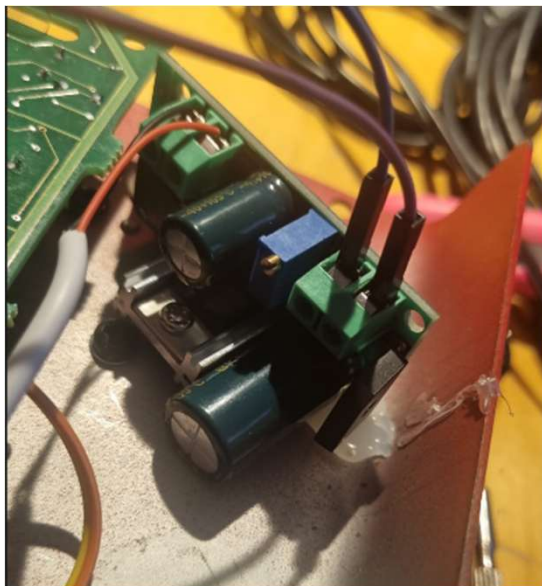
MIDI

220 Ω

4

2

5

220 Ω

MIDI 5

Not really needet
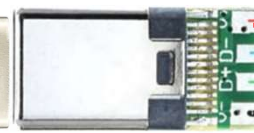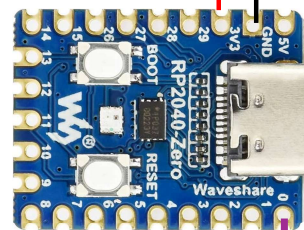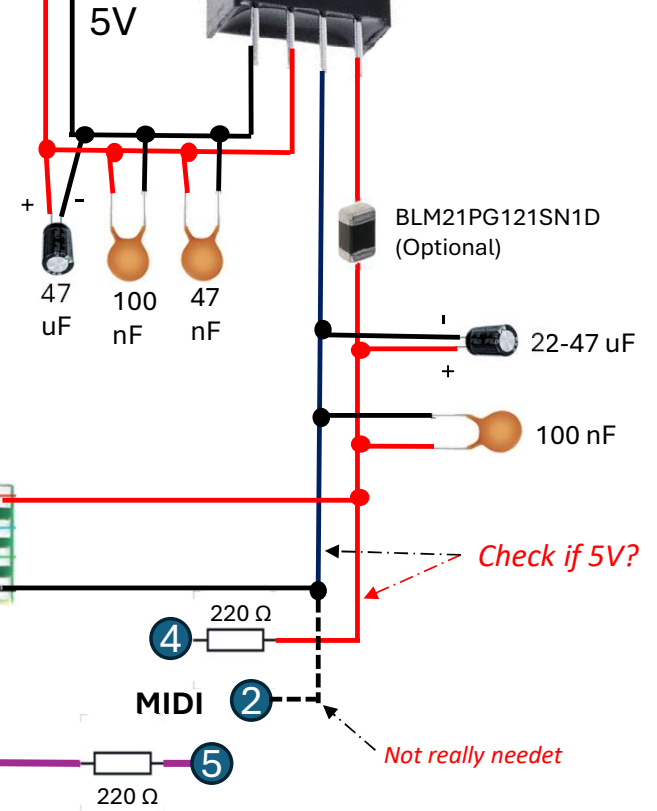
*Dont connect 2040 Zero
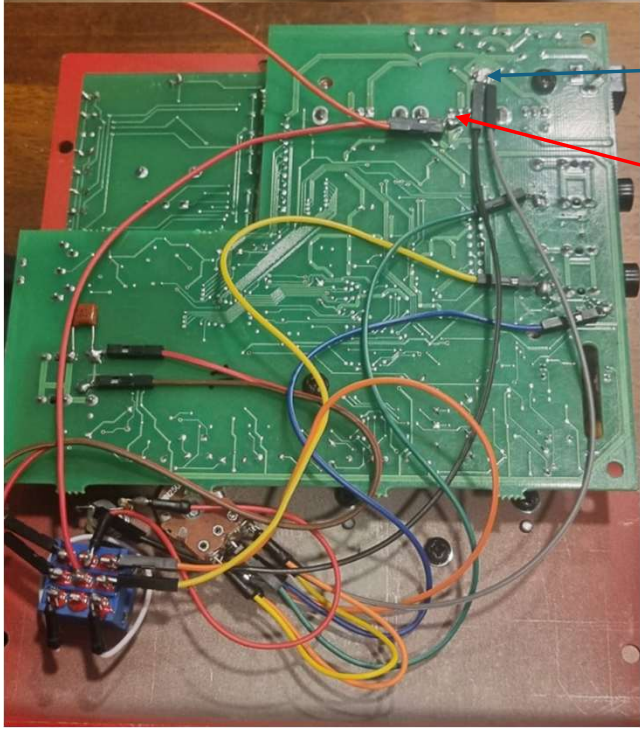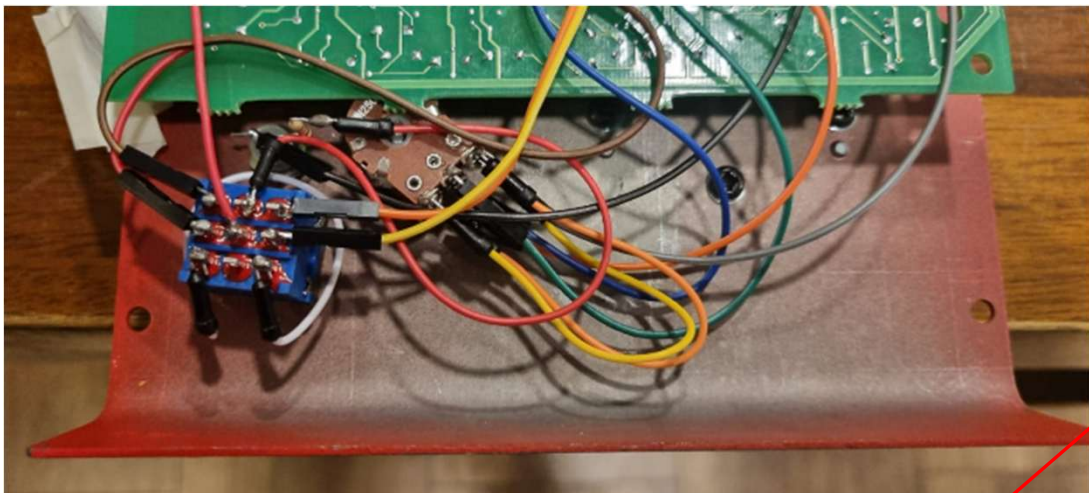bevor Voltage is correct!*

Power Supply PLAN C
MT3605 **OR** TPS61023

1000mA ~ 5-6h Playtime

TP4056 – USB-C

OUT+

B+

B-

OUT-

Var1

Var2

- CL   103450
+ 3.7V 2000mAh

3,7-4V

BEST OPTION!!!

TPS61023

VIN+   VIN-

MT3608

220

VOUT+   VOUT-

GND

Check if stable 3,3V?

3V3 GND 5V

2040 Zero

Dont connect 2040 Zero bevor Voltage is correct!

MIDI 5

4   220 Ω

MIDI   2

5   220 Ω

4,5-5V !!!

Vin GND 5V En

StandBy
ON/OFF

100 kΩ

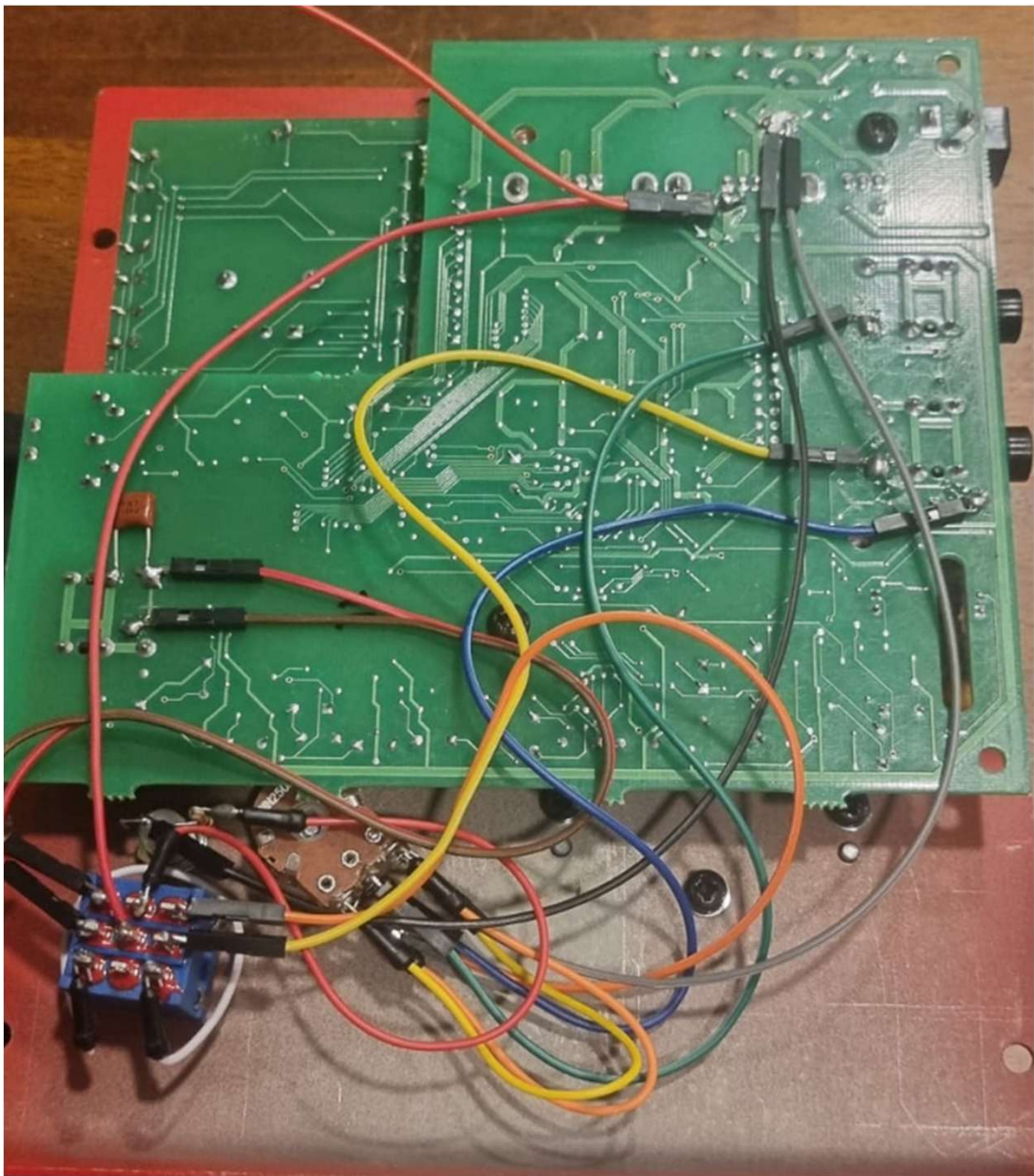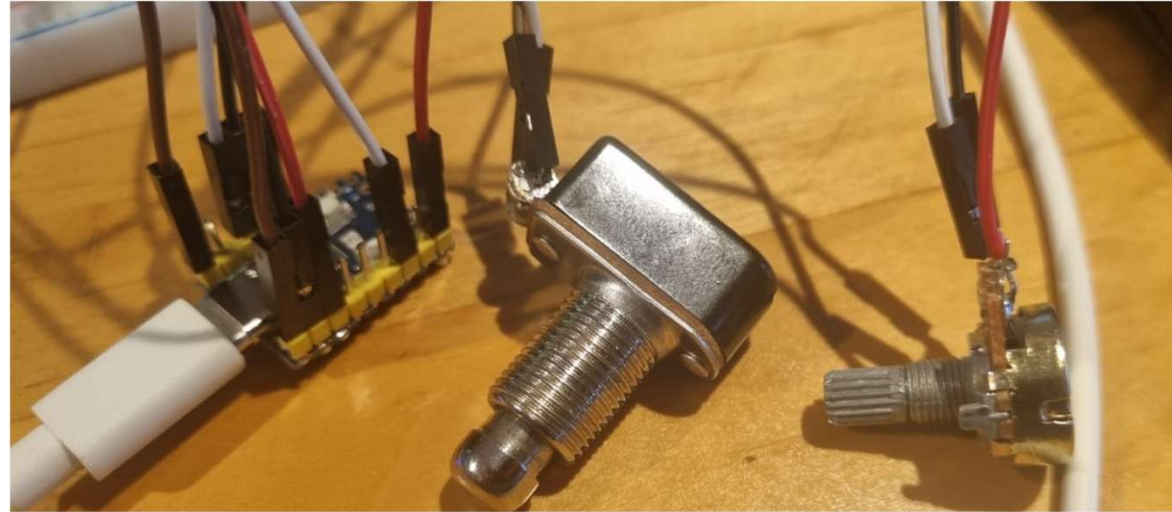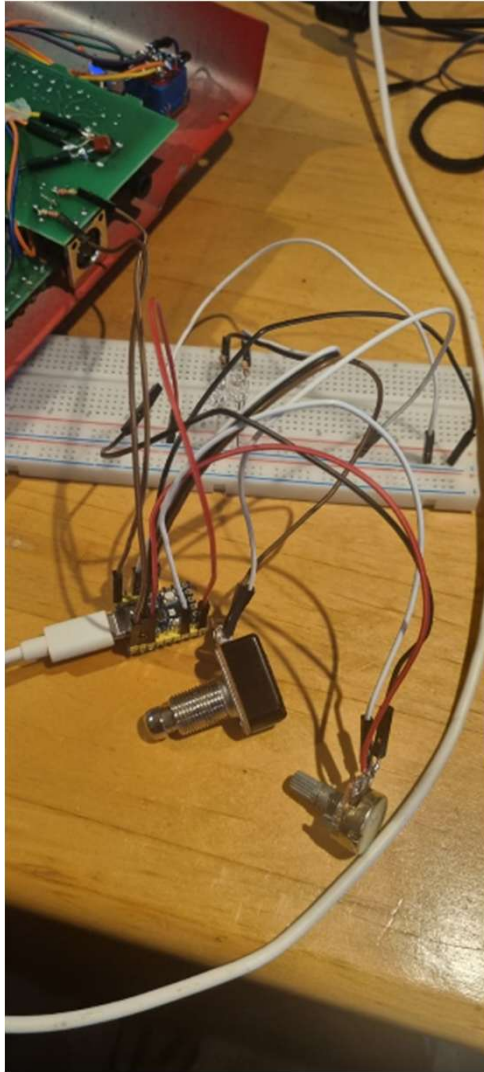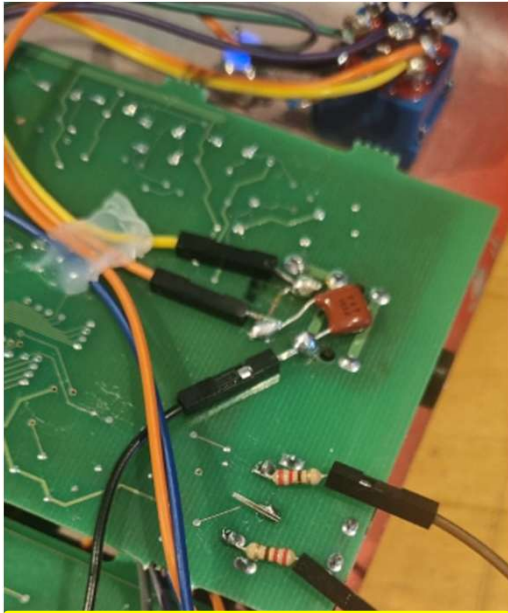Toggle Switch

Power Supply Test

Midi 4
VBUS

MIDI 2
GND

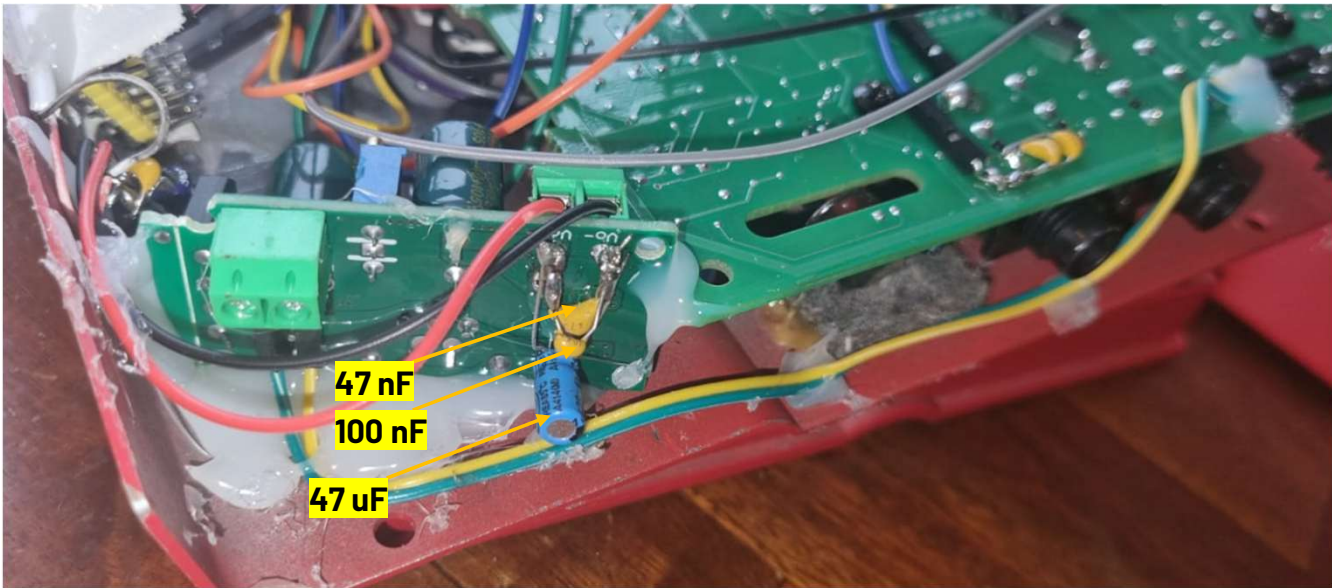Midi 5
TX

CUT
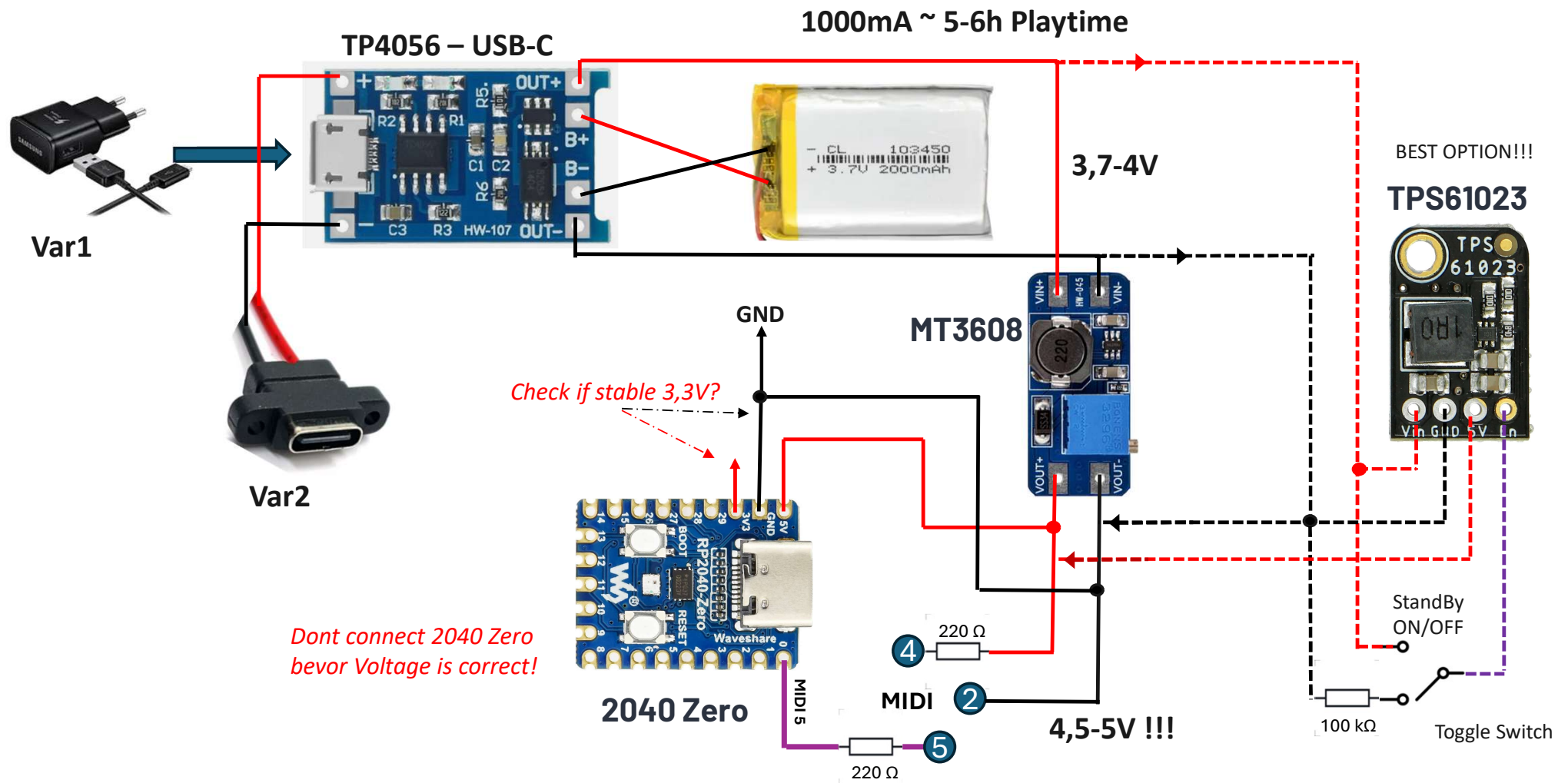
CUT
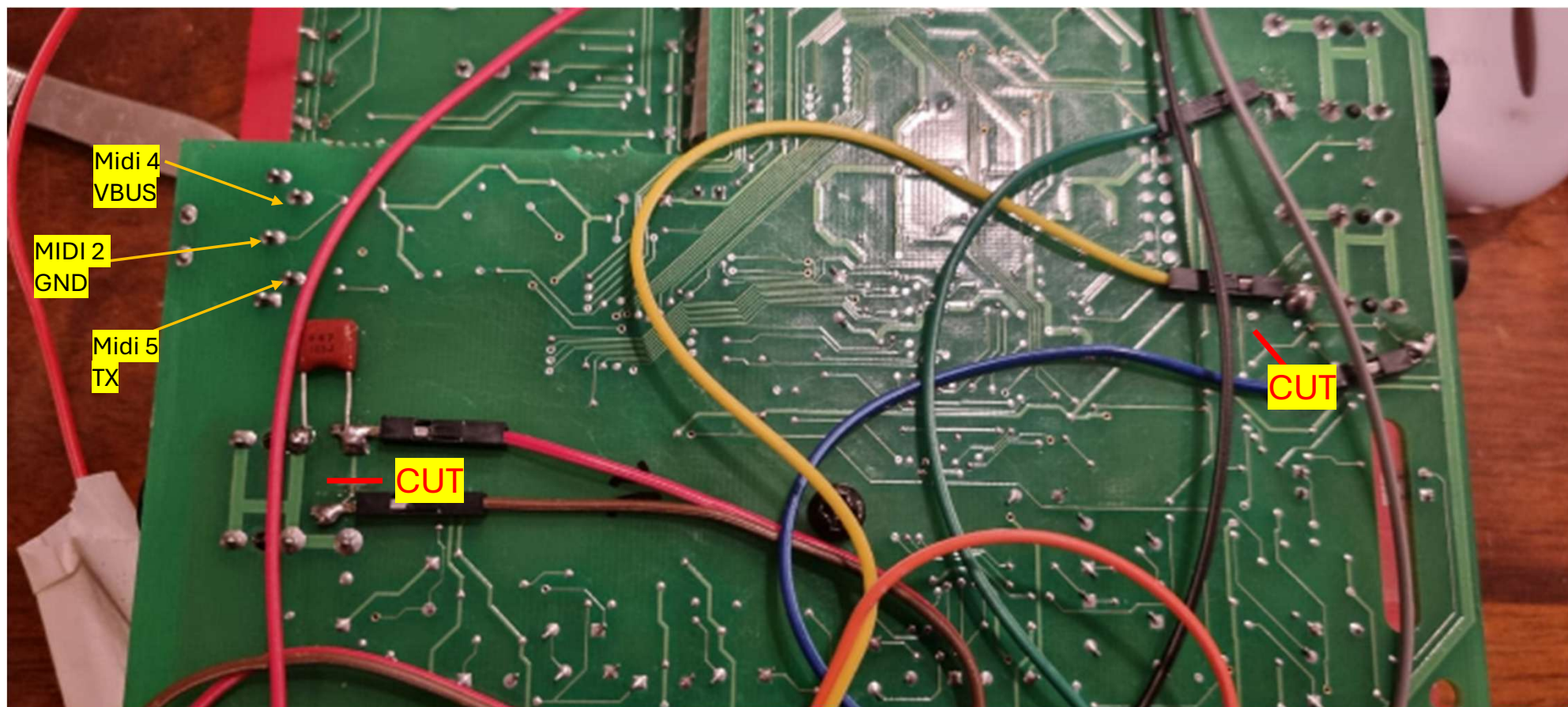
GND LED
HERE!!!

+5V LED
HERE!!!

Pull up
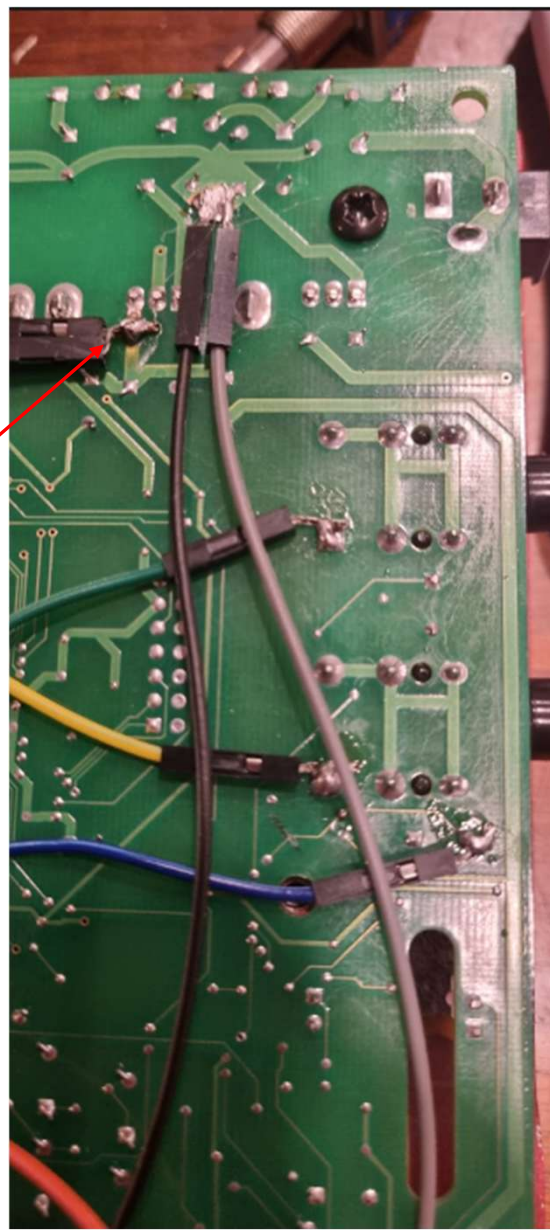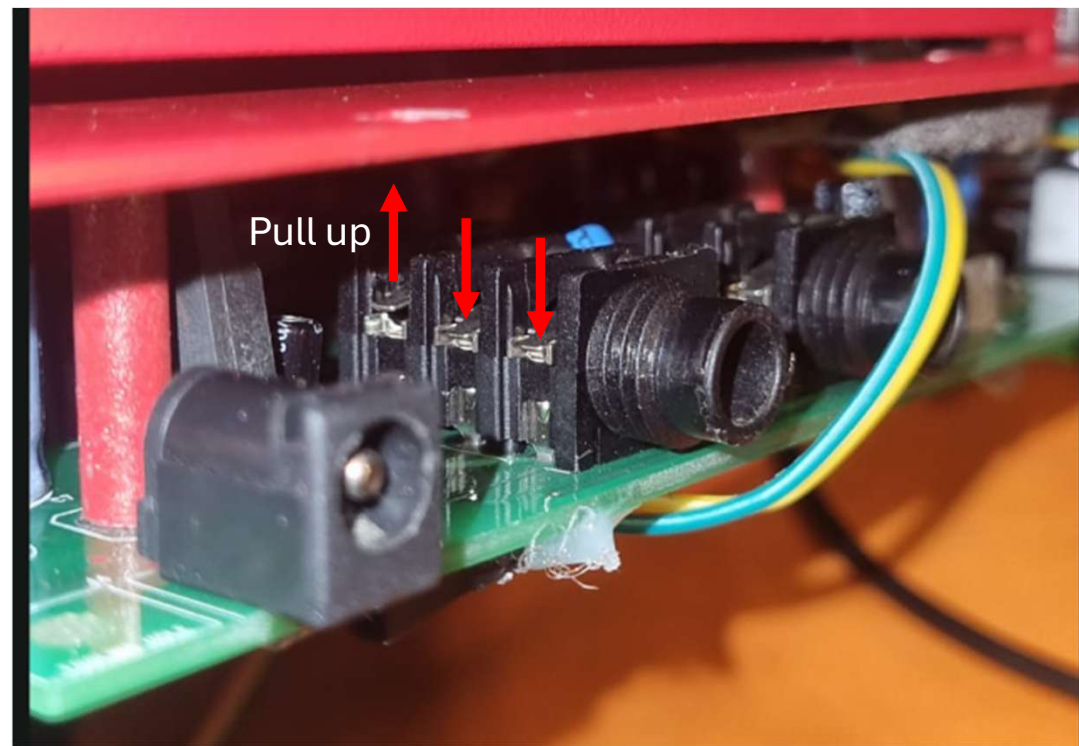
Midi Test

- 2 combinable effect presets

Anti- Noise-Filter

Insulate the cooling shield behind the housing with a PVC film.

B0505S-1W

47 uF

100 nF

47 nF

100 nF

47 nF

100 nF

47 uF
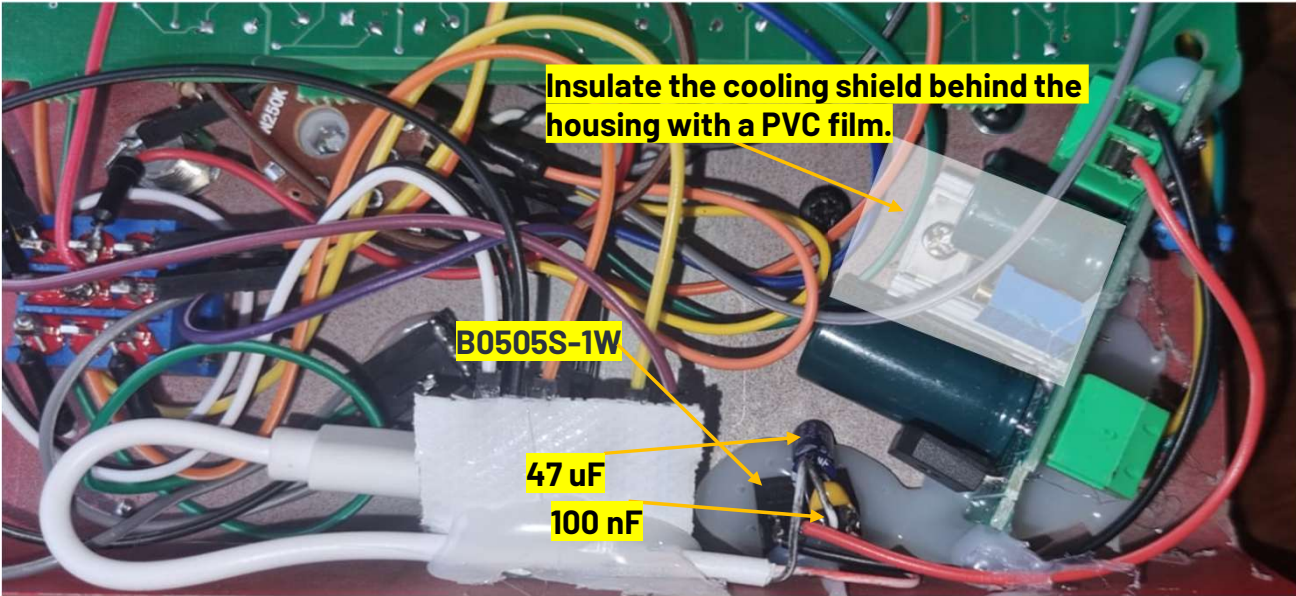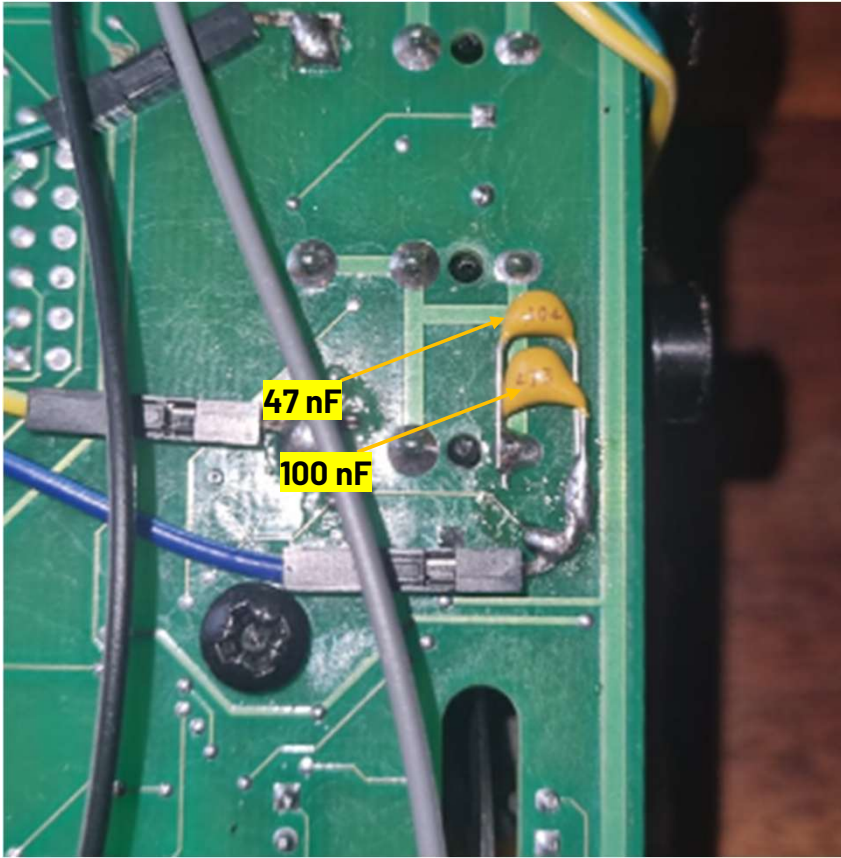
Final Front/Back

Flash NEO Software