PreenFM2 Eurorack Assembly.

v1 2019.

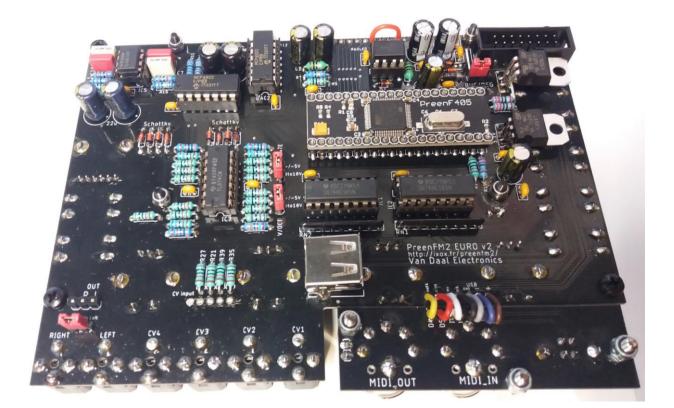


This assembly instruction will guide you though all the steps needed to assemble PreenFM2 for Eurorack format with 4 CV inputs.

Step 1. Resistors.

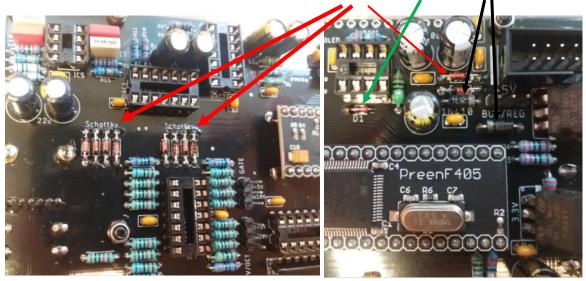
Mount all the needed resistors to the main board. All the values are written on the PCB.

QTY	Value
2	Resistor network
2	22ohm
3	68ohm
4	220ohm
2	1.8k
3	3k
1	3,3k
1	4,7k
3	6.8k
2	8.2k
18	10k
2	115k
2	1M



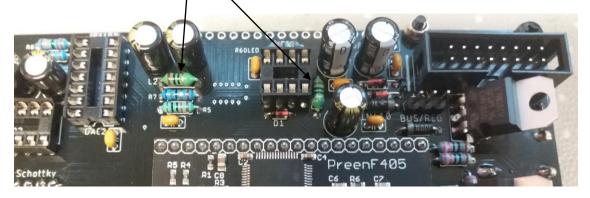
Step 2. Diodes

There are 3 different types of diodes used. 10x Schottky **Bat42**; 1x **1N4148**; 2x **1N4001**.



Step 3. Inductors

There are 2 inductors used. L1 and L2. Both same value.



Step 4. IC socets.

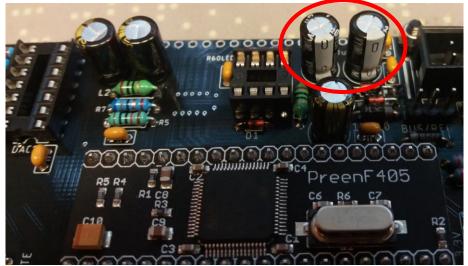
Solder all the IC sockets. 3x14Pin; 2x8Pin; 2x16Pin. Don't mount the chips inside just jet.

Step 5. 100n capacitors.

Solder all 15x100n ceramic caps. The small Yellow ones.

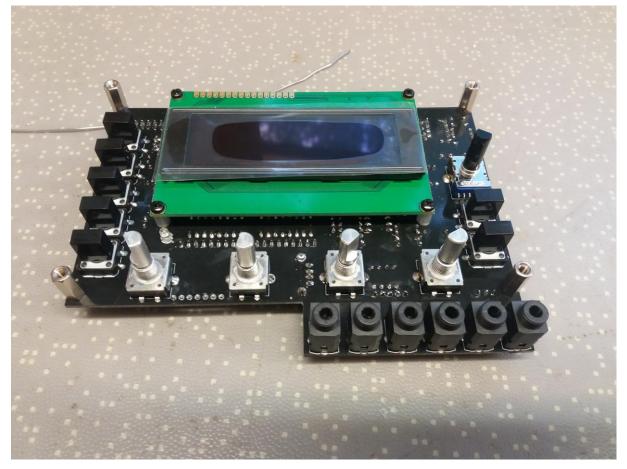
Step 6. Electrolytes.

Two of the 220uF electrolytes are 220uf 25V. They must be used in this position.



Step 7 Solder everything else!

Make sure to follow that parts that have screenpint on the other side, will be mounted to correct side.



Some important thigs!

- 3,5mm jacks must be first screwed to the panel and then soldered to the pcb!!
- Controller PreenF405 can be mounted directly to the PCB or with a connector. Both ways are ok.
- Bend the Voltage regulators and mount them on 90 deg angle. Make sure it doesnt touch anything!



• USB connector must be under slight angle. Otherwize the stick will not fit!



• Mount the MIDI and USB connector to the pcb and then screw to the panel. Align the connectors nicely (look from front) and then solder!



• OLED screen and glass should be handled with care so no dust or dirt gets inside.



• OELD Screen pins are directly soldered to the board. So be sure its the last thing you need to do! You can even assemble the whole synt and then solder the pins as the very last thing.



- Solder wires from the main board to the MIDI/USB subboard. Or use leftover resistor legs.
- If your PreenFM comes with Blue OLED screen intall a jumper wire across the R6OLED resistor. This results 0ohm on R6.



Jumper settings.

CV1 is used as GATE and CV2 is used as V/Oct control. These inputs can be from 0 to 10V or from -5V to +5V. Jumpers on the back are used to select the suitable range.

Jumper near the Power connector is to select if 5V is taken from your Eurorack PSU or regulated down from +12V rail. I suggest having +5V available from the Eurorack PSU and not to use the onboard regulation.