EURORACK MODULES

KIT EXTENSION MAIN PCB MODEL D 1U

Assembly guide

Manual V1.0

What is the Model D ?

The MODEL D is a reproduction of the famous Minimoog Model D, Eurorack compatible:

- Analog synthesizer with 3 VCO
- Analog signal path
- 5 variable oscillator shapes with variation of pulse width
- 24 dB classic scale analog filter with LFO triangle / square wave resonance
- Switchable low pass / high pass filter mode
- Overdrive, noise generator
- 46 commands for real-time access to all important parameters
- External audio input for processing external sound sources
- Low and high level outputs
- Full MIDI implementation with MIDI channel selection
- etc ...

Why an extension ?

The MODEL D fits perfectly into a modular EURORACK environment by offering the possibility of being easily detached from its frame, at 80HP.
But the "MAIN PCB" board, disconnected, becomes unusable. We thus lose very interesting functionalities of this synthesizer, like the audio outputs in 6.35mm, the choice of the MIDI channels and the auto-feeding.

The solution: the extension imagined and produced by "ph modular" in the form of a "Do It Yourself" kit, to be assembled by the user, with all the components necessary for its realization supplied. Thus, you will find the full power of Model D in your Eurorack system!

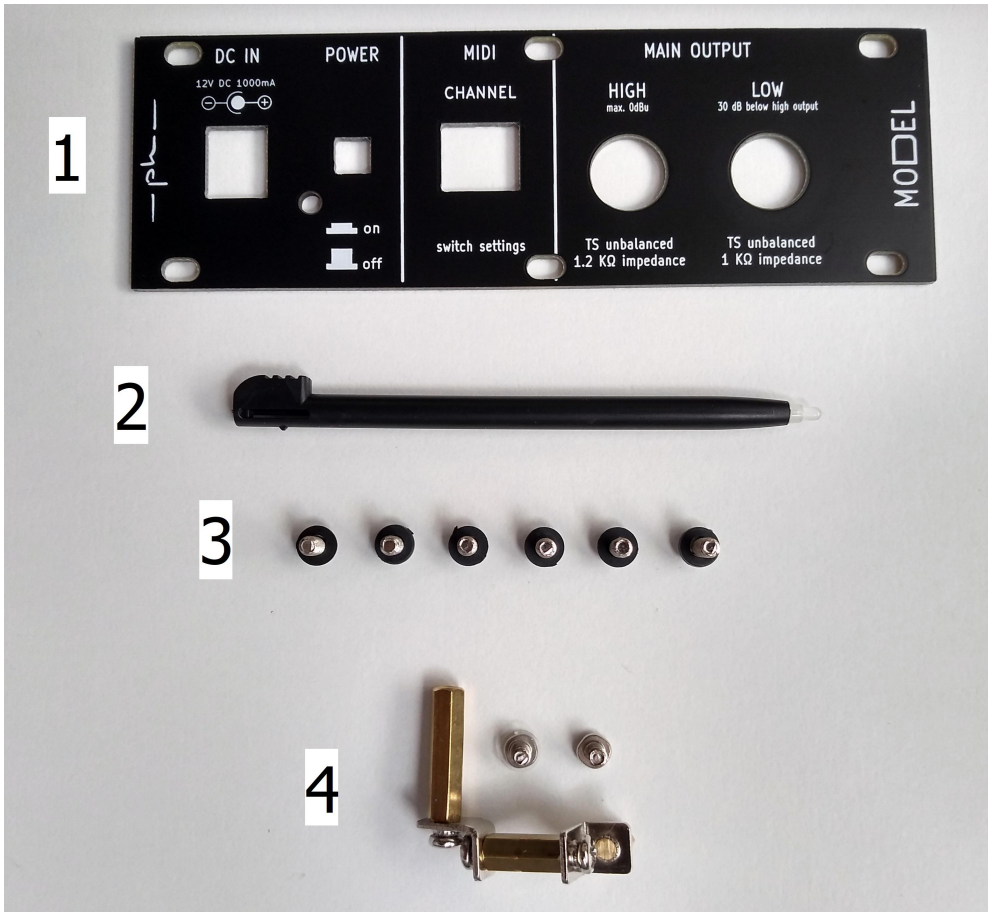
What does the "MAIN PCB" extension bring?

- Independent power supply, you relieve that of your eurorack case
- On / off switch
- Easy choice of MIDI channel among the traditional 16 available
- Line level output jack 6.35
- Instrument level output jack 6.35

Kit contents

In the box, you will find :

1 “ph modular” panel in 1U Intellijel ™ format
2. 1 stylus to facilitate access to the "midi channel" mini switch
3. M3 screws and washers for fixing the panel in your system
4. 1 angle system to reinforce the assembly and its dedicated screws
5. Downloadable from the ph modular site, this complete assembly guide.
6. Two extensions for the ribbon cables (not shown in the photo)



Nota : Des différences entre le produit que vous avez reçu et les images d'illustrations présentes dans ce guide peuvent apparaître. Cela n'aura aucune incidence sur son montage ou son utilisation et ne pourra être retenu comme une clause de contestation.

Assembly of the kit

Before you begin, please read the following carefully:

"Any modification which is not expressly approved by the manufacturer will void the warranty for the user of this device. In addition, unauthorized opening of the device will void the warranty. "

Christian FOUCAUD "ph modular" company cannot be held responsible for any malfunction, deterioration or breakdown following the operations proposed in this manual.

If one day you wish to reintegrate your Model D into its chassis, nothing could be simpler, you just have to perform the reverse operations.

Please accept the fact that you are acting knowingly.

That being said, the implementation of this kit, everything will be fine ☺
And in just half an hour, you will taste the joys of all the features of your synthesizer combined in your eurorack system ... Enough talk, let's get started!

The steps that await you:

1. Removing the Model D from its chassis (follow the steps in the Model D manual)
2. Disassembly of the MAIN PCB (outer nuts and inner screws)
3. Fix the system of brackets, replace the plastic washers
4. Setting up the panel
5. Place the retaining screw
6. Connect the 1U extension to Model D
7. Turn on and play!

1. Removing the Model D from its chassis

Simply unscrew, using a Phillips screwdriver, the 8 black screws bordering the front of the Model D.

I invite you to consult the user manual which can be downloaded from the brand's website, you will find the steps to perform this action explained there, on page 44, chapter "Model D, Eurorack Installation".

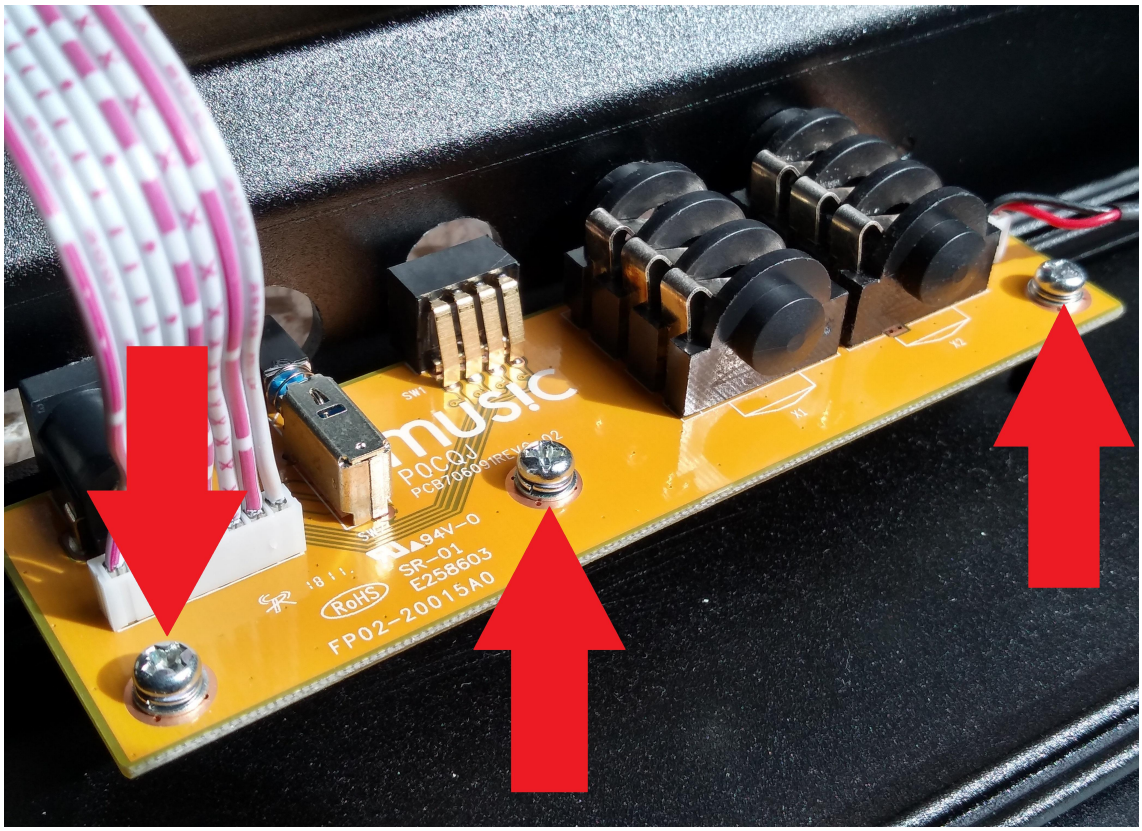
It is of course useless to connect the 10pins connection cable to "X23" since your Model D will be powered by its own external power supply.

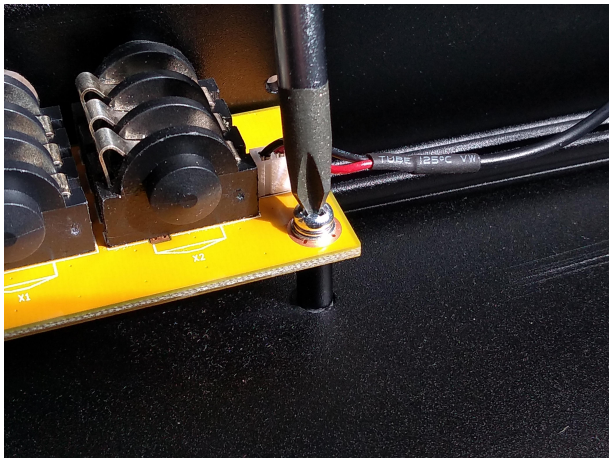
2. Disassembly of the MAIN PCB (outer nuts and inner srews)

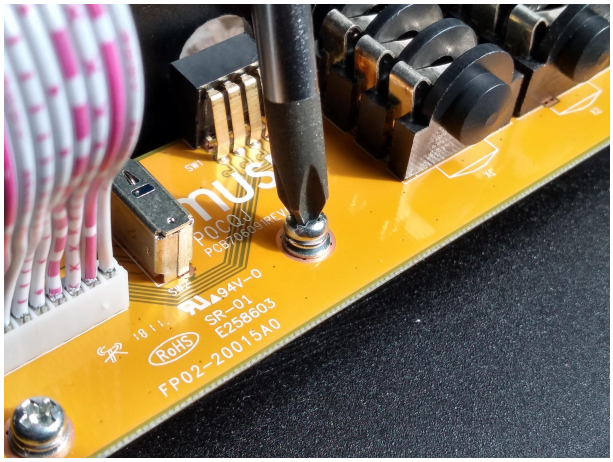
Remove the nuts from the OUTPUT jacks. I advise you to avoid using a metal tool (or protect with tape), in order to avoid damaging the nuts

Images d'illustration...

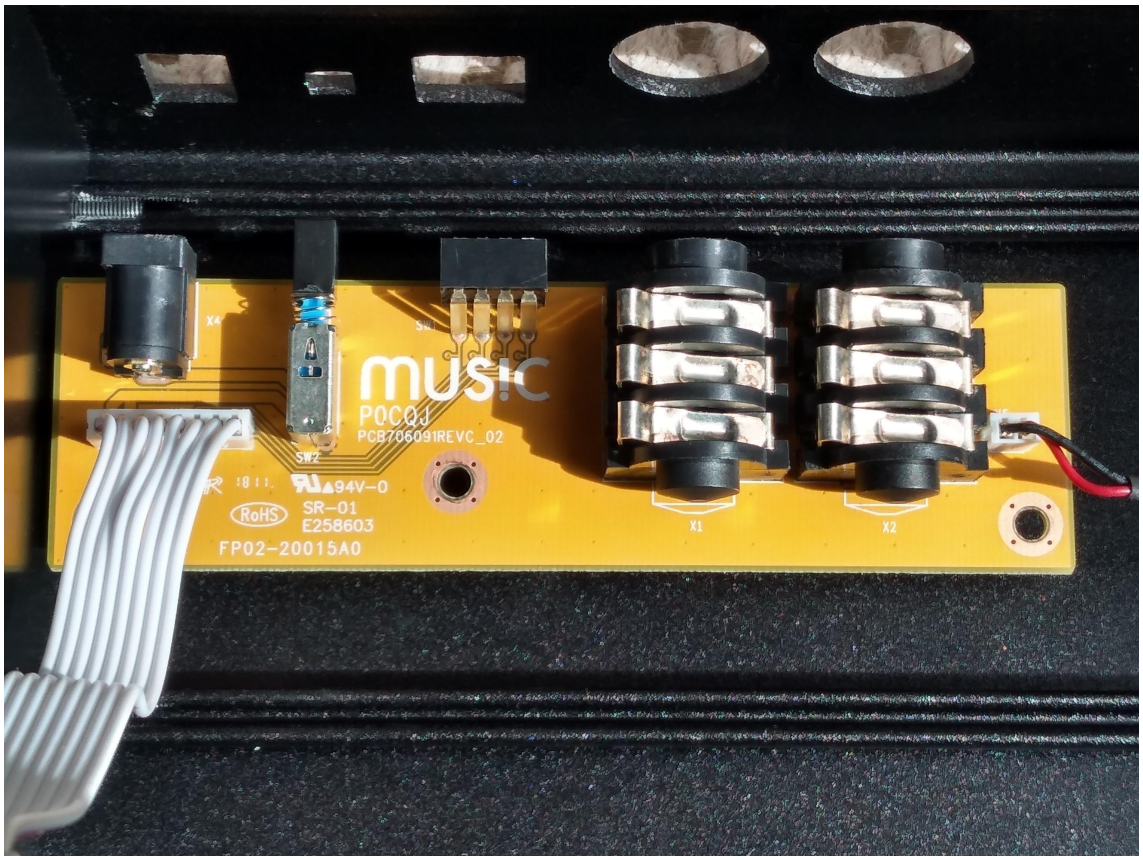
Let's move on to the inner part, with a Phillips screwdriver, remove the 3 screws identified in the illustration below:



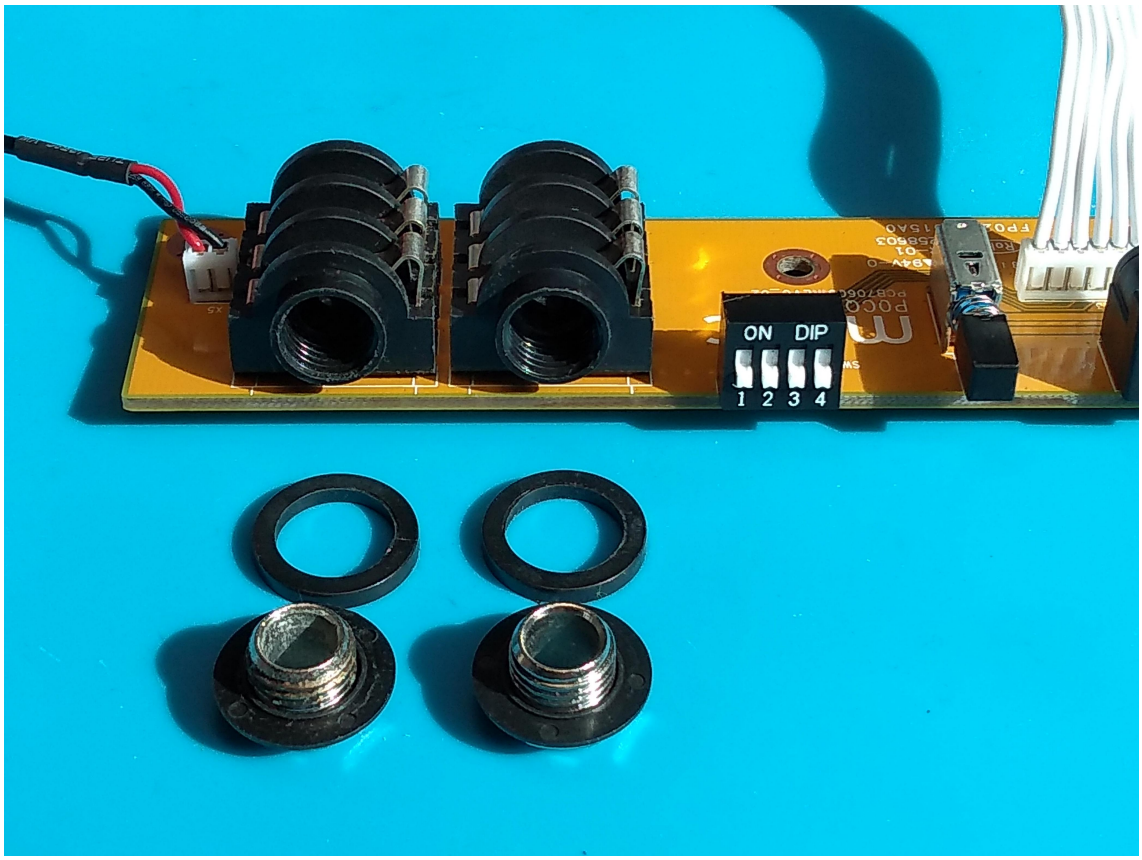




The MAIN PCB is now detached from the chassis. In order to keep the 3 screws removed, I advise you to replace them in their respective locations on the chassis ...

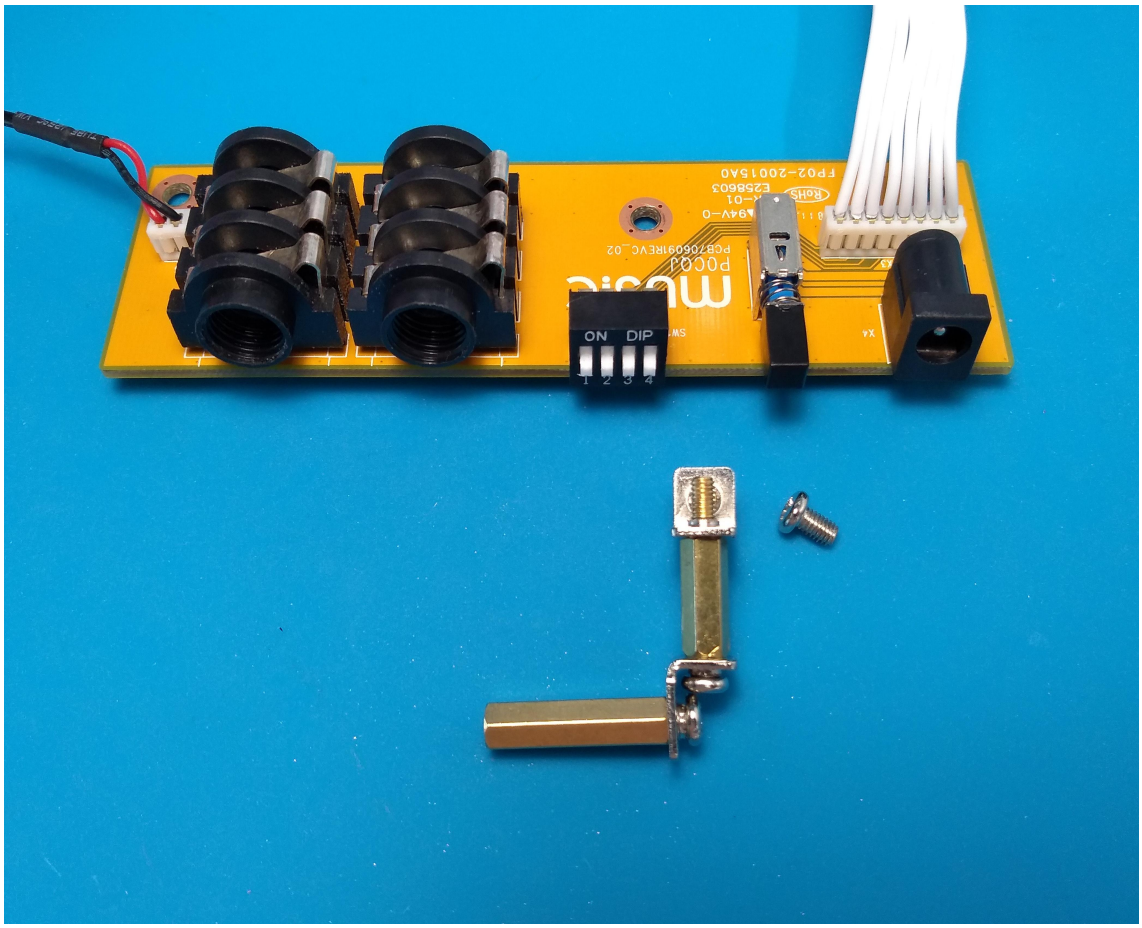


Set aside all plastic washers and nuts, these items will be used again during final assembly.

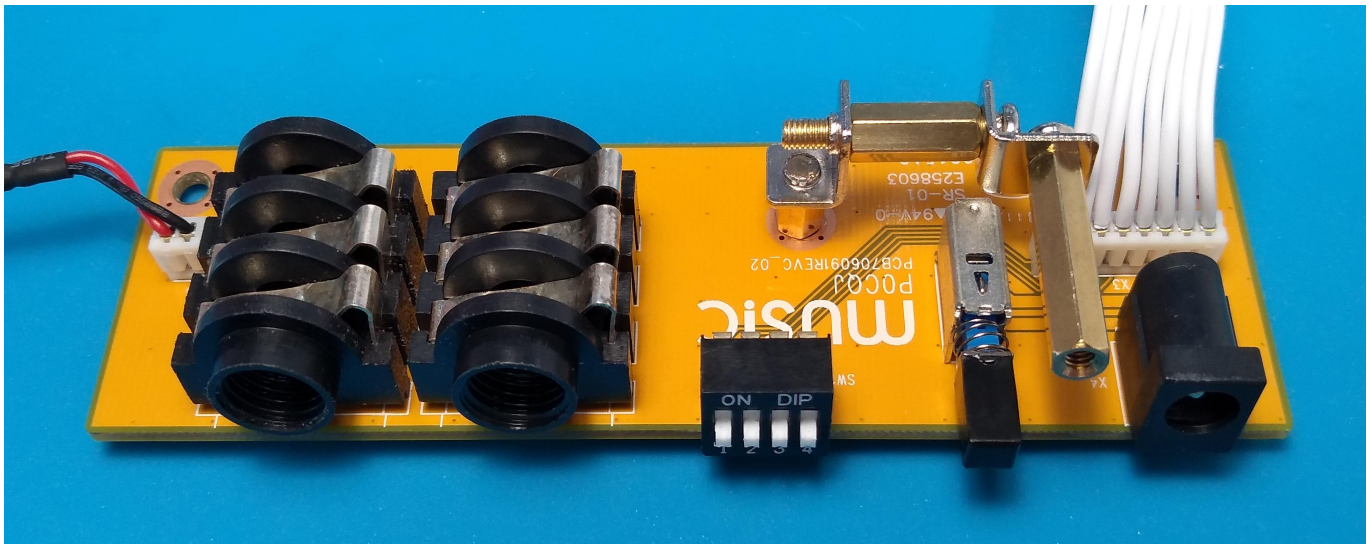


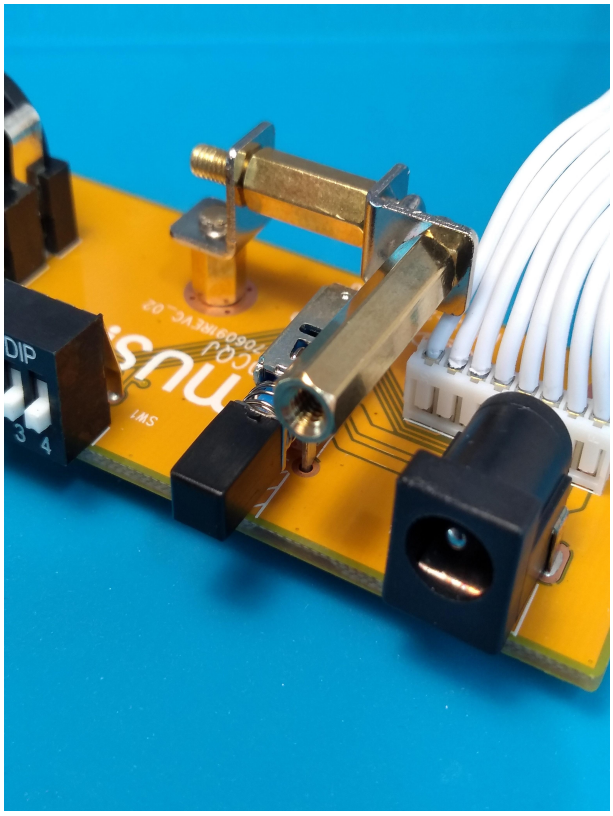
3. Fix the angle system

This system consolidates the panel / main PCB assembly and compensates for the mechanical force inflicted when inserting the DC cable or pressing the ON / OFF button ...
The brackets will be fixed using the screws provided, through the central hole visible in the illustration below



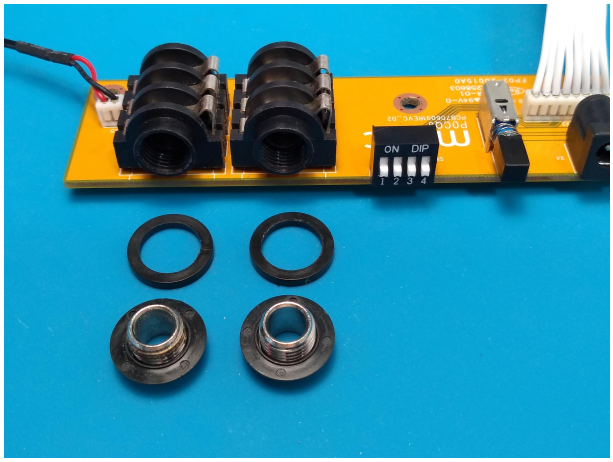
At this stage, do not tighten the screw too much so that in the next step, there are no constraints ...

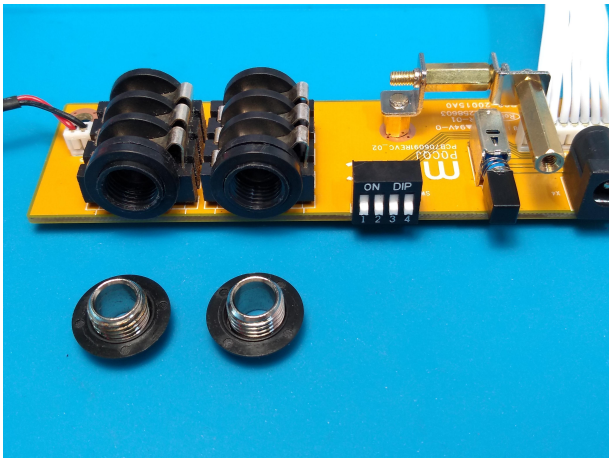




SUPPORT IN PLACE

It is time to finalize our assembly, take the plastic washers of the Jacks (removed during step 2), and put them back in place.

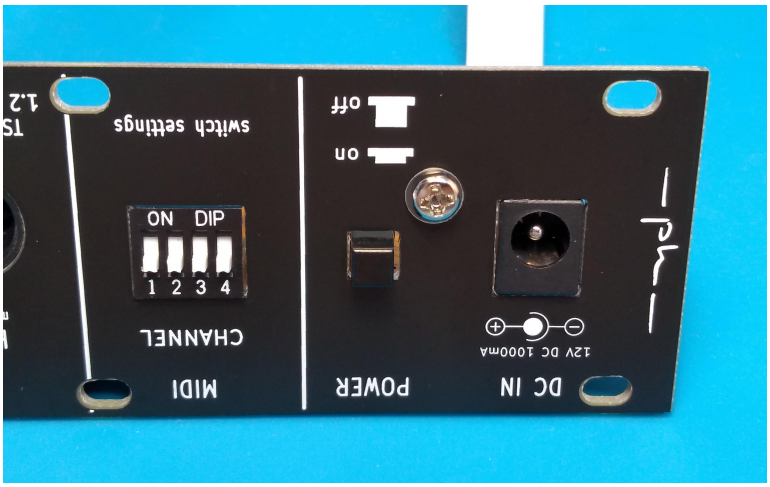




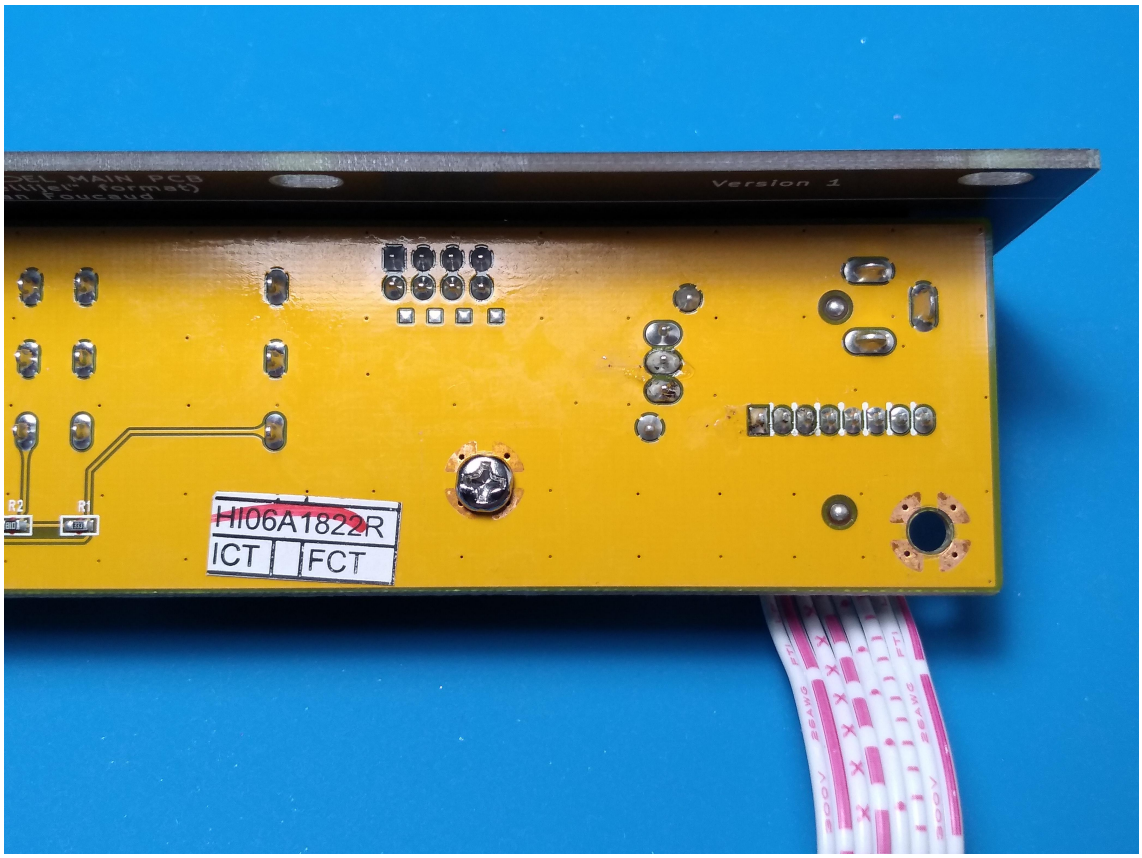
4. Setting up the panel

Gently place the panel, taking care not to force it. Everything is supposed to take its place perfectly.

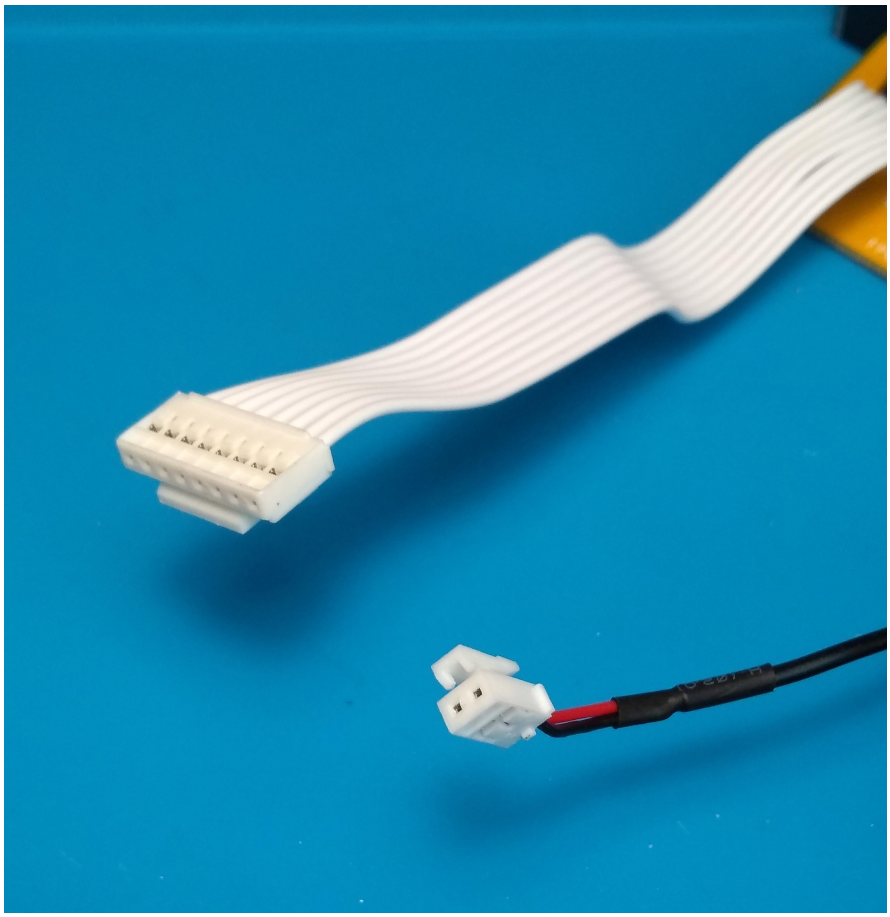
Check the correct correspondence between the two holes of the system of supports ; place the screws (with nylon washers) and the hexagonal nut in their respective housing ... replace the nuts of the OUTPUTs jacks. You can tighten them permanently



Turn the assembly over and retighten the screw of the square system.



As the connecting original cables are short, if you want to deport the extension, you can use the extensions provided (50 cm). Connect them to connectors X21 (8 wires) & X22 (2 wires) ...



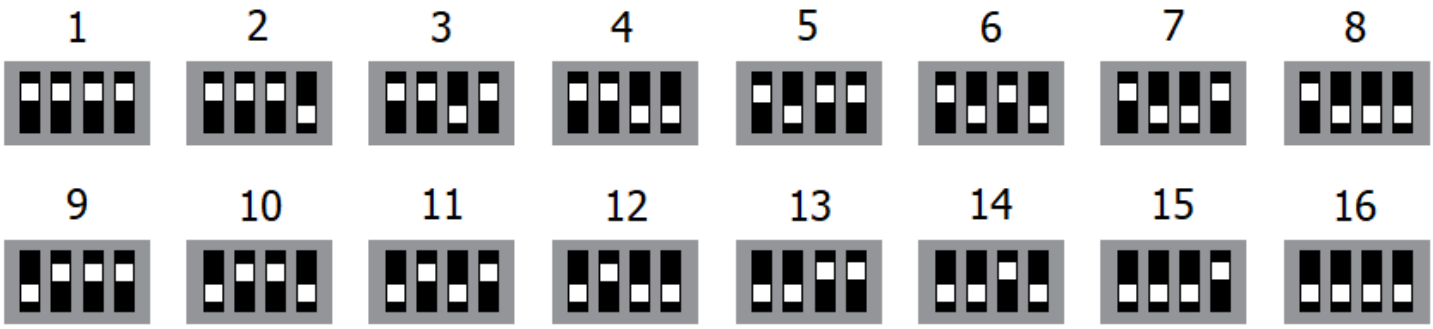
5. The assembly of your kit is finished!

All you have to do is integrate it into your system! Last step: fix your module with the 2 nylon screws / washers provided on the rails, connect the mains unit to the DC INPUT socket and start playing music!

Do not connect the 10pins eurorack connection cable to "X23", your Model D will be powered by its own external power supply.

MIDI « switch settings »

The 4 switches of the micro switch allow you to set the MIDI channel number from 1 to 16.
WARNING: the extension requiring the Main PCB to be turned over for ease of installation, here is the correction to apply to adjust the MIDI channels:



Characteristics

Size 24HP (12 cm), epoxy white panel 1,6 mm.

Mounted deep (with ribbon) : 50 mm.

PCB in epoxy FR4 dual layer, 1,6 mm. Surface finish HASL.

M3 and nylon nuts inc.

Merci pour votre confiance
N'hésitez pas à me donner vos avis, critiques ou souhaits...
Découvrez mes modules eurorack !

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http://ph.modular.free.fr

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