b3FACO

THANKS FOR CHOOSING ONE OF OUR KITS!

This manual has been written taking into account the common issues that we often find people experience in our workshops. The order in which the components are placed on the board is meant to make assembly as easy as possible.

Some steps are not obvious, so even if you're an experienced DIYer please read the steps thoroughly before starting.

If this is your first project, please read this article before you start assembling the kit:
www.befaco.org/howto/

Or Take a look to our youtube channel:
https://www.youtube.com/user/Befacosynth/videos

HAVE FUN!

OPEN BAG A

PIN HEADERS		
Place and solder the Pin Headers on the silkscreen side. It is the shorter pins that you are soldering. Double check they all are perfectly straight.		
2	2X5	THRU, TO_MUX

FRONT PANEL COMPONENTS MOUNTING TIPS:

Now we will proceed to mount mechanical parts to panel. This part of the assembly is CRITICAL. Please take your time and read the following instructions carefully.

These components must **NOT** be soldered until they are placed on the PCB and fully attached to the front panel!!!

There are two reasons for this:

- The height of the panel components are not all the same. Because of this, if not attached properly before soldering, they will not stay properly seated against the panel. This might cause mechanical stress reducing their life expectancy and in the worst case cause them to break.
- The second reason is that it is very difficult to align the components to the holes if the panel is not positioned prior to soldering.

OPEN MINI-JACKS BAG

MINI-JACKS
Place the mini-jacks on the PCB ensuring they are on the side with the silkscreen but **don't solder them until the front panel is in place with all nuts screwed to it.** This way it's easier to solder them in the right position. Keep in mind that the front panel holes are quite narrow and it is almost impossible to place it with all the components already soldered.

LEDs	
Place the LEDs onto the PCB minding their polarity, but **don't solder them** until the front panel is in place. This is the only way to solder them in the right position.	
The long leg is the positive and the short the negative. On the PCB the square pad indicates the negative side and there is a + symbol to indicate the positive.	

Qty	Name on PCB
8	D1, D2, D3, D4, D5, D6, D7, D8

TOGGLE SWITCHES
Sometimes the toggle switch is a tight fit with the front panel, so before placing the switch check if it fits comfortably through its hole on the front panel. If yes proceed to place the switch like normal. But If its tight with the panel, then screw the switch through the hole. Make it straight vertically, and then attach the front panel, making sure the switch sits correctly into its soldering points.
Orientation of the switches doesn't matter this time because this ones are symmetric.

Qty	Type	Name on PCB
8	Single two position, ON-OFF-ON	SW1, SW2, SW3, SW4, SW5, SW6, SW7, SW8

FINISH YOUR BUILD!
Attach the **front panel** adjusting the parts one by one if necessary until it fits. At this point a pair of fine tweezers can be helpful.
To Finish:

- Screw in the parts in this order: A) **Mini-jacks** B) **Switches.**

- Ensuring all of the above parts are flush with the panel and both PCB and panel are perfectly parallel. Then you can **finally solder** them!

- Put the the red caps on the switches.

- Connect the **ribbon cable between MEX and Muxlicer**: The red wire ribbon cable corresponds to pin number one on the Expansion connector on muxlicer (marked with triangle) and a with line on the MEX. **DO NOT CONNECT POWER THERE!**

ENJOY YOUR NEW BEFACO MODULE!