

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.

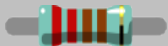
If this is your first project, please read this article before you start assembling the kit


www.befaco.org/howto/


GOOD LUCK!


MAIN PCB


OPEN MAIN BOARD BAG A


RESISTORS 			
Qty	Value	Code	Name on PCB
5	56k	Green, Blue, Black, Red, Brown	R3, R4, R11, R12, R15
4	100k	Brown, Black, Black, Orange, Brown	R9, R10, R17, R19
2	1k	Brown, Black, Black, Brown, Brown	R1, R2
2	10k	Brown, Black, Black, Red, Brown	R7, R8
2	2k7	Red, Purple, Black, Brown, Brown	R13, R20
2	47k	Yellow, Violet, Black, Red, Brown	R5, R6,
1	3k3	Orange, Orange, Black, Brown, Brown	R14
1	1M	Brown, Black, Black, Yellow, Brown	R16
1	120 Ω	Brown, Red, Black, Black, Brown	R21
1	470k	Yellow, Purple, Black, Orange, Brown	R18

DIODES 		
Solder the diodes observing their polarity . The black or white line on the diode must match with the white line on the diode symbol on the PCB silkscreen.		
Qty	Value	Name on PCB
2	1N5817	D1, D2


ICs 		
First place the sockets (taking care to orientate them properly - the notch or dot on one end of the IC should match the image on the silkscreen) and solder them into their correct positions.		
Next place the ICs in their respective sockets (again taking note of their orientation - the notch or dot on the top of the IC must match that of the socket and silkscreen).		
Qty	Value	Name on PCB
1	TL074	IC1

CAPACITORS 			
Identifying capacitors can be quite tricky. Codes stated are indicative, please take a look at this guide for help identifying capacitors http://www.wikihow.com/Read-a-Capacitor			
Qty	Value	Code	Name on PCB
4	100n	104	C1, C2, C7, C8
1	100p	101	C3

ELECTROLYTIC CAPACITORS 			
Values are written on the side of the capacitor. Mind their polarity (The long leg of the capacitor is the positive (+)).			
Qty	Value	Code	Name on PCB
2	10 μ F	10 μ F	C5, C6
1	1 μ F N.P.	1 μ F	C4 (This cap has no polarity)

TRANSISTORS 		
Be sure they are orientated correctly. The curved and flat sides of the silkscreen outline of the transistor on the PCB must match that of the transistor's body.		
Qty	Value	Name on PCB
2	2N3906	T2, T3
2	2N3904	T1, T4

OPEN MAIN BOARD BAG B

POWER CONNECTOR 
Solder the power connector at "POWER". The small arrow on the connectors must be on the side with the thick white line.

FRONT PANEL COMPONENTS MOUNTING TIPS

Now we will proceed to mount the jacks, sliders & potentiometer. 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. In the case of the LEDs, they are almost impossible to set to the correct height without reference to the front panel.

FADERS

Solder the faders onto the PCB in the position indicated by the silkscreen

Qty	Name on PCB
2	RISE_POT, FALL_POT

MINI-JACKS

Place all the mini-jacks onto the PCB ensuring they are on the silkscreen side, but **don't solder yet**.

POTENTIOMETER

Now place potentiometer on the PCB but... **don't solder them**.

Qty	Type	Name on PCB
1	Single (3pin) 100K	SHAPE

FRONT PANEL

Attach the **front panel** adjusting the parts one by one if necessary until they fit. At this point a pair of fine tweezers can be helpful.

- To finish
- Secure the parts to the panel in this order A) **Mini-jacks** B) **Pot**
 - Ensuring all of the above parts are flush with the panel then you can finally **solder** them!
 - Put the **knob** on the potentiometer and the red end-**caps** on the switches/faders.
 - Connect the **power ribbon cable** The red wire (-12V) on the power ribbon cable corresponds to pin number one on the male power connector. The number one pin is indicated with a small triangle on the male power connector and a white line on the main PCB. A white or black line (or “-12v”) marked on your power bus normally indicates the corresponding pin.

ENJOY YOUR NEW BEFACO MODULE!