

Tubbutec Modysix

MIDI RETROFIT AND FEATURE EXTENSION

Installation Manual for Mono/Poly v1.0

<http://tubbutec.de>

1 Installation

The Modysix is a drop in replacement for the "key assigner" IC and thus very easy to install. Just plug and play basically. Three holes for the midi sockets and the sustain pedal jack have to be drilled in the back of the Mono/Poly and if you want to be able to control the filter via midi there is one cable to solder. Midi pitch bend requires soldering of three resistors and one capacitor.

Important: Before doing any of the steps below unplug the Polysix's power chord!

1.1 Opening the Mono/Poly

In order to open the Mono/Poly you have to take out the four screws in the corners of the front panel and four screws on the underside of the synth. You can then open the front panel.

1.2 Installing the connectors

Use the stencil provided to mark the location of the three holes for the midi connectors and the sustain jack. You can choose any location for these holes. We recommend to remove the serial plate beside the power connector and drill the holes there. This way, if you ever want to remove the connectors for some reason, you can cover the holes with the plate.

The DIN connector with three cables is for midi out, the one with two for midi in and the jack for the sustain pedal. A drill aid for the connectors and a sticker comes with the kit.

1.3 Installing the processor board

In order to install the processor board you have to remove the existing processor and replace it with the Modysix board. You can use a small

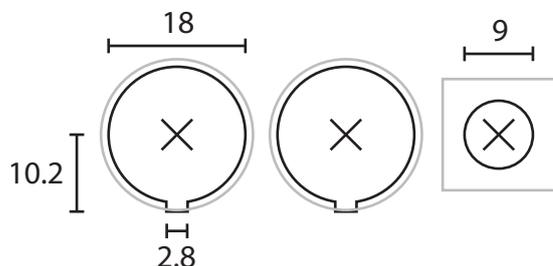


Figure 1: drill aid for the connectors

screw driver to carefully lift the processor out of its socket. When putting the Modysix board into the socket, mind the orientation (ribbon cable is on the left side) and be careful not to bend any pins. See figure 4.

1.4 Solder the filter cable

if you want to be able to control the filter via midi, you will have to solder one cable to the leg of a resistor as shown in figure 2. The cable is the orange wire coming from the Modysix board. If you don't know how to solder, you can find a lot of (video) tutorials in the internet.

1.5 Solder the pitch bend cable

The red wire is for controlling pitch bend. You need to solder three resistors and one capacitor on the back side of KLM-354 board as shown in fig. 3. The red wire has to be soldered to one leg of the 1.8k resistor, some heat shrink may be used as shown in the image. The capacitor is soldered across the upper left two pins of IC2 (Pin 1 and 2).

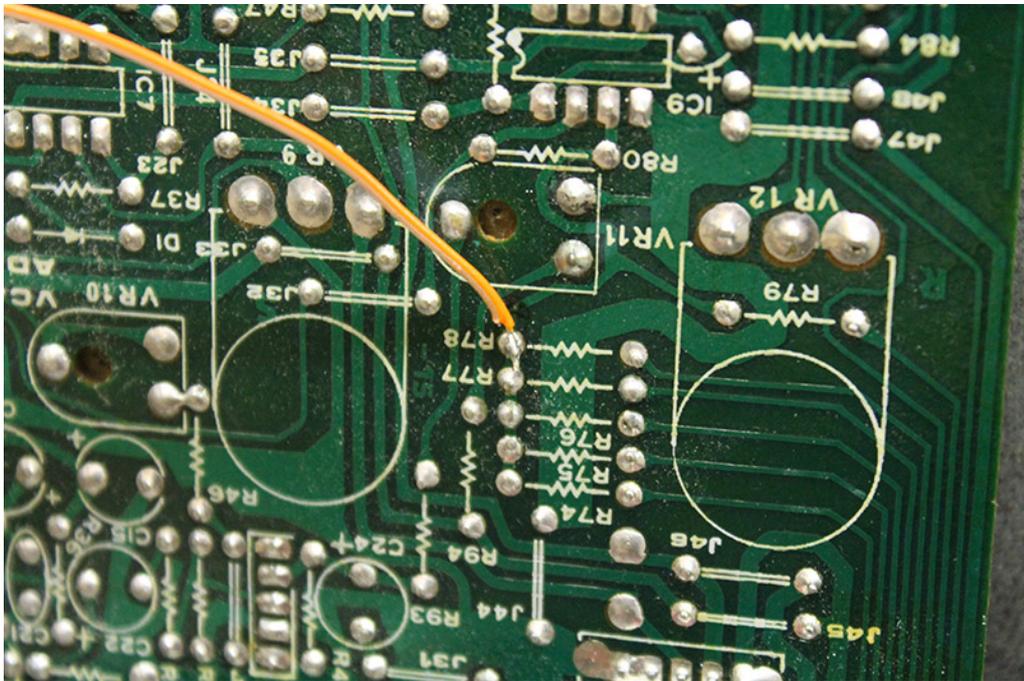


Figure 2: Solder point for the filter cable

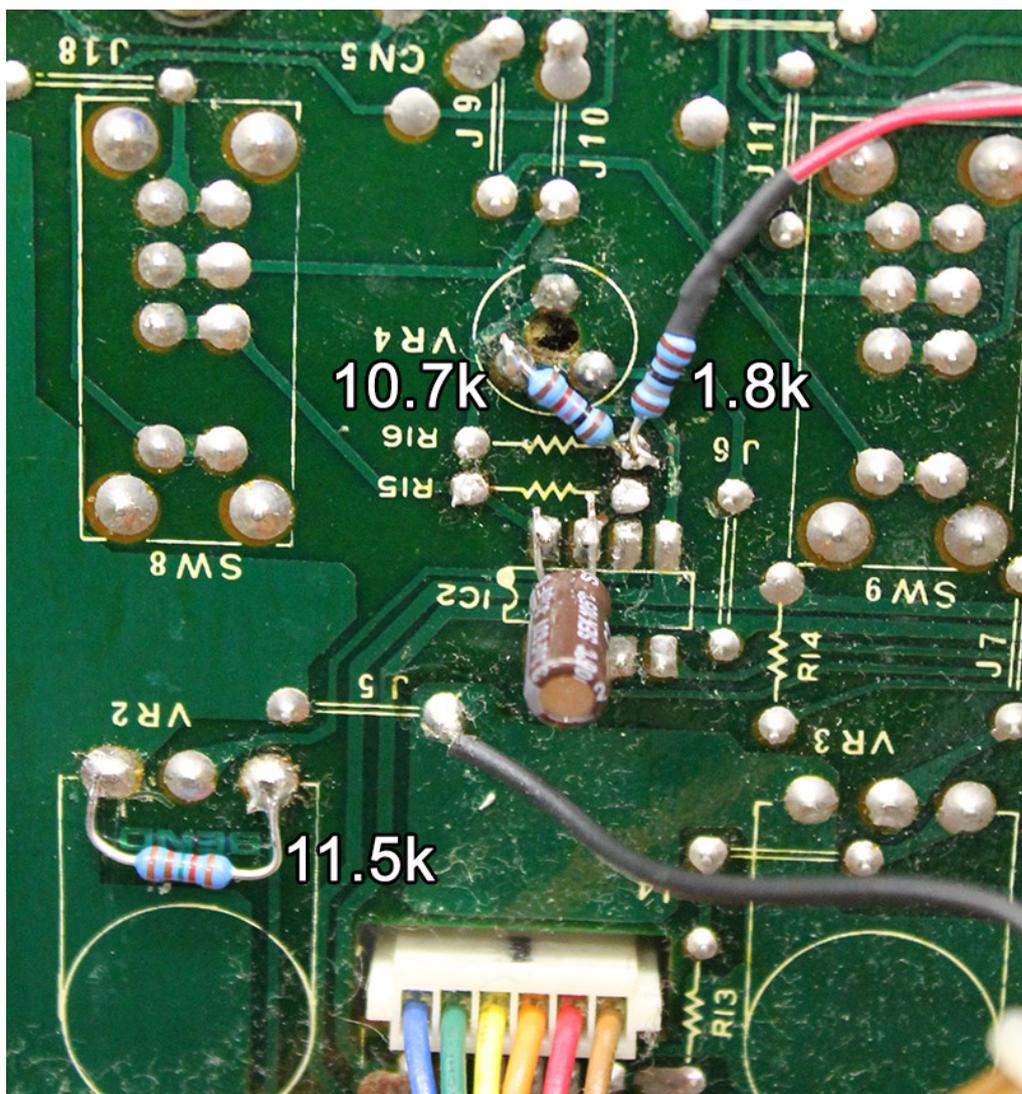


Figure 3: Solder point for the filter cable

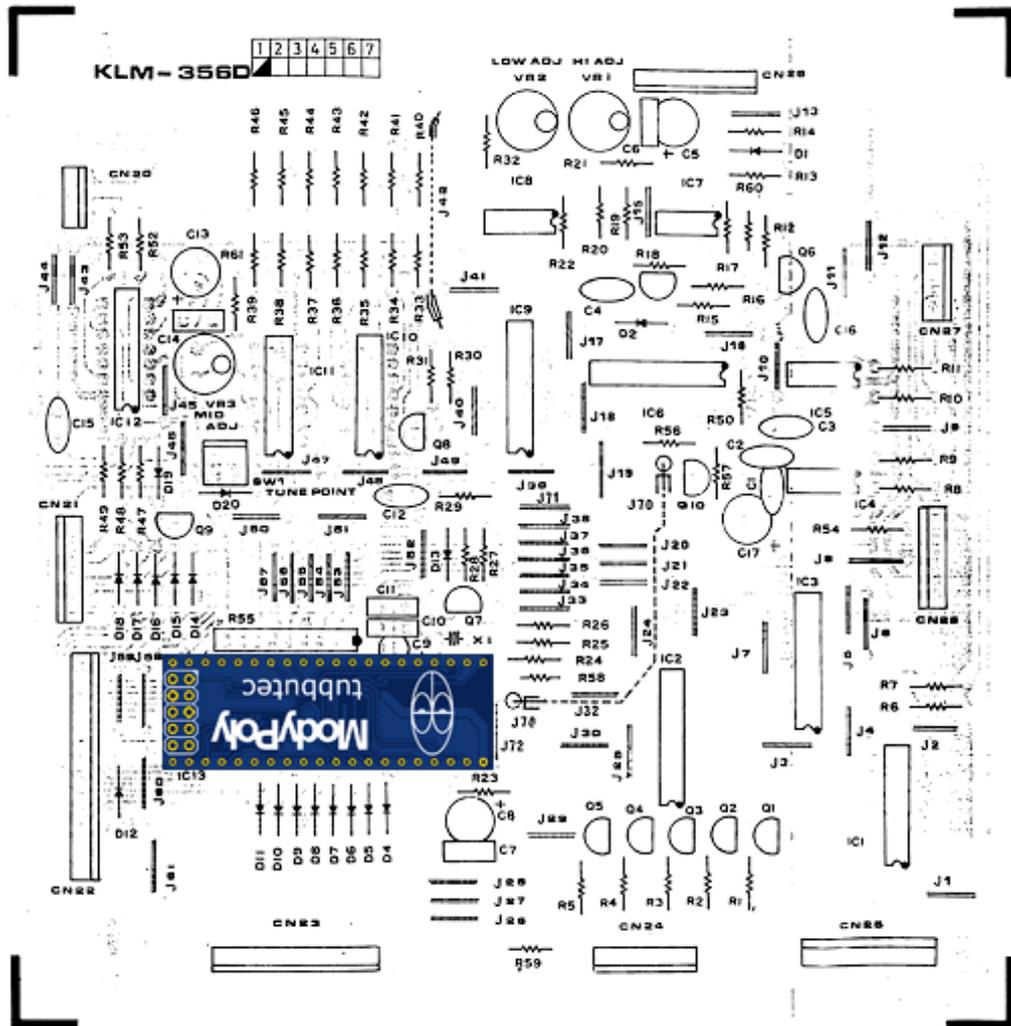


Figure 4: Placement of board in Mono/Poly and filter connection