TR-6oh6 install guide

Introduction

The installation of TR-6oh6 is fairly simple if you know how to solder. First, you need to desolder the existing TR-606 CPU. Then, solder a socket (comes with the kit) in its place.
You can then plug in the TR-6oh6 CPU and solder a few wires to access the additional CPU.
Finally, you need to install MIDI – Either by using the existing DIN socket and/or by drilling holes for TRS or DIN sockets.

Tools you need

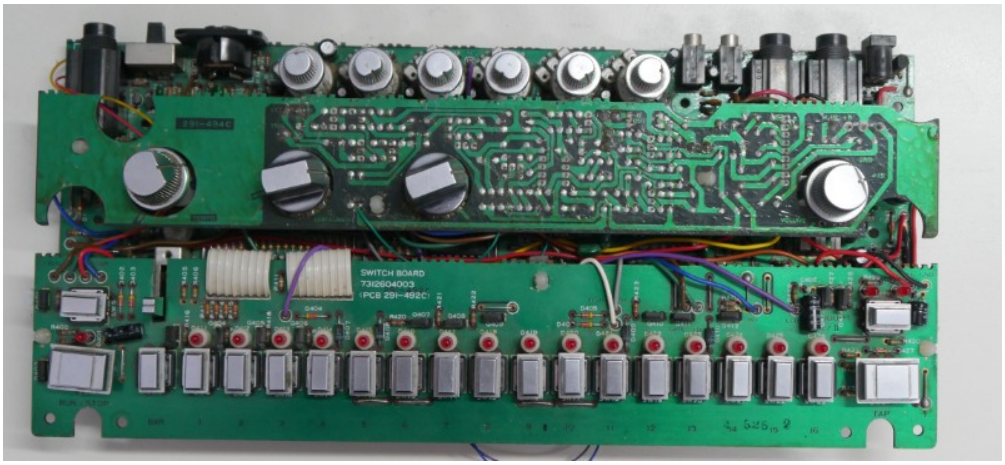
- Soldering iron
- Desoldering pump
- screw drivers (Phillips)
- pliers
- optional: 6mm Drills for the TRS sockets

Installation

Accessing the boards

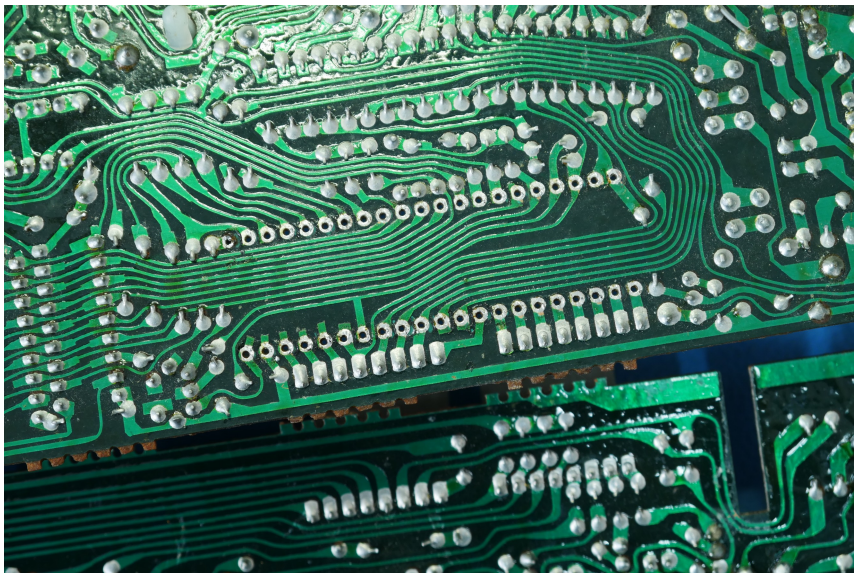
Remove the 7 screws on the back of the TR-606. You can now take the board assembly out of the case. You might want to temporary desolder the wires going to the battery compartment for easier access.

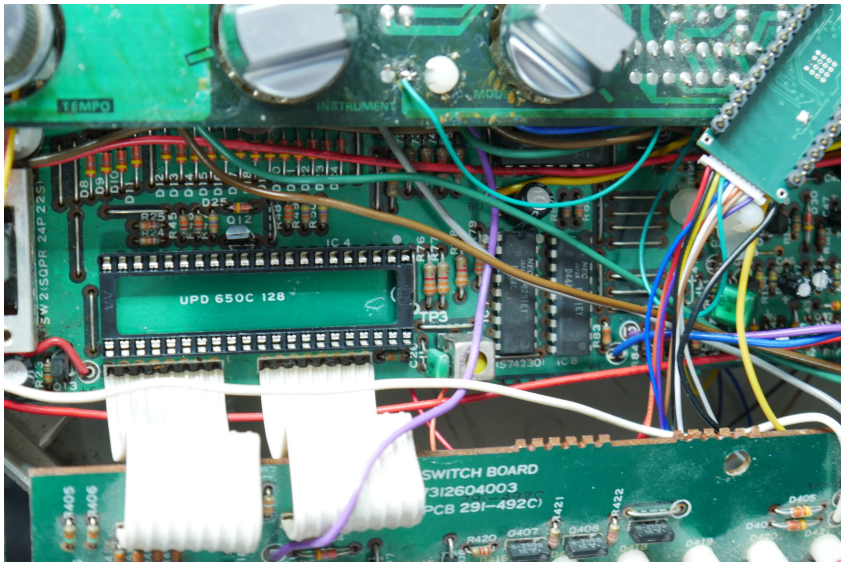
With some pliers, pinch the 3 plastic spacers holding the switch board and gently lift it up. You can now move the switch board to the front exposing the board underneath.



Desoldering the CPU / Install the socket

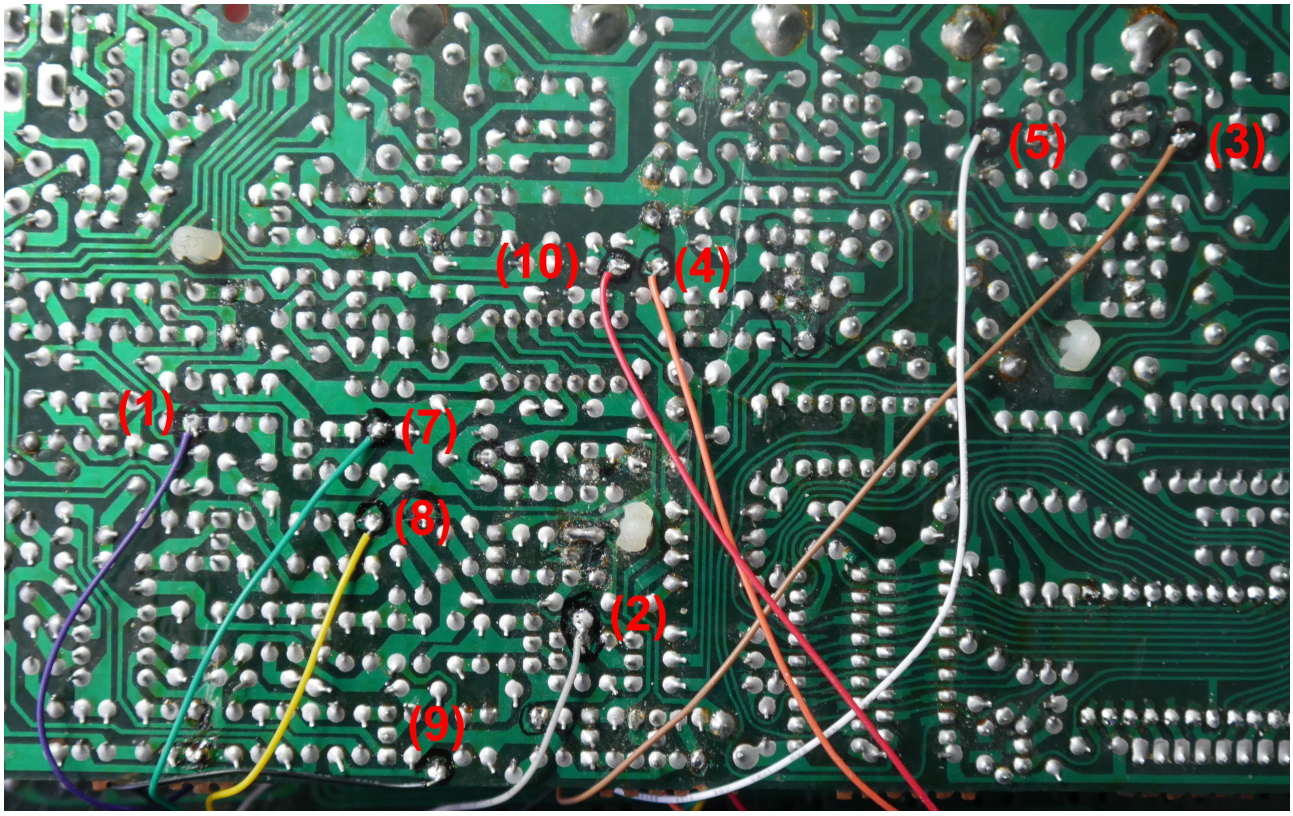
Desolder the 42-pin CPU and clean the pads. Then, solder the 42-pin socket in its place. There is a notch on the socket that you may want to line up with the notch printed on the board.

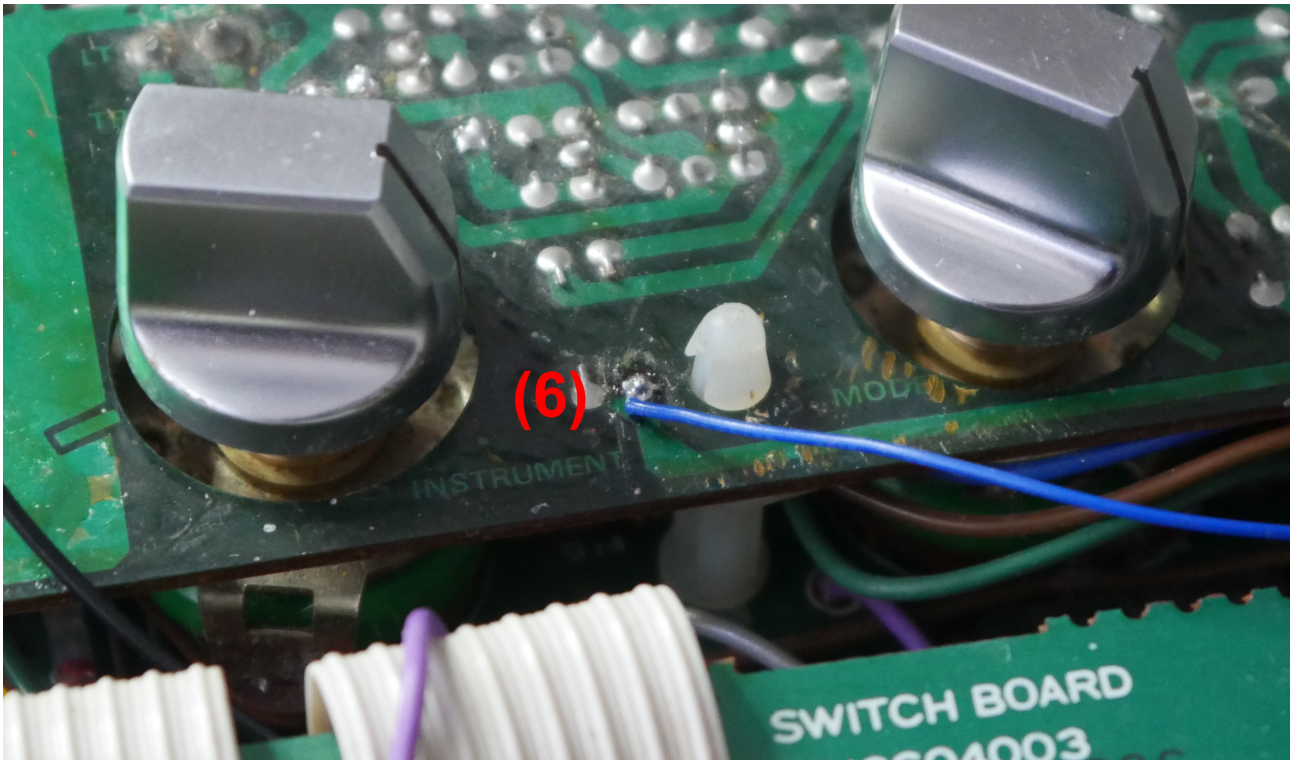




Solder the control wires

In order to trigger additional instruments and get decay control, 10 wires need to be soldered to the back of the main board. The following picture shows their positions.
You may have different wire colors, so it is recommended to solder according to the numbering, not the colors. Numbering starts at the ‘PIN1’ location on the TR-6oh6 CPU.





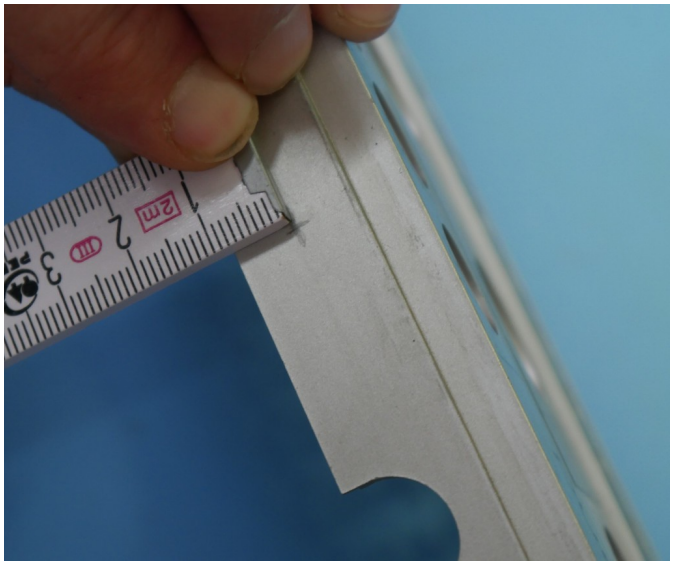
Installing MIDI

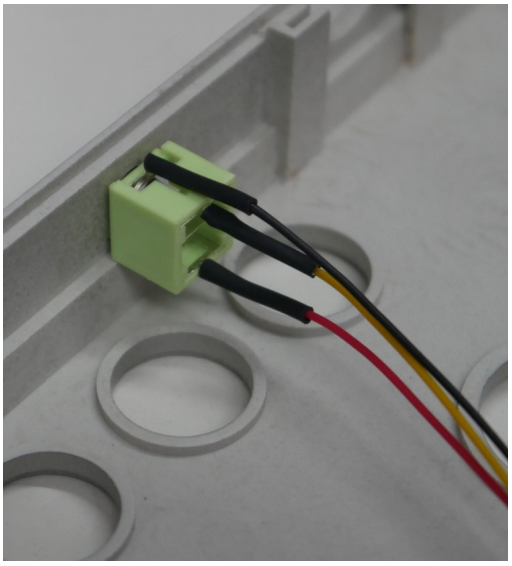
There are several options for MIDI installation:

1. You can use the existing DIN socket for both DIN-sync and MIDI input.
   When doing so, you will use the ‘tap’ and ‘fill’ signals on the DIN socket, but these are rarely used anyway. This will only give you a MIDI input, no MIDI output.
2. You can install additional TRS-sockets for both MIDI input and output. These are included in the kit. You can also use the existing DIN socket as MIDI input and a TRS socket as output.
3. You can install MIDI in as in 1) and only one TRS-socket for MIDI out.
4. You can actually install DIN sockets

TRS Sockets

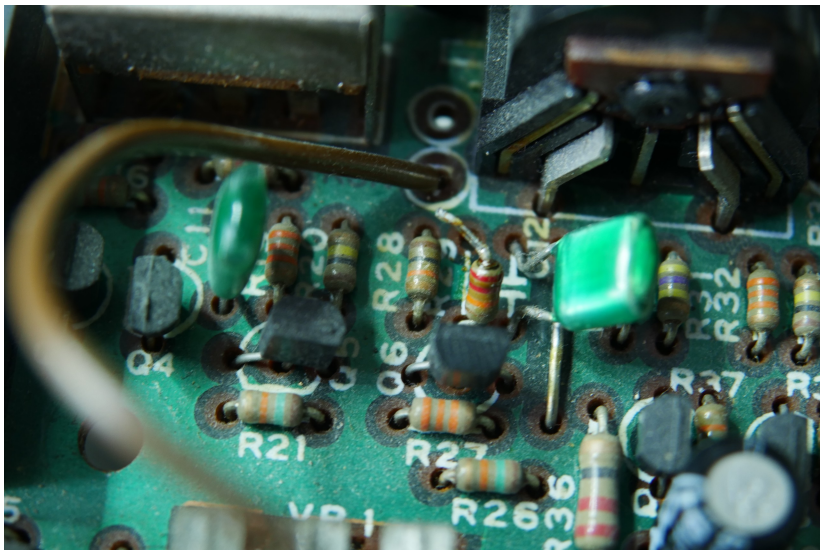
It is your decision where you would like to put the TRS sockets. For example, they fit between the volume pots: Drill a 6mm hole between 2 pots. Place the hole 8mm away from the bottom edge of the case’s top half:



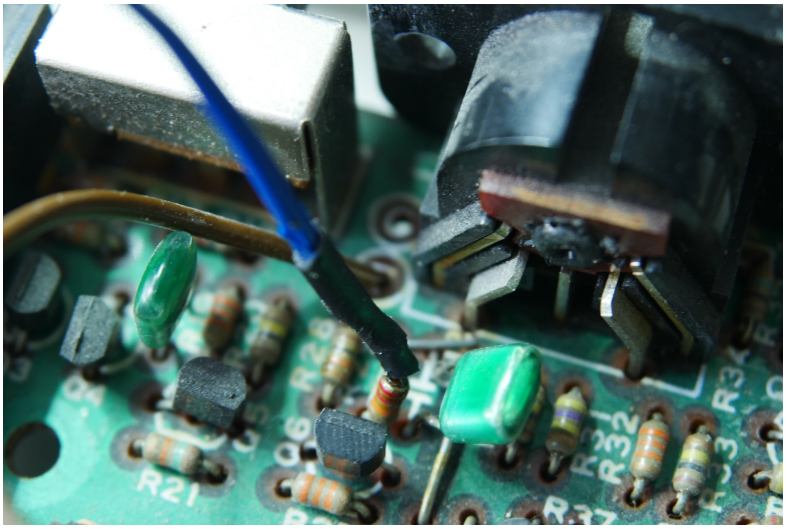


Using the DIN socket for MIDI-in

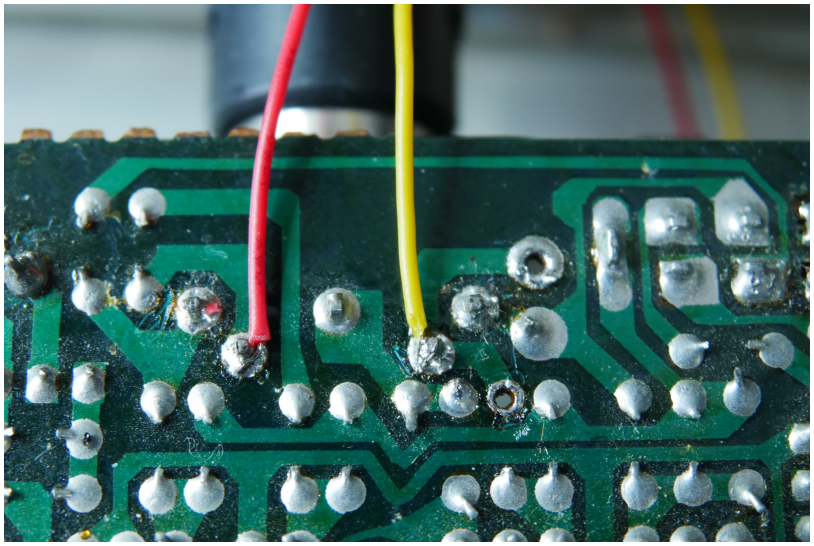
Desolder the blue wire next to the DIN socket. Also desolder one leg of R29 as shown in the picture below



Next, solder the blue wire to the open leg of R29



Cut off the TRS-socket from one of the TRS cable assemblies. You can also cut off the black wire, as it is not used. Then solder the yellow and red wires to the bottom of the DIN socket as shown:



Here is how it looks like with the DIN socket used for MIDI-in and an additional TRS socket for MIDI out:

Additional DIN-sockets

If you do not like options 1-3, you can actually install DIN sockets for MIDI input and output. This however means drilling rather large holes into your 606 case. It is also not easy to properly fit the sockets between the volume pots. But it works. Up to you if you want that.

Here is how this would look like (The DIN sockets are not included in the kit, but we can provide them on request):

Installing the CPU

Plug the MIDI cables into the sockets on the CPU. Also plug in the 10 pin connector of the extra triggers and decay control. It is possible to plug in the connectors after the CPU is installed, but it might be easier doing it before.

Then put the CPU into the socket. You want to orientate it, so that PIN1 is on the side with the notch in the socket. (see picture). Note: The CPU only has 40 pins. Make sure that the CPU is not shifted inside the socket.

Putting it back together

You have completed the installation and can now put the TR-606 back together.

Put the overlay stickers on the 606, if you like.

Have fun :)