

CeeS installation manual

for Yamaha CS10

Introduction

This guide shows how to install the Tubbutec CeeS upgrade in a Yamaha CS10 synthesizer. It is a relatively easy install, but basic soldering and metal working skills are necessary. You will need to solder 20 castellated pins with 2.54mm pitch and 3 wires. You will also need to drill 6 holes in order to install the MIDI sockets.

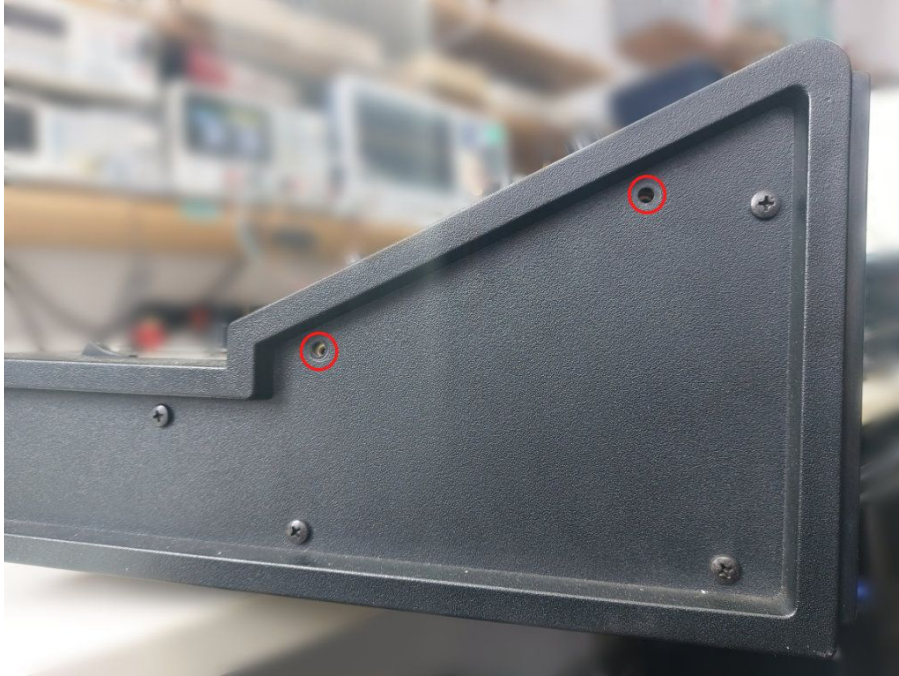
Tubbutec does not take any responsibility for damage caused by an improper installation.

Tools needed

- Screw driver
- Soldering iron
- Center punch
- Metal drill: 3.2mm – 3.5mm (1/8" should work fine)
- Stepping drill to create 14mm or 15mm (9/16" or 19/32") holes
- Cable ties

Opening the synth

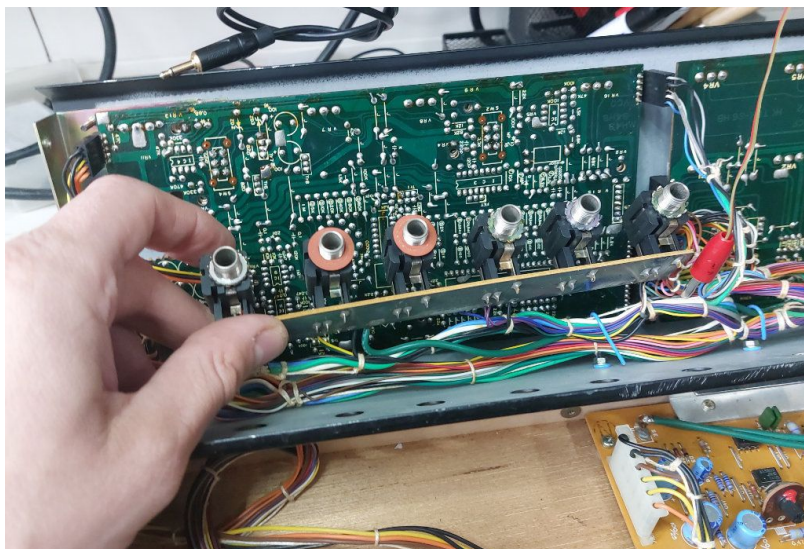
Remove the 4 screws on the side panels as shown. You will also need to remove the 4 bottom screws on the back of the CS10. You can remove the front panel of the CS10.



Remove these screws and the ones on the other side to open the front panel

Installing the CeeS board

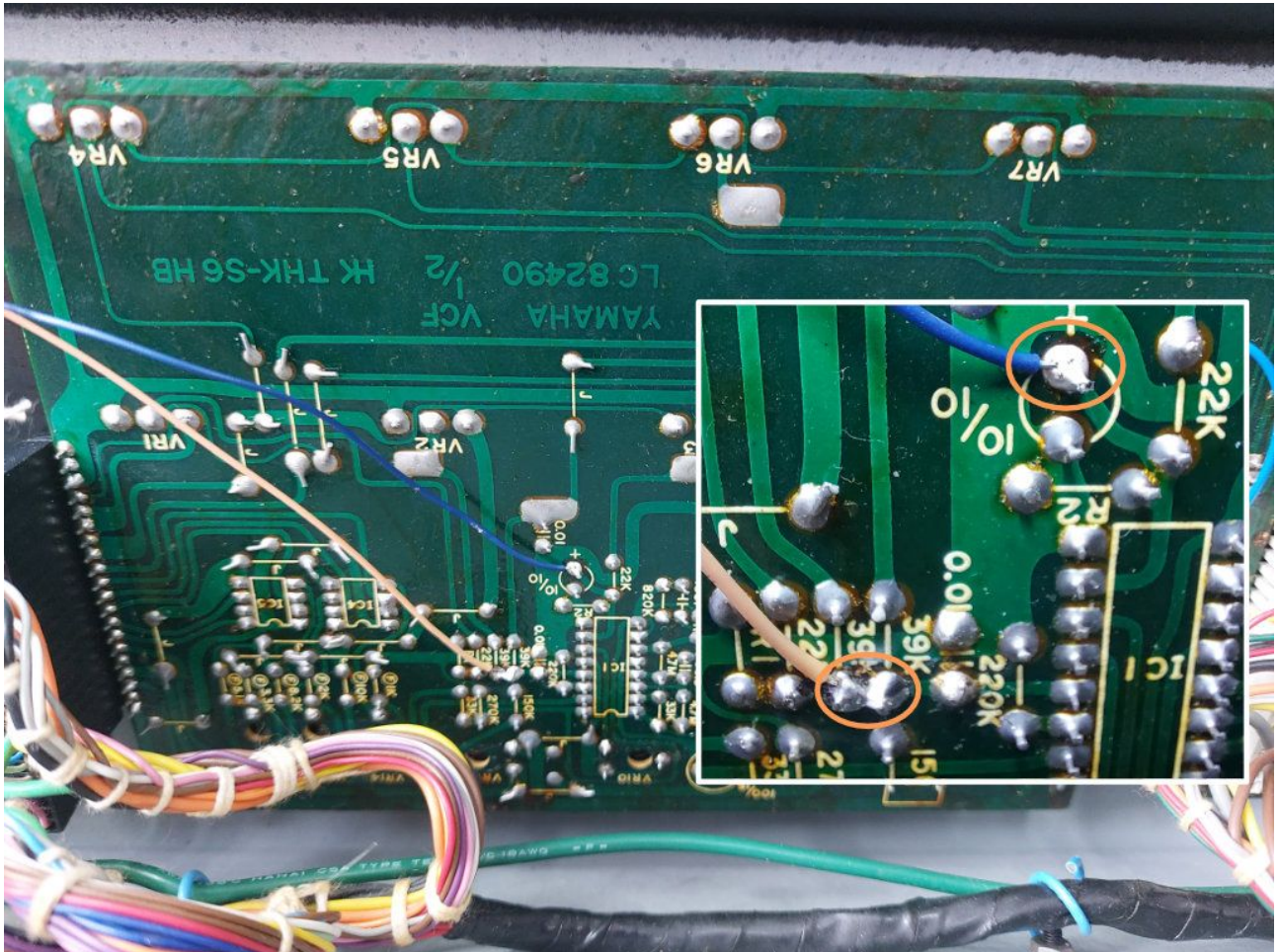
In order to access the panel board properly you might want to remove the jack board first. The installation is quite possible without this step though.



Removing the jack board helps accessing the panel board

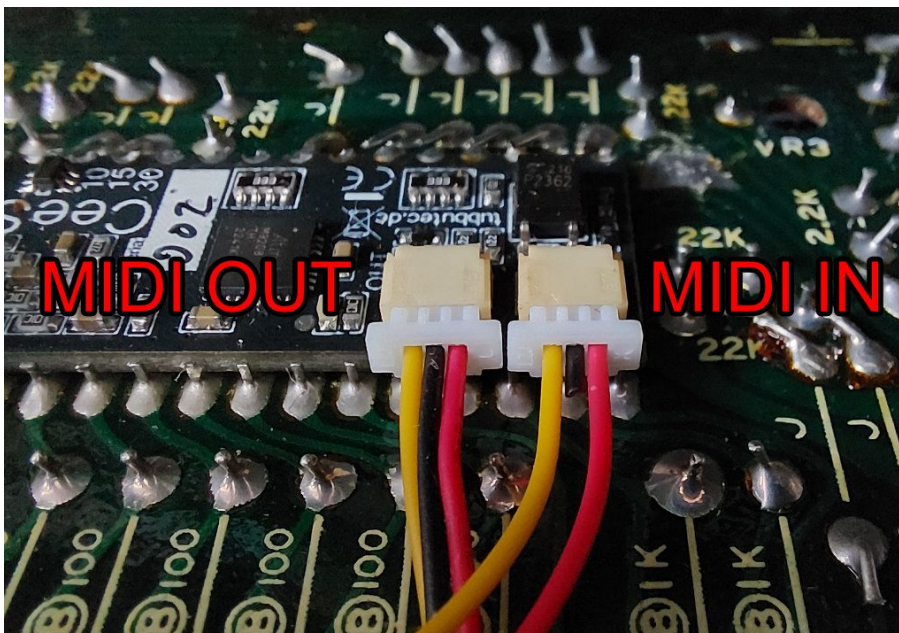
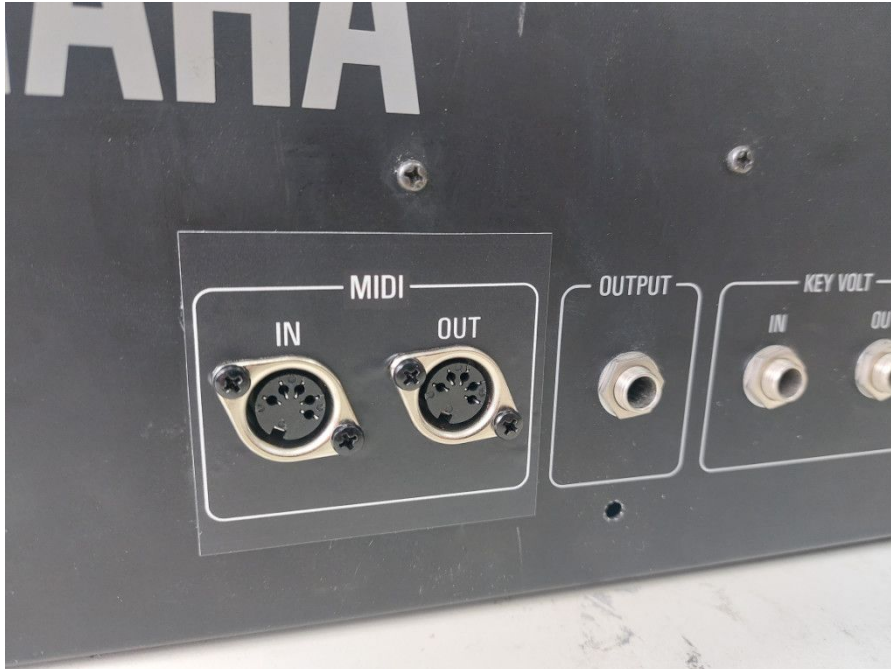
Soldering the filter wires

In order to get control of filter cutoff and resonance, two wires need to be soldered to the back of the filter board. Solder the blue and orange to the points shown in the picture below.



Carefully put the overlay sticker at the correct location.

Finally, mount the MIDI sockets with the bolts and nuts provided, and connect them to the CeeS board. The MIDI socket with two wires is the MIDI in socket, the one with three wires is MIDI out. **Make sure not to swap them.**



Testing

The CeeS boards are of course fully tested by us. However, it is advised to test all functions after installation to rule out any installation errors.

After the installation turn on the CS10. A small red LED on the CeeS board should light up and the synthesizer work normally.

MIDI input test

Connect a MIDI keyboard or computer to the MIDI-IN socket. When sending notes in the correct range on MIDI channel 1, the notes should play and the red LED blink whenever notes are received.

In order to test the filter control, we recommend sending the cutoff and resonance MIDI CC messages from a DAW or MIDI controller:

Filter cutoff: CC #16

Filter resonance: CC #18

MIDI output test

Connect a synthesizer or computer to the MIDI-out socket. Pressing keys on the CS10 keyboard should result in MIDI notes being sent.