

Service Memo for Tactile M 4000:

Problem: No function of one motorfader:

It may happen that one (or more) motorfaders do not work.

Cure: To check the complete function of the fader-drivers, please take the following steps:

1. switch ON the complete console
2. now press the CLR key on the M 411 (located under the LCD-screen)
3. now type in: **41582525** and press ENTER
4. the 5 keys directly under the LCD screen will now show +6 / 0 / -20 / -infinite
5. press any of theses keys and see if all faders will move to the same position
6. toggle between two of the positions and see which fader is moving slow
7. the fader which does not move is obviously defective and needs a closer inspection.

To check the fader, please unscrew the front panel of the M 411 and lift the panel very carefully. It is recommended to rest one side of the panel on the console-chassis so you have one hand free for the following checks:

1. identify the defective fader under the panel
2. carefully unplug the white connector to that fader
3. disconnect the cable to the next working fader close to the defective one
4. connect that drive.cable to the "dead" unit, now crefully
5. put back the fader panel into the normal position and look out that no cables are squeezed in
6. switch ON the console and check if that fader now is working

If YES, the fader-driver on the main drive board is defective and needs to be replaced.

If NO, the fader itself is either dead, i.e the motor or the drive board on the motor need to be replaced.

For replacement, we can supply the blank motorfaders without the driver, or the complete fader with the driver soldered onto it. This package is fully tested prior to shipment to you.

For replacement of the fader-driver on the main drive board you will need some experience in soldering delicate electronics!!

Simply count which fader is not working and in the same sequence you will find the drivers in the main board. Mark it clearly! Make sure that you really have chosen the correct driver! NEVER start counting the faders from the component-side, always look on the top panel and look up the number for correct reference, then count the drivers, the lower number always is on the left side!!

The next step is getting more complicated. Disconnect all cables and connectors from the main drive board and loosen the 4 screws holding that board in position.

Take out the complete board and look at the soldering side. Locate the correct row of pins (10 in a row) which have to be unsoldered very carefully. NEVER use a soldering iron with too high temperature, it will destroy the tracks on the PCB. When the solder has melted at every individual pin, suck it off with a pump or a special copper-wire (solder-sucker). Make sure that every contact has come free completely, then slowly move the driver PCB out of it's position. CARE has to be taken not to pull out the through-connection in the soldering holes, as some of the tracks are connected to the other side of the PCB. If it should happen that

you pull out one of these contacts, mark the hole and make sure to solder both sides later, or to install a bridge made of a thin, isolated wire.

NOW we recommend you solder in a 10-pin row of sockets made from IC-sockets. This can be made very easy, and you have better access just in case there will be a new problem. Make sure that the sockets are not too high, as there is only limited space above the drivers (under the faders).

When the sockets are soldered in, you may plug in the new driver (or you already have soldered in the driver without the sockets).

Now install the main PCB into the console and plug in all cables you have taken out!! Make sure not to mix up any of them, as this will cause you additional headache!!!

When all cables are connected, please put the fader panel back into it's position and then switch ON the console. Check for correct working faders in all positions.

To get a quick overview, please press the buttons:

2 x CLR
then **41582525** ENTER

Now the display in M 411 will be ready for a fader test, please press the F 1 to F 4 buttons and see what the faders are doing. All working?? All at the same speed to the correct position?

You have done a good job!

Make sure to tighten the fader-panel on the console.