Replacement of LCD on a MSD600M

Please read the whole document before doing anything!!! (2 Pages.)

At first you need to remove all modules (including the utility module)
from the MSD, then you should remove the four philips-screws holding
the cabinet in place.

When the cabinet is removed you need to separate the connectors on the
LCD. That should be done using a pair of tweezers to gently lift the
connector in each end where the small metal pieces are mounted.

You should also gently remove the two connectors for the backlight tubes.

After separating the connectors, it is possible to remove the four 30 mm. spacers in each corner of the
main-board. For that, you have to use a 5 mm. nut driver. Please notice that there are two washers
between the main-board and each spacer.

The main-board is now free, and LCD can now be replaced.

When mounting the main-board on the new LCD please be sure that there is 1 washer between the
7 mm. spacer and the main-board. (It might not have been there before.)

You should also be sure that the wires to the upper backlight-tube are placed between the display and
the main-board. The wires for the lower backlight-tube must be placed in a way so the white wire goes
along the cobber-surface of the front plate, and the black wire is placed between the
main-board and the display. The connector marked 1 (One) should be placed closest to the JTAG
connector.

When you mount the 30 mm. spacers, be sure that the two washers between the main-board and the
spacers are in place.

You should now reconnect the main-board and the LCD. Be careful not to damage the flex-pcb on
which the white LCD-connector is mounted. Gently press on the middle of the connector in each end.
(The black marking on the supplied flex-pcb.)

It is now possible to place the cabinet back on and fasten the four philips-screws.

You should now place all the modules at their original position. It would be practical to start with the
module nearest input module 4, because it is then possible to check that the pin-connectors on the
main-board are connected correctly. You might even remove some of the blank-panels. When
mounting the utility-module it is of course impossible to verify that the connector is attached
correctly, but as a guideline, the back-panel of the module should be aligned with the cabinet. When
all the modules are at their right place, you should then fasten all eighteen black hex-screws.

The procedure should now be completed and you will now have a fully functioning MSD…

Tip:

Before mounting all the modules, you might power-up the instrument and verify that the backlight lights uniform all over the surface of the screen. (Backlight to max. in the setup-menu.) If it's brighter at the lower part of the screen you should try placing the wires to the backlight-tubes in a slightly different way.

Supplied in this kit is:

1 Color 640X480 LCD Display.
1 Flex-pcb with display connector.
1 Hex-key.

Some washers and black hex-screws.