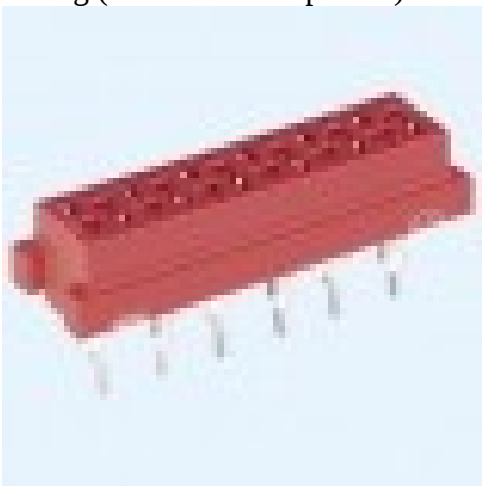
Assembly Instruction 100W_PA Display

The topside of the pcb is marked “BS”
The bottom side is marked with “LS”

On the topside are assembled:
3 pusbuttons
1 header 16pol. for the display (**near the pusbuttons)**. The connector at the top boarder of the pcb is provided for different displays which have the connector on the upper side and is not used for this display.
The shorter pin side of the header is soldered to the pcb and the **display module** is plugged on the longer pins and soldered. This gives enough stability for the display module. However you can fix the upper side of the display module with one or two dots of silicon glue.

On the bottom side of the pcb is assembled a Tantalum capacitor C1. The marked side is the +pole and a 100n SMD 0805 capacitor C2. The red 16-pole MicroMatch connector has a coding (left side on the picture) which shall point to the upper side on the assembly drawing.



Pin1 is on the same side as this coding.

Assembly of the display cable.

First you should verify how long your cable from the display to connector J12 on the main board has to be. It depends on your specific mounting in a housing.
Cut the desired length from the supplied cable. Take care that you cut it with a sharp scissors or knife. Use 16 leads of this piece of cable beginning from the colour marked lead. The resting 9 leads are pulled off from the cable and are no longer used.
The male connectors are pressed onto the cable that the marked lead of the cable shows to pin1 of the connectors i.e. by means of a bench vise. Take care not to damage the coding nose while using the vise. The nose must stay outside the vise jaws.
Also take care that the cable exits the connector in the correct direction fitting your mounting.

Display test

Connect the display to the mainboard and connect 12V to the green connector J1 on the mainboard which needs not be mounted onto the heatsink for this test. The Pins are marked with +12V and GND on the pcb. Insert the fuse into the holder next to J1 and the display should then show 2 lines with FWD and REV Power and current 0A. You can adjust the display contrast with pot VR4 which is next to the display connector J12.

The pushbottons are called:
left : - (minus)
middle: + (plus)
right: OK or ENTER

With + and – you can change the displayed pages between power/current and temperature.