

Service data bulletin



Instrument: GDS101

Date: 23.01.2007

Created by: Geir Theodorsen

GUIDE TO CHANGE MONOCHROME SCREEN

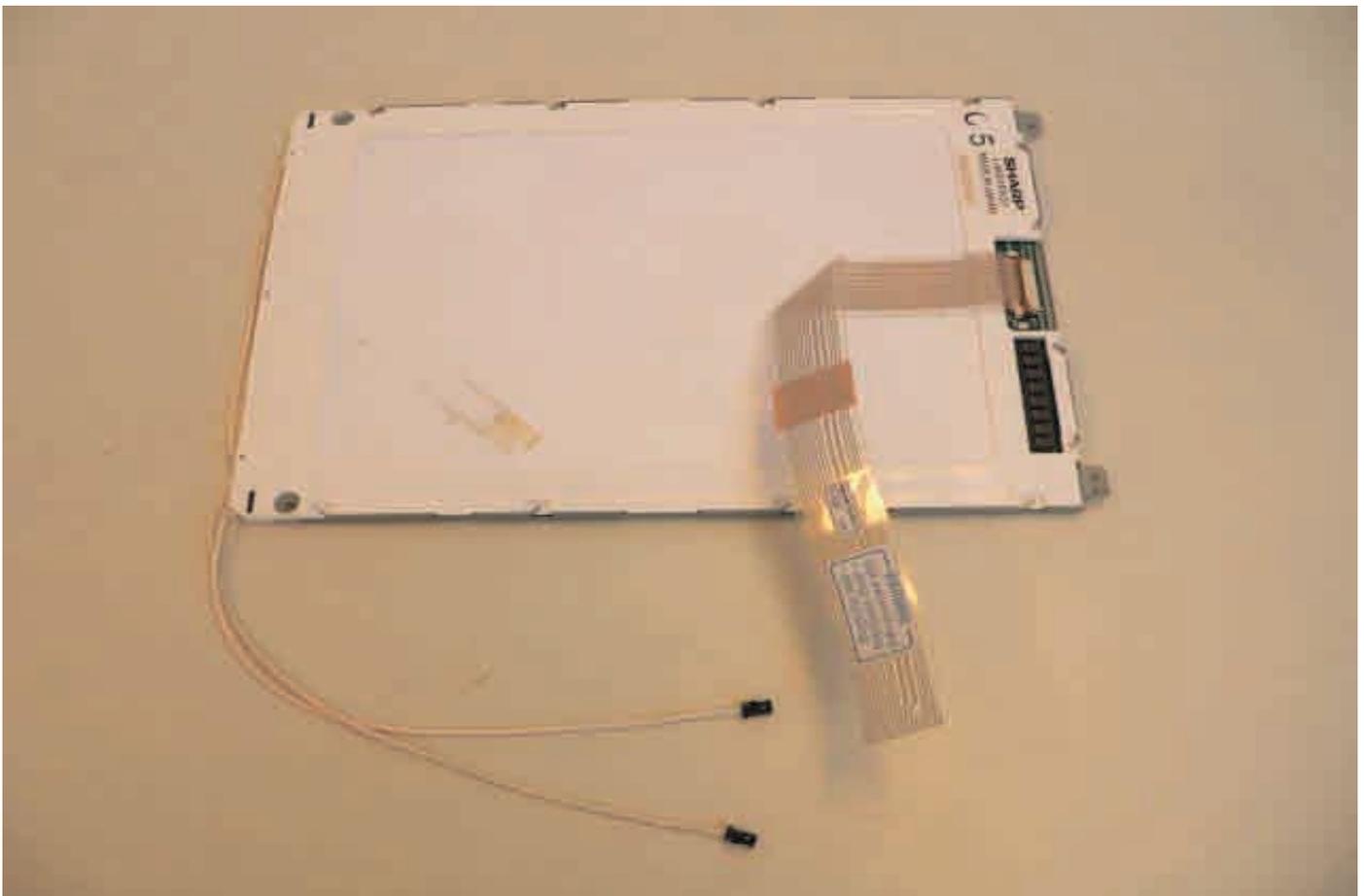
From 1994 there have been three different versions of monochrome screens.

SHARP LM64P839	(obsolete)
SHARP LM64P83L	(Part number KY-G001)
HITACHI LMG5278XUFC-00T	(Part number KY-G002)

Below is pictures and description of the three versions.

LCD Screen type LM64P839.

Late 1994 a new and less bulky type screen was taken into use. This screen had a 16 pin MOLEX socket soldered to the screen. An ISOF type transparent flat cable connected the screen to J 202 on the keyboard. Nominal value of R 207 on keyboard is 27 Kohm.



LCD Screen type LM64P83L.

LM64P83L came into use in 1997. This screen is identical to LM64P839.

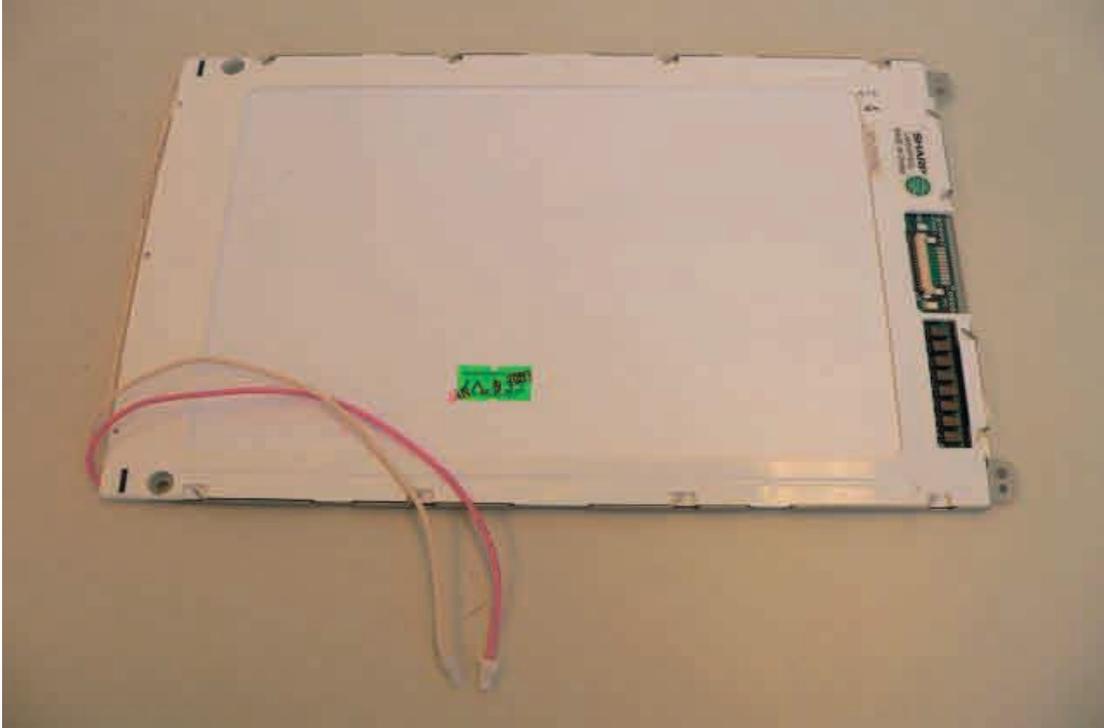
1999: Effective from serial number 99951 the 16 Pin MOLEX socket and ISO cable is not used.

A standard Cable ZZK-01023 is connected between the screen and CN4 on the CPU Board.

The CPU board is changed from separate CPU and VGA boards to the combined CPU/VGA type PCA-6135.

A separate wire is connected to minus 20 volt at JP200 on keyboard and another wire from CPU end of cable is connected to pin 5 on J203 Keyboard for ground.

R207 on keyboard has still 27 Kohm nominal value.



LCD Screen type LMG5278XUFC-00T.

In 2003, from serial number 031985, the above type screen is used.

Nominal value on R 207 on keyboard is 24 Kohm. On keyboards version "B", it is possible to select 24 or 27 Kohm by inserting or removing a "link" on the pcb.(J205 pos 1-2.)

The screen cable is the same as for LM64P83L.

A molex type socket can not be connected to this screen.

Units with separate CPU and VGA pcb's can not use this screen.



How to change screen from SHARP LM64P839 (and LM64P83 with flat cable)

Should be replaced with SHARP LM64P83L Part number KY-G001.

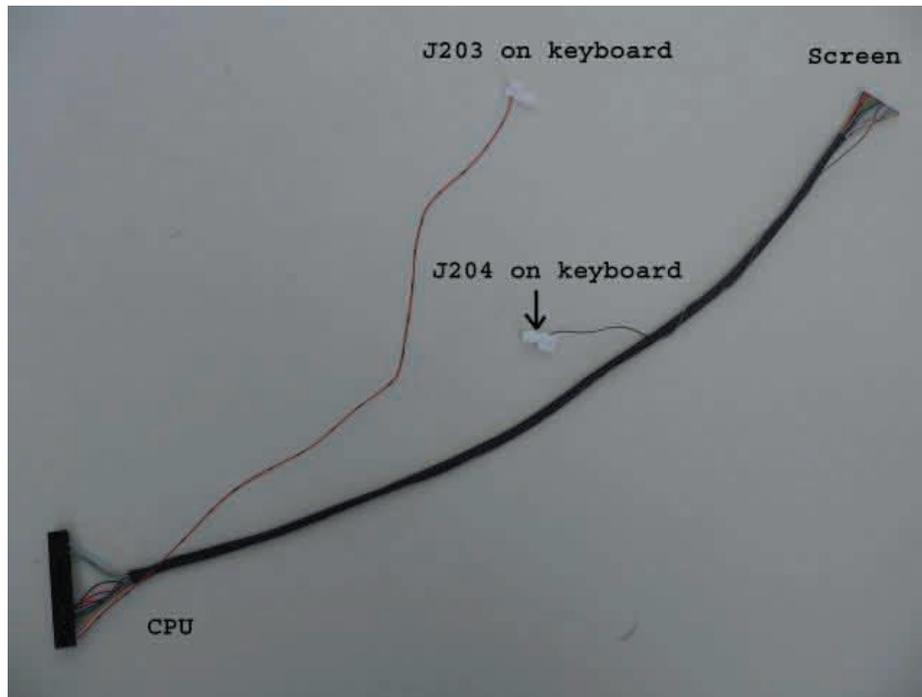
In addition you will need the screen cable ZZK-01023 going to CPU and Keyboard

May also be replaced by Hitachi LMG5278XUFC. Part number KY-G002.

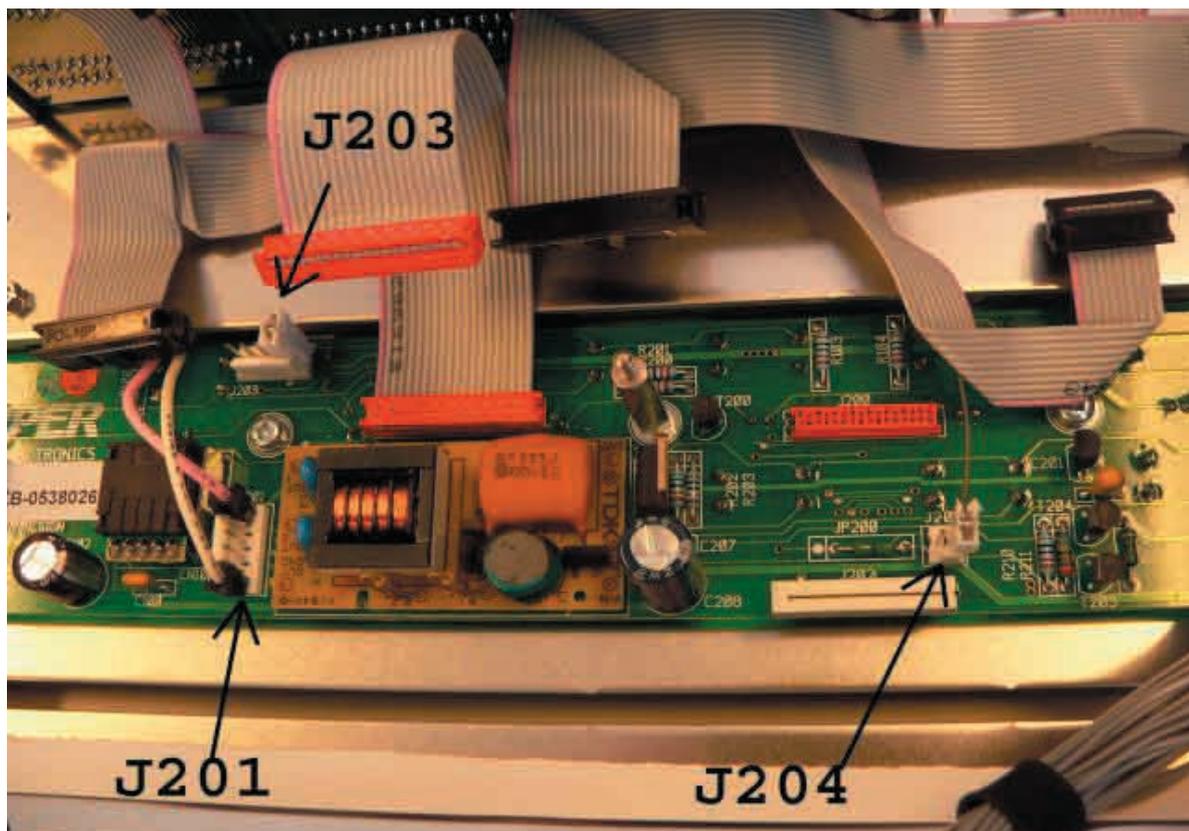
In addition you will need the screen cable ZZK-01023(See picture below) going to CPU and Keyboard and the cable ZZK-01046.(See picture on previous page)

NOTE! R207 on keyboard must be changed to 24kOhm.

ZZK-01023



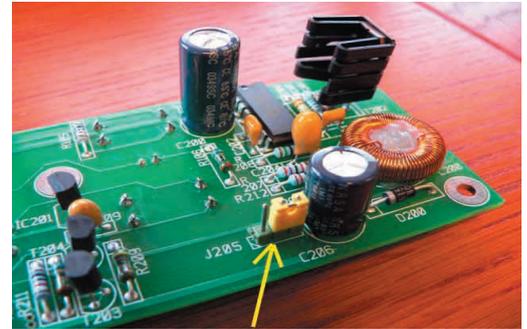
Connection to keyboard ver B



Change resistor value on keyboard ver B

Position 2-3 (shown on picture) Resistance is 27kOhm

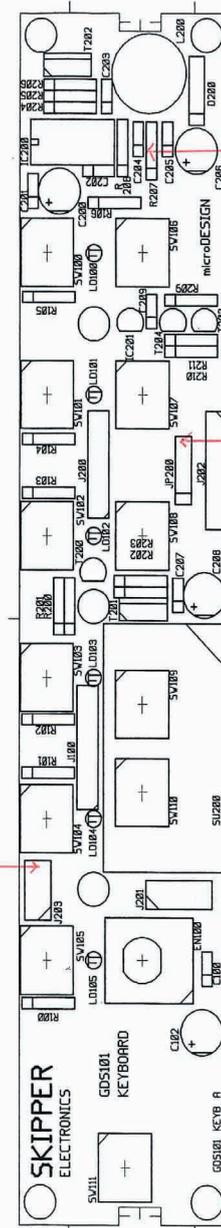
Position 1-2 Resistance is 24kOhm



JUMPER J205 in position 2-3

Keyboard ver A

Keyboard version A may have to be modified according to drawing to fit the new screen.



VALUE OF R207
LMG 5278: 24kΩ
LM64P83L: 27kΩ

-20V
FIT PIN HERE FOR SHORT
FLYLEAD FROM SCREEN
CABLE
JP200 (0Ω) MUST BE
MOVED TO REVERSE
SIDE OF PRINT

GROUND.
LONG FLYLEAD
SCREEN CABLE
TO PIN 5 OF J203

NOTE!

All units with serial numbers lower than 99950 should be upgraded to combined CPU/VGA type PCA6135. See service data bulletin "GDS101 Old CPU upgrade parts" or send the complete unit to SKIPPER Electronics for upgrading.