Website:http://biz.LGservice.com
E-mail:http://www.LGEservice.com/techsup.html

COLOR MONITOR
SERVICE MANUAL

CHASSIS NO. : CL-61

MODEL: FLATRON L1730S (L1730SSQTM-ALR, AG**R)**

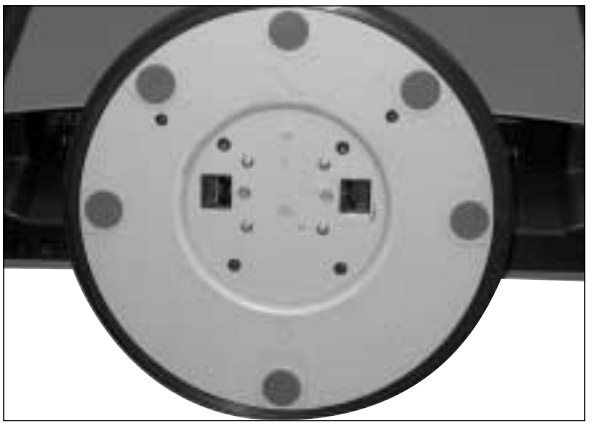
( ) **Same model for Service

CAUTION

BEFORE SERVICING THE UNIT,
READ THE **SAFETY PRECAUTIONS** IN THIS MANUAL.

DISASSEMBLY

 # 1

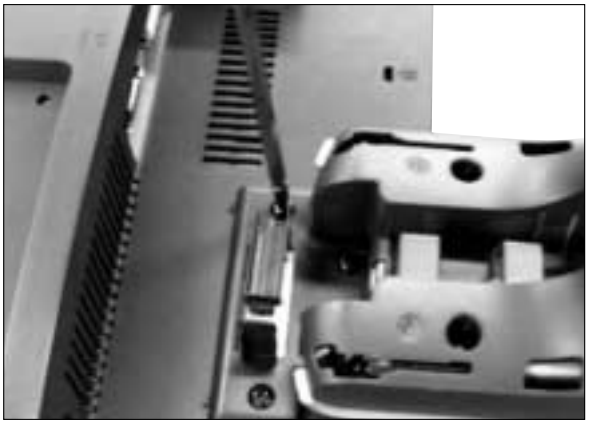


1. Put a soft cushion on the floor and lay the stand on its side so that the base is accessible.

 # 2

2. Hold the set while folding the latch and take out the stand base.

 # 3



3-1. Push the cover upward and remove it.

3-2. Unscrew the four screws.

 # 4

4. Cover the panel with your hand so that it is not scratched. Then, pull up the cabinet corner side.

 # 5

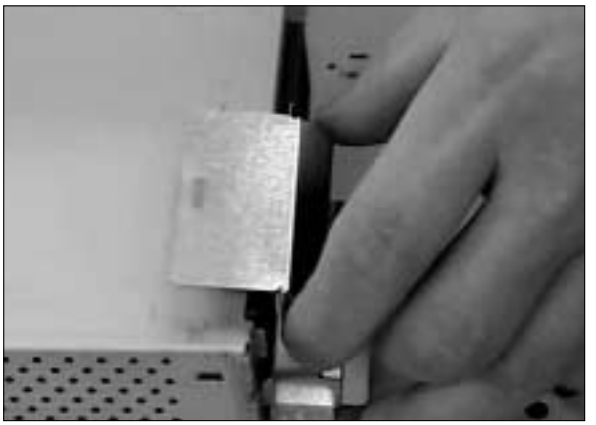
5-1. Disassemble the cabinet.

5-2. Hold the control PCB as shown in the figure and gently pull it out.

 # 6

6. Push up the back cover as shown in the figure and pull out the chassis assembly so that the latch is untied.

 # 7

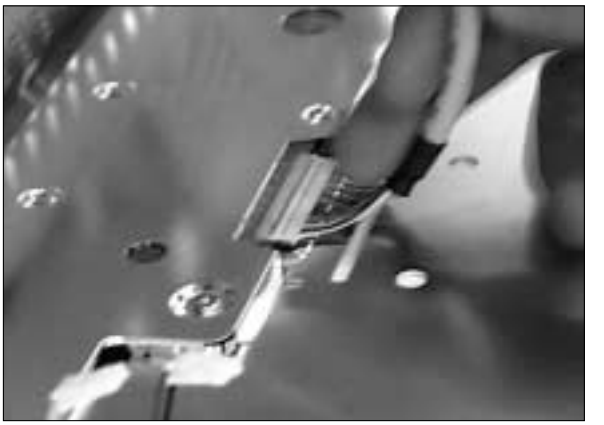


7. Push the shield cap upward and disassemble it.

 # 8

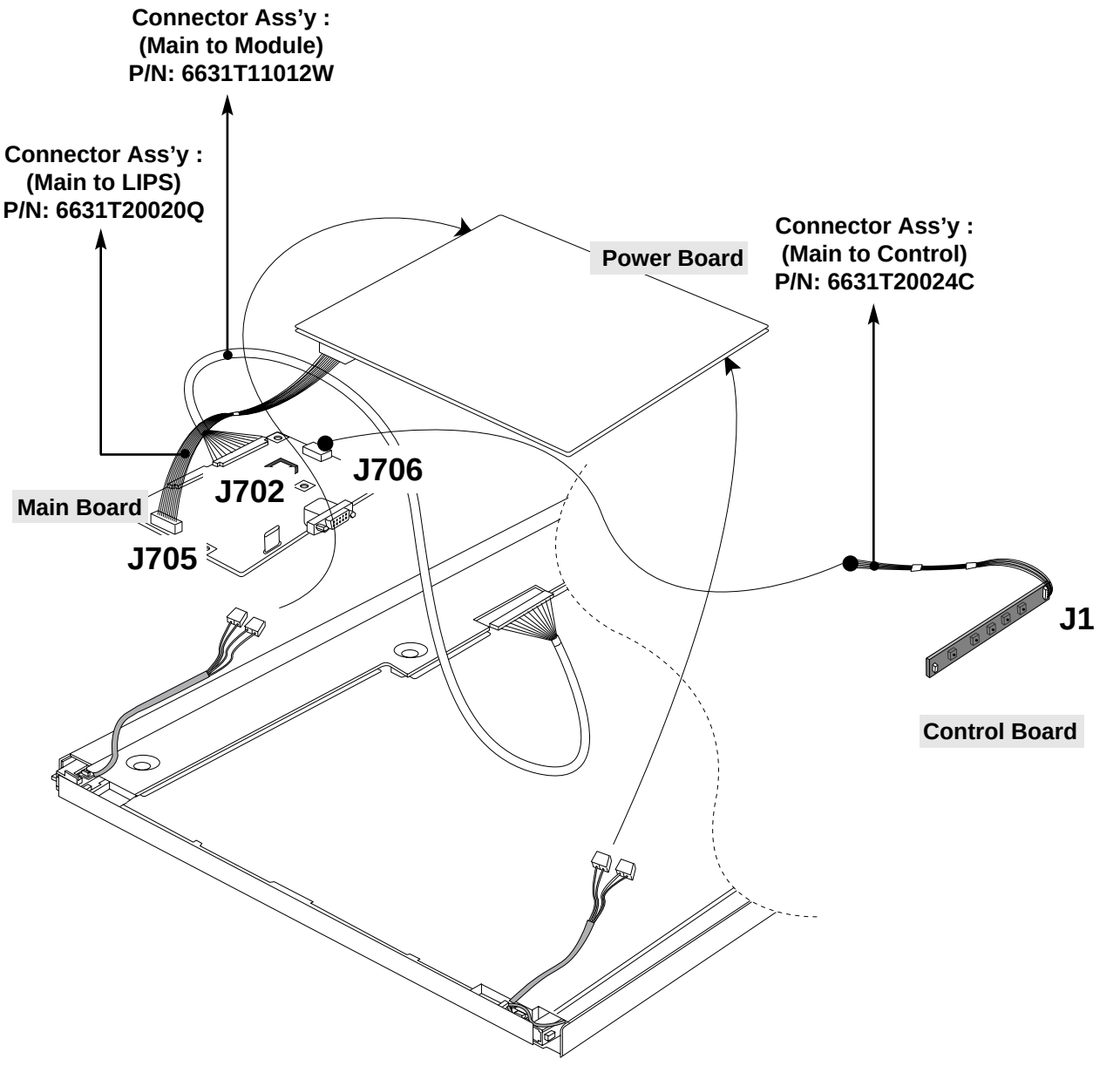
8. Pull out the cable.

 # 9

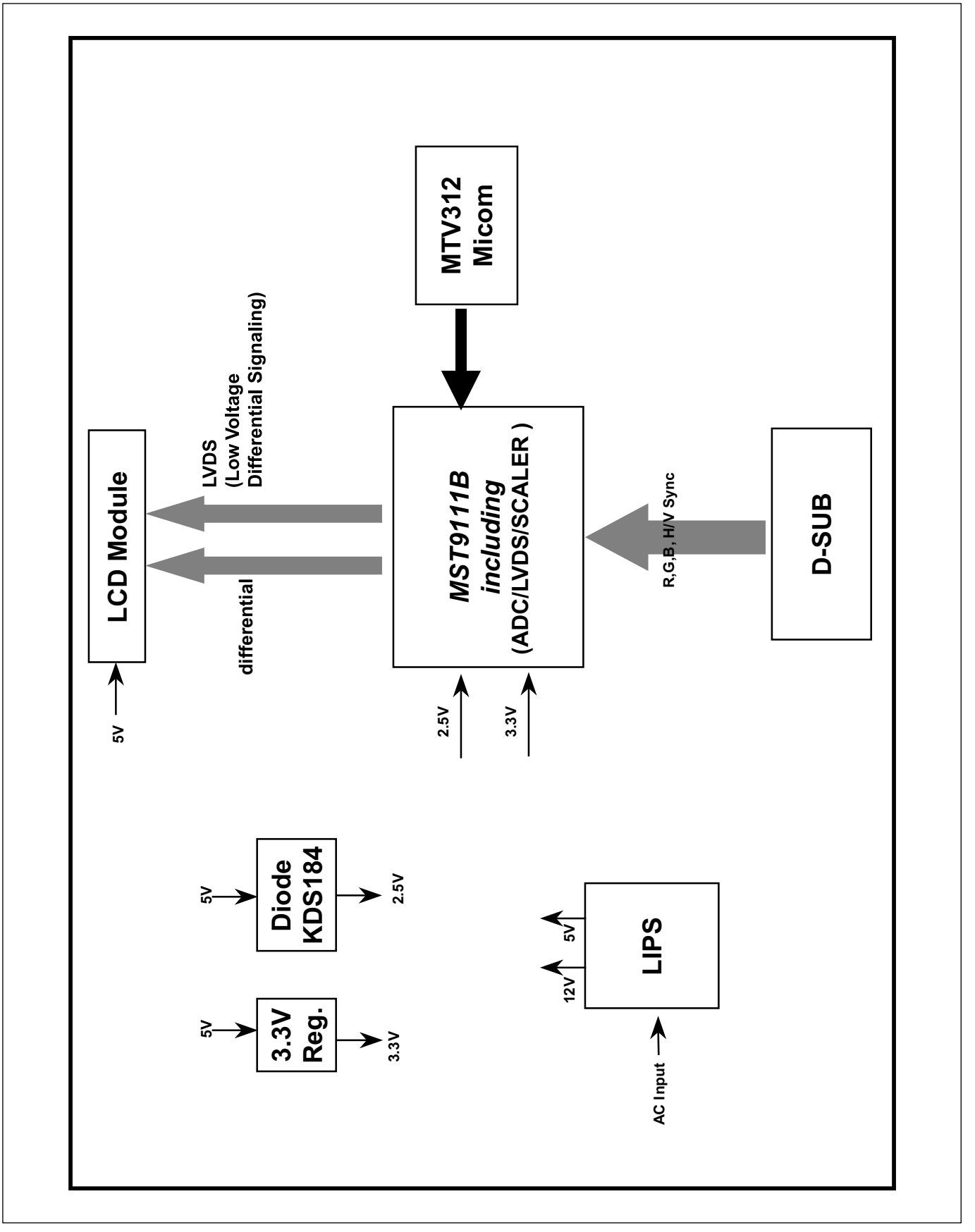


9. Pull out the link cable while pushing up the main frame.

WIRING DIAGRAM



BLOCK DIAGRAM



DESCRIPTION OF BLOCK DIAGRAM

1. Video Controller Part.

This part amplifies the level of video signal for the digital conversion and converts from the analog video signal to the digital video signal using a pixel clock.
The pixel clock for each mode is generated by the PLL.
The range of the pixel clock is from 25MHz to 135MHz.
This part consists of the Scaler, ADC, LVDS transmitter.
The Scaler gets the video signal converted analog to digital, interpolates input to 1280 X 1024 resolution signal and outputs 8-bit R, G, B signal to transmitter.

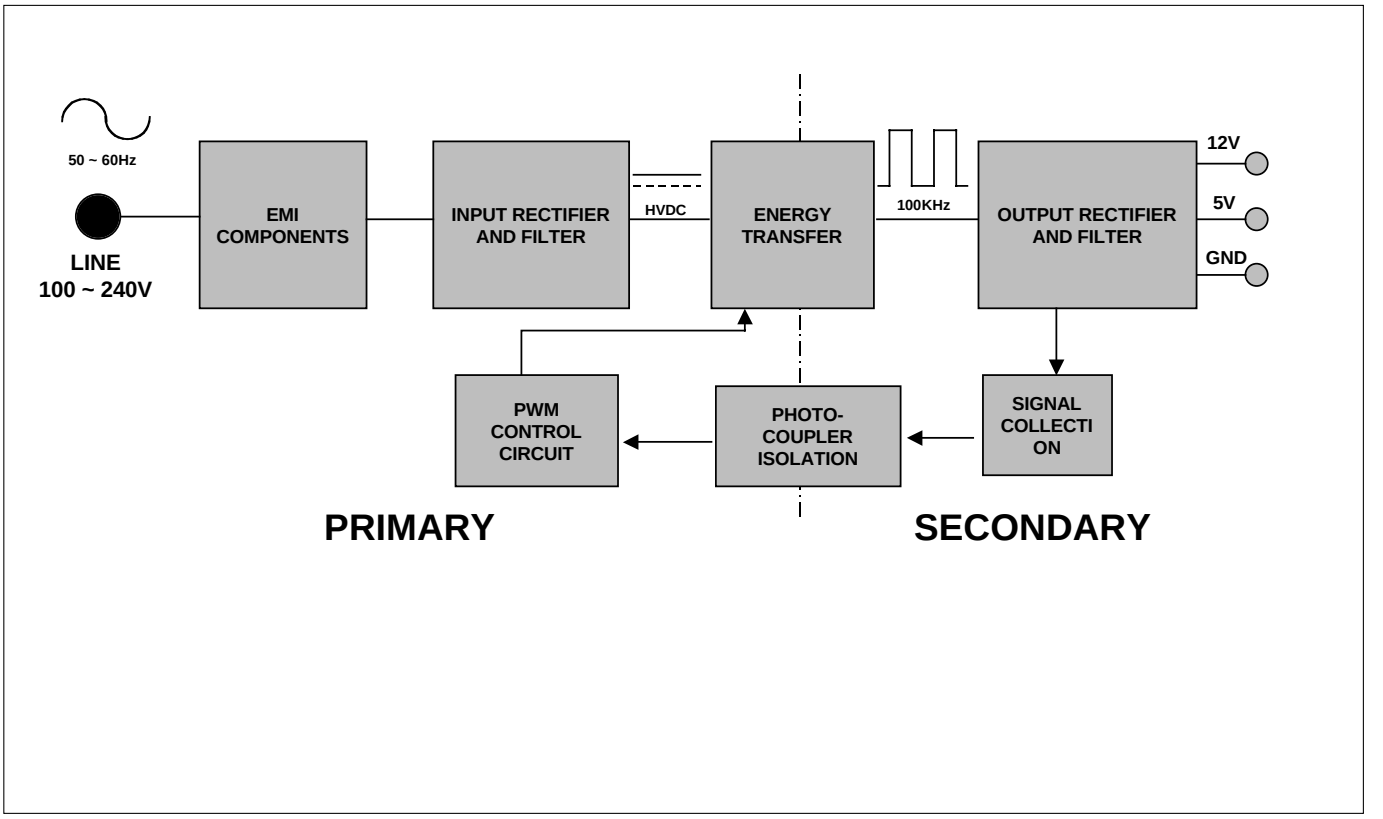
2. Power Part.

This part consists of the one 3.3V regulator, and two 2.5V drop diodes to convert power which is provided 12V, 5V in Power board.
5V is provided for LCD panel and Micom.
Also, 5V is converted 3.3V by regulator and 3.3V is converted 2.5V by drop diode.
Converted power is provided for IC in the main board.

3. MICOM Part.

This part consists of EEPROM IC which stores control data, Reset IC and the Micom.
The Micom distinguishes polarity and frequency of the H/V sync are supplied from signal cable.
The controlled data of each modes is stored in EEPROM.

LIPS Board Block Diagram



Operation description_LIPS

1. EMI components.
This part contains of EMI components to comply with global marketing EMI standards like FCC,VCCI CISPR, the circuit included a line-filter, across line capacitor and of course the primary protection fuse.

2. Input rectifier and filter.
This part function is for transfer the input AC voltage to a DC voltage through a bridge rectifier and a bulk capacitor.

3. Energy Transfer.
This part function is for transfer the primary energy to secondary through a power transformer.

4. Output rectifier and filter.
This part function is to make a pulse width modulation control and to provide the driver signal to power switch,to adjust the duty cycle during different AC input and output loading condition to achieve the dc output stabilized, and also the over power protection is also monitor by this part.

5. Photo-Coupler isolation.
This part function is to feed back the dc output changing status through a photo transistor to primary controller to achieve the stabilized dc output voltage.

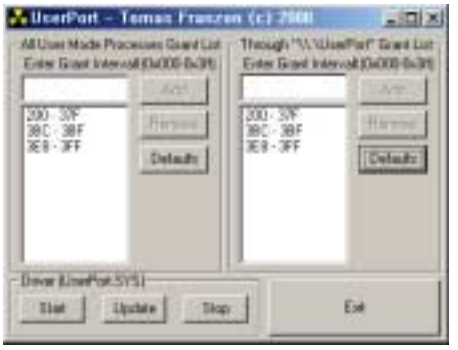
6. Signal collection.
This part function is to collect the any change from the dc output and feed back to the primary through photo transistor

ADJUSTMENT

Windows EDID V1.0 User Manual

Operating System: MS Windows 98, 2000, XP
Port Setup: Windows 98 => Don't need setup
Windows 2000, XP => Need to Port Setup.
This program is available to LCD Monitor only.

1. Port Setup
   a) Copy "UserPort.sys" file to
   "c:\WINNT\system32\drivers" folder
   b) Run Userport.exe



   c) Remove all default number
   d) Add 300-3FF

   e) Click Start button.
   f) Click Exit button.

2. EDID Read & Write
   1) Run WinEDID.exe

   2) Edit Week of Manufacture, Year of Manufacture, Serial Number
      a) Input User Info Data
      b) Click "Update" button
      c) Click " Write" button

SERVICE OSD

1)Turn off the power switch at the front side of display.

2)Wait for about 5 seconds and press MENU key, press POWER key.

3)Shows the service OSD menu.

4)The service OSD menu contains additional menus that the User OSD menu as described below.

a) CLEAR ETI : To initialize using time.
b) AUTO COLOR : W/B balance and Automatically sets the gain and offset value.
c) AGING :Select Aging mode(on/off).
d) PANEL : Select using panel.
e) NVRAM INIT : EEPROM initialize(24C08).
f) 9300 : Allows you to set the R/G/B.-9300K value manually.
g) 6500 :Allows you to set the R/G/B.-6500K value manually.
h) OFFSET : Allows you to set the R/G/B.-Offset value manually.(Analog Only)
i) GAIN : Allows you to set the R/G/B.-Gain value manually.(Analog Only)

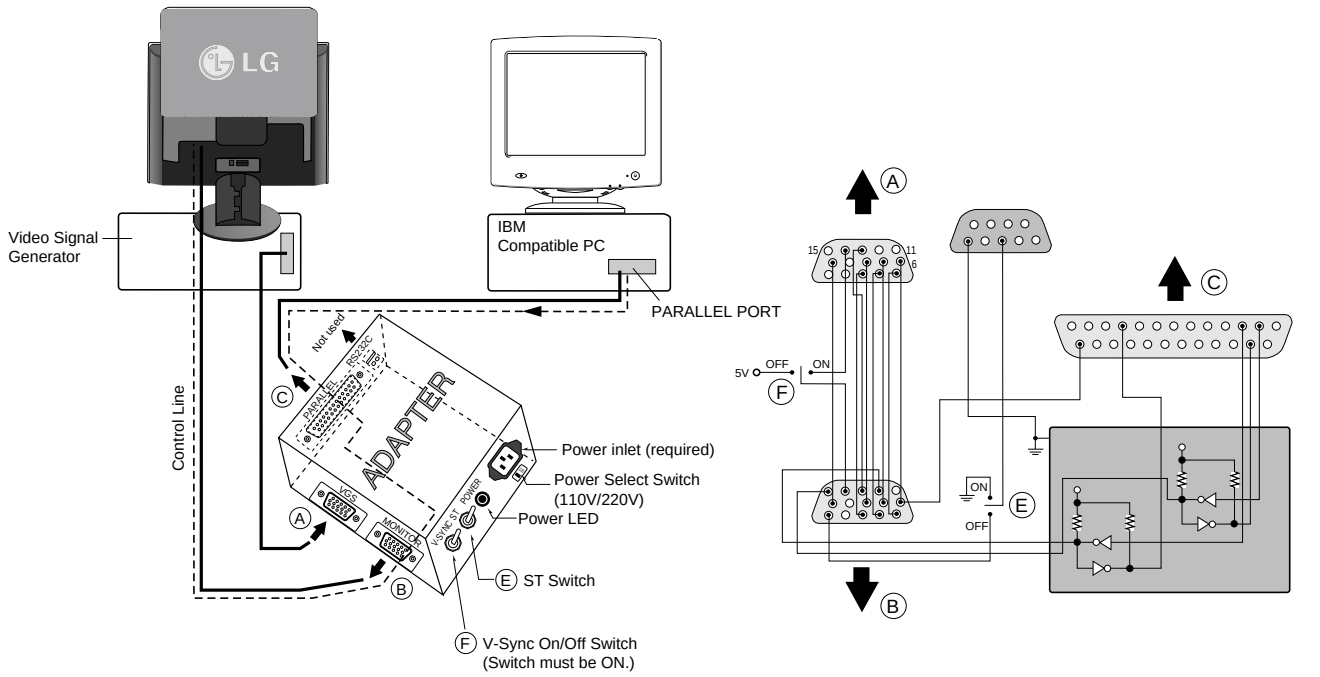
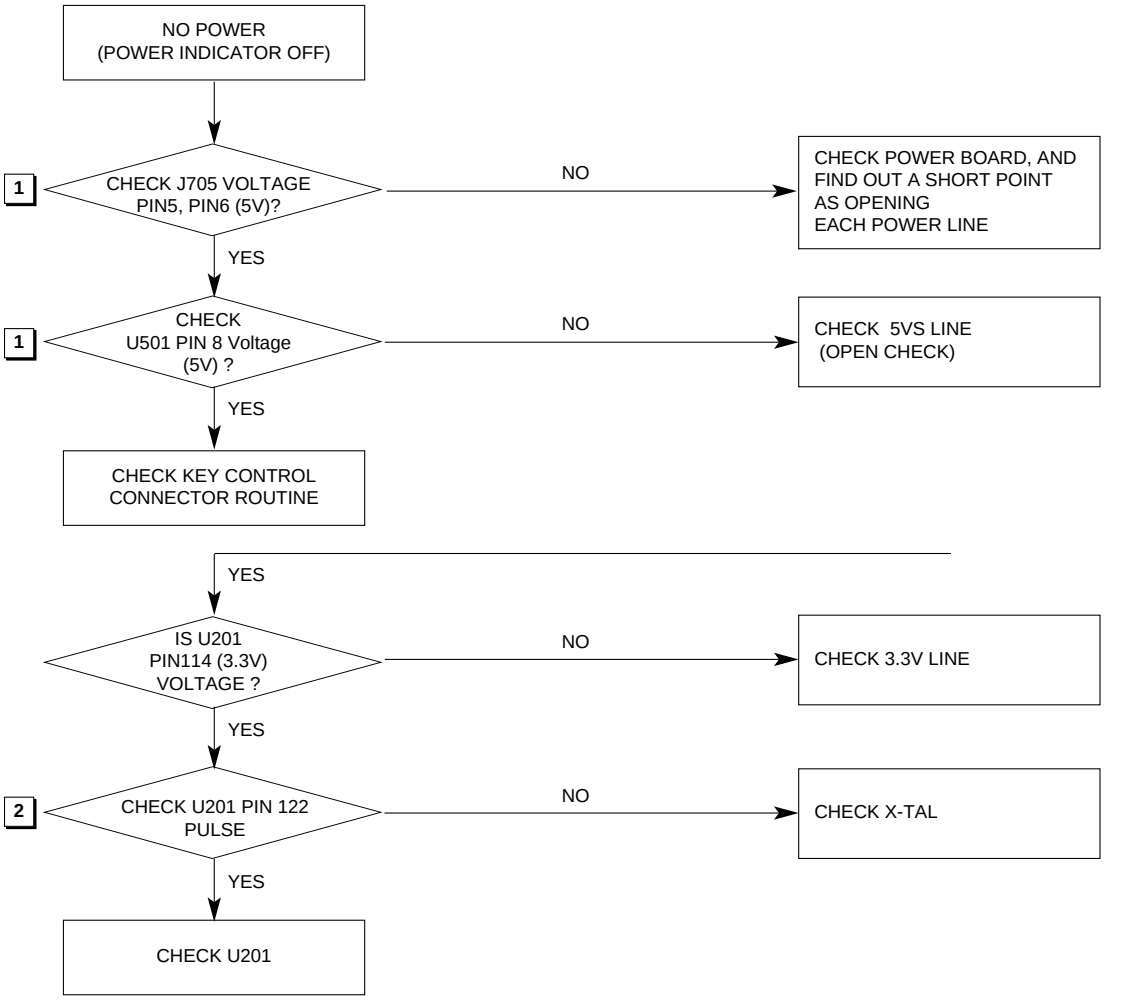


Figure 1. Cable Connection

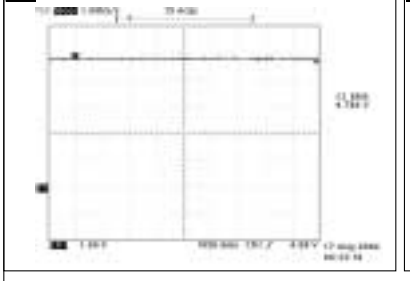
TROUBLESHOOTING GUIDE

1. NO POWER

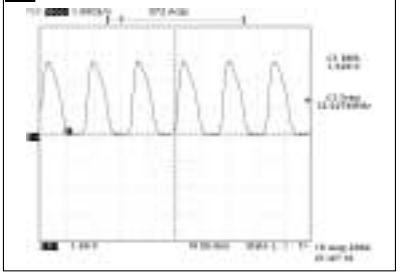


Waveforms

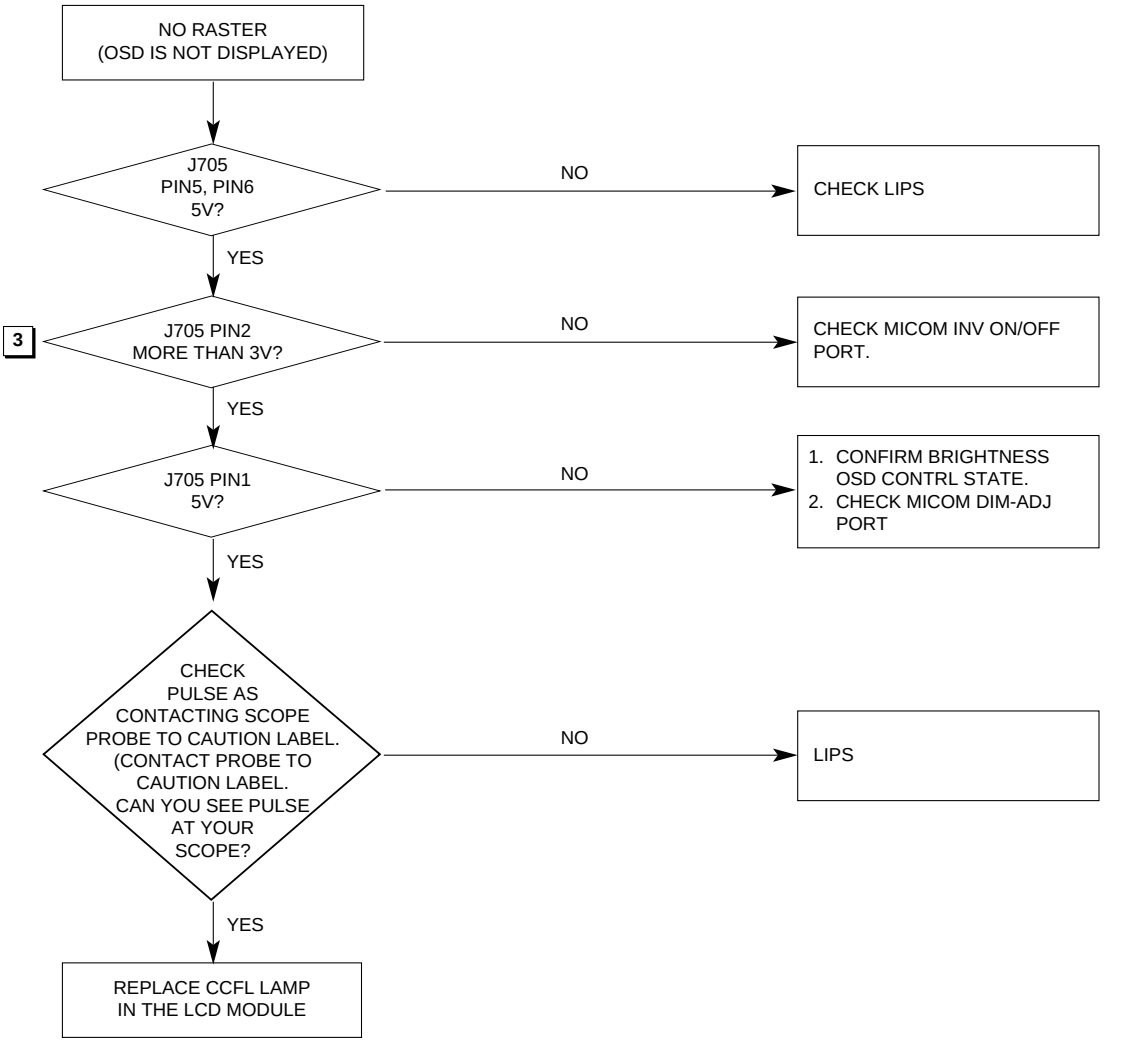
1 J705-#5, 6 / U501-#8



2 U201-#122

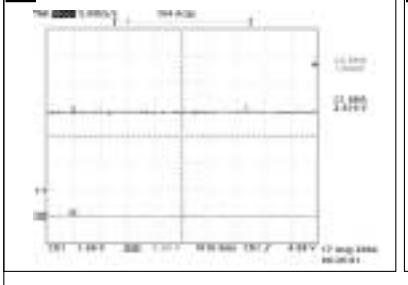


2. NO RASTER (OSD IS NOT DISPLAYED) – LIPS

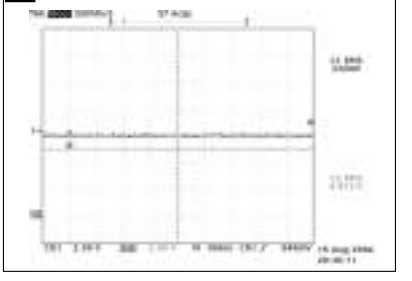


Waveforms

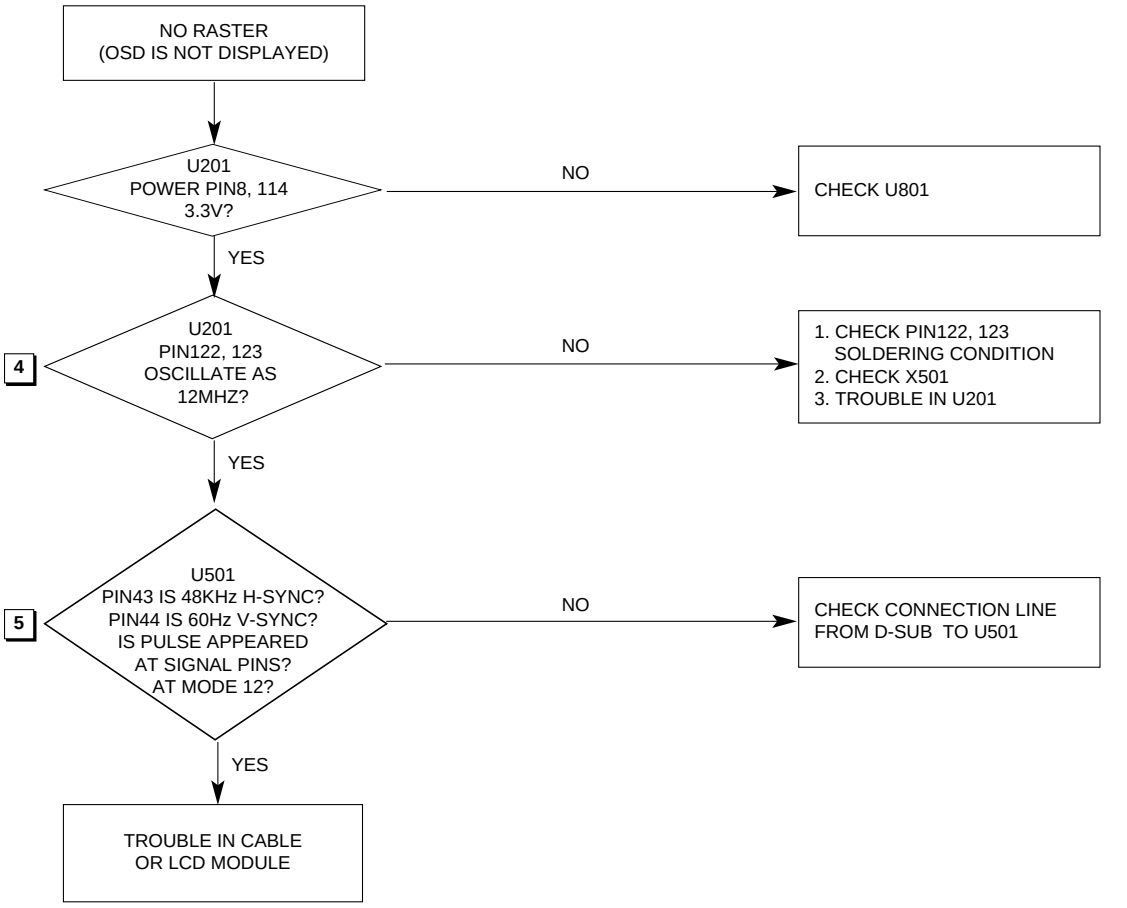
3 J705-#2



3 J705-#2

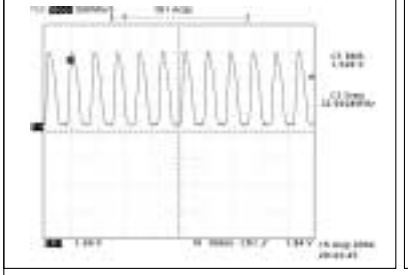


3. NO RASTER (OSD IS NOT DISPLAYED) – MST9111B

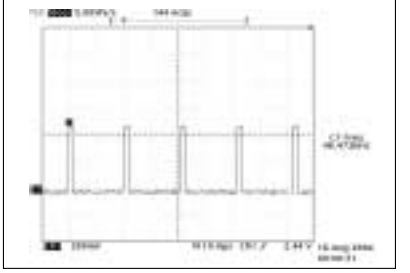


Waveforms

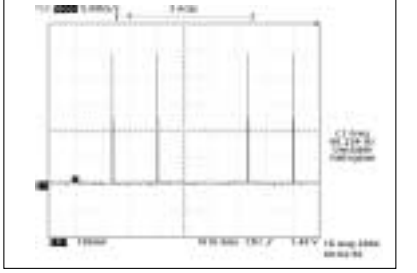
4 U201-#122, 123



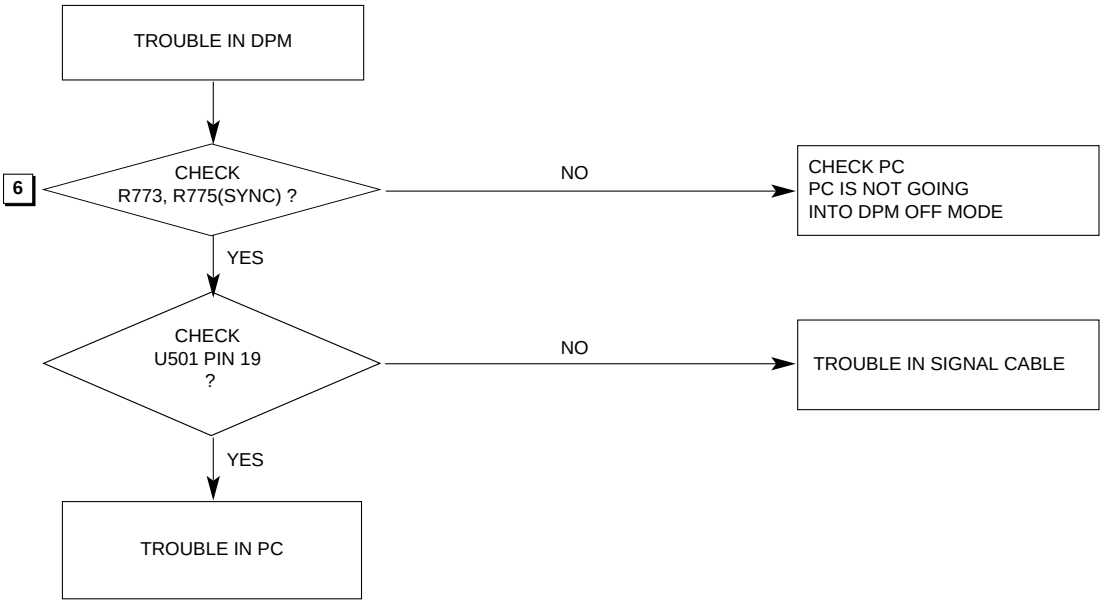
5 U501-#43 H-SYNC



5 U501-#44 V-SYNC

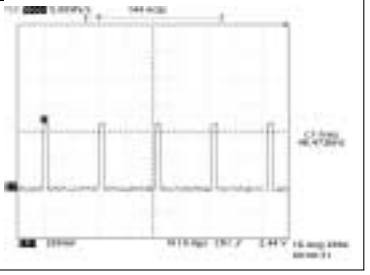


4. TROUBLE IN DPM

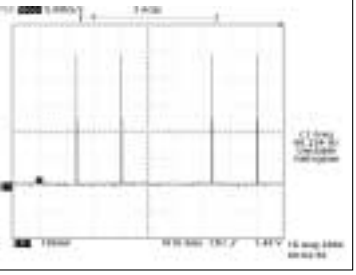


Waveforms

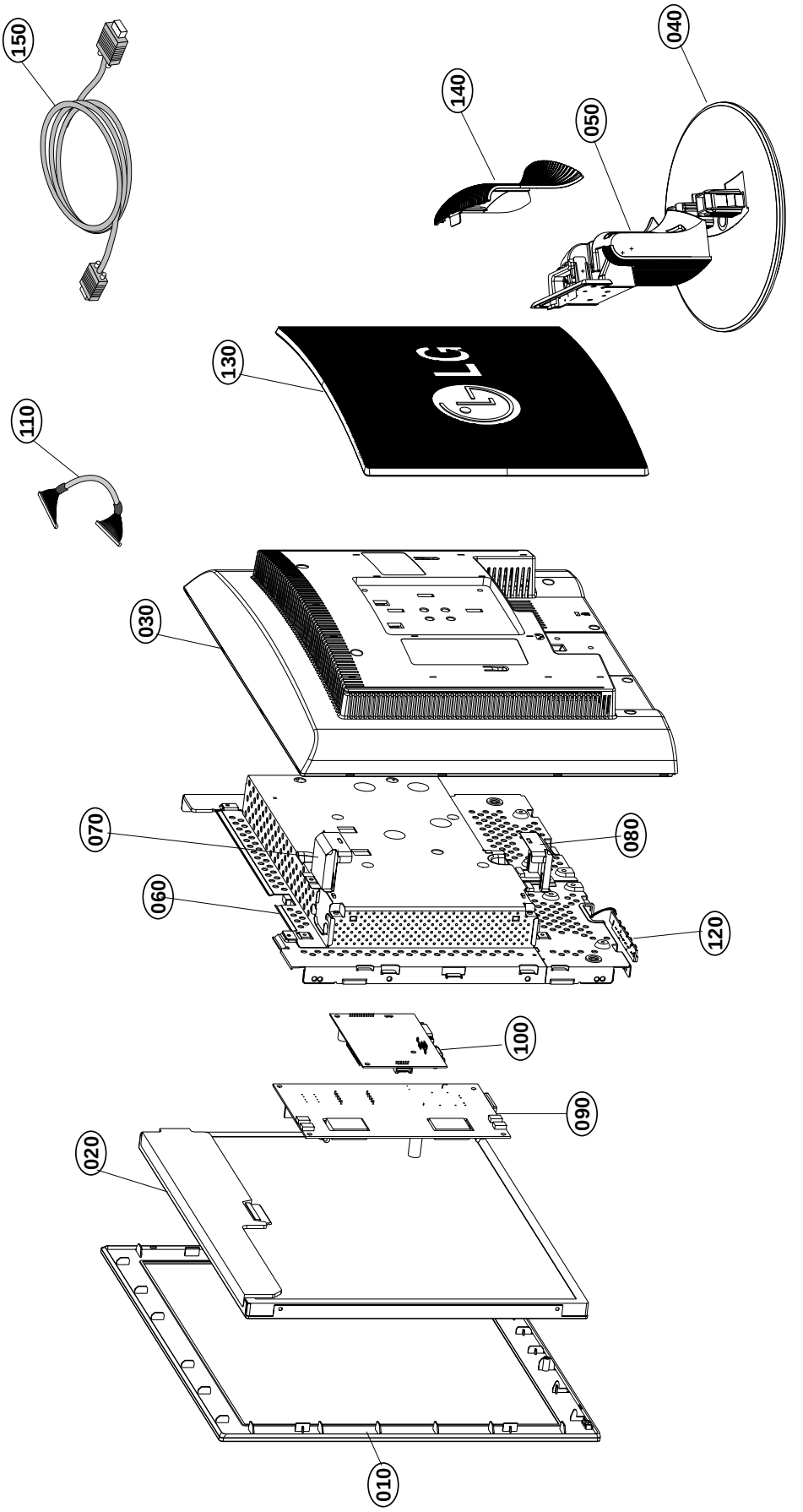
6 R773 H-Sync



6 R775 V_Sync

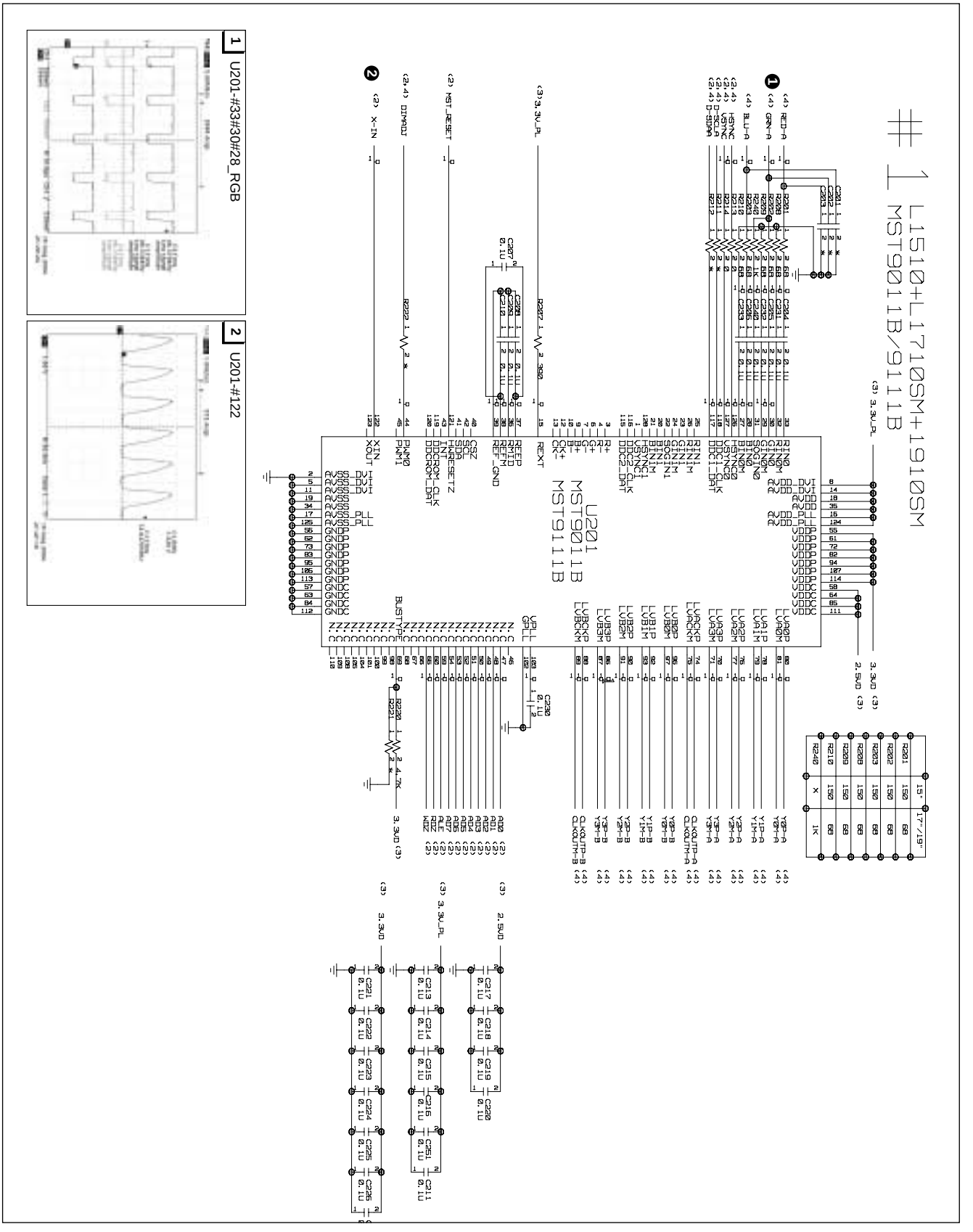


EXPLODED VIEW

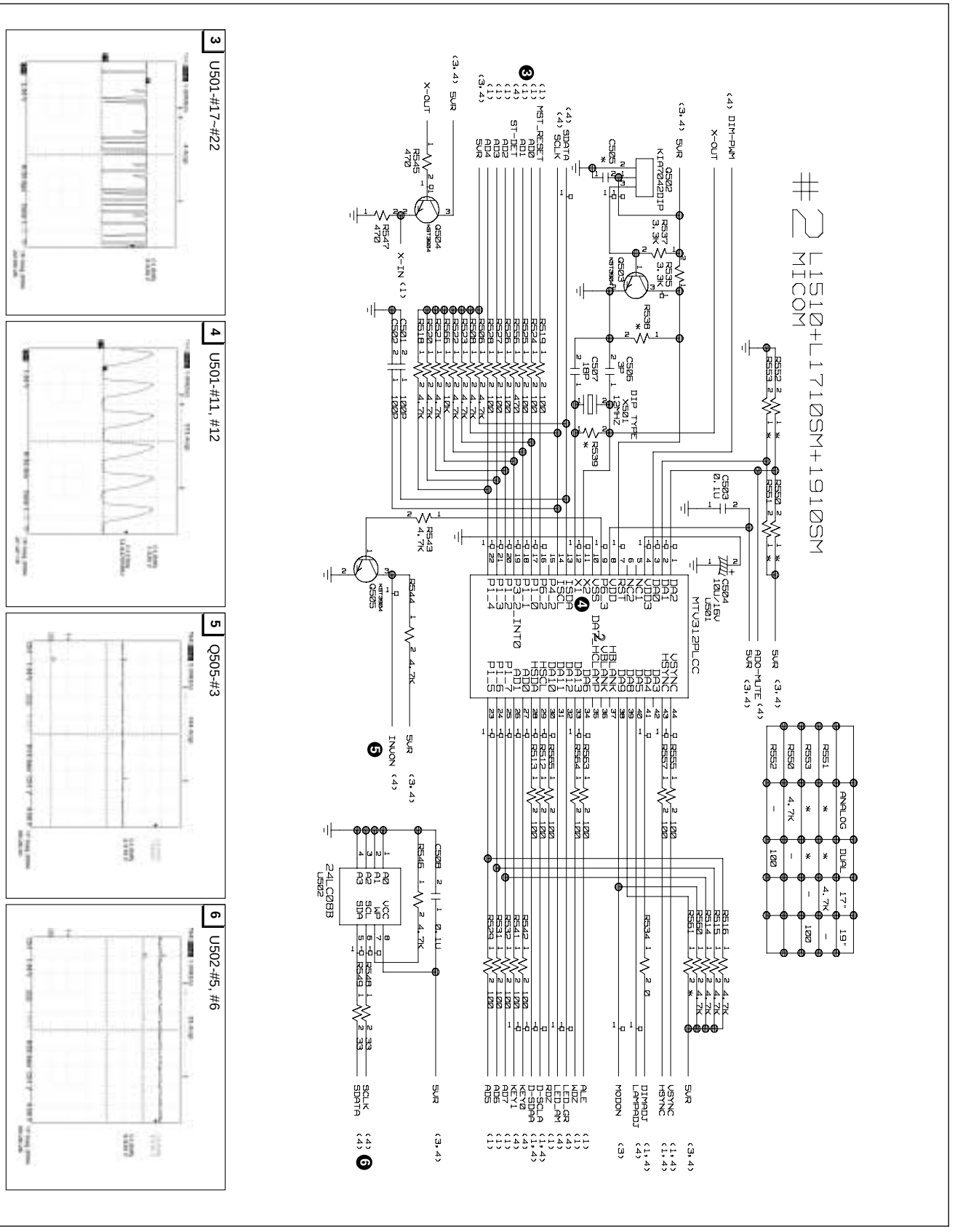


SCHEMATIC DIAGRAM

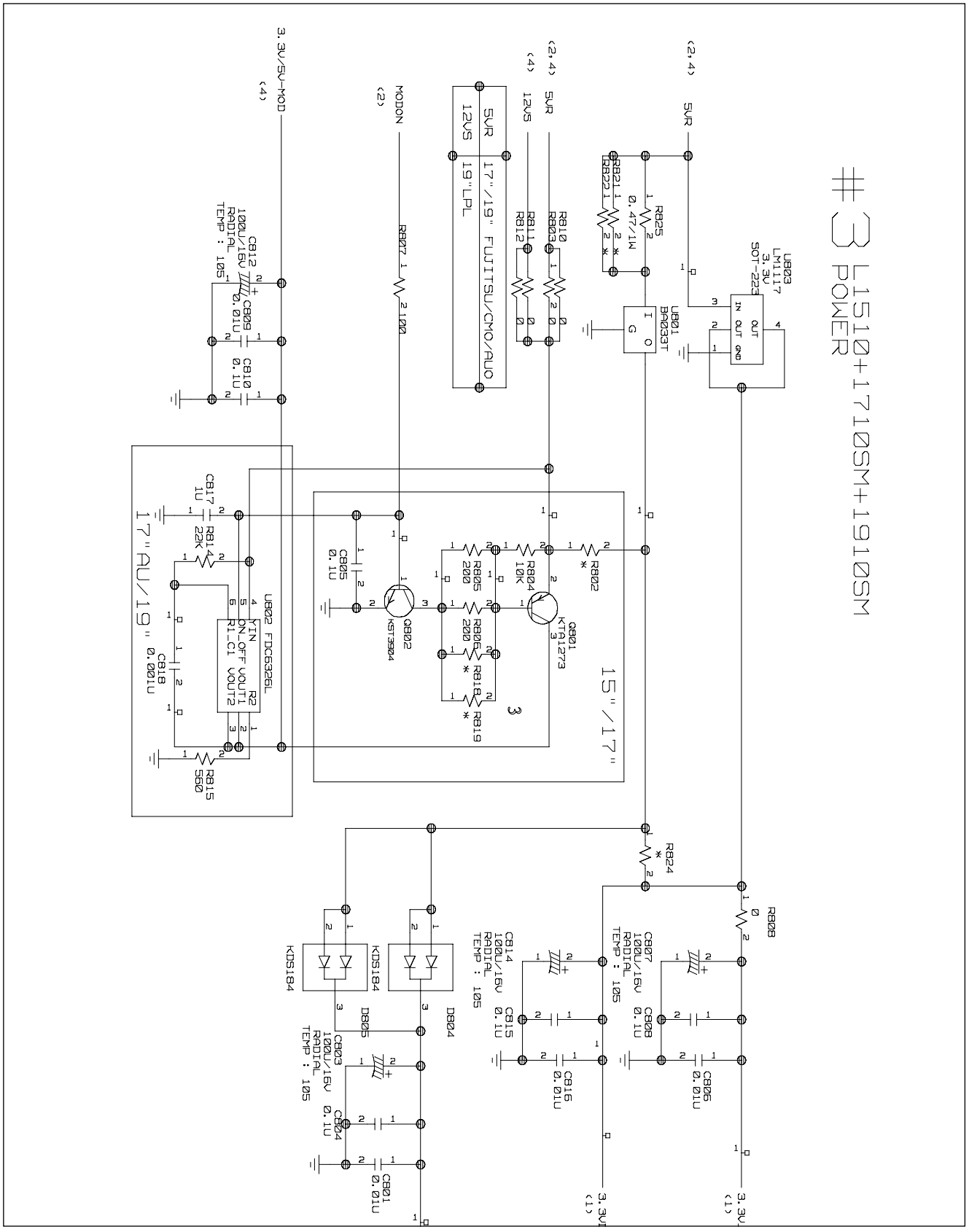
1. SCALER



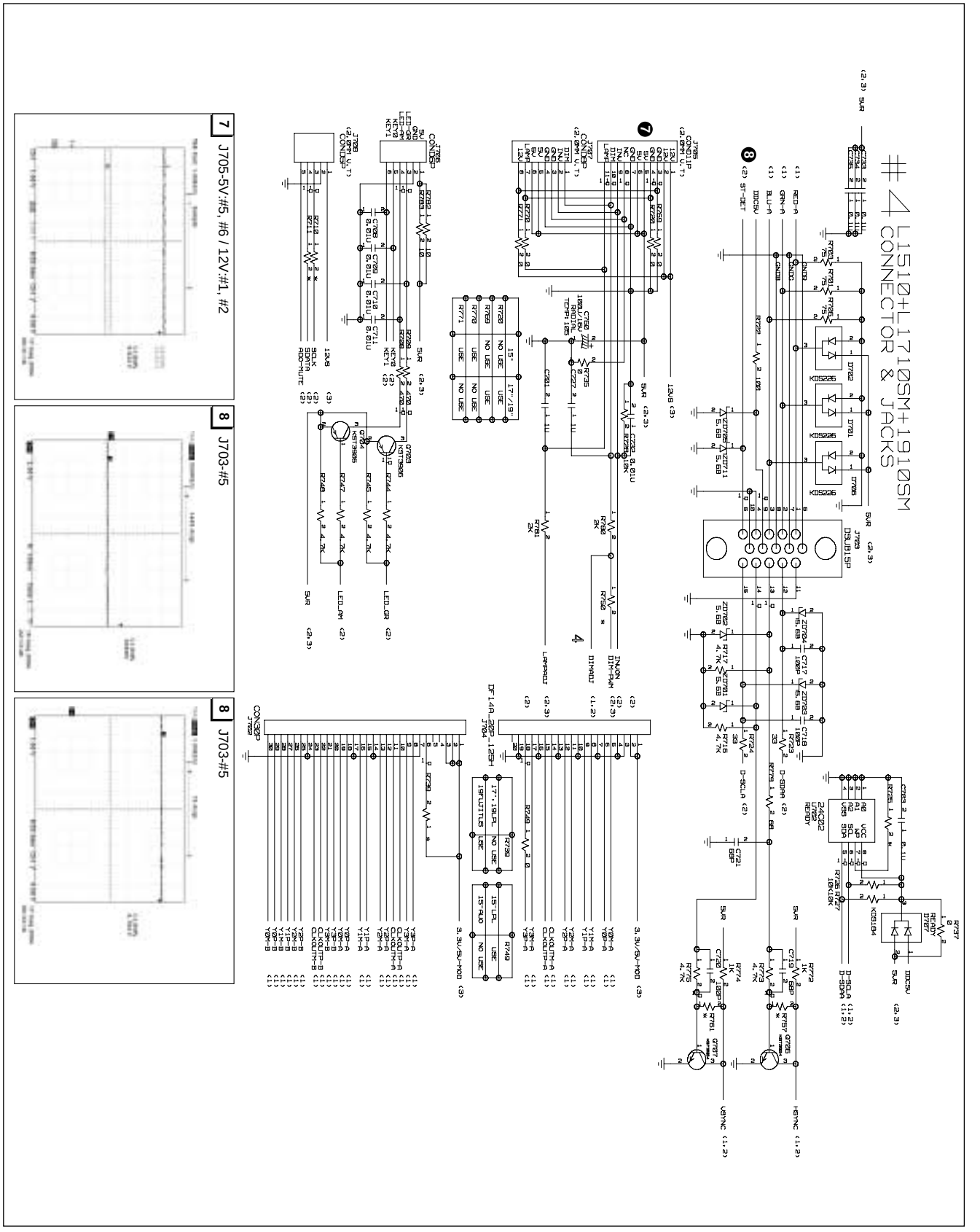
2. MICOM


#2 L1510+L1710SM+1910SM
MICOM
3 U501-#17~#22
4 U501-#11, #12
5 Q505-#3
6 U502-#5, #6

3. POWER


#3 L1510+1710SM+1910SM
POWER
U803
LM1117
3.3V
SOT-223
IN OUT GND
OUT
U801
BA033T
I
G
O
R825
0.47/1W
R821
R822
R810
R803
R811
R812
5VR
12VS
17"/19" FUJITSU/CMO/AUO
19"LPL
MODON
R807 1 2 100
3.3V/5V-MOD
C812
100U/16V
RADIAL
TEMP : 105
C809
0.01U
C810
0.1U
C817
1U
R814
22K
U802 FDC6326L
VIN
ON_OFF
R1_C1
R2
VOUT1
VOUT2
C818
0.001U
R815
560
17"AU/19"
C805
0.1U
Q802
KST3904
R804
10K
R805
200
R806
200
R818
R819
Q801
KTA1273
R802
15"/17"
3
R824
R808
0
C807
100U/16V
RADIAL
TEMP : 105
C808
0.1U
C806
0.01U
C814
100U/16V
RADIAL
TEMP : 105
C815
0.1U
C816
0.01U
3.3V
(1)
KDS184
D805
D804
C803
100U/16V
RADIAL
TEMP : 105
C804
0.1U
C801
0.01U

4. CONNECTOR & JACKS



7 J705-5V:#5, #6 / 12V:#1, #2

8 J703-#5

8 J703-#5

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