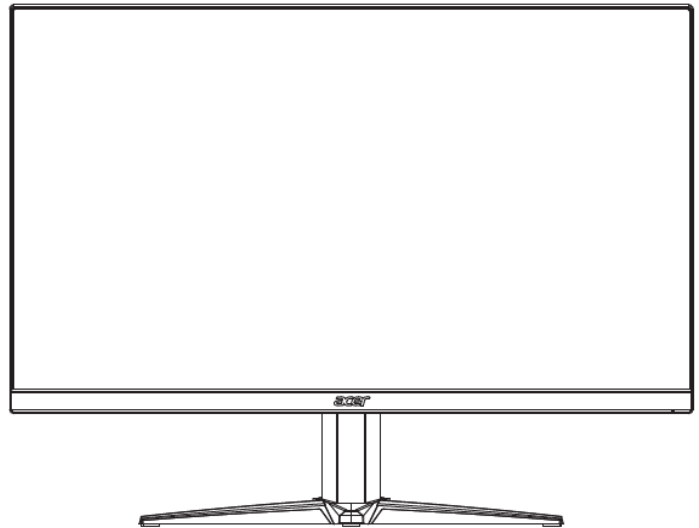


Service
Service
Service



Acer Monitor VG240Y

LIFECYCLE EXTENSION GUIDE

Contents

- Important Safety Notice..... 3
- 1. Exploded view diagram with list of items..... 4
- 2. Mechanical Instruction 5
- 3. Firmware Upgrade Process 17
- 4. Writing EDID Process 23
- 5. FRU (Field Replaceable Unit) List..... 30
- 6. Trouble shooting instructions 34

Important Safety Notice

Proper service and repair is important to the safe, reliable operation of all ACER Company Equipment. The service procedures recommended by ACER and described in this service manual are effective methods of performing service operations. Some of these service operations require the use of tools specially designed for the purpose. The special tools should be used when and as recommended.

It is important to note that this manual contains various CAUTIONS and NOTICES which should be carefully read in order to minimize the risk of personal injury to service personnel. The possibility exists that improper service methods may damage the equipment. It is also important to understand that these CAUTIONS and NOTICES ARE NOT EXHAUSTIVE. ACER could not possibly know, evaluate and advise the service trade of all conceivable ways in which service might be done or of the possible hazardous consequences of each way. Consequently, ACER has not undertaken any such broad evaluation. Accordingly, a servicer who uses a service procedure or tool which is not recommended by ACER must first satisfy himself thoroughly that neither his safety nor the safe operation of the equipment will be jeopardized by the service method selected. Hereafter throughout this manual, ACER Company will be referred to as ACER.

WARNING

Use of substitute replacement parts, which do not have the same, specified safety characteristics may create shock, fire, or other hazards.

Under no circumstances should the original design be modified or altered without written permission from ACER. ACER assumes no liability, express or implied, arising out of any unauthorized modification of design.

Servicer assumes all liability.

FOR PRODUCTS CONTAINING LASER:

DANGER-Invisible laser radiation when open. AVOID DIRECT EXPOSURE TO BEAM.

CAUTION-Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

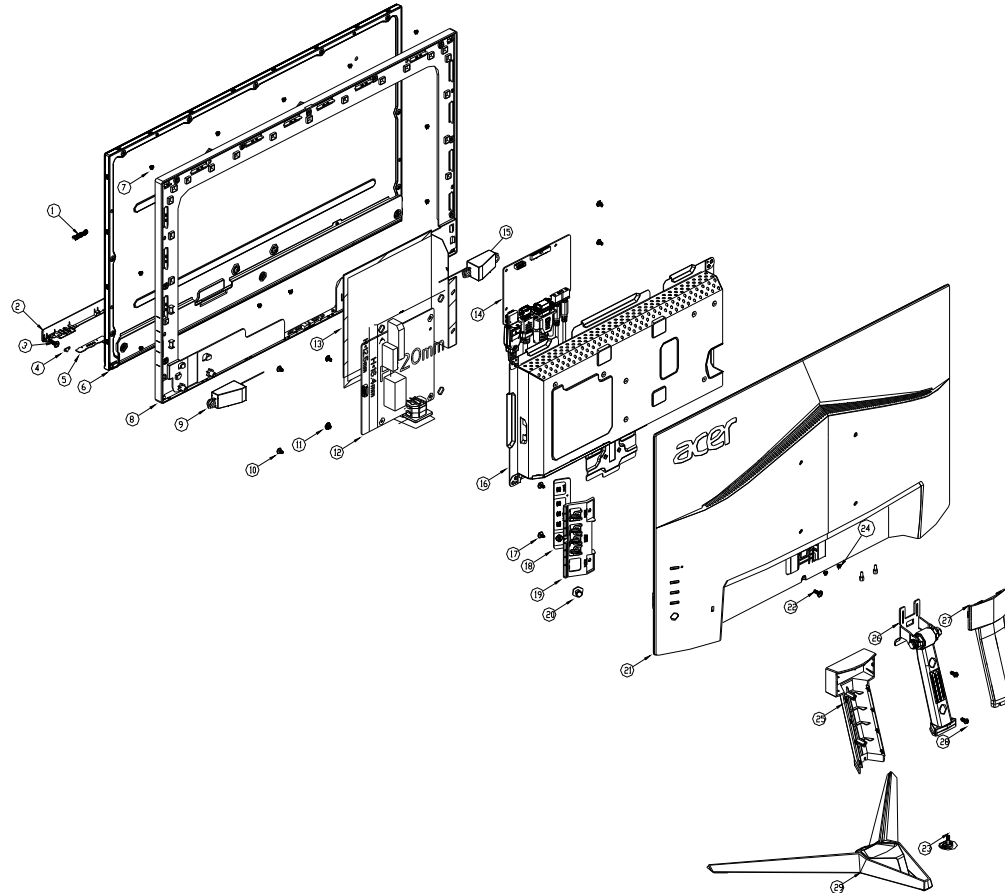
CAUTION -The use of optical instruments with this product will increase eye hazard.

TO ENSURE THE CONTINUED RELIABILITY OF THIS PRODUCT, USE ONLY ORIGINAL MANUFACTURER'S REPLACEMENT PARTS, WHICH ARE LISTED WITH THEIR PART NUMBERS IN THE PARTS LIST SECTION OF THIS SERVICE MANUAL.

Take care during handling the LCD module with backlight unit

- Must mount the module using mounting holes arranged in four corners.
- Do not press on the panel, edge of the frame strongly or electric shock as this will result in damage to the screen.
- Do not scratch or press on the panel with any sharp objects, such as pencil or pen as this may result in damage to the panel.
- Protect the module from the ESD as it may damage the electronic circuit (C-MOS).
- Make certain that treatment person's body is grounded through wristband.
- Do not leave the module in high temperature and in areas of high humidity for a long time.
- Avoid contact with water as it may a short circuit within the module.
- If the surface of panel becomes dirty, please wipe it off with a soft material. (Cleaning with a dirty or rough cloth may damage the panel.)1.

1. Exploded view diagram with list of items



Item	Description	TPV Part No.	ACER Part No.
5	LED BOARD	LEPCLQA2	55.TCCM2.004
6	PANEL	750GBK238HM2B6N000	KL.2380E.011
12	POWER BOARD	PLPCHE541KVG4	NA
14	MAIN BOARD	CBPRITMC0Q6	NA
18	KEY BOARD	KEPCLQA6	55.TCCM2.003
	CABLE 30P-30P 450MM(MB TO PANEL)	395G179M30B8370000	

2. Mechanical Instruction

Tools Required

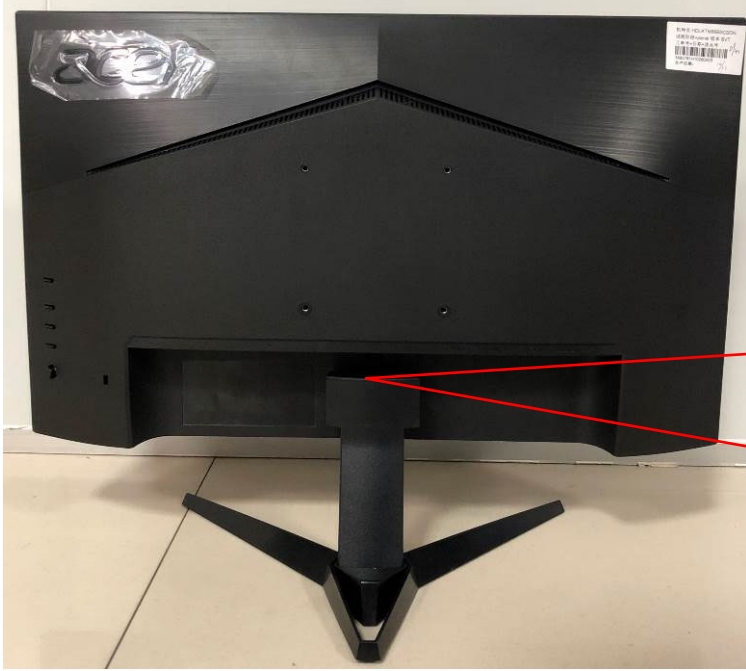
List the type and size of the tools that would typically can be used to disassemble the product to a point where components and materials requiring selective treatment can be removed.

Tool Description:

- Screwdriver (Phillip-head, Hexagonal head)
- Penknife

2.1 Disassembly Procedures:

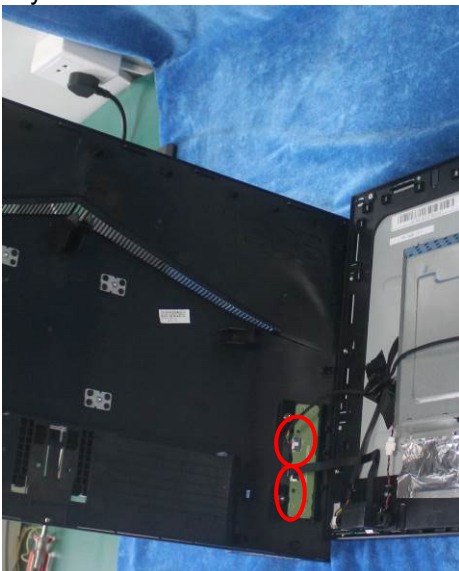
S1. Push the button to remove the stand –base ASS'Y and unscrew the screw on rear cover.

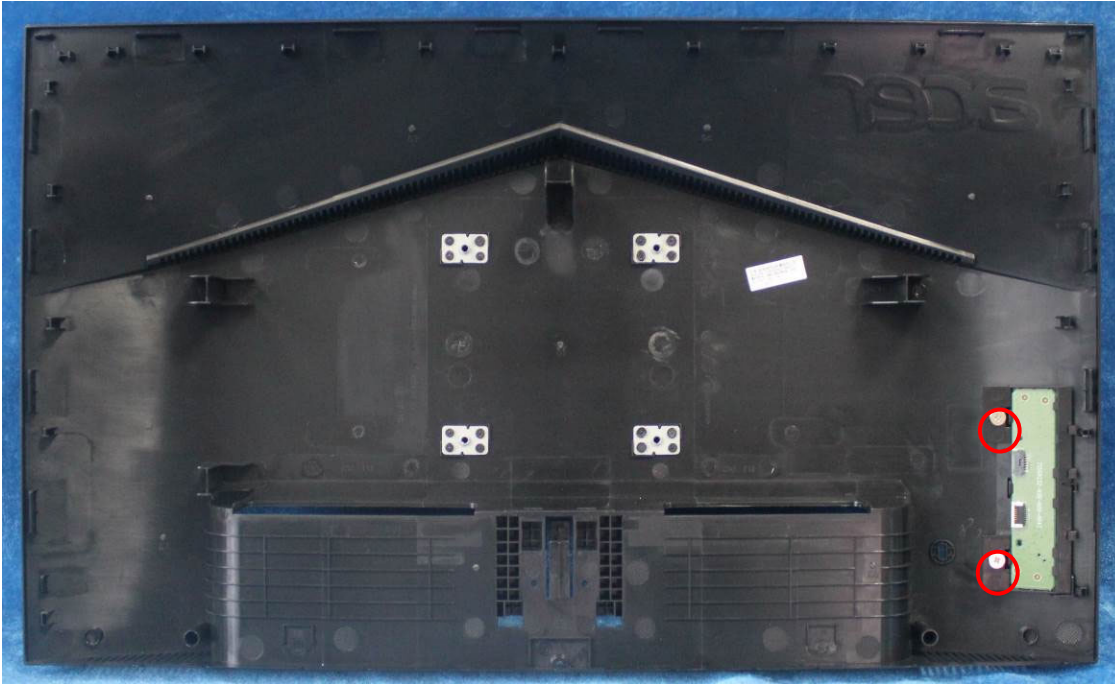


S2. Remove the rear cover. Use a tool (like picture using) to open all latches. (Be careful the position of the key board.)

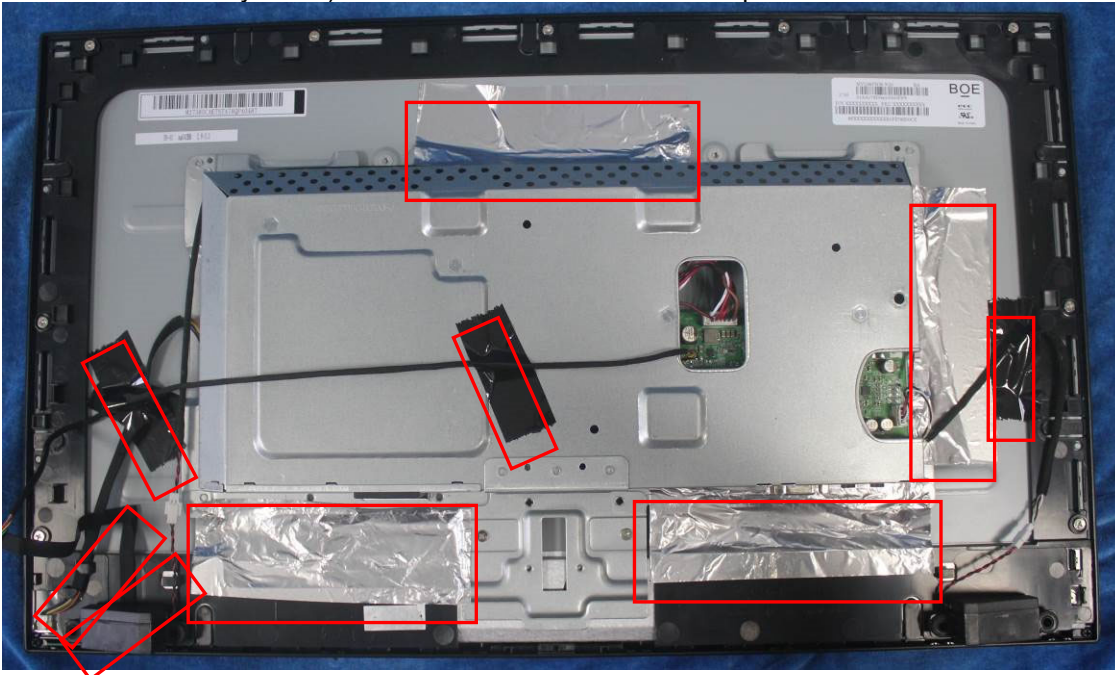


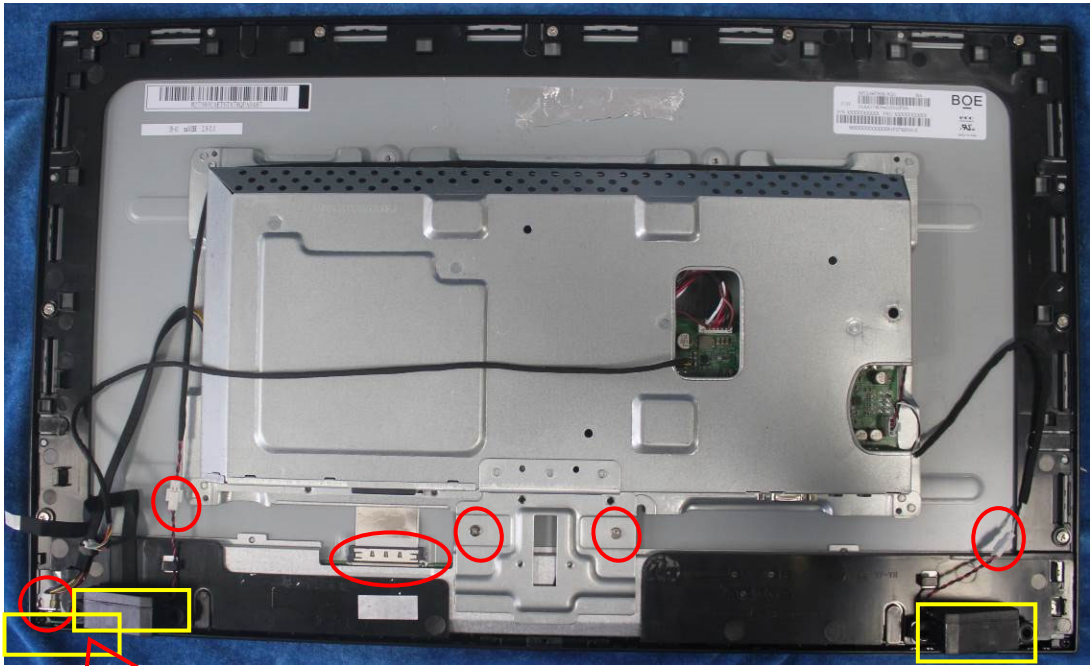
S3. Disconnect the cable (main board to Key board / LED board / Key board) and remove the screws to remove the key board from the rear cover.





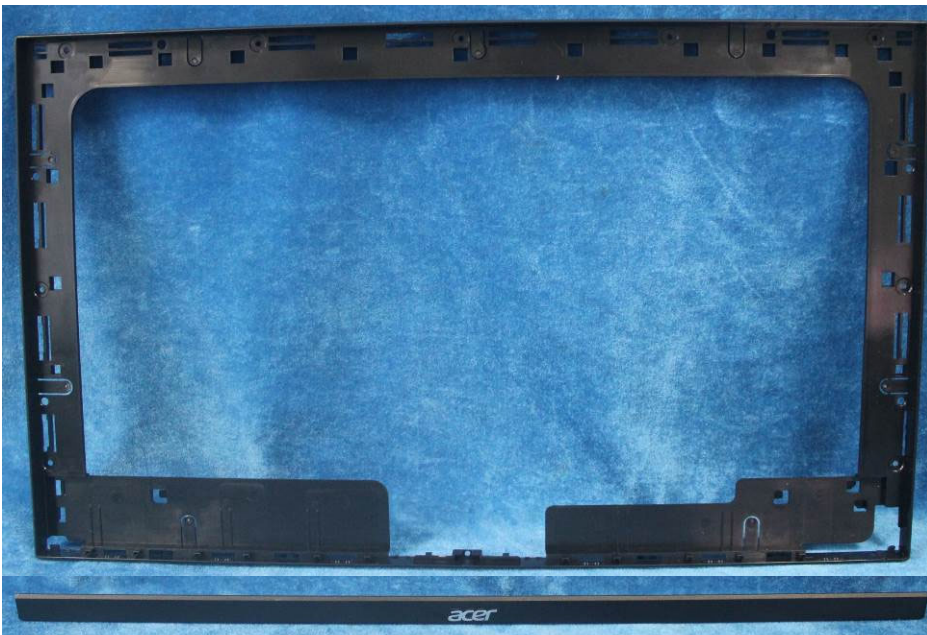
S4. Tear up all tapes and disconnect the LVDS cable (main board to panel), the cables (power board to panel and the main board to key board). Remove the LED board and the Speakers and unscrew the screws.



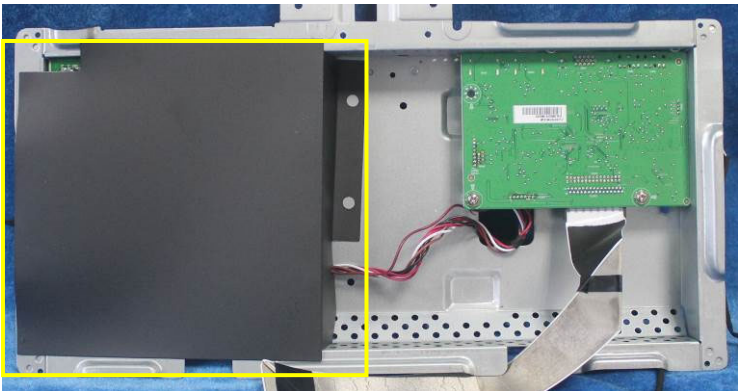
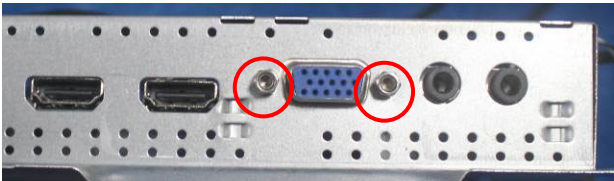


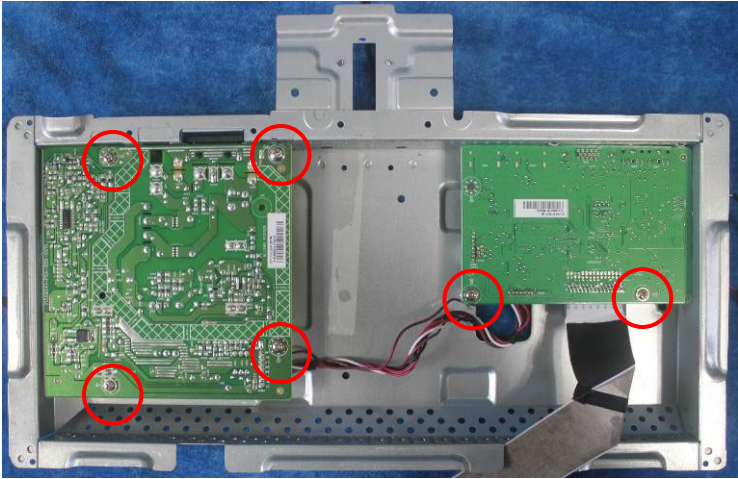
S5. Remove the screws to separate the panel and the Middle Frame and the DECO BEZEL.



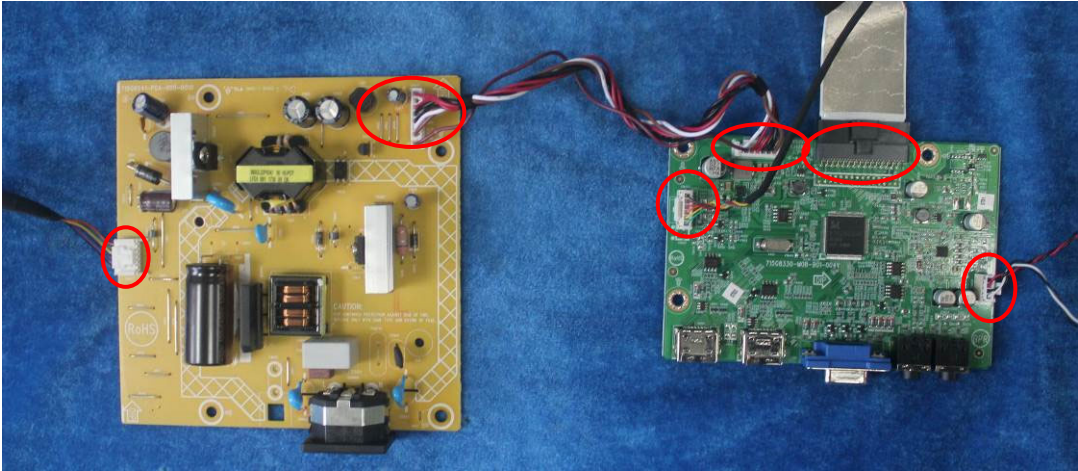


S6. Unscrew the screws of the main board remove the mylar. Then unscrew the screws of the power board and main board to remove them from mainframe.



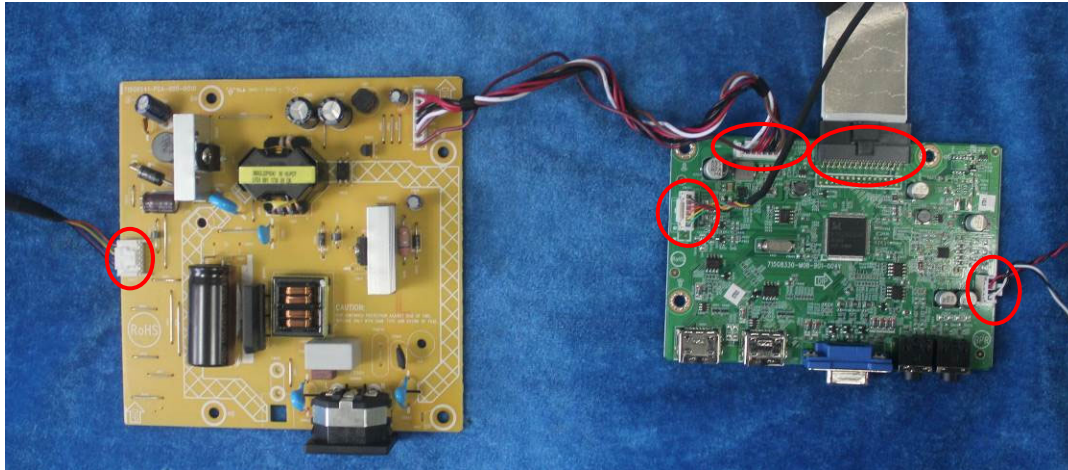


S7. Remove the main board and power board. Disconnect the cables.

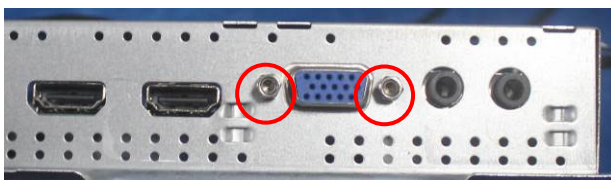
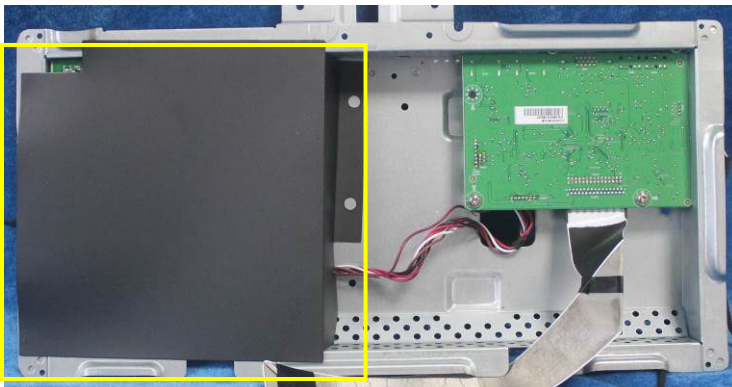
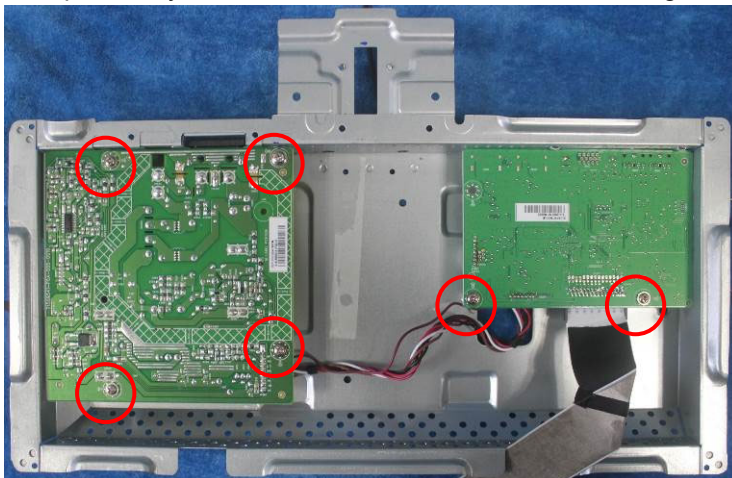


2.2 Assembly Procedures:

S1 Prepare a main board, a power board and some essential cables. Connect every cable as the below picture.



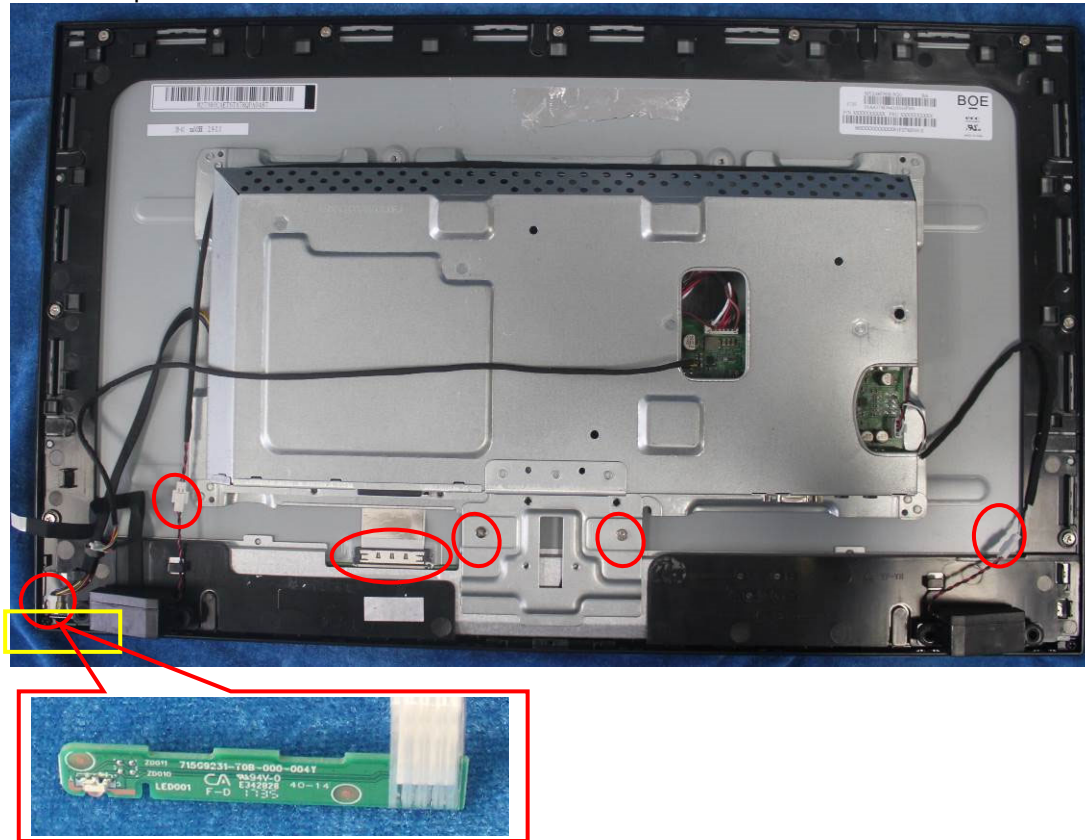
S2. Use a Philips-head screwdriver to tighten the screws till the power board and main board with shield are firmly attached. Tape the Mylar. And use a Hex-head screwdriver to tighten the screws for locking the connectors.



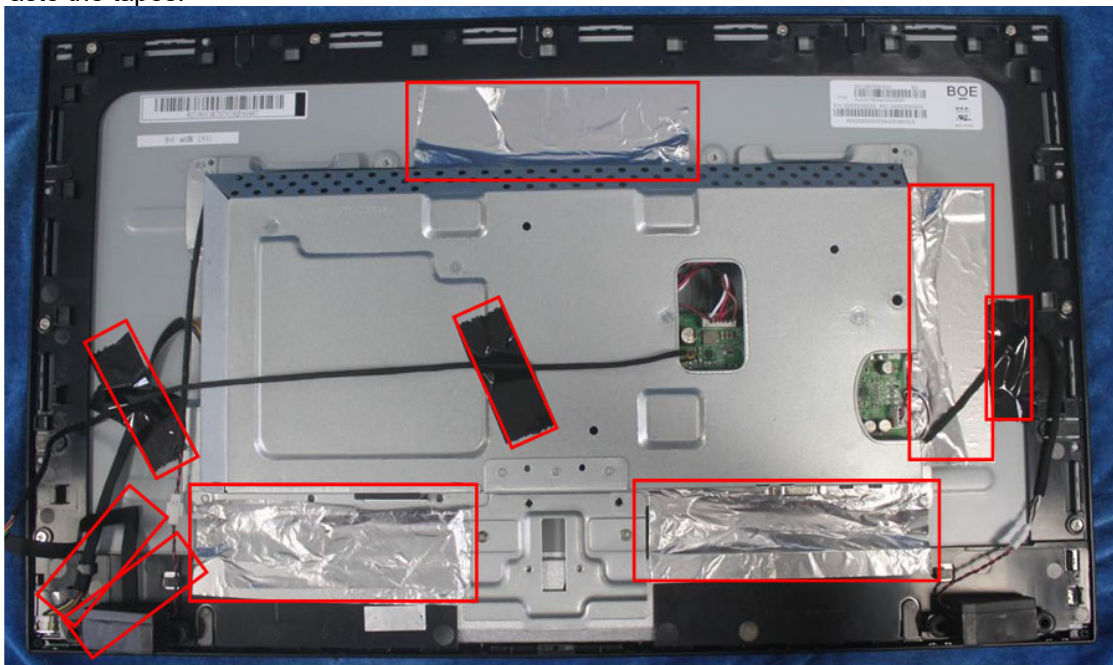
S3. Assemble the MIDDLE FRAME, DECO bezel and the panel. Use a screwdriver to tighten the screws.



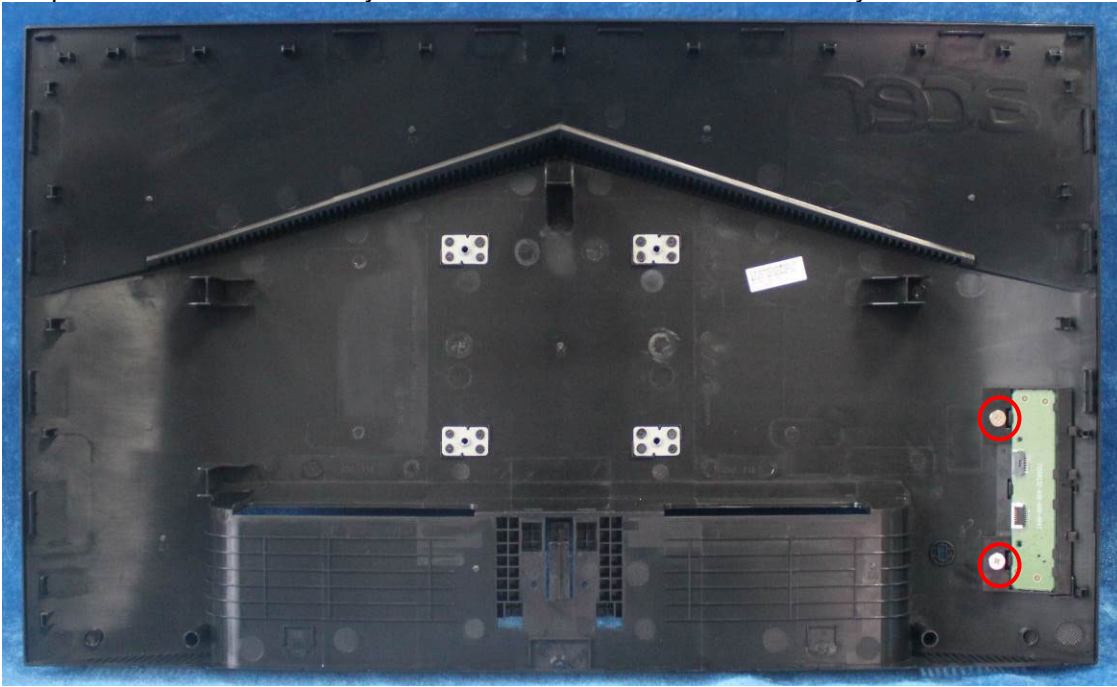
S4. Connect cables (mainboard to panel, mainboard to speakers and the power board to panel). Assemble the LED board and the speakers and screw the two screws.



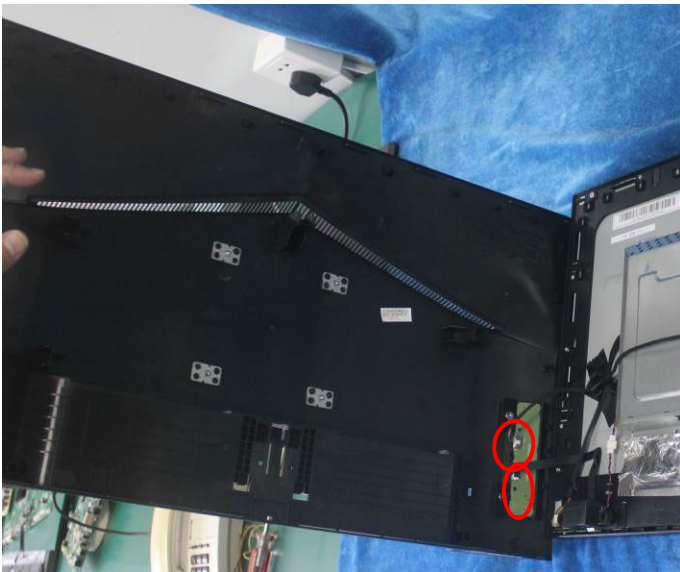
S5. Paste the tapes.



S6. Prepare a rear cover and a key board and use the screws to lock the key board.



S7. Connect the pin (LED board / Key board) and the pin (Key board to mainboard). Use the screws to lock the rear cover.



S8. Assemble the stand and base ASS'Y.



3. Firmware Upgrade Process

1. Materials list and connection



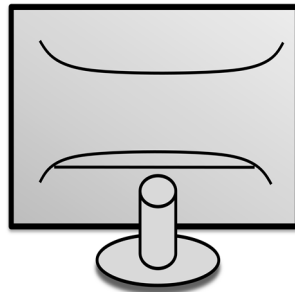
ISP JIG: 715GT089-C



VGA cable
TPV P/N: 089G728 GAA DB



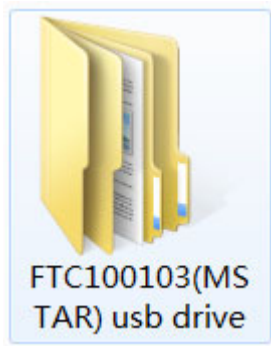
PC



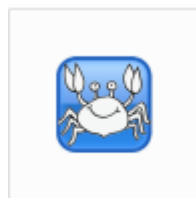
Monitor



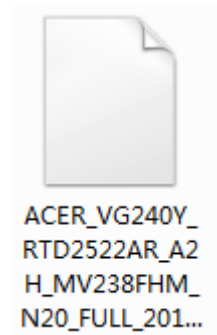
USB cable
TPV P/N: 089G1758 X



USB port driver

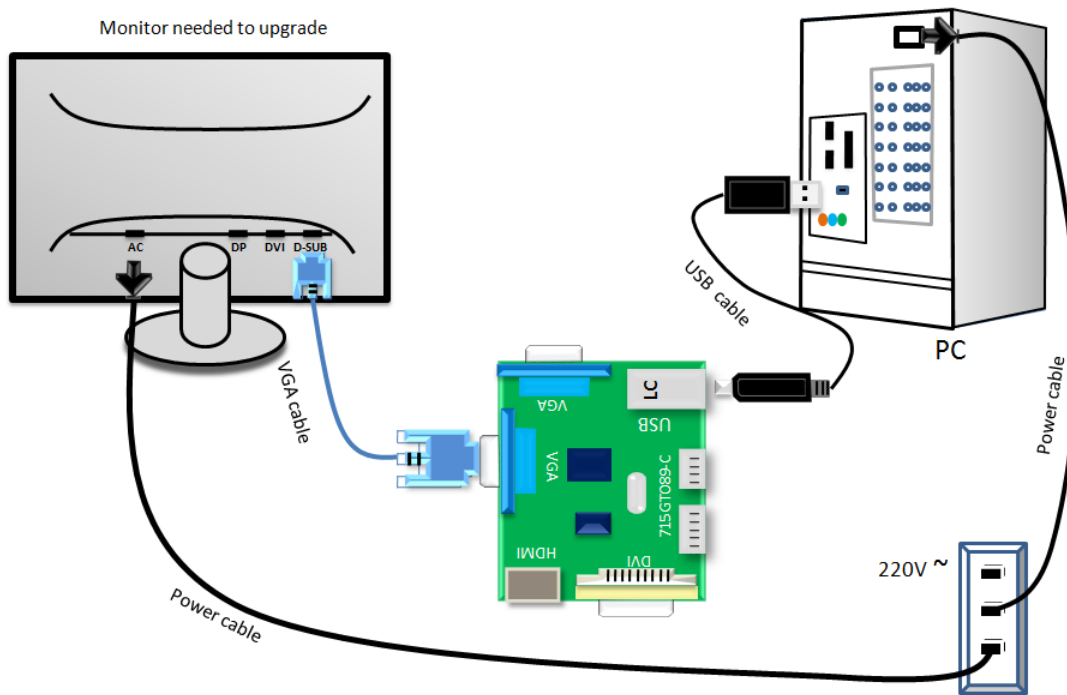


RTDTool.exe
ISP tool:



ACER_VG240Y_
RTD2522AR_A2
H_MV238FHM_
N20_FULL_201...
New F/W

2.Connection

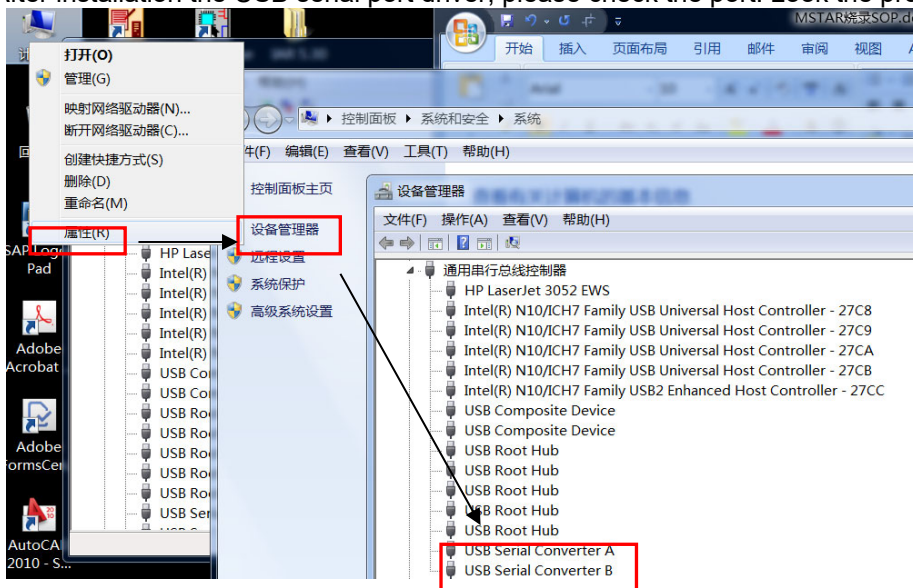


3.Install USB driver.

3.1. When insert the USB cable to PC USB port, will pop up a Hardware Wizard to help you install the USB driver if you use this ISP board first time.it can auto install success by itself

Remark: The USB driver files path: D:\FTC100103(Mstar)\FTCUSB.INF

After installation the USB serial port driver, please check the port. Look the properties of “my Computer”



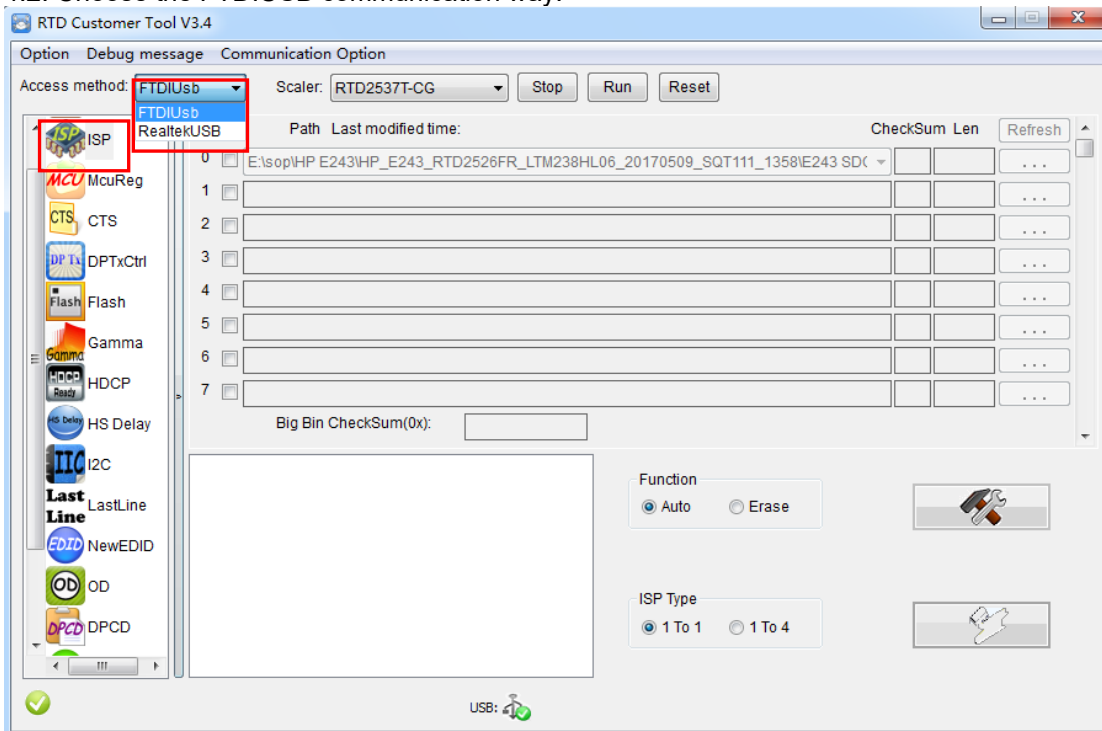
4. Install RTD tool.

Note: If the F/W Upgrade use the same ISP tool as the EDID writing, you must close the EDID writing tool before running the F/W Upgrade tool.

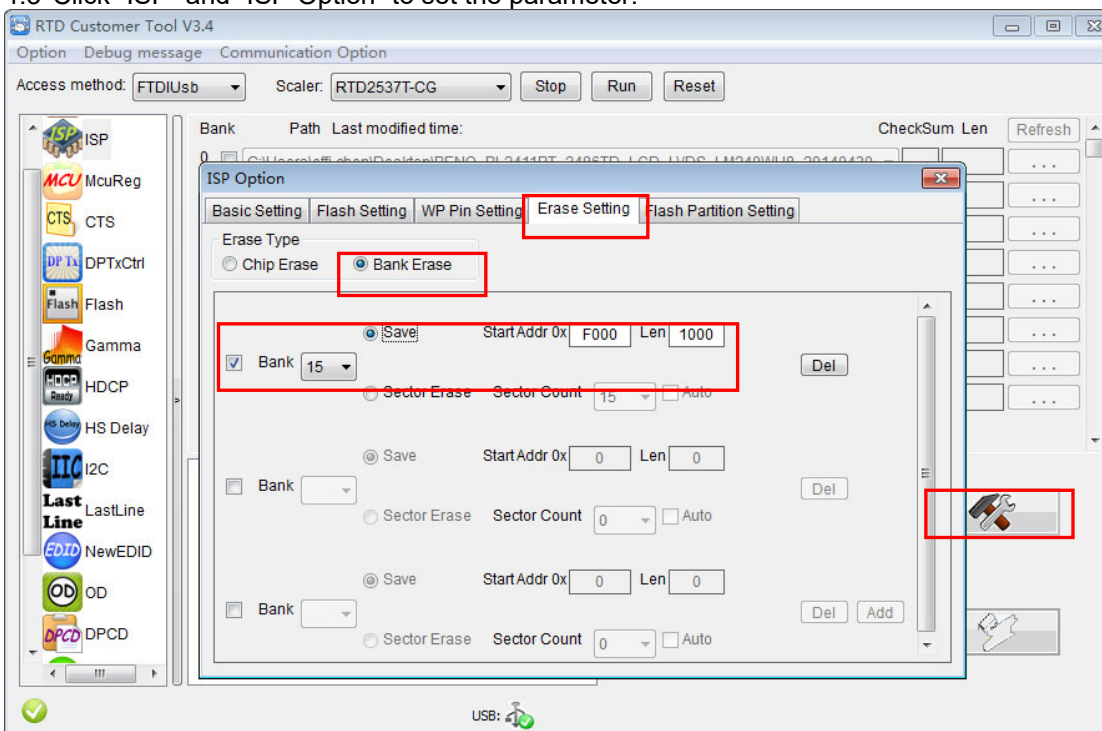


- 4.1. **RTDTool1.exe** double- clicks the icon to run it.
Note: Must to install driver firstly

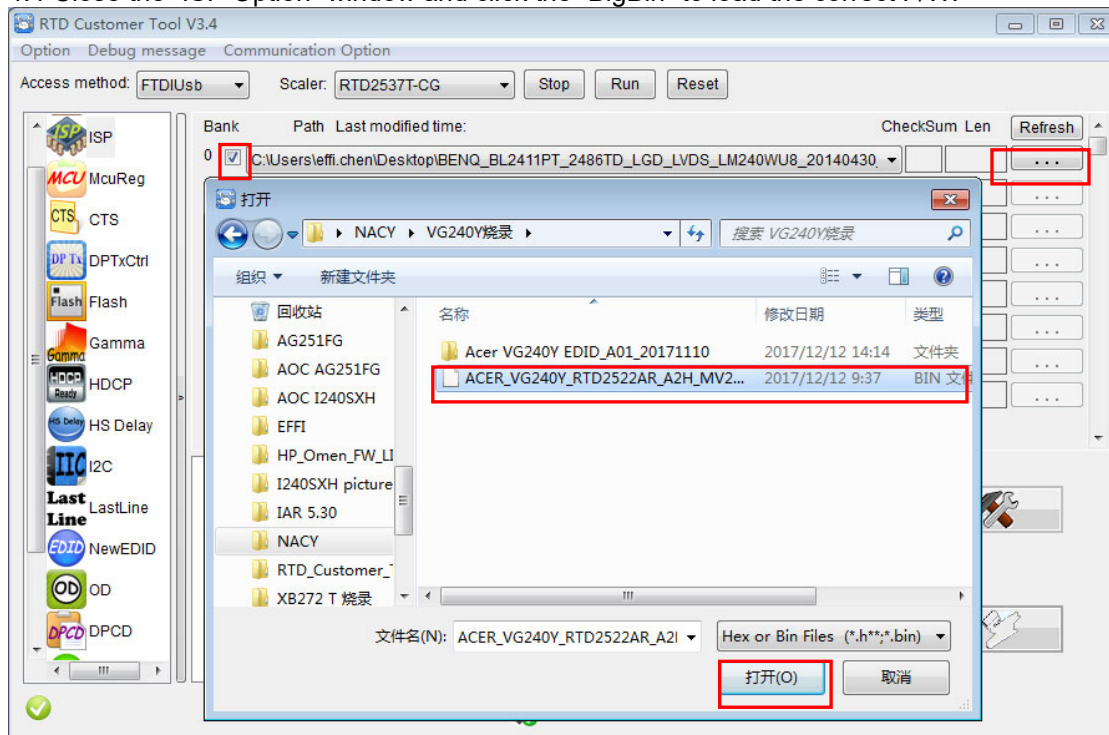
4.2. Choose the FTDIUSB communication way.



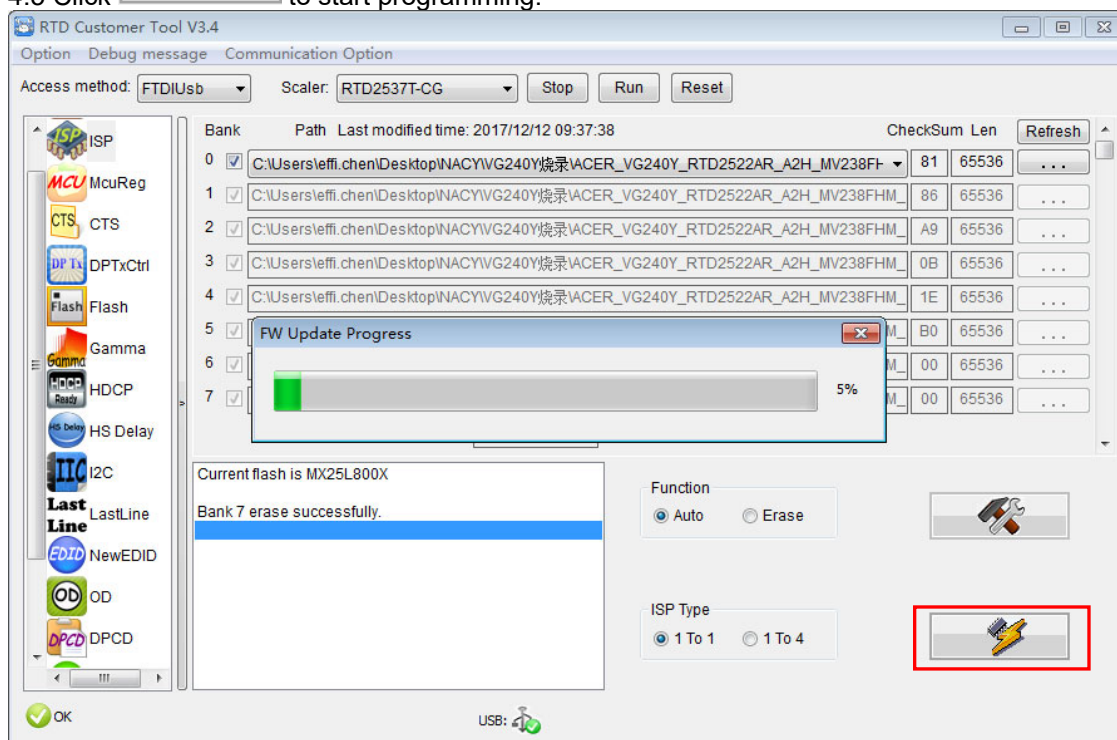
4.3 Click “ISP” and “ISP Option” to set the parameter.



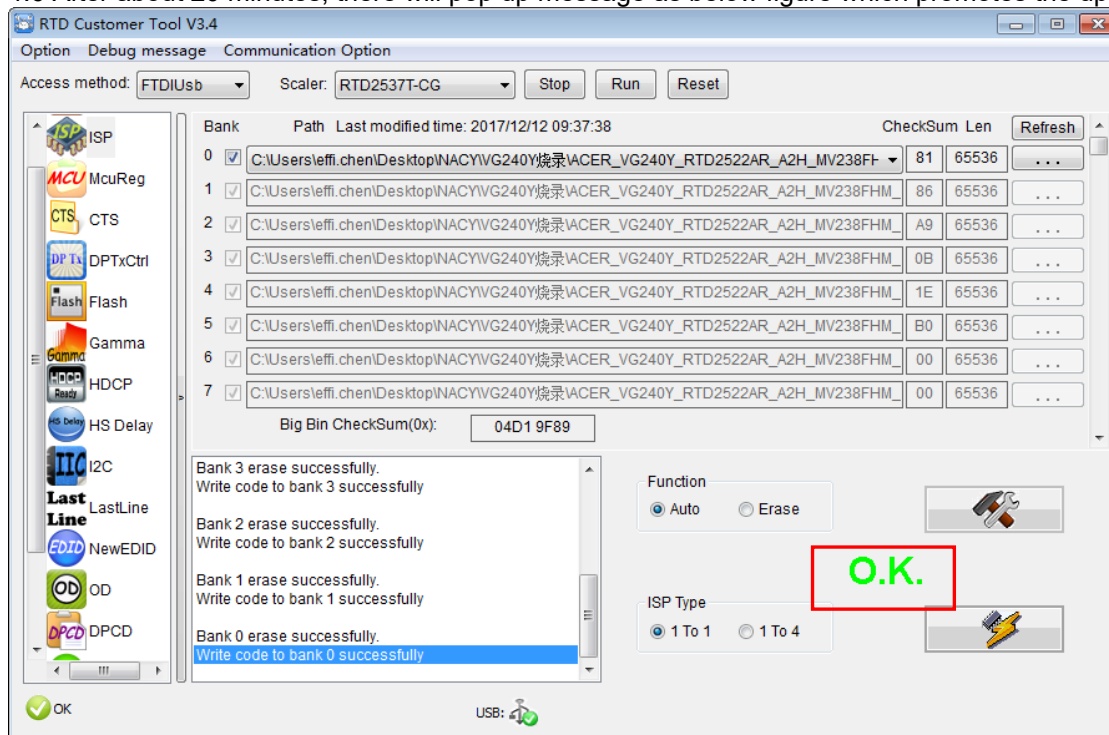
4.4 Close the “ISP Option” window and click the “BigBin” to load the correct F/W.



4.5 Click  to start programming.



4.6 After about 20 minutes, there will pop up message as below figure which promotes the upgrade successful.



5. Check the FW version after upgrade.

5.1. The way to open factory menu.

- (1) Connect VGA source to monitor and turn it on.
- (2) The way to factory menu: Pressing the hot key button and DC on, when the screen lights, release the key and press the left button again to open the menu with "F" and select "F" to open factory menu.




```

Model: V6240Y
Chips: AT02522AA
Panel: BOE MV238FHM N20
Date : 20171211 Version: 0.03

AutoColor
Gain   R 181 G 168 B 178
Offset R 114 G 107 B 111

      BRI 100   CON 50

Warm   R 128 G 125 B 127
Normal R 113 G 118 B 125
Cool   R 105 G 114 B 128
Slight R 128 G 128 B 120
Light  R 128 G 128 B 110
Medium R 128 G 128 B 99
Strong R 128 G 128 B 88

DFM : OFF
Burn In: OFF
NVRAM Initial
Force Logo Off OFF
HW AutoColor FAIL
SSC 8 LVDS Current 3
Exit

```

Check this
F/W version.

(3) Do "Auto Color" in factory mode.

```

Model: V6240Y
Chips: AT02522AA
Panel: BOE MV238FHM N20
Date : 20171211 Version: 0.03

AutoColor PASS
Gain   R 193 G 184 B 173
Offset R 112 G 108 B 111

      BRI 100   CON 50

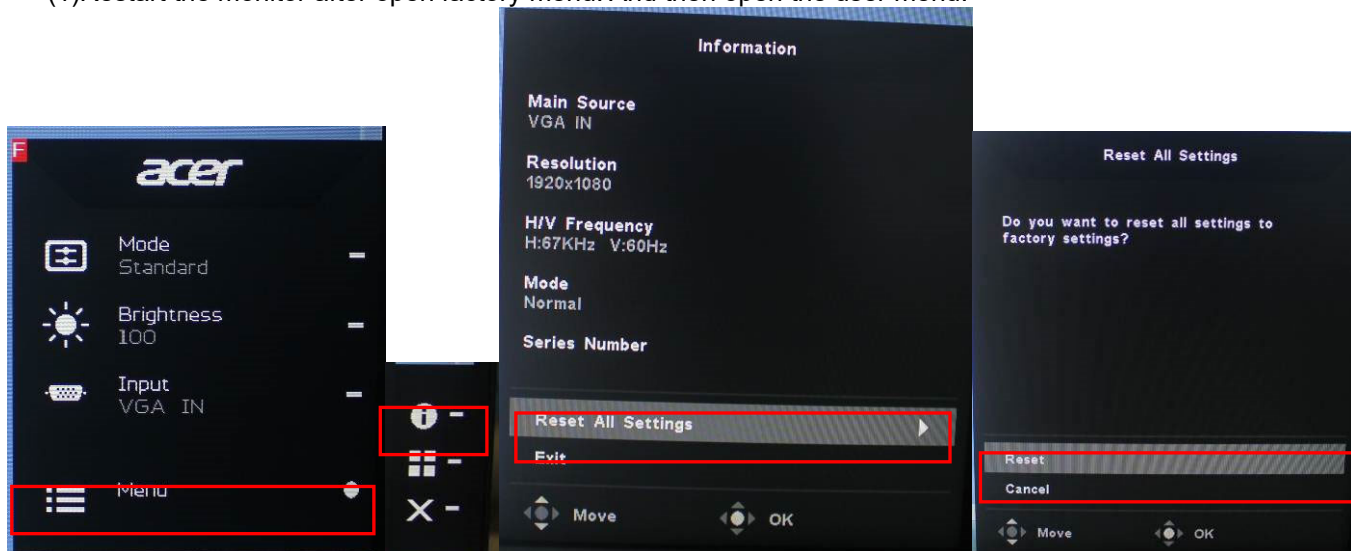
Warm   R 128 G 125 B 127
Normal R 113 G 118 B 125
Cool   R 105 G 114 B 128
Slight R 128 G 128 B 120
Light  R 128 G 128 B 110
Medium R 128 G 128 B 99
Strong R 128 G 128 B 88

DFM : OFF
Burn In: OFF
NVRAM Initial
Force Logo Off OFF
HW AutoColor FAIL
SSC 8 LVDS Current 3
Exit

```

5.2. Do factory reset in user menu.

(1) Restart the monitor after open factory menu. And then open the user menu.



(2) Factory reset will turn off "Burn in" mode which screen color switches among red, green, blue and black.

4. Writing EDID Process

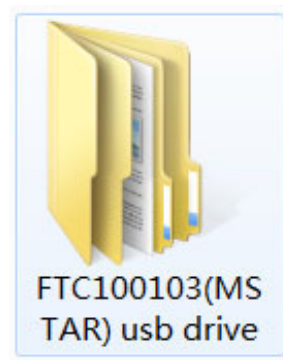
1. Materials list



VGA cable
TPV P/N: 089G728 GAA DB



USB cable
TPV P/N: 089G1758 X



FTC100103(MS
TAR) usb drive

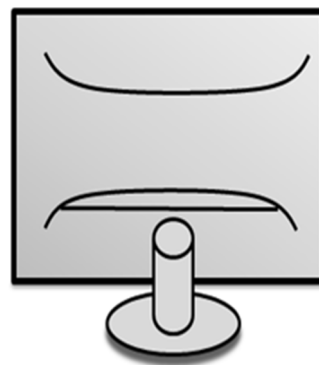
USB port driver



ISP JIG: 715GT089-B



PC

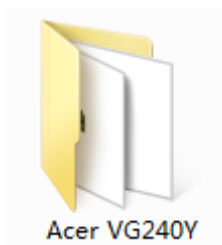


Monitor



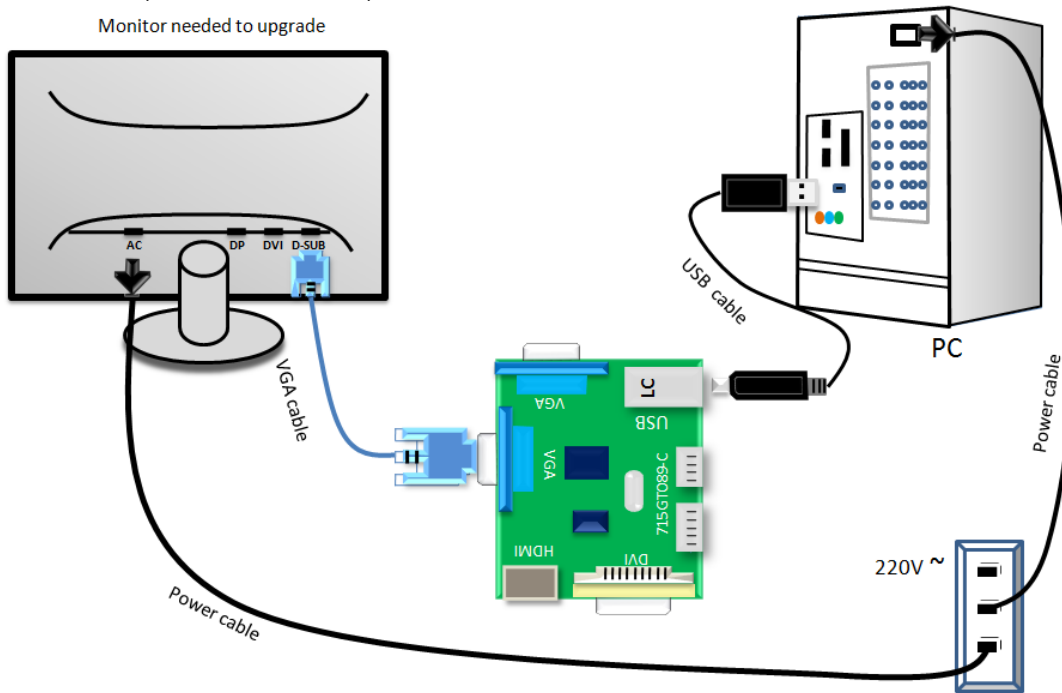
TPVDDC_V066_
20170512.exe

ISP tool



Acer VG240Y
EDID

2. Connection(DC on the monitor)



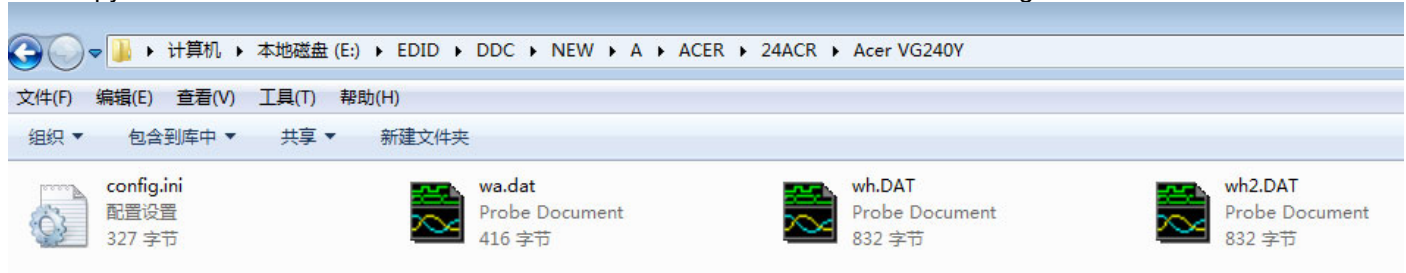
3. Install USB driver.

4. Prepare the EDID written.

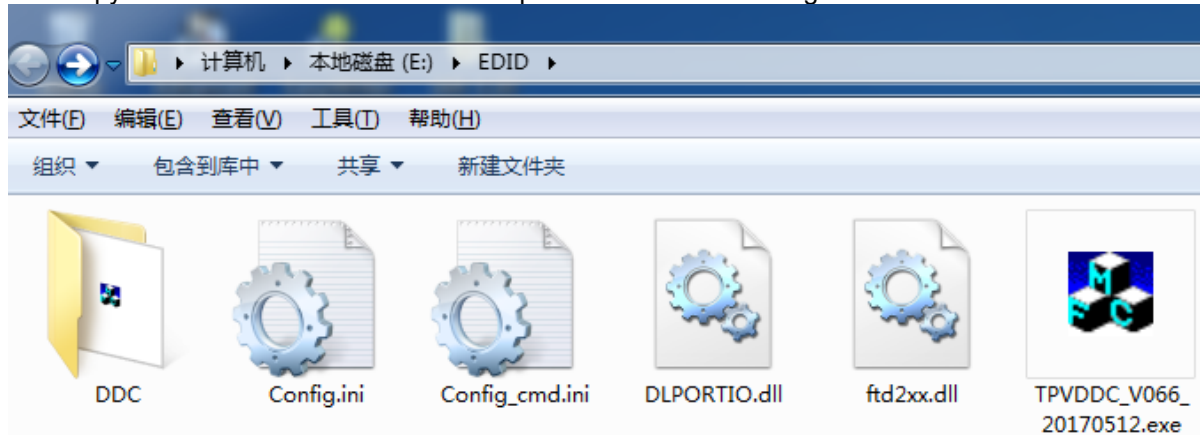
4.1. Change the EDID files name as below rule.

Analog EDID → WA.dat HDMI EDID → WH.dat
HDMI2 EDID → WH2.dat

4.2. Copy these files to one folder named as Acer VG240Y which must contains "config.ini" file.



4.3. Copy Acer VG240Y to DDC folder and put DDC and ISP tool together.

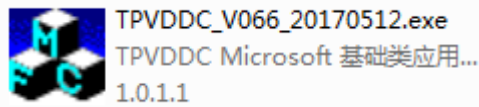


4.4 Setting the Config as below.



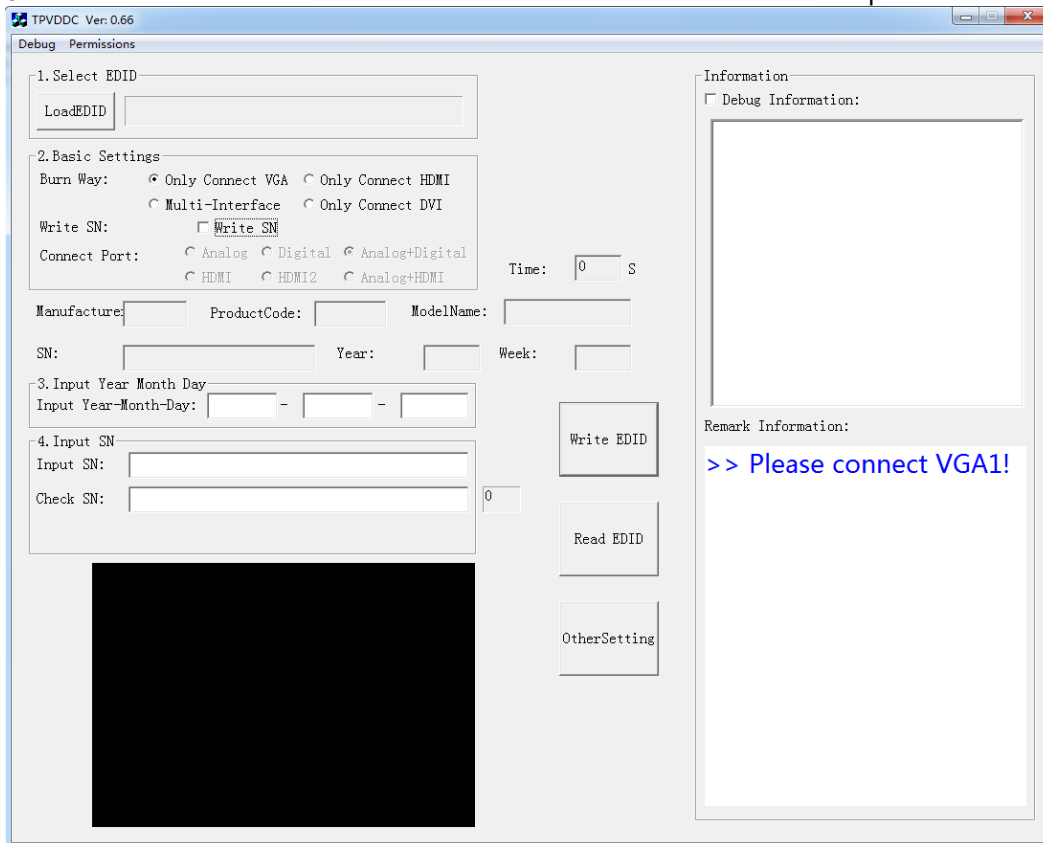
5. Run the ISP tool

Note: If the F/W Upgrade use the same ISP tool as the EDID writing, you must close the F/W Upgrade tool before running the EDID writing tool.

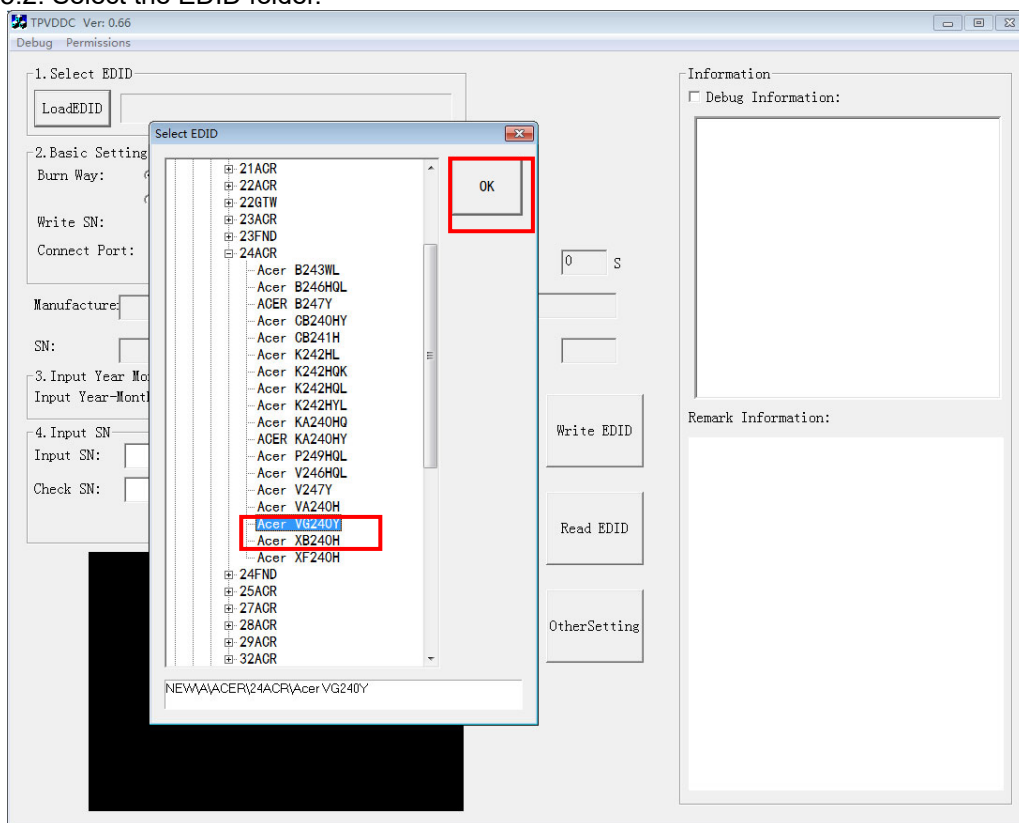


5.1. Double-click the icon

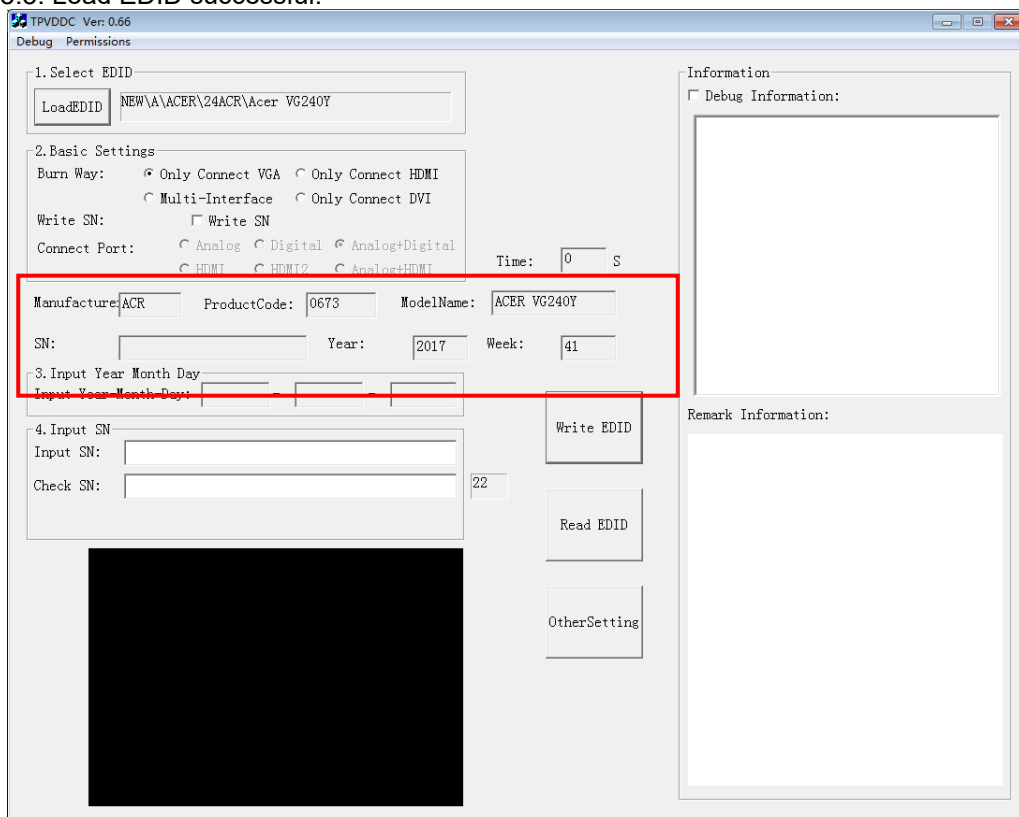
to open the tool.



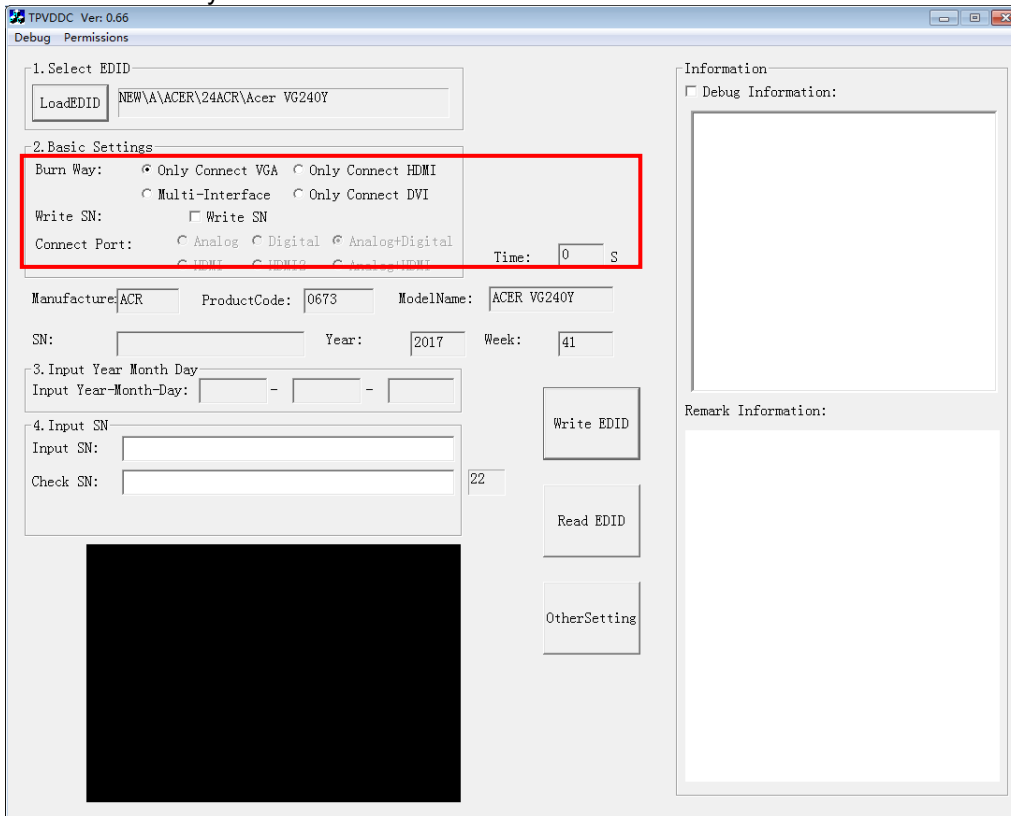
5.2. Select the EDID folder.



5.3. Load EDID successful.



5.4 Tick the “Only connect VGA”.



TPVDDC Ver: 0.66
Debug Permissions

1. Select EDID
LoadEDID NEW\A\ACER\24ACR\Acer VG240Y

2. Basic Settings
Burn Way: ☒ Only Connect VGA ☐ Only Connect HDMI
☐ Multi-Interface ☐ Only Connect DVI
Write SN: ☐ Write SN
Connect Port: ☐ Analog ☐ Digital ☒ Analog+Digital
Time: 0 S

Manufacturer: ACR ProductCode: 0673 ModelName: ACER VG240Y
SN: Year: 2017 Week: 41

3. Input Year Month Day
Input Year-Month-Day: - -

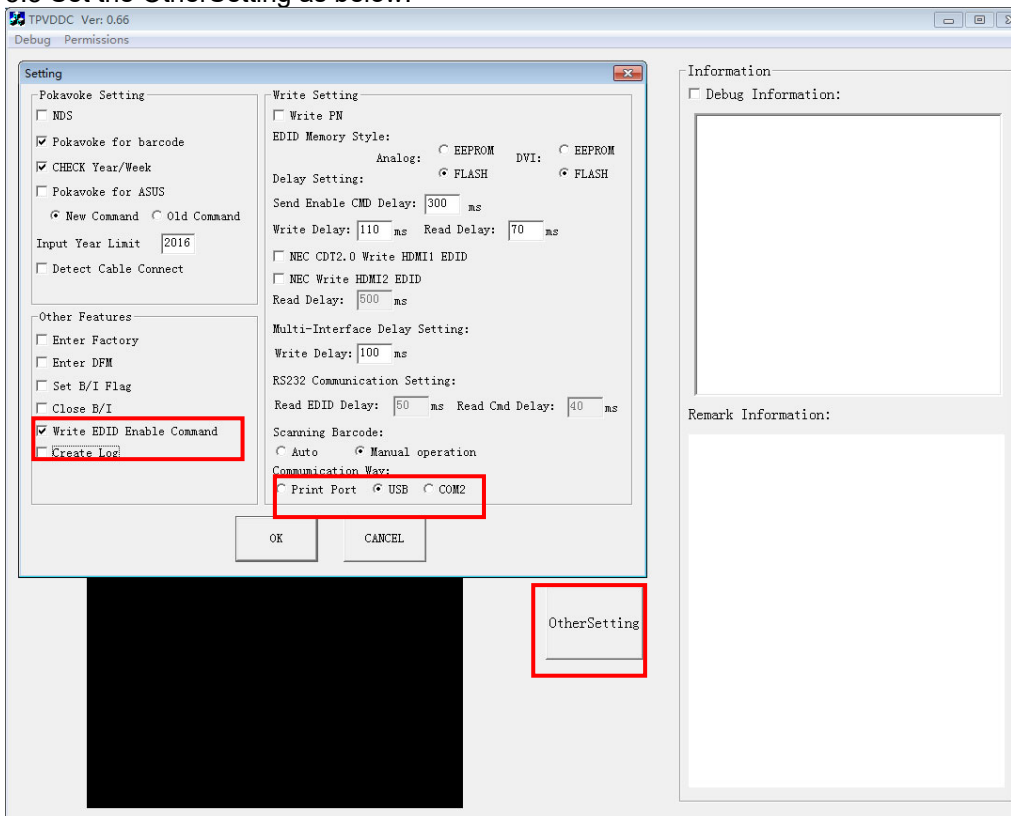
4. Input SN
Input SN:
Check SN: 22

Write EDID
Read EDID
OtherSetting

Information
☐ Debug Information:

Remark Information:

5.5 Set the OtherSetting as below.



TPVDDC Ver: 0.66
Debug Permissions

Setting

Pokavoke Setting
☐ MDS
☒ Pokavoke for barcode
☒ CHECK Year/Week
☐ Pokavoke for ASUS
☒ New Command ☐ Old Command
Input Year Limit 2016
☐ Detect Cable Connect

Other Features
☐ Enter Factory
☐ Enter DFM
☐ Set B/I Flag
☐ Close B/I
☒ Write EDID Enable Command
☐ Create Log

Write Setting
☐ Write PM
EDID Memory Style: Analog: ☐ EEPROM DVI: ☐ EEPROM
Delay Setting: ☒ FLASH ☒ FLASH
Send Enable CMD Delay: 300 ms
Write Delay: 110 ms Read Delay: 70 ms
☐ NEC CDT2.0 Write HDMI1 EDID
☐ NEC Write HDMI2 EDID
Read Delay: 500 ms

Multi-Interface Delay Setting:
Write Delay: 100 ms

RS232 Communication Setting:
Read EDID Delay: 50 ms Read Cmd Delay: 40 ms

Scanning Barcode:
☐ Auto ☒ Manual operation

Communication Way:
☐ Print Port ☒ USB ☐ COM2

OK CANCEL

Information
☐ Debug Information:

Remark Information:

OtherSetting

5.6 Type in the date and the 22 digit S/N and “Debug Information”.

TPVDDC Ver: 0.66
Debug Permissions

1. Select EDID
LoadEDID: NEW\A\ACER\24ACR\Acer VG240Y

2. Basic Settings
Burn Way: ☒ Only Connect VGA ☐ Only Connect HDMI
☐ Multi-Interface ☐ Only Connect DVI
Write SN: ☐ Write SN
Connect Port: ☐ Analog ☐ Digital ☒ Analog+Digital
☐ HDMI ☐ HDMI2 ☐ Analog+HDMI
Time: 0 S

Manufacture: ACR ProductCode: 0673 ModelName: ACER VG240Y
SN: Year: 2017 Week: 41

3. Input Year Month Day
Input Year-Month-Day: - -

4. Input SN
Check SN: 1234567890123456789012
Check SN: 1234567890123456789012 22

Write EDID
Read EDID
OtherSetting

Information
☒ Debug Information:
Remark Information:

5.7. Start to writing. Click “write EDID” to start writing. When The green “PASS” appear, the process is finished.

TPVDDC Ver: 0.66
Debug Permissions

1. Select EDID
LoadEDID: NEW\A\ACER\24ACR\Acer VG240Y

2. Basic Settings
Burn Way: ☒ Only Connect VGA ☐ Only Connect HDMI
☐ Multi-Interface ☐ Only Connect DVI
Write SN: ☐ Write SN
Connect Port: ☐ Analog ☐ Digital ☒ Analog+Digital
☐ HDMI ☐ HDMI2 ☐ Analog+HDMI
Time: 5.366 S

Manufacture: ACR ProductCode: 0673 ModelName: ACER VG240Y
SN: Year: 2011 Week: 23

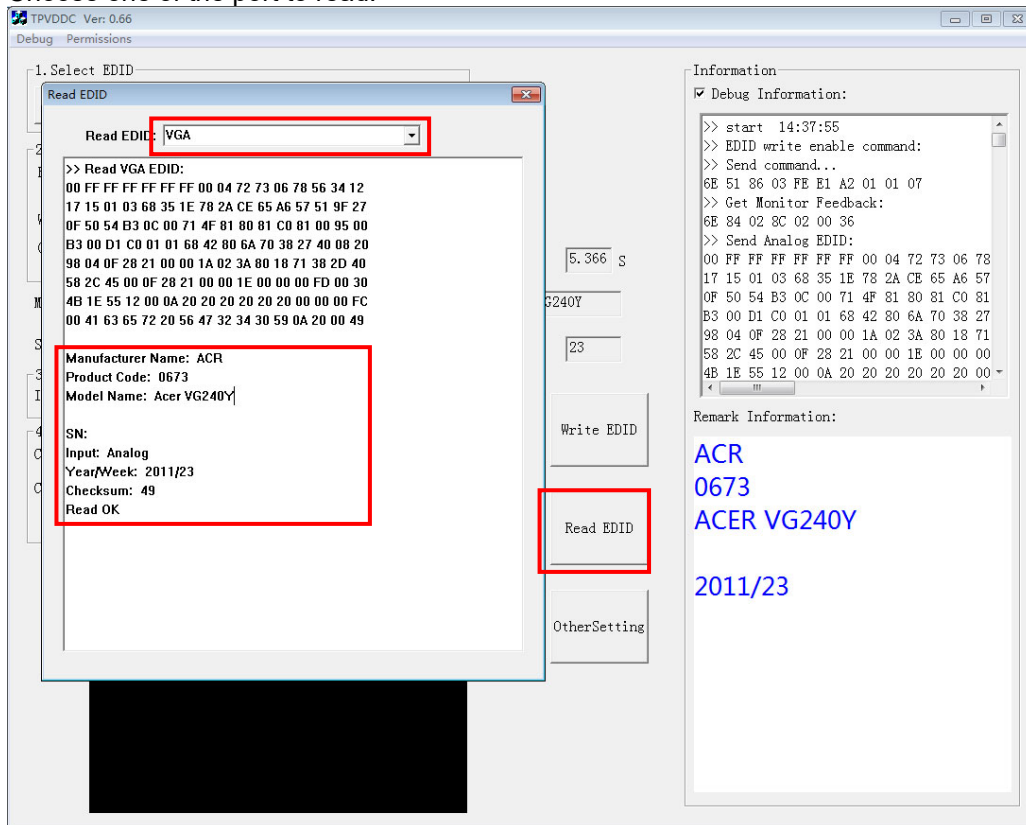
3. Input Year Month Day
Input Year-Month-Day: - -

4. Input SN
Check SN: 1234567890123456789012
Check SN: 1234567890123456789012 22

Write EDID
Read EDID
OtherSetting

Information
☒ Debug Information:
>> start 14:37:55
>> EDID write enable command:
>> Send command...
6E 51 86 03 FE E1 A2 01 01 07
>> Get Monitor Feedback:
6E 84 02 8C 02 00 36
>> Send Analog EDID:
00 FF FF FF FF FF 00 04 72 73 06 78
17 15 01 03 68 35 1E 78 2A CE 65 A6 57
0F 50 54 B3 0C 00 71 4F 81 80 81 C0 81
B3 00 D1 C0 01 01 68 42 80 6A 70 38 27
98 04 0F 28 21 00 00 1A 02 3A 80 18 71
58 2C 45 00 0F 28 21 00 00 1E 00 00 00
4B 1E 55 12 00 0A 20 20 20 20 20 00 00
Remark Information:
ACR
0673
ACER VG240Y
2011/23
Analog: PASS!
HDMI2: PASS!
HDMI: PASS!

5.8 After writing the EDID pass, you must read the EDID to ensure the EDID data had been write into the monitor. Choose one of the port to read.



1. If it appears all "00" when read the EDID data, you need reconnect the ISP tool or install the the driver of the ISP tool again.

Note: While reading the DP EDID data, you must light up the monitor or connect a signal to the monitor. If after doing this setp the EDID still shows all "00", but others port can show the EDID data, the EDID data of DP uually include in FW, can't read out it.

2. If it appears all "FF", it shows that the EDID data of the Main board is empty, you must writing the EDID again.

6. Troubleshooting.

6.1. Can't write!

(1) AC on the monitor and turn on it. (Restart the monitor)

(2) Take apart the monitor and connect the 7pin of EEPROM to GND to diable write protection then write EDID one by one.


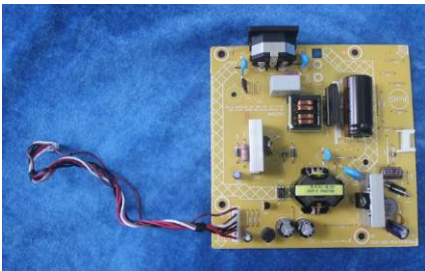



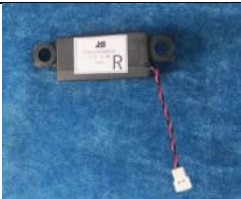
(3) Set the Burn in on last to try again.

5. FRU (Field Replaceable Unit) List

This chapter gives you the FRU (Field Replaceable Unit) listing in global configurations of ACER VG240Y Refer to this chapter whenever ordering for parts to repair or for RMA (Return Merchandise Authorization).

Please note that WHEN ORDERING FRU PARTS, you should check the most up-to-date information available on your regional web or channel. For whatever reasons a part number change is made, it will not be noted on the printed Service Guide. For ACER AUTHORIZED SERVICE PROVIDERS, your ACER office may have a DIFFERENT part number code from those given in the FRU list of this printed Service Guide. You MUST use the local FRU list provided by your regional ACER office to order FRU parts for repair and service of customer machines.

NOTE: To scrap or to return the defective parts, you should follow the local government ordinance or regulations on how to dispose it properly, or follow the rules set by your regional ACER office on how to return it.

Picture	Description	TPV Part No.	ACER Part No.
	CBPRITMC0Q6	756GQHCB0BA156000Q	NA
	POWER BOARD	PLPCHE541KVG4	NA
	KEY-BOARD	KEPCLQA6	55.TCCM2.003
	LED-BOARD WITH CABLE	LEPCLQA2	55.TCCM2.004
	SPEAKER 4 OHM 2.5W 63x22mm 50mm BOX LEFT	378G0025689CLA	23.TCCM2.001
	SPEAKER 4 OHM 2.5W 63x22mm 50mm BOX RIGHT	378G0025689CRA	23.TCCM2.002

	CABLE 30P-30P 450MM(MB TO PANEL)	395G179M30B8370000	NA
	CABLE 4P-2P+2P 600/80MM(MB TO SPEAKER)	395GH20004XM150000	NA
	CABLE 6P-6P 450MM(MB TO KEY BOARD)	395GH20006XM208000	50.TCCM2.003
	CABLE 6P-6P 200MM(PB TO PANEL)	395GH20006XM253000	50.TCMM2.003
	BEZEL ASSY W LOGO	705GQHCS034441	60.TCCM2.001
	MIDDLE FRAME	Q34G8552AEM02S0100	60.TCCM2.002
	REAR COVER	Q34G8553AEM05S0130	NA

	FUNCTION KEY	Q33G0890AEM01S0100	60.TCCM2.006
	Joystick BUTTON	A33G2238AEM01L0100	60.TCCM2.007
	STAND HINGE ASSY	705GQHCS034496	NA
	BASE ASSY	705GQHCS034497	NA
	INSULATING- SHEET	Q52G18016730HF0ADG	NA
	MAINFRAME	Q15G320110180100FJ	NA

	D-SUB CABLE 1800	089G 728CAA 2A	50.LZJM2.003
	HDMI CABLE 1800	389G1848GAA502	50.T27M2.010
	AC POWER CORD 1800 for Europe	389G404A18NISG	27.T1BM2.001
	AUDIO CABLE 1800	389G017356G53R	50.LXPM2.012

6. Trouble shooting instructions

Before sending your LCD monitor for servicing, please check the troubleshooting list below to see if you can self-diagnose the problem.

HDMI /VGA Mode (Optional)

Problem	LED status	Remedy
No picture visible	Blue	Using the OSD menu, adjust brightness and contrast to maximum or reset to their default setting.
	Off	Check the power switch. Check if the AC power cord is properly connected to the monitor.
	Amber	Check if the video signal cable is properly connected at the back of monitor. Check if the computer system is switched on and in power saving/standby mode.