Service
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Acer Monitor V277 Gbmipx

LIFECYCLE EXTENSION GUIDE

Contents

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.

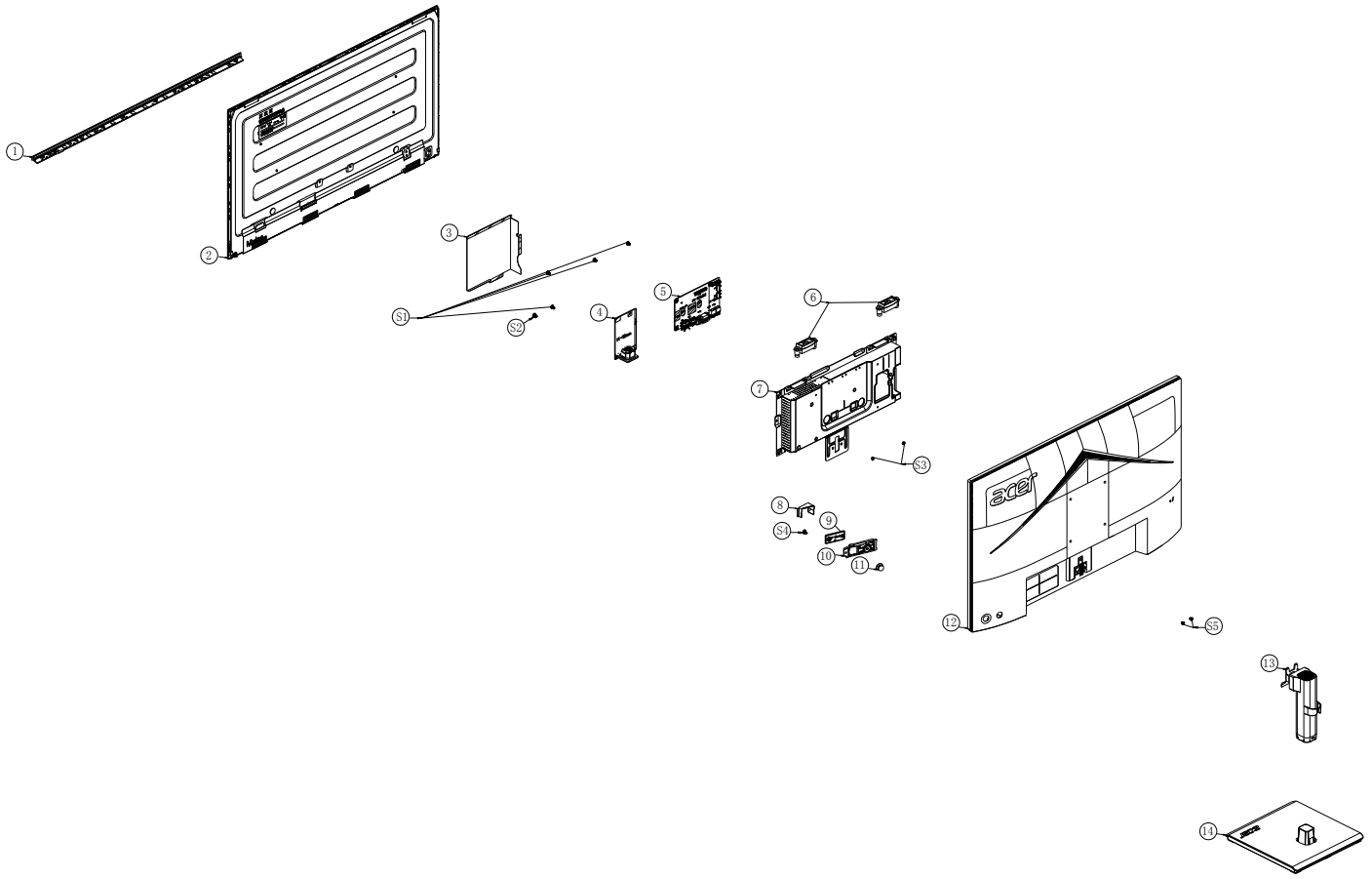
Servicer assumes all liability.

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.
2	LBB270FY0W0C004X0F	panel TPM270WF1-FHBNY0.K 4W50A FQ	NA
4	ADPCN1925AHN3	Power board	NA
5	CBPT3TMC0Q7	Main board	NA
9	KEPC3QC5	Key board	NA
	395G179Q30G712M000	395G179Q30G712M000	NA

2. Mechanical Instruction

Tools Required

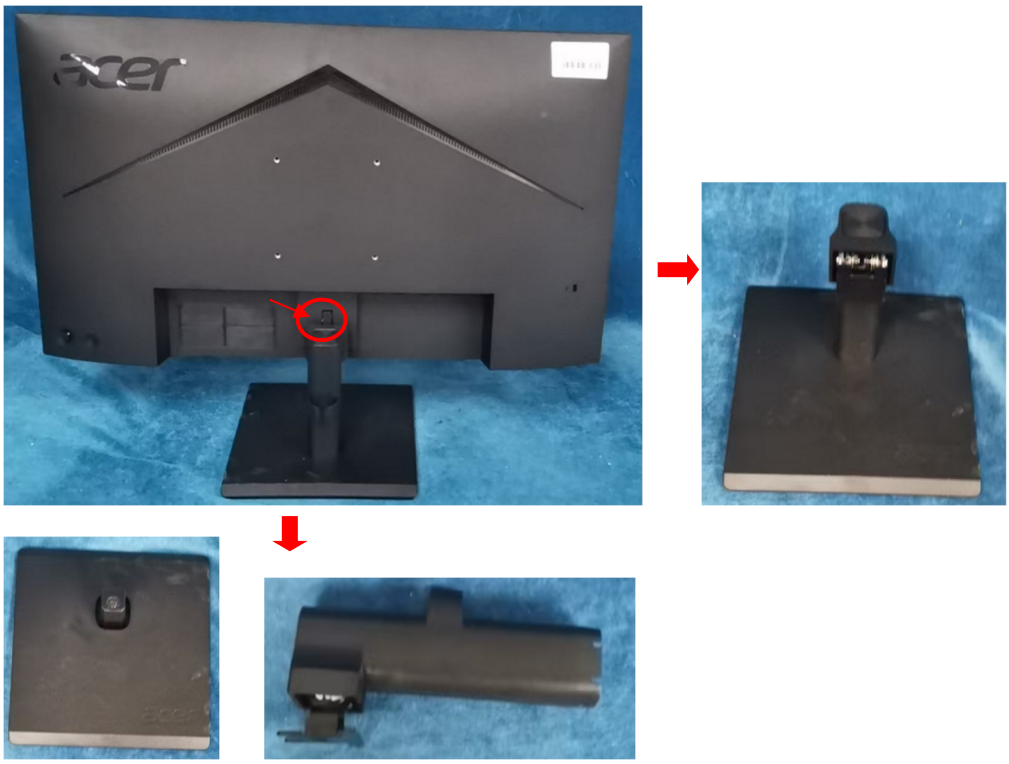
List the type and size of the tools that would typically can be used to disassemble the product to a point where components and materials requiring selective treatment can be removed.

Tool Description:

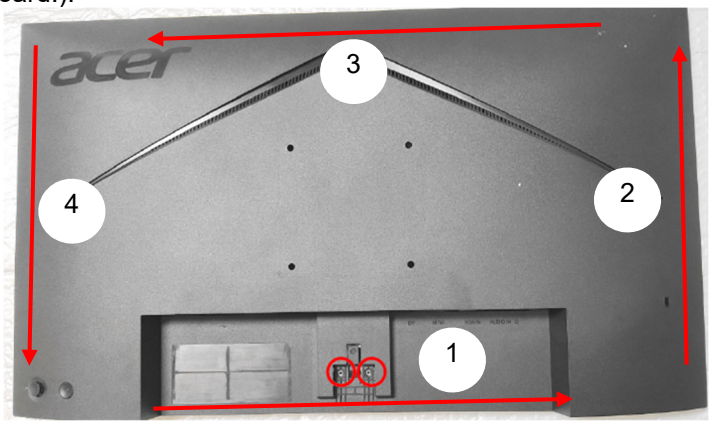
- Screwdriver (Phillip-head, Hexagonal head)
- Penknife

2.1 Disassembly Procedures:

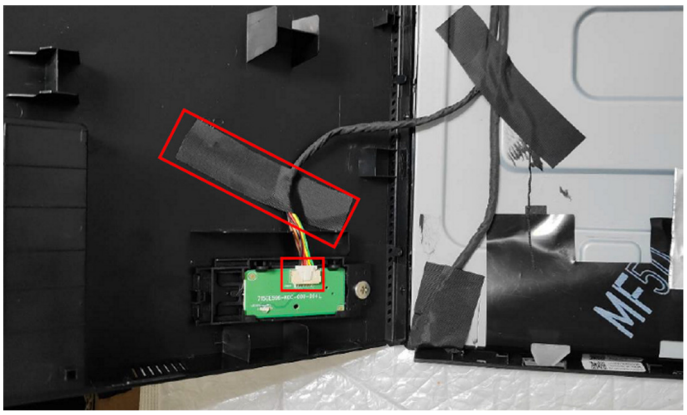
S1 Push the button to remove the stand base ass'y.



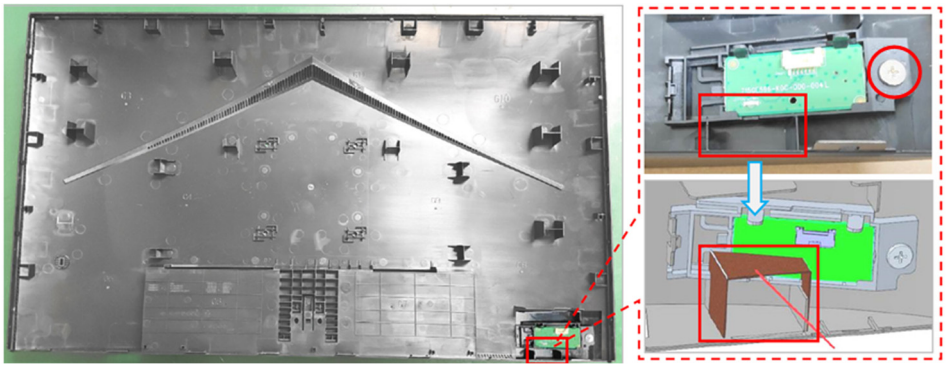
S2 Unscrew the screws then use disassembly tool to open all latches for removing the REAR COVER. (Be careful the position of the key board.).

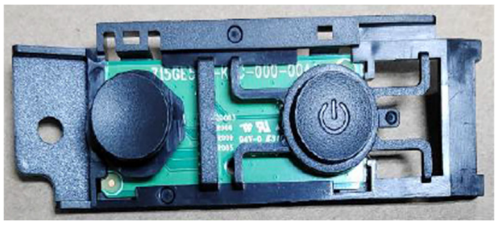


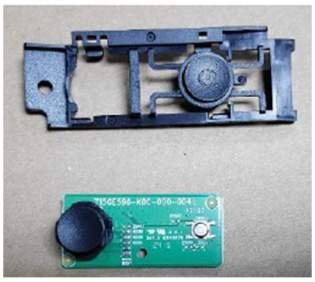
Disconnect the cables to remove the rear cover.



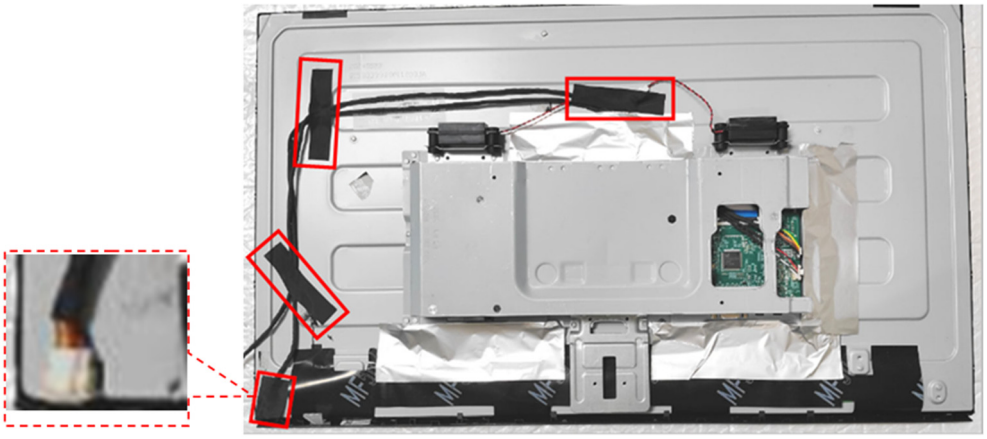
S3 Tear off the tape and release the screws to remove the key board.

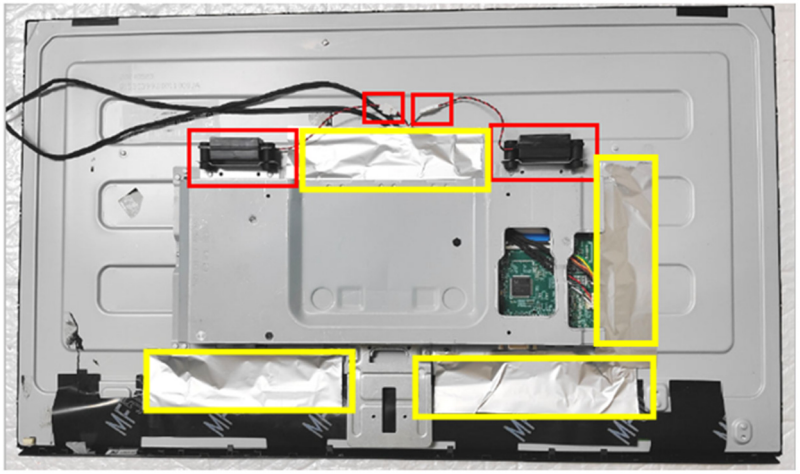




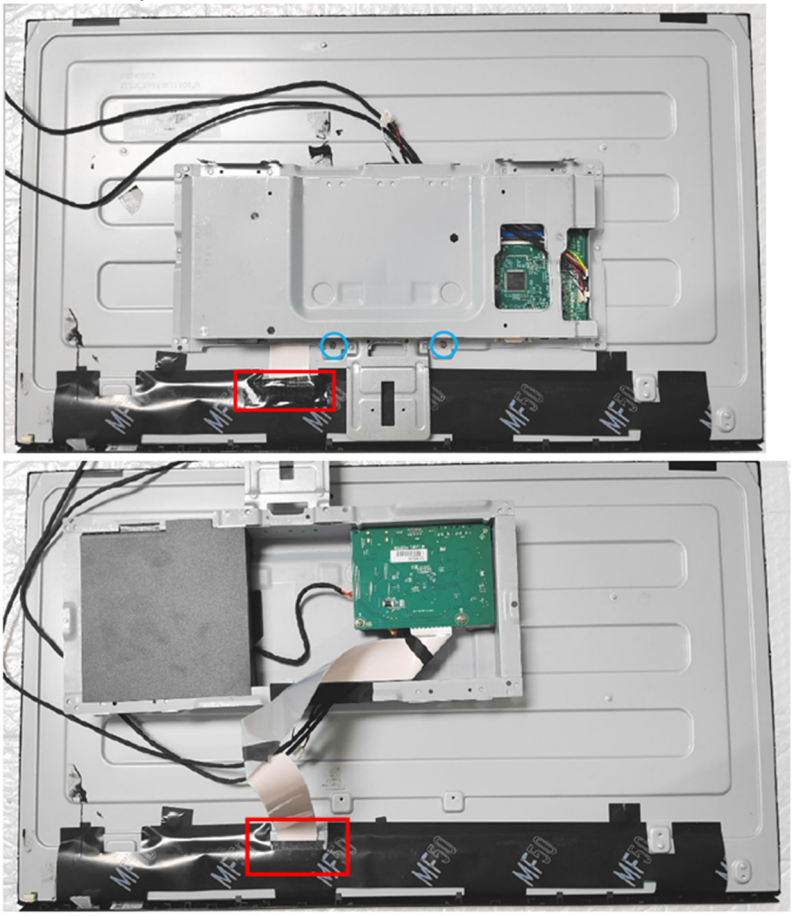


S4 Tear off the tapes. Disconnect the pins to remove the speakers.



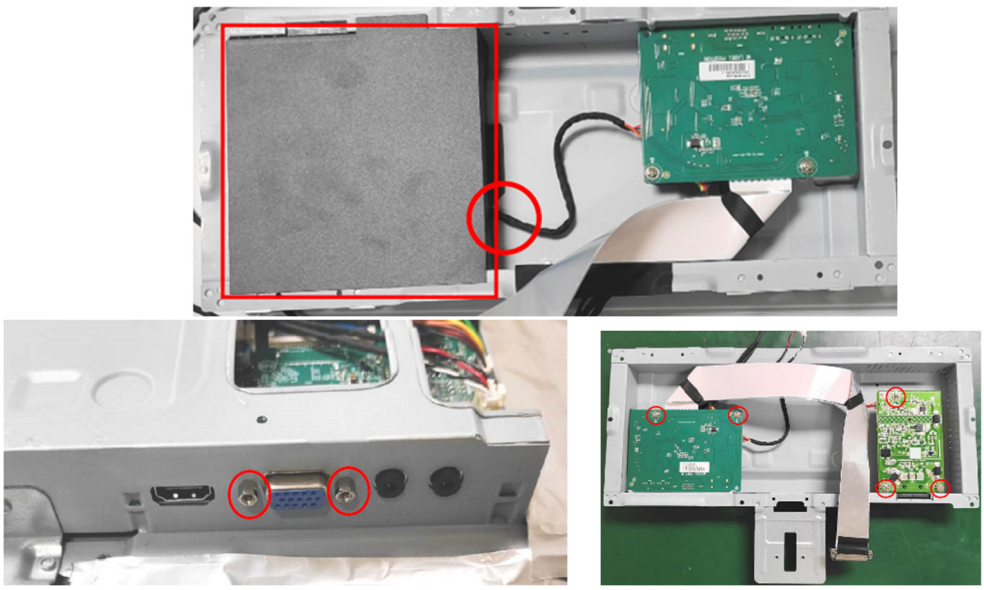


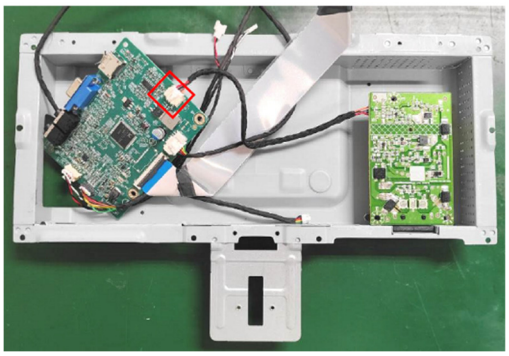
S5 isconnect the pins and tear off the tapes. Release the screw to remove the main frame.

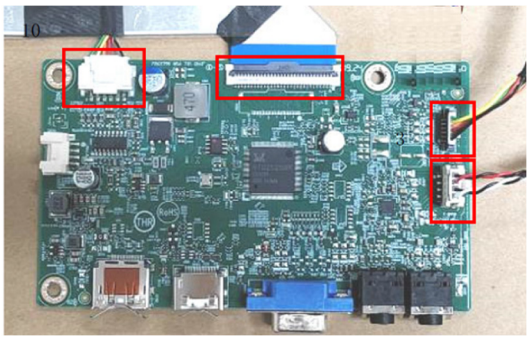


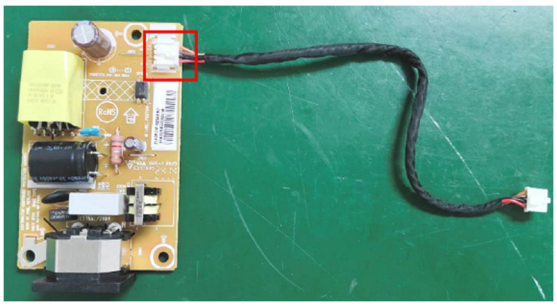
S6 emove the deco bezel.

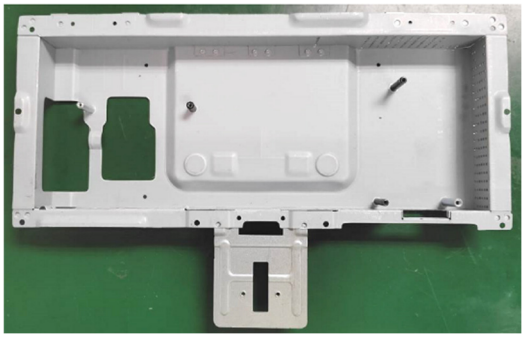
S7 Remove the Mylar and release all of the screws to remove the main board and power board. Disconnect the pins.





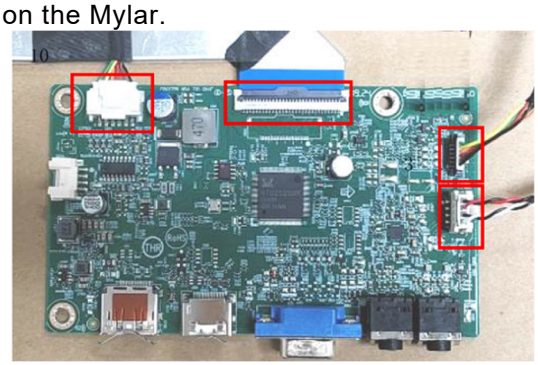


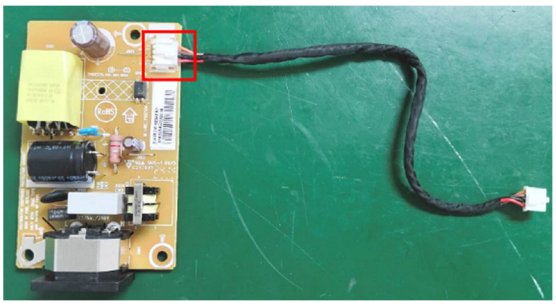


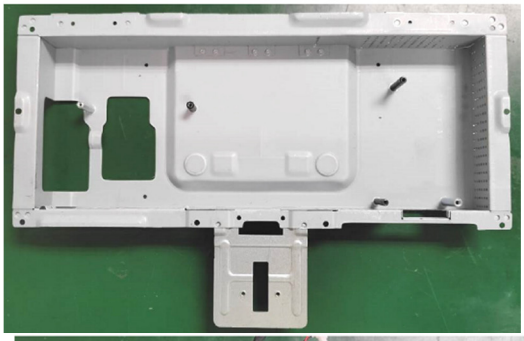


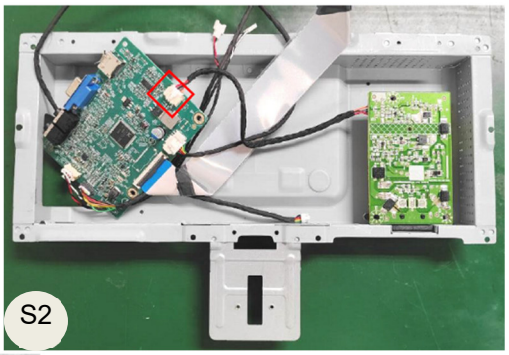
2.2 Assembly Procedures:

S1 Prepare a main board, a power board, a main frame and some essential cables. Connect all pins. Use a screwdriver to tighten the screws till the main board and power board with shield are firmly attached. Put on the Mylar.

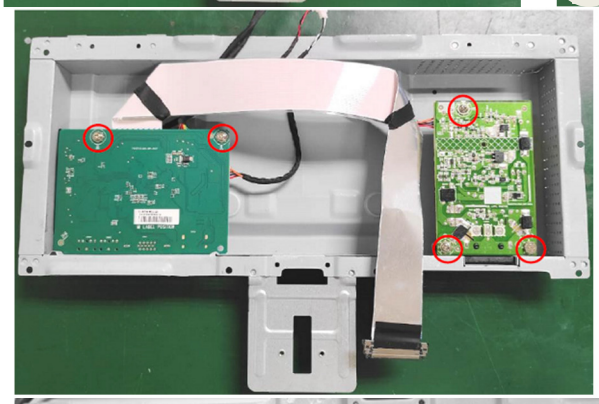


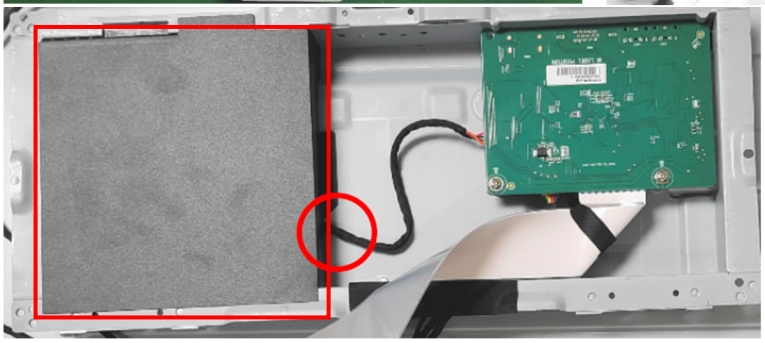






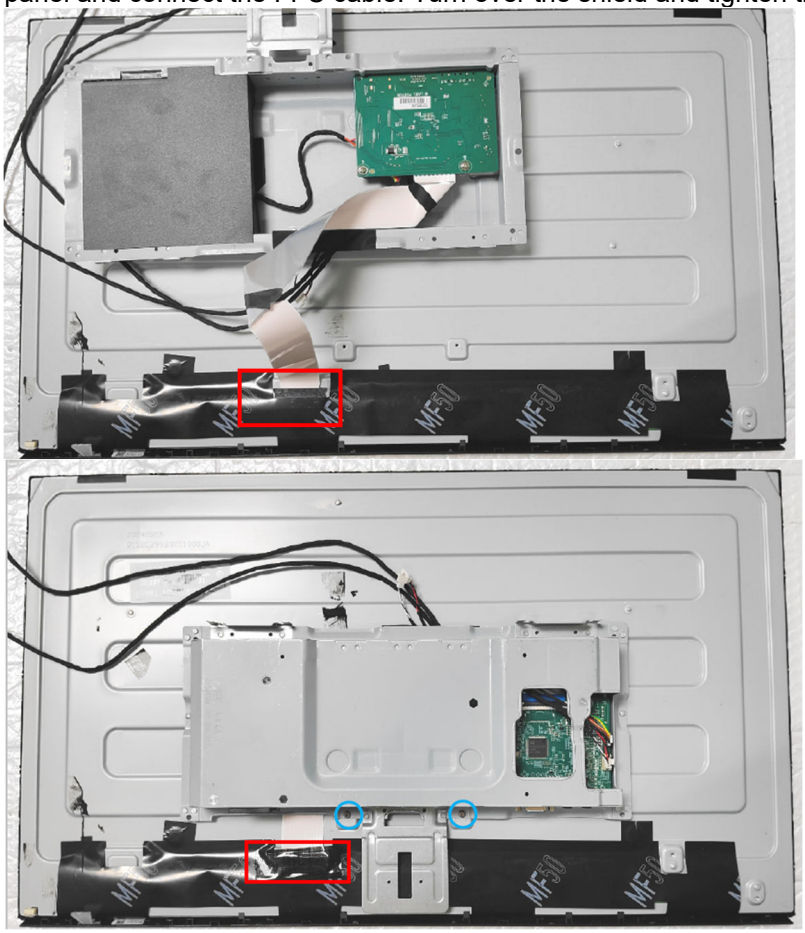
S2



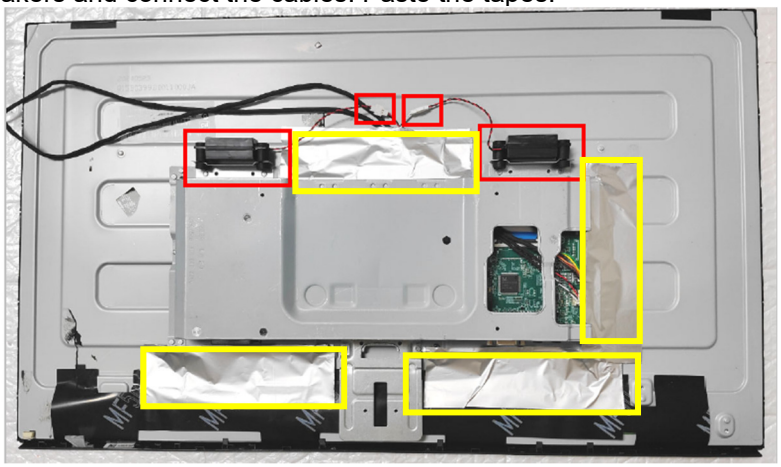


S2 Assemble the Deco bezel to panel.

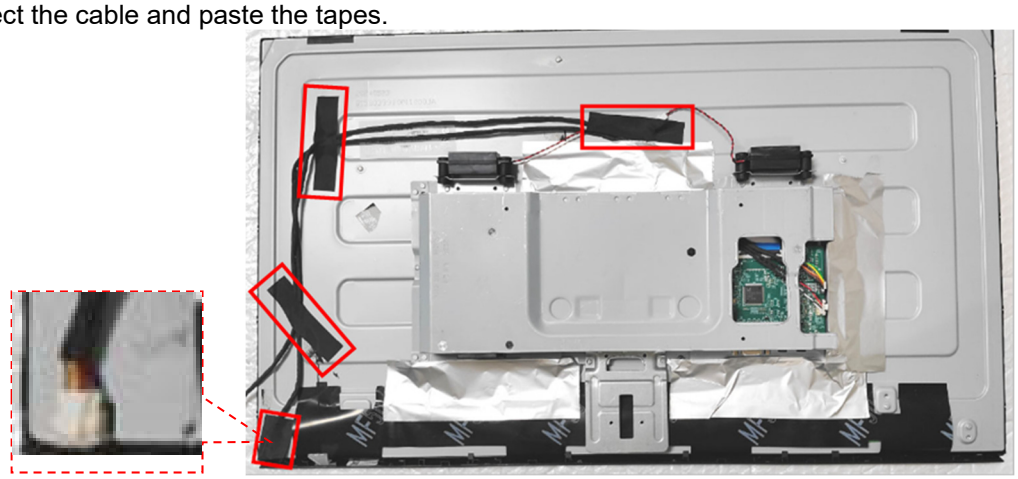
S3 Put the shield on panel and connect the FFC cable. Turn over the shield and tighten the screws. Paste the tape.



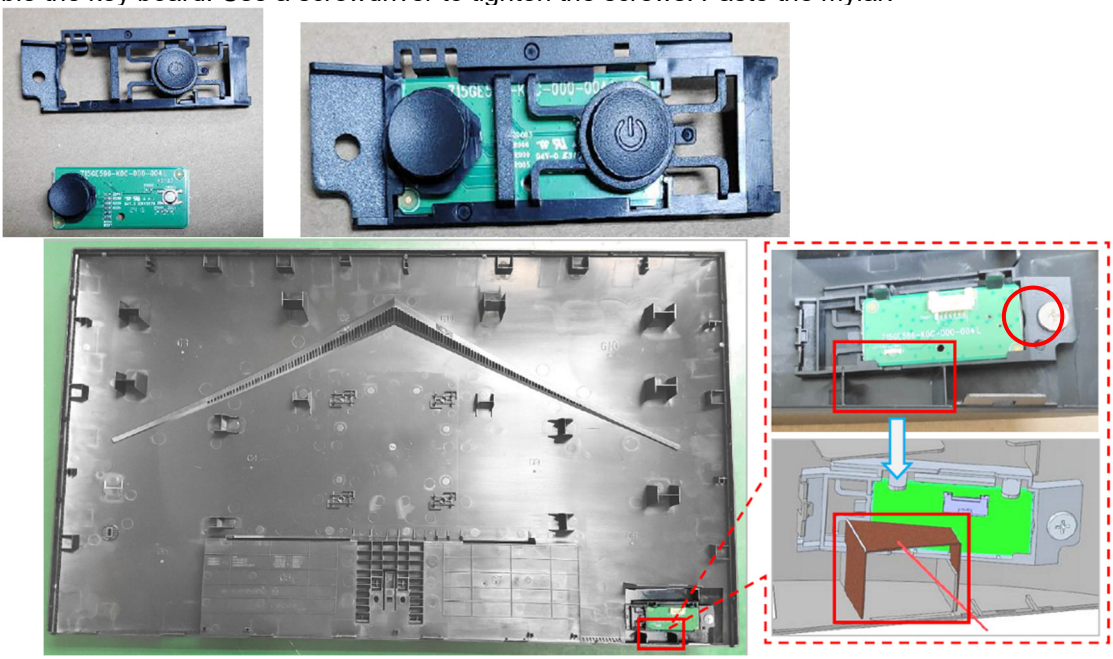
S4 Assemble the speakers and connect the cables. Paste the tapes.



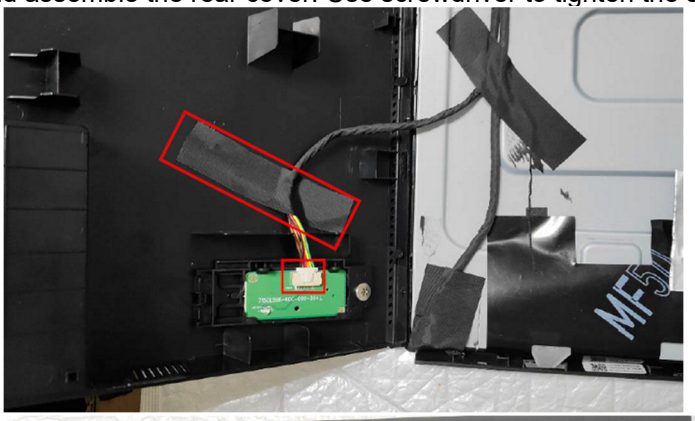
S5 Connect the cable and paste the tapes.

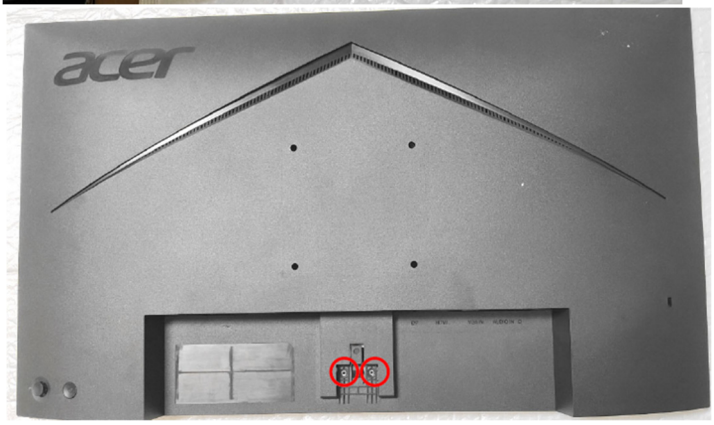


S6 Assemble the key board. Use a screwdriver to tighten the screws. Paste the mylar.



S7 Connect the cables and assemble the rear cover. Use screwdriver to tighten the screws.



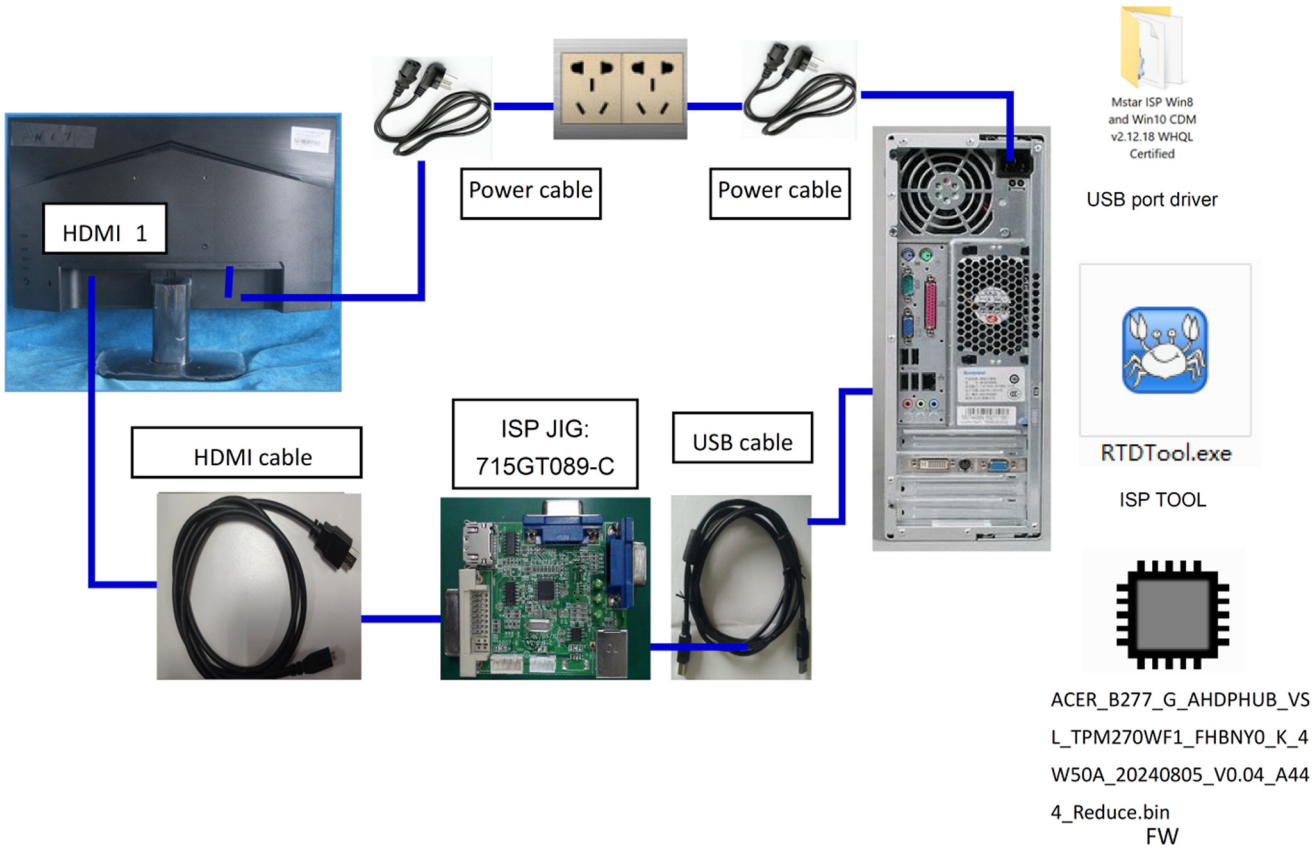


S8 Assembly the stand base ass'y.

3. Firmware Upgrade Process

Note: Take below model for example; the upgrade steps are the same.

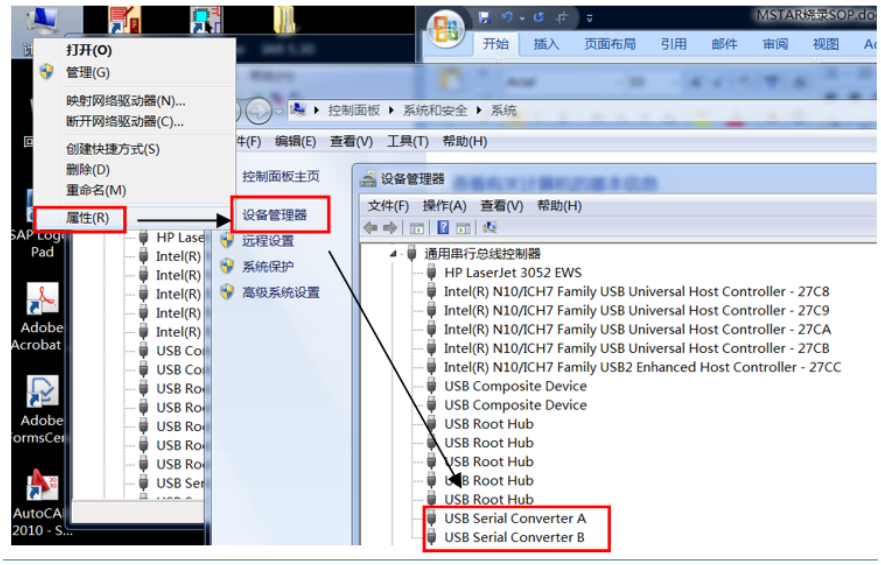
1. Materials list and connection



2.Install USB driver.

If you use this ISP board first time，you need to install mstar driver, open the device manager.

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



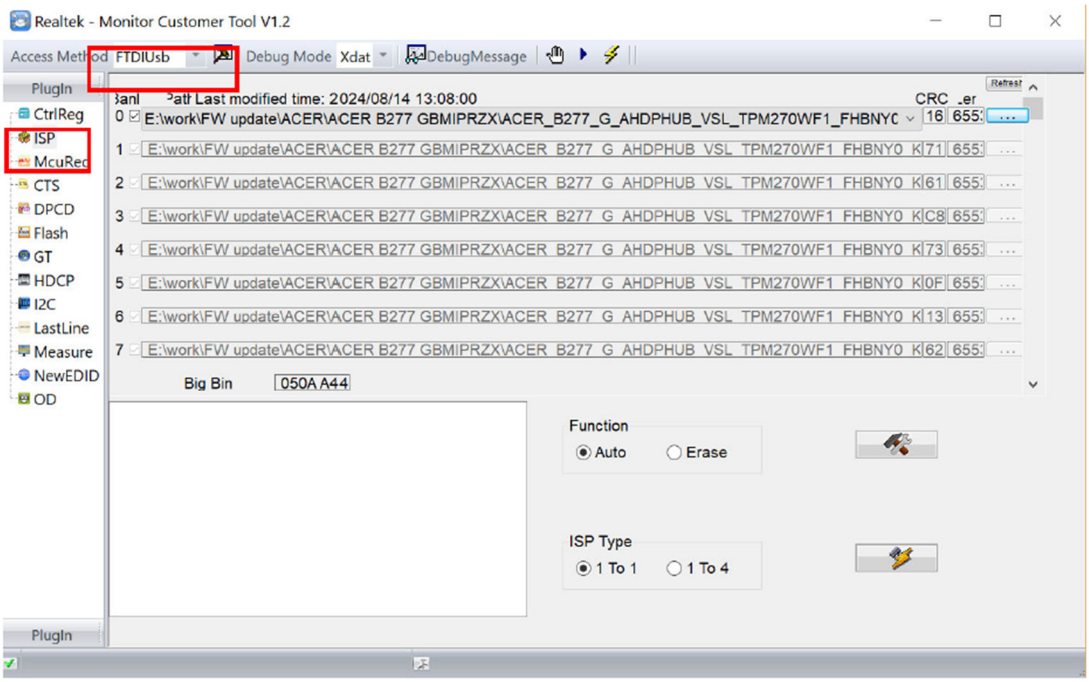
3. Install RTD tool.

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.

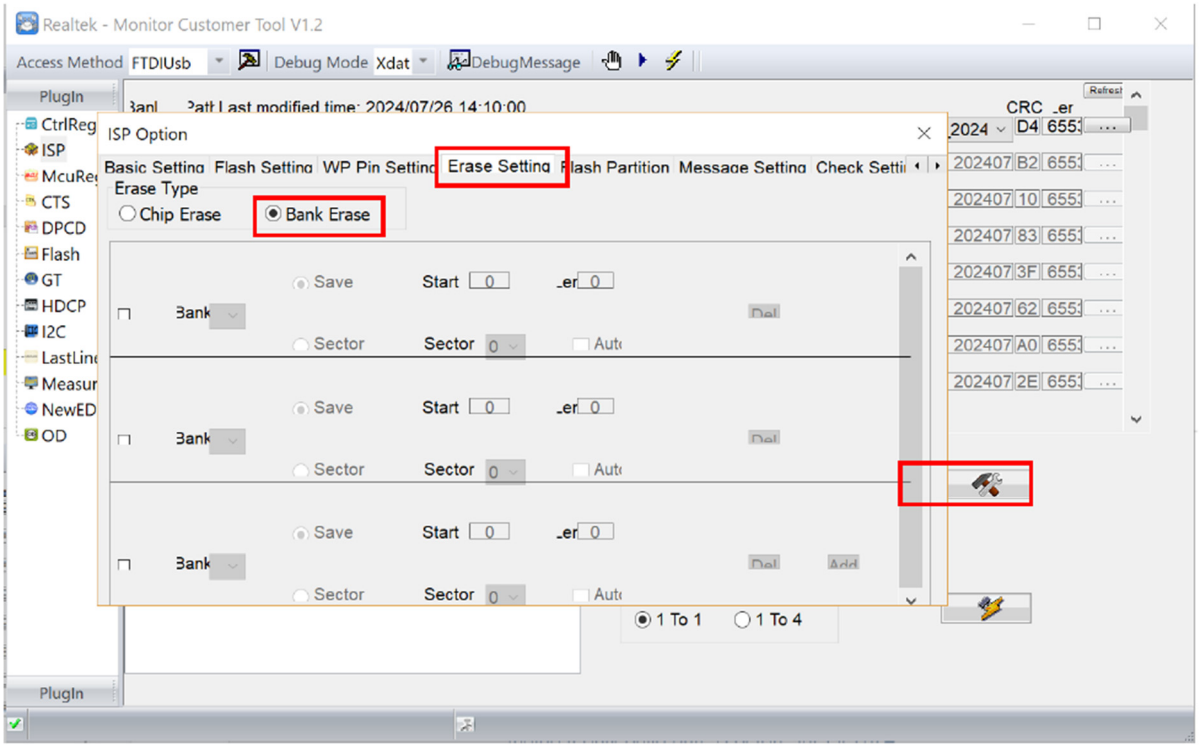
3.1 RTDTool.exe double-click the icon to run it.

Note: Must to install driver firstly.

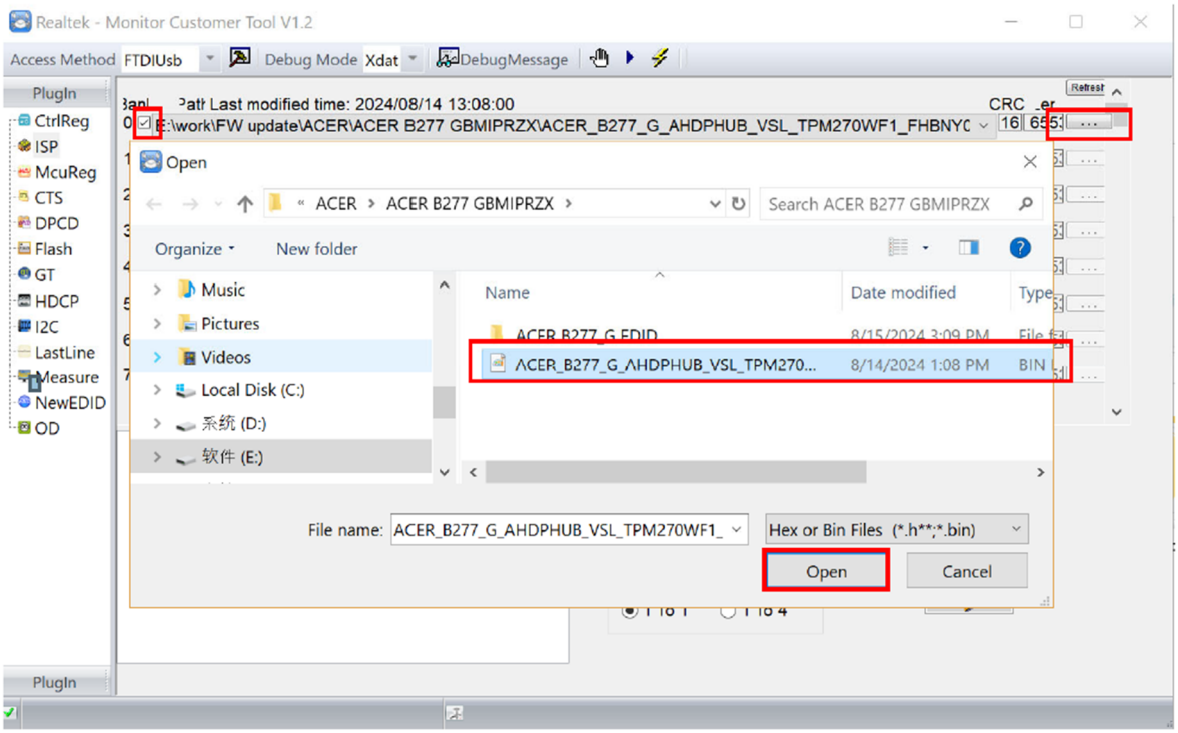
3.2 Choose the FTDIUSB communication way.



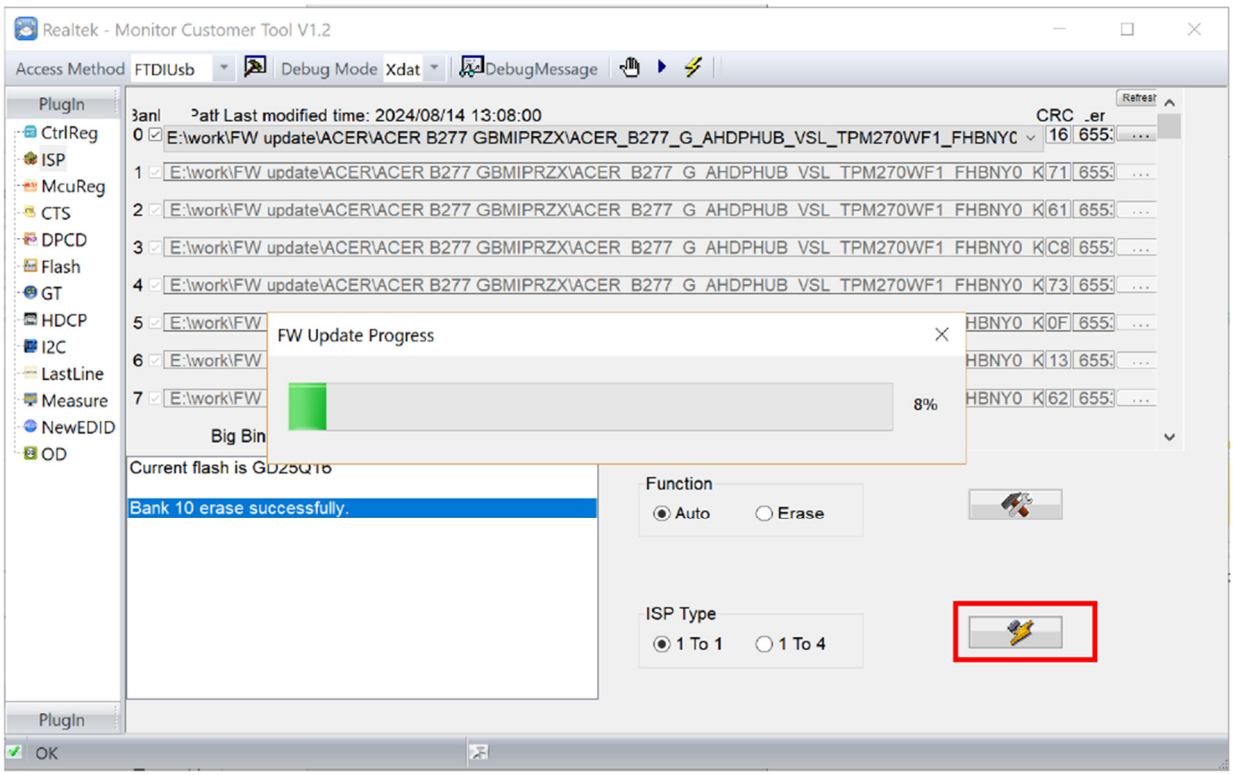
3.3 Click “ISP” and “ISP Option” to set as below. (In order to prevent HDCP KEY data loss, please must load the file name contain the “ Reduce“ of the firmware)



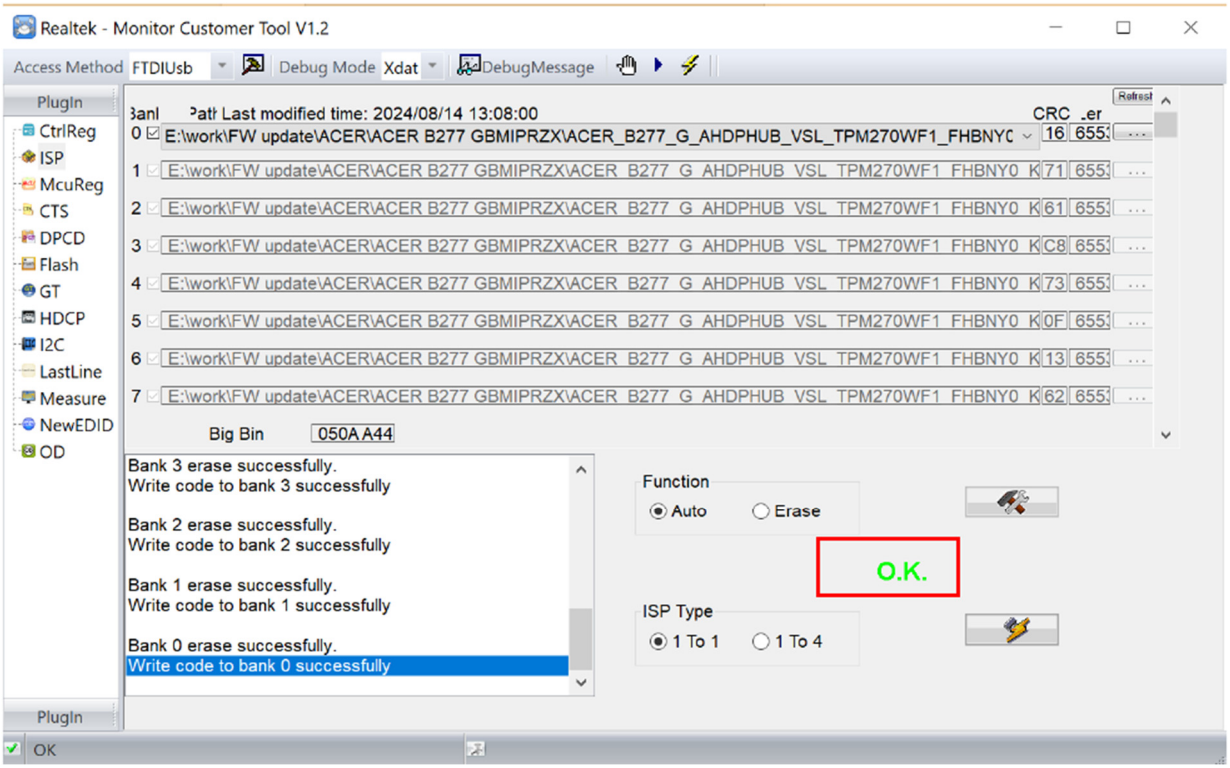
3.4 Close the “ISP Option” window and click the “BigBin” to load the correct F/W.



3.5 Click  to start programming.



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

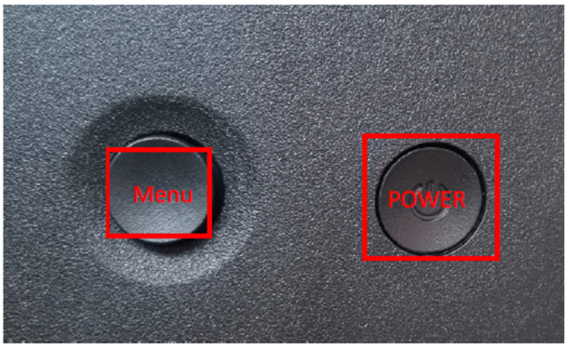


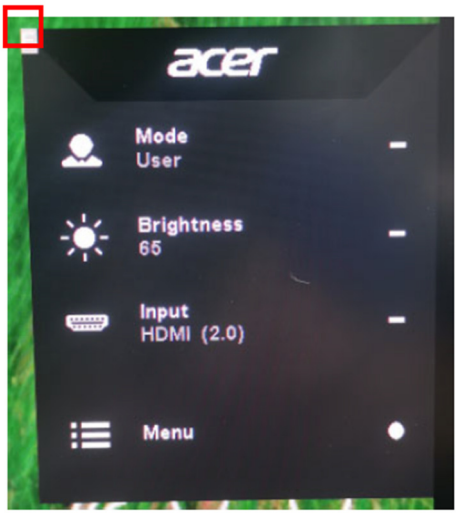
4. Check the FW version after upgrade.

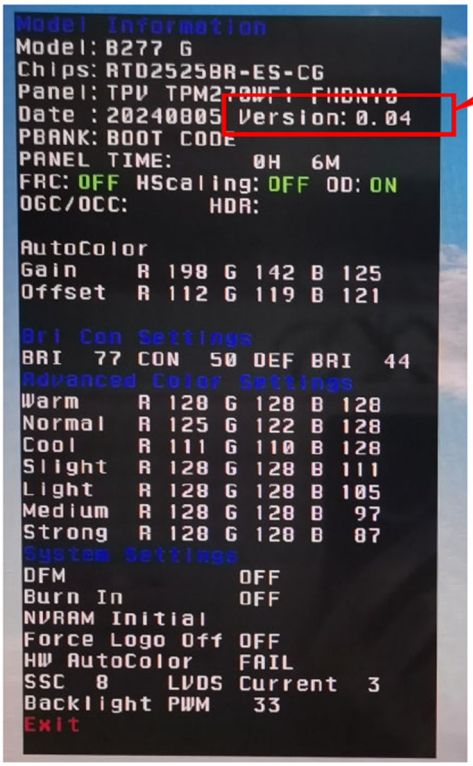
4.1. The way to open factory menu.

(1) Connect signal source to monitor and turn it on.

(2) DC off the MNT, then pressing the menu key and DC on, when the screen lights, release the key and press the menu key to open the factory menu with “F”



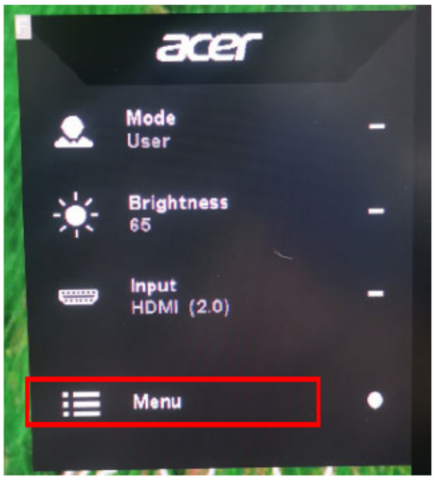


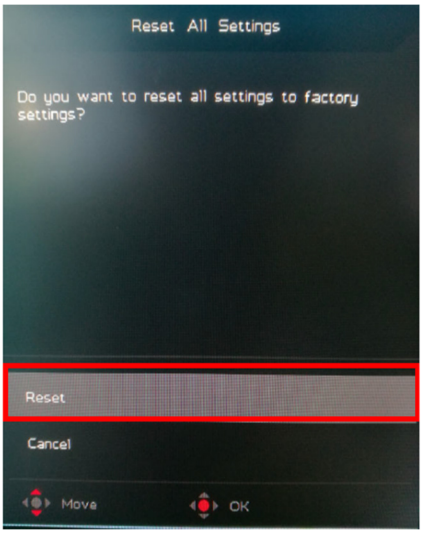


Check this F/W version.

4.2. Do factory reset in user menu.

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



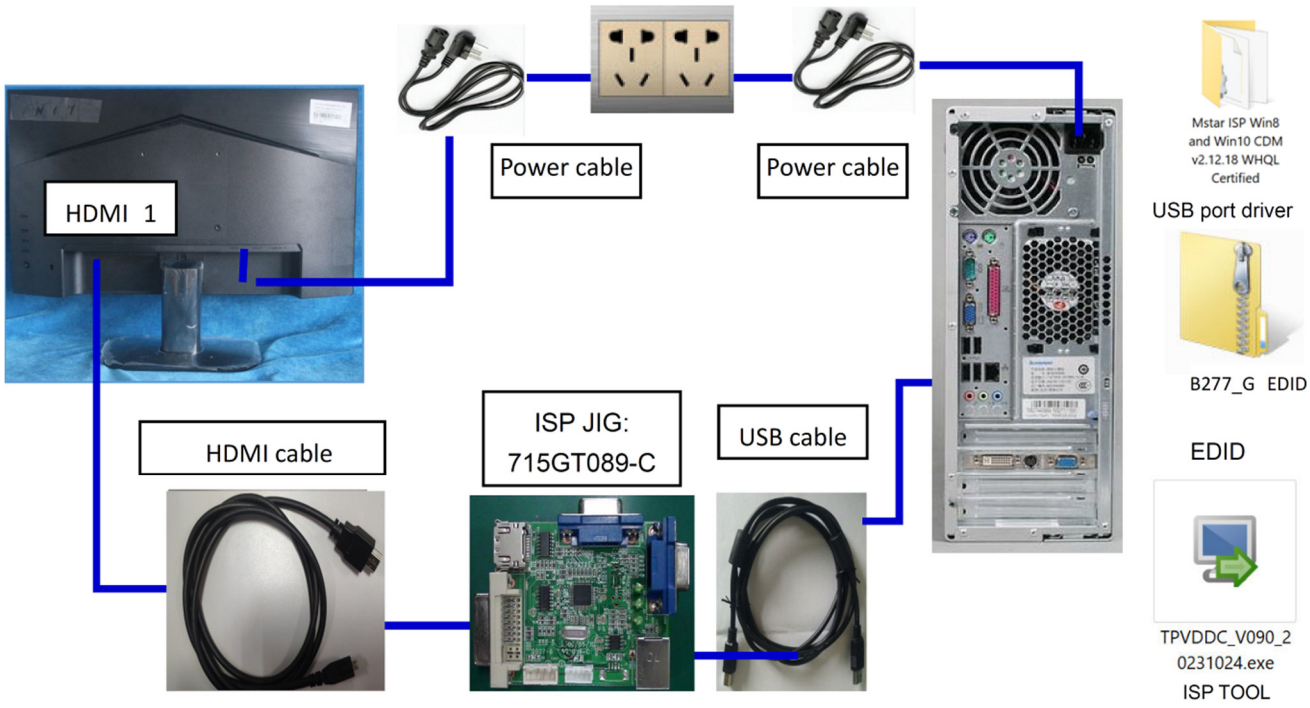


(2) Factory reset will turn off “Burn in” mode which screen color switches among red, green, blue and black.

4. Writing EDID Process

Note: Take below model for example; the upgrade steps are the same.

1. Materials list and connection



2. Install USB driver

3. Prepare the EDID written.

3.1. Change the EDID files name as below rule.

VGA EDID ⟶ WA.dat HDMI EDID⟶WH.dat

DP EDID ⟶ WP.dat

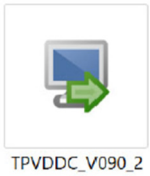
3.2. Copy these files to one folder named as ACER B277_G which must contains “config.ini” file.

Name	Date modified	Type	Size
config.ini	3/10/2020 7:42 PM	Configuration sett...	1 KB
wa.dat	7/9/2024 5:48 PM	DAT File	1 KB
wh.dat	7/9/2024 5:49 PM	DAT File	1 KB
wp.dat	7/9/2024 5:49 PM	DAT File	1 KB

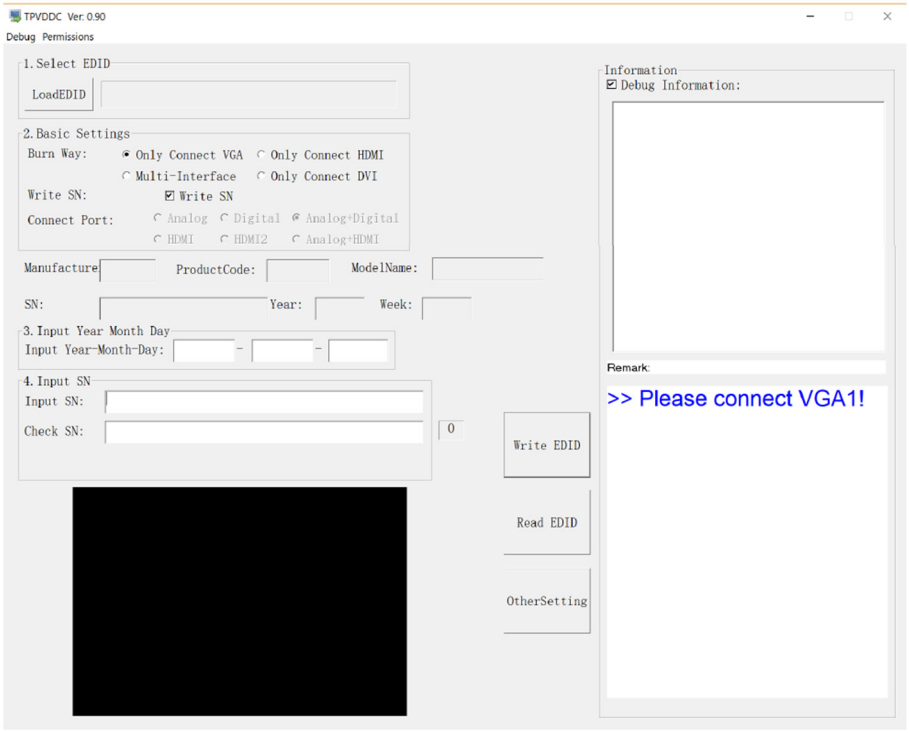
3.3. Copy ACER B277_G to DDC folder and put DDC and ISP tool together.

4. Run the ISP tool

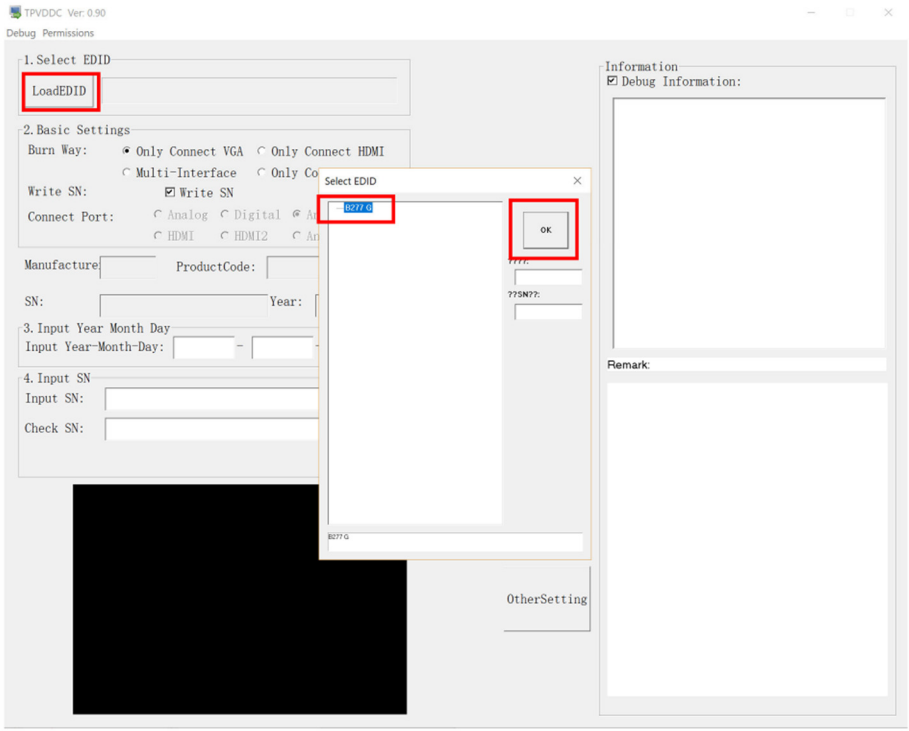
Note: If the F/W Upgrade use the same ISP tool as the EDID writing, you must close the F/W Upgrade tool before running the EDID writing tool.



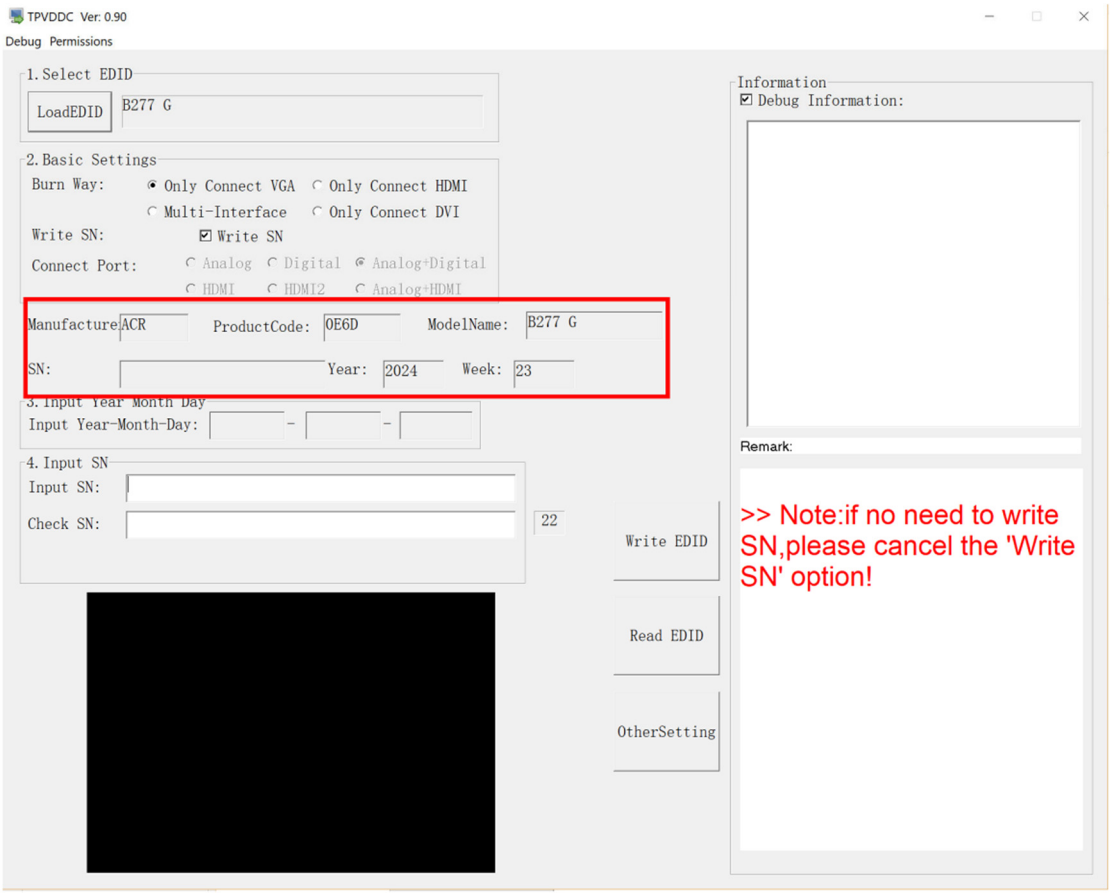
4.1. Double-click the icon to open the tool.



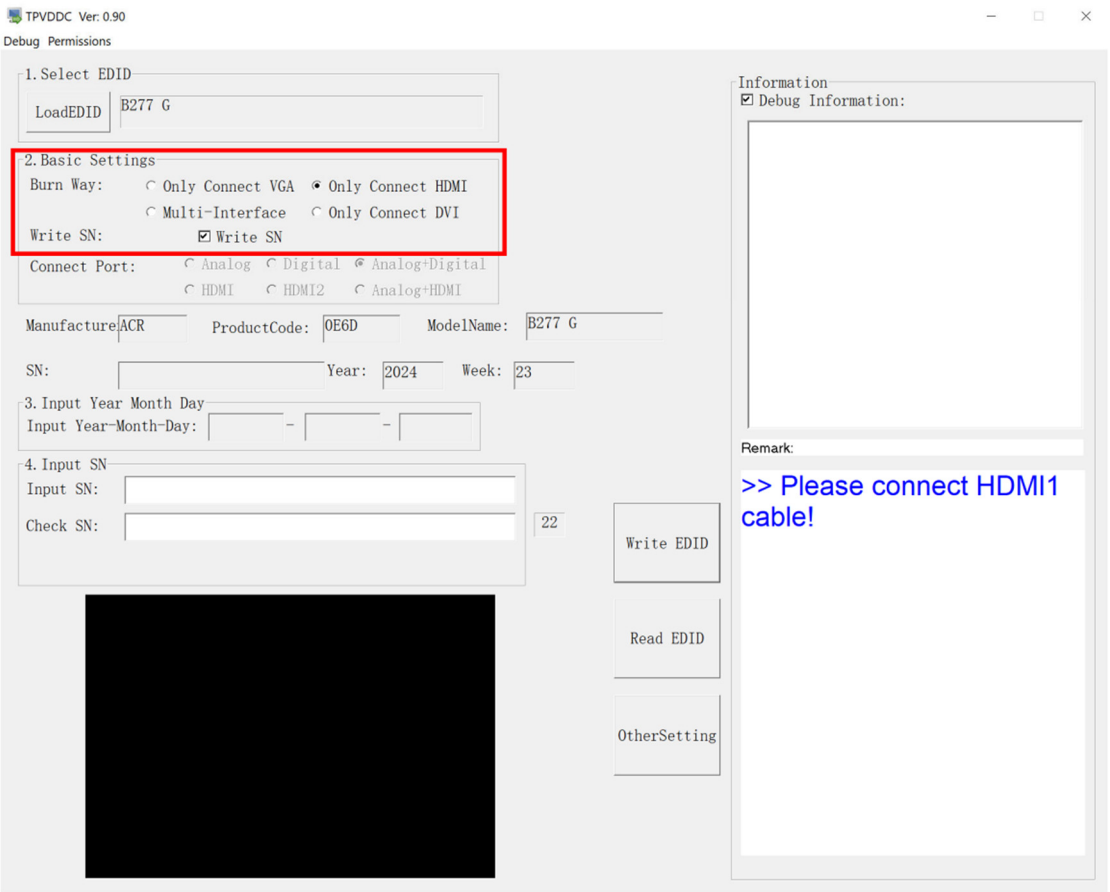
4.2. Select the EDID folder.



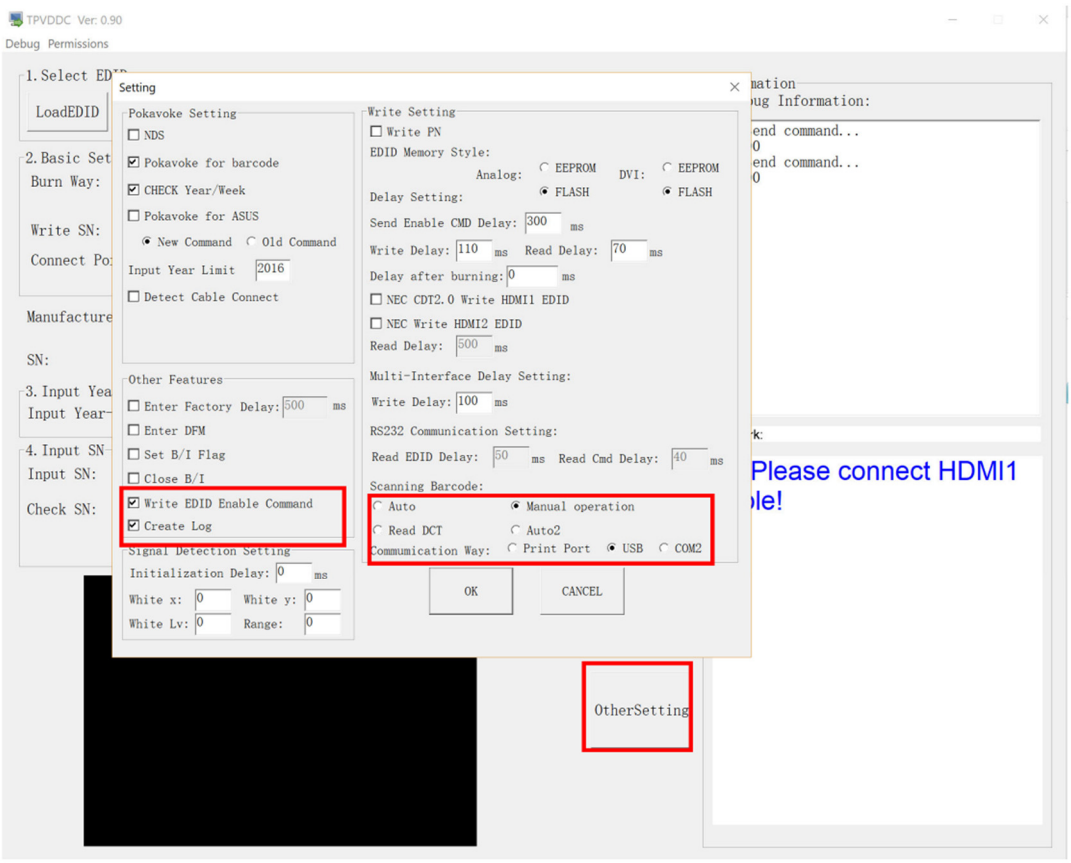
4.3. Load EDID successful.



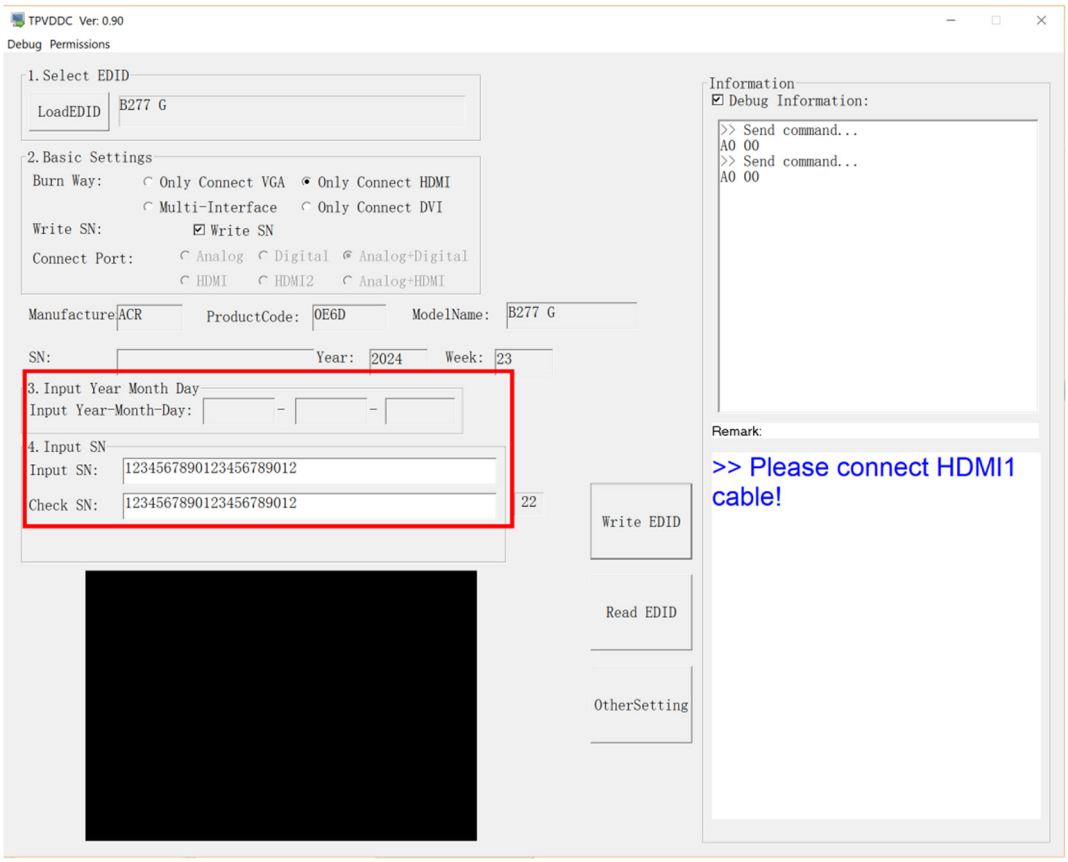
4.4 Tick the “Only connect HDMI and “Write SN”



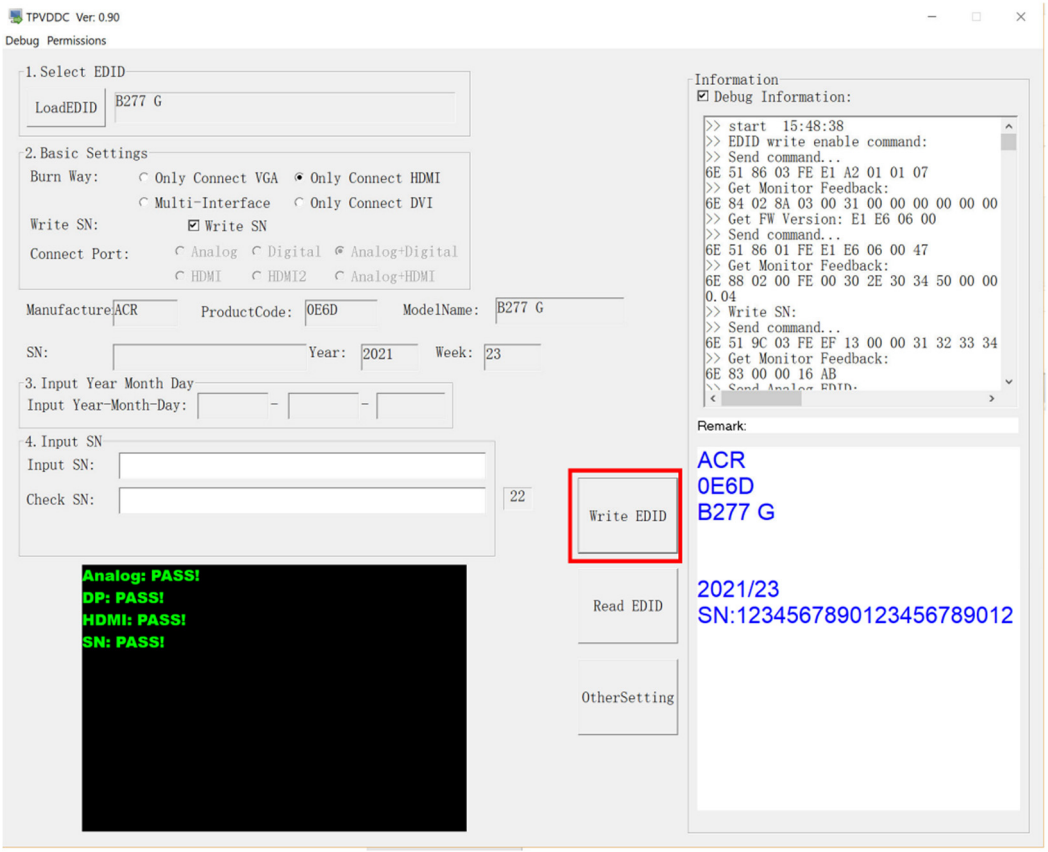
4.5 Set “other setting” as below.



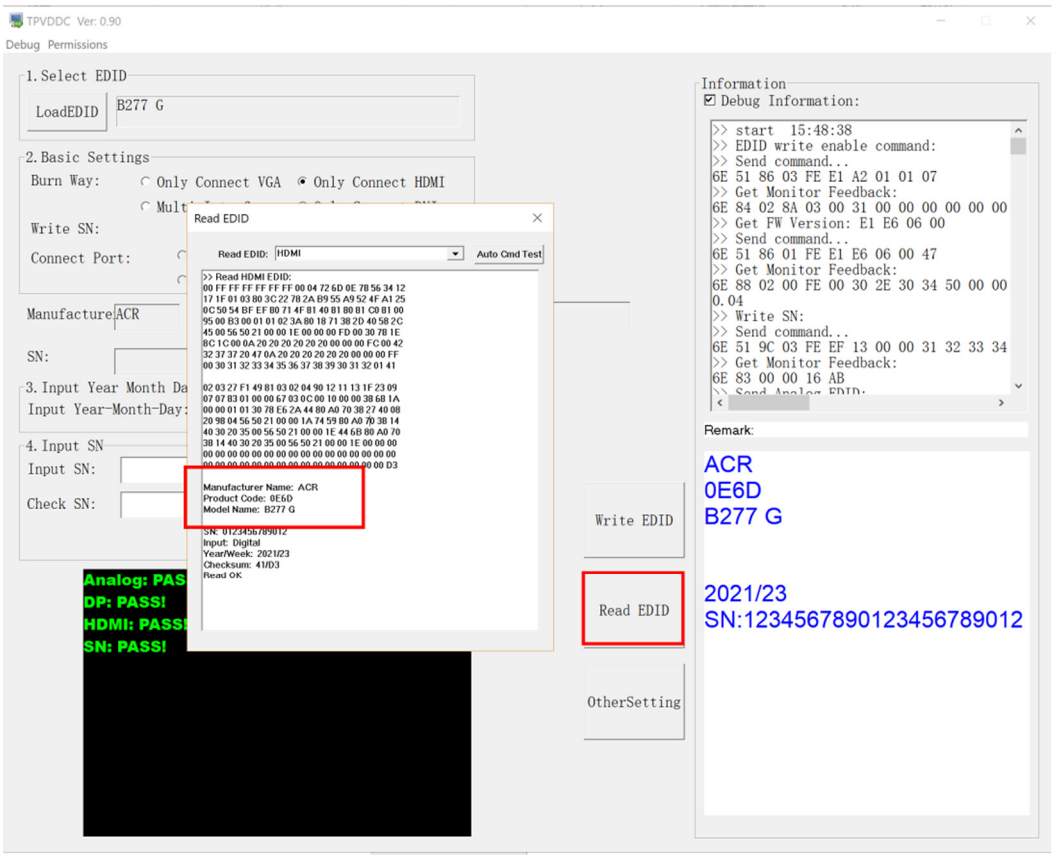
4.6 Type in the date and the 22 digit S/N.



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



4.8 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.
2. If it appears all “FF”, it shows that the EDID data of the Main board is empty, you must writing the EDID again.

5. Troubleshooting.

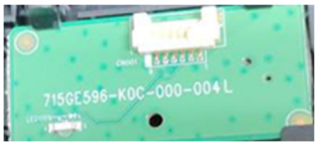
5.1. Can’t write!

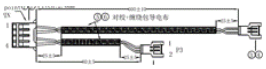
(1) AC on the monitor and turn on it.(Restart the monitor)

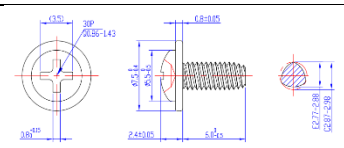
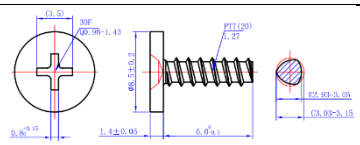
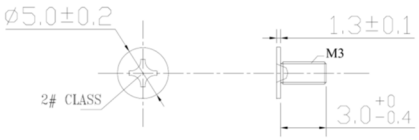
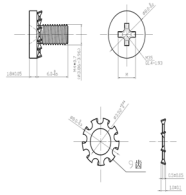
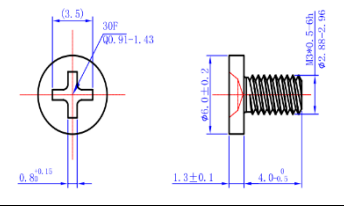
(2) Set the Burn in on last to try again.

5. FRU (Field Replaceable Unit) List

This list is for reference only, please contact Acer local service center to order the correct replacement part and Availability.

Category	Picture	Description
BOARD		MAIN BOARD FOR panel TPM270WF1-FHBNY0.K 4W50A FQ DP+HDMI+AUDIO+USB+SPK-CBPT3TMC0Q7 (100GBRVD136NT1SXXY)
		POWER BOARD
		KEY BOARD
LCD		PANEL
SPEAKER		SPEAKER 2.5W 38*17*17mm BOX 100mm 4 R
CABLE		HNS LBCA 6P 2.00 6P 1.00 550 M19(MB TO PANEL L/B)

		HNS SP 4P 2.00 2P 2.0Tr 600+80 M49 2P 2.(MB TO SPK)
		HNS PBMB 4P 2.00 4P 2.00 180 M19(MB TO PB)
		HNS Key 6P 1.25 6P 1.25 650 M19(MB TO KEY)
		KEY_POWER
		KEY_FUNCTION
		MAINFRAME
		REAR_COVER
		DECO_BEZEL
		STAND
		BASE
		KEY_POWER

		KEY_FUNCTION
SCREW		SCREW D3 6
		SCREW M3 6
		SCREW M3 3
		SCREW M4 6
		SCREW M3 4

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.

DP/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.