Lifecycle Extension Guide





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SAFETY NOTICE

ANY PERSON ATTEMPTING TO SERVICE THIS CHASSIS MUST FAMILIARIZE HIMSELF WITH THE CHASSIS AND BE AWARE OF THE NECESSARY SAFETY PRECAUTIONS TO BE USED WHEN SERVICING ELECTRONIC EQUIPMENT CONTAINING HIGH VOLTAGES.

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 served person 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 radiations 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 (CMOS).

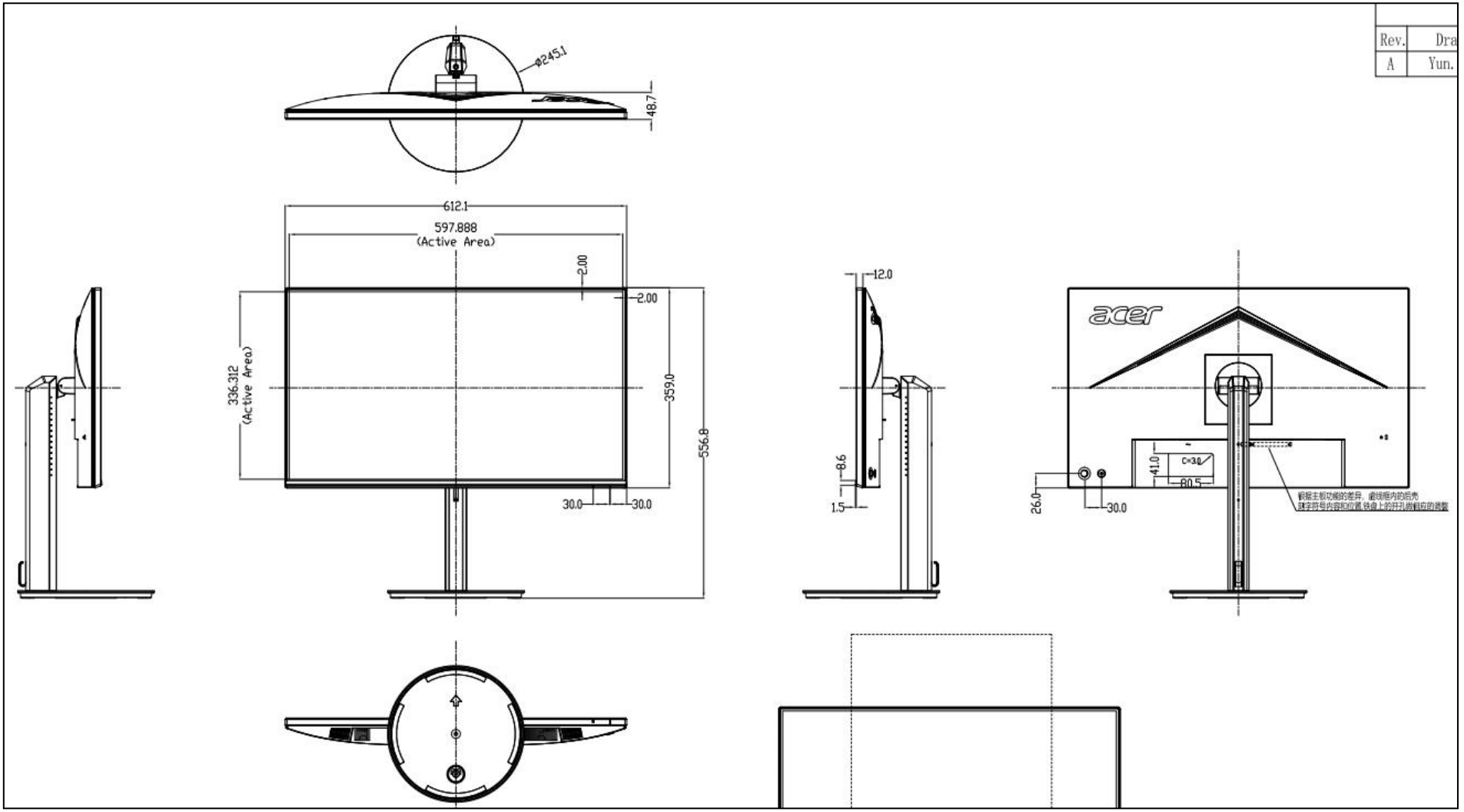
-Make certain that treatment person’s body is grounded through wristband.

-Do not leave the module in high temperature and in areas of high humidity for a long time.

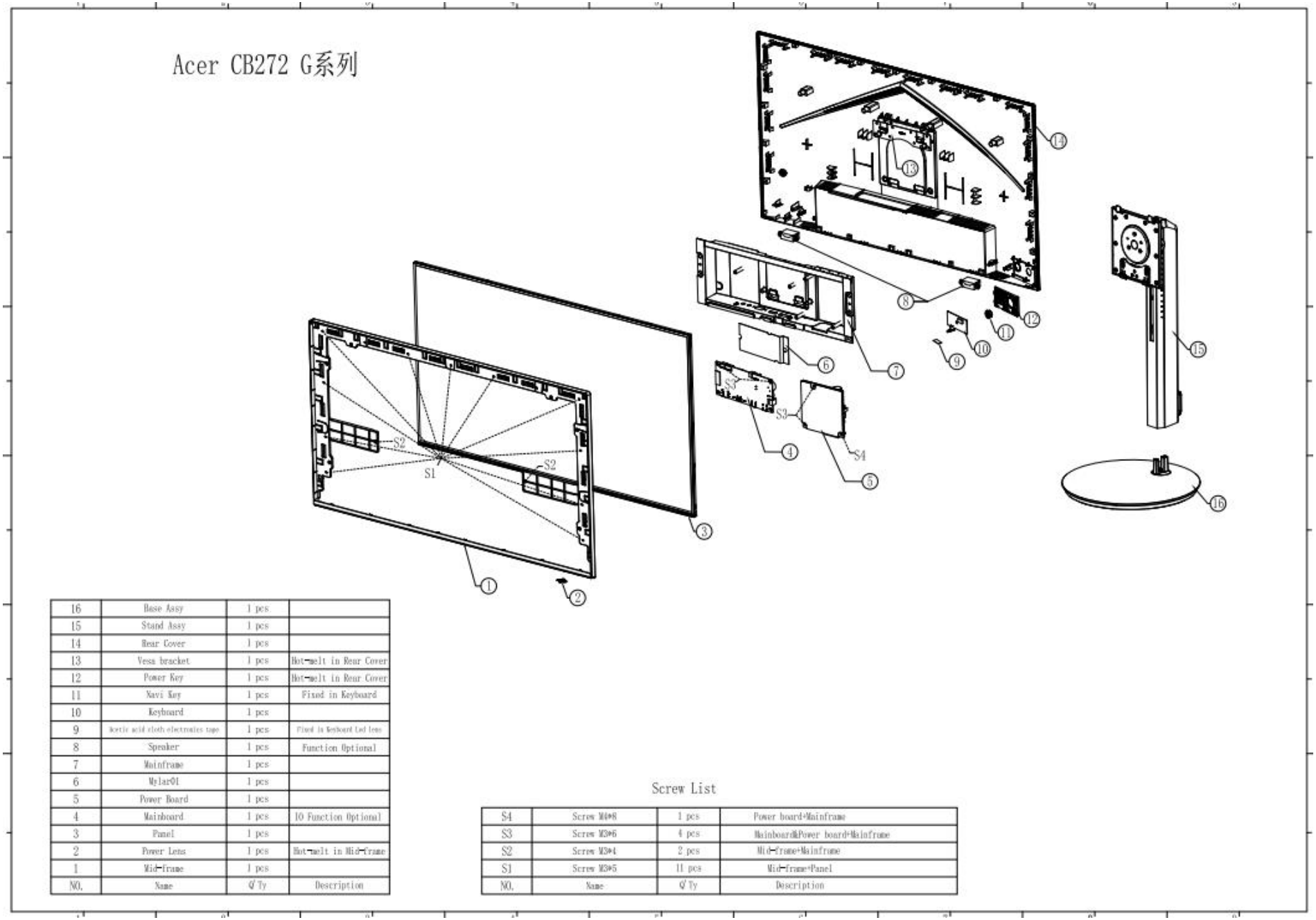
-Avoid contact with water as it may a short circuit within the module.

-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. Dimension of 6 views



2. Exploded Drawing



NO.	Name	Q'Ty	Description
16	Base Assy	1 pcs	
15	Stand Assy	1 pcs	
14	Rear Cover	1 pcs	
13	Vesa bracket	1 pcs	Hot-melt in Rear Cover
12	Power Key	1 pcs	Hot-melt in Rear Cover
11	Navi Key	1 pcs	Fixed in Keyboard
10	Keyboard	1 pcs	
9	Acetic acid cloth electronics tape	1 pcs	Fixed in Keyboard Led lens
8	Speaker	1 pcs	Function Optional
7	Mainframe	1 pcs	
6	Mylar01	1 pcs	
5	Power Board	1 pcs	
4	Mainboard	1 pcs	IO Function Optional
3	Panel	1 pcs	
2	Power Lens	1 pcs	Hot-melt in Mid-frame
1	Mid-frame	1 pcs	

Screw List

NO.	Name	Q'Ty	Description
S4	Screw M4*8	1 pcs	Power board+Mainframe
S3	Screw M3*6	4 pcs	Mainboard&Power board+Mainframe
S2	Screw M3*4	2 pcs	Mid-frame+Mainframe
S1	Screw M3*5	11 pcs	Mid-frame+Panel

3. Assembly and Disassembly SOP

3.1 Precaution

Please read the precautions as follows to prevent any damages to the LCD Monitor.

Make sure all power connection is removed. Be sure that the LCD Monitor is in power off status.

Prepare soft cloth and sponge as working platform to place LCD monitor horizontally.	
Hold LCD by the side carefully and DON'T touch or press panel directly.	

3.2 Appropriate tools

Select the appropriate tools for disassembly and re-assembly.

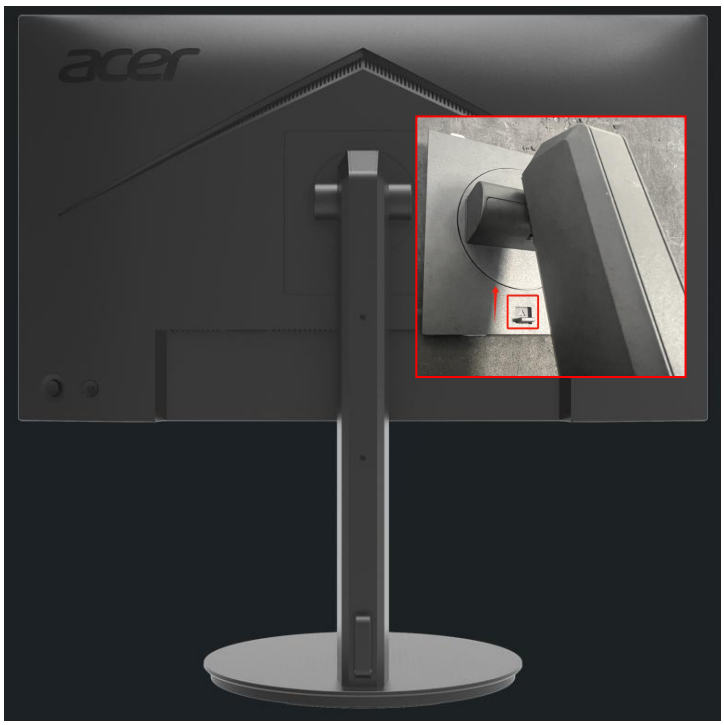
Phillips screwdriver	
spacer screwdriver	
C/D Disassembly Tool	
Gloves or soft cloth	

3.3 Disassembly of LCD and power board

1. Remove the stand assy

A.Starting from the back of the monitor, remove the stand and base.

B.Then use C/D Disassembly Tool to separate bezel and cover.









2. Remove all wire fittings, aluminum foil and tape.

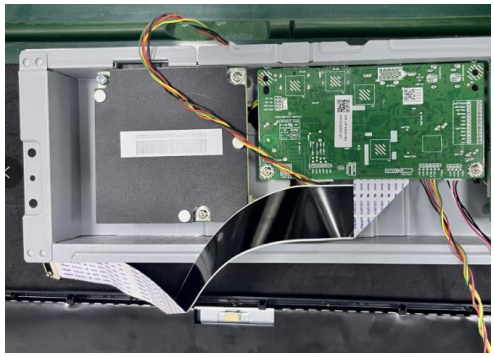


3.Remove the screws.

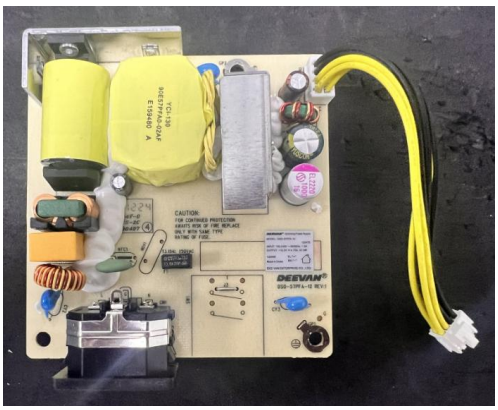




4. Remove the boards







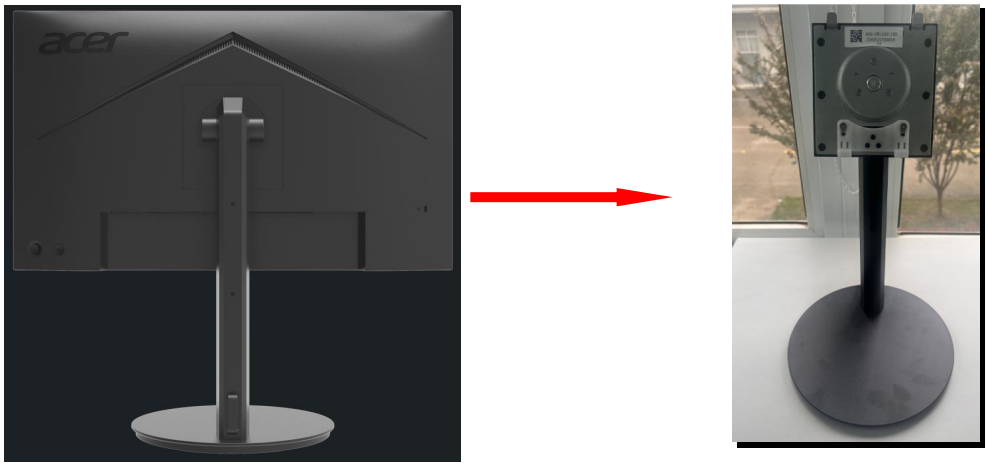
Power board



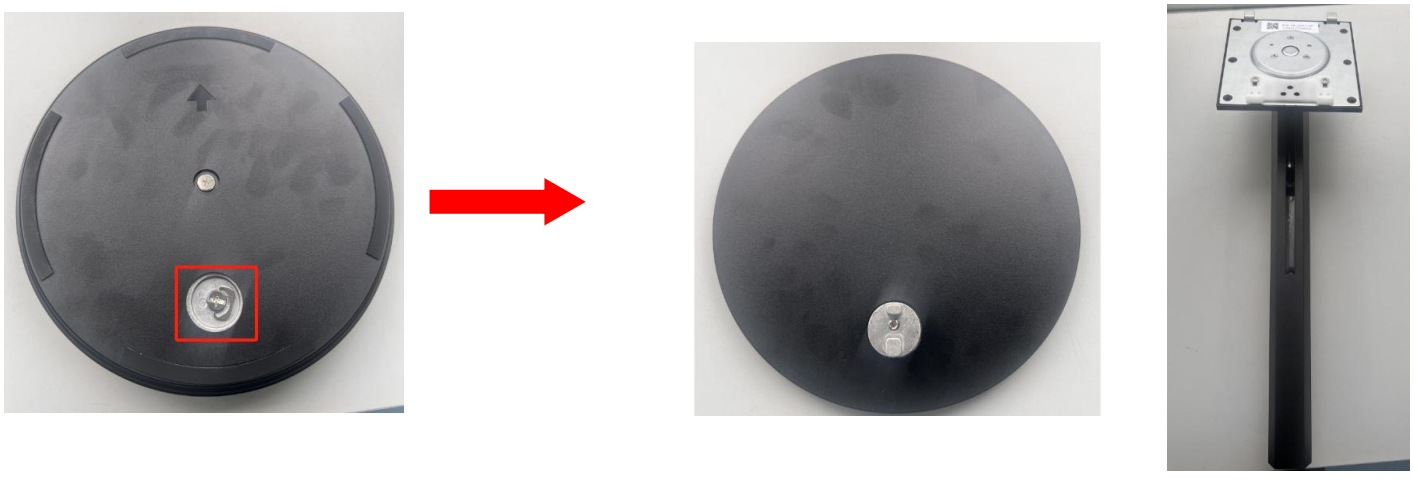
Main board

3.4 Disassembly of base

a.Press down on the clip to remove the base.

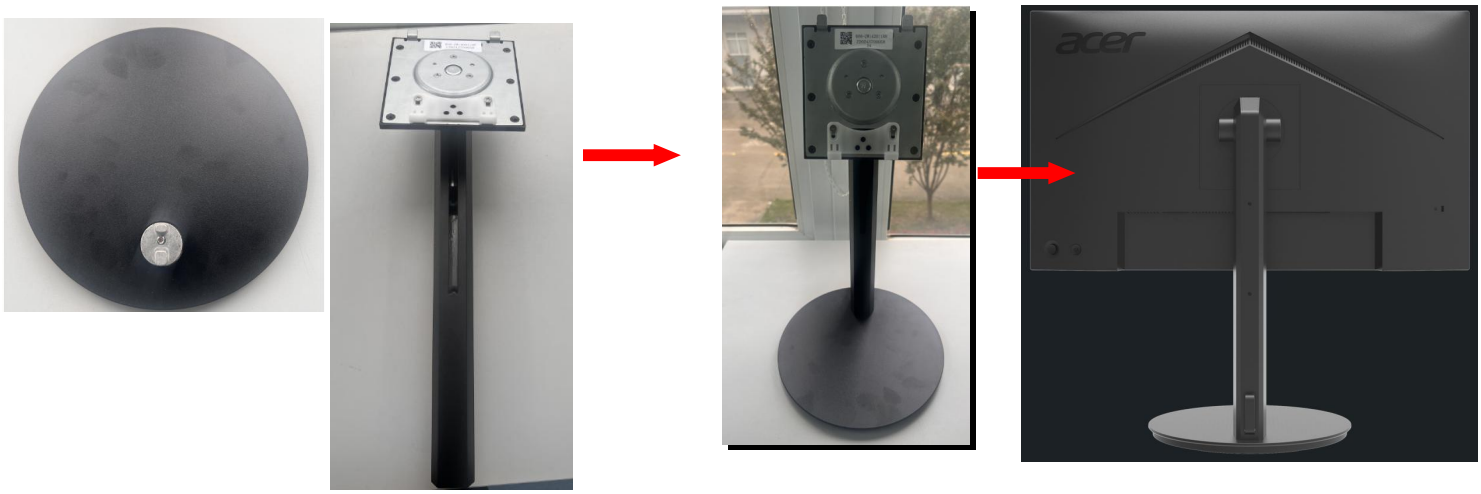


b.Remove the set screw in the middle of the base and separate the base and stand.



3.5 Assembly of base

Install the stand on the base and turn to the left until the limit block is stuck.



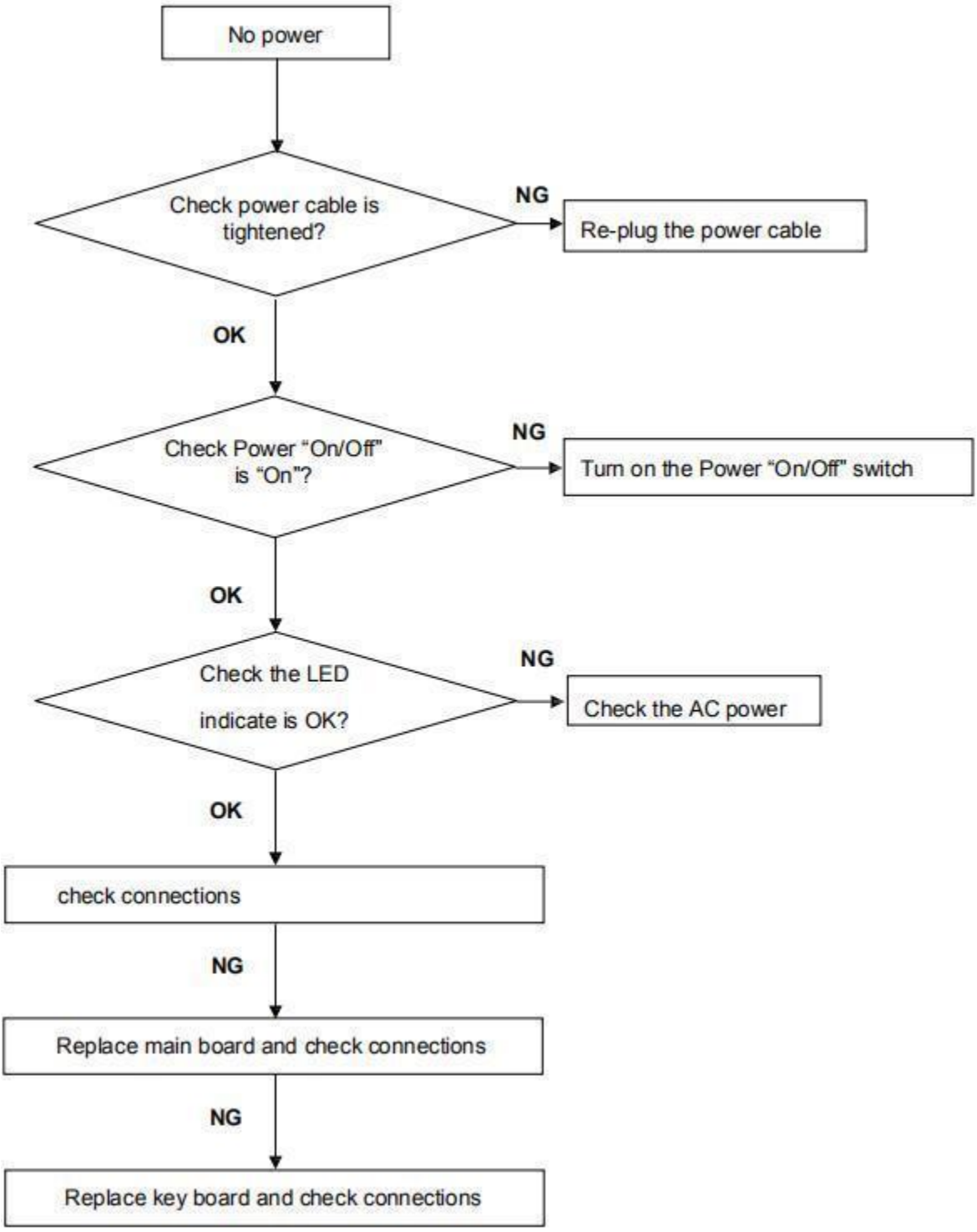
3.6 AC cable



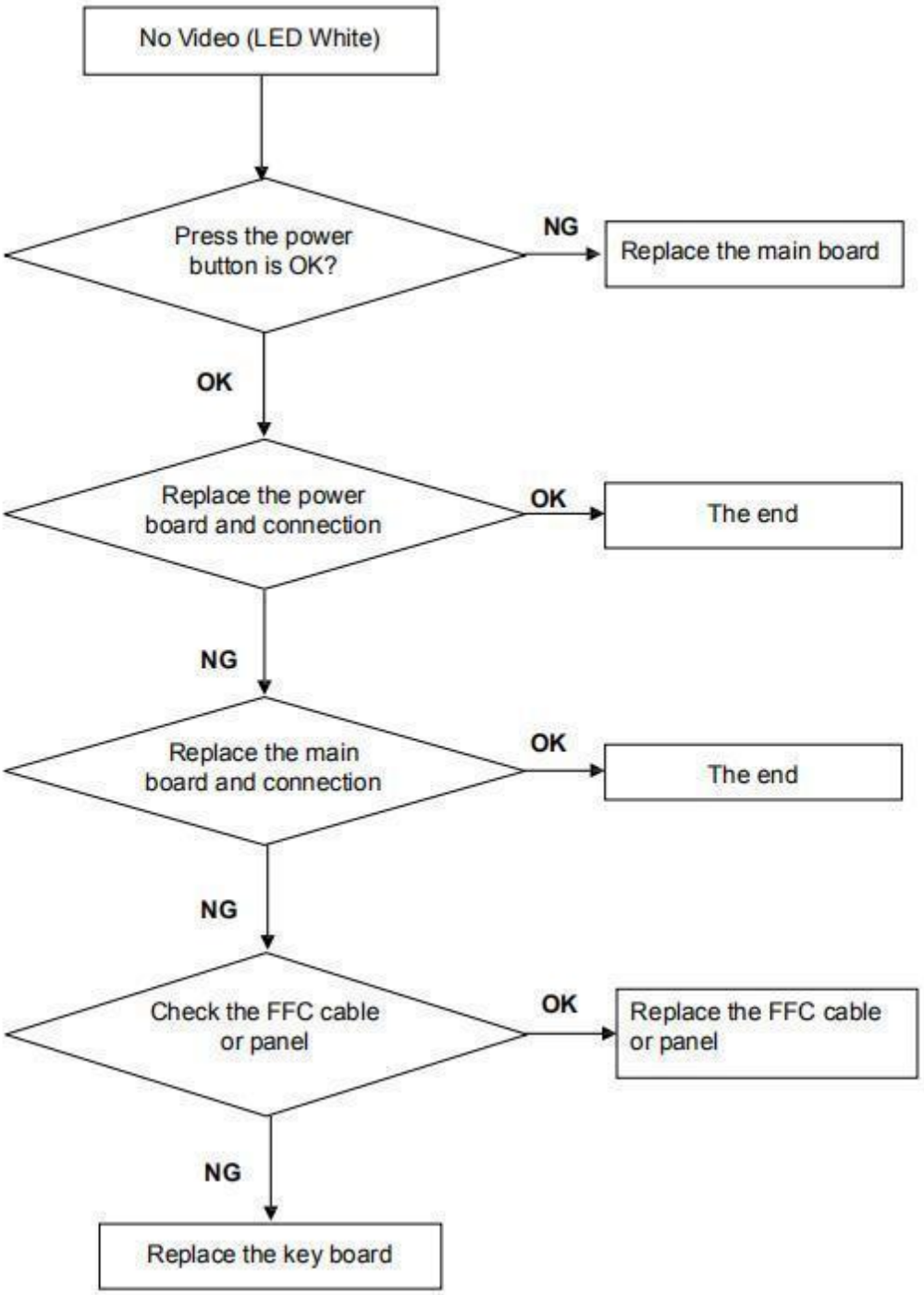
Note：Customer can perform the steps to replace the LCD、boards、 AC cable and other parts.

4. Trouble Shooting

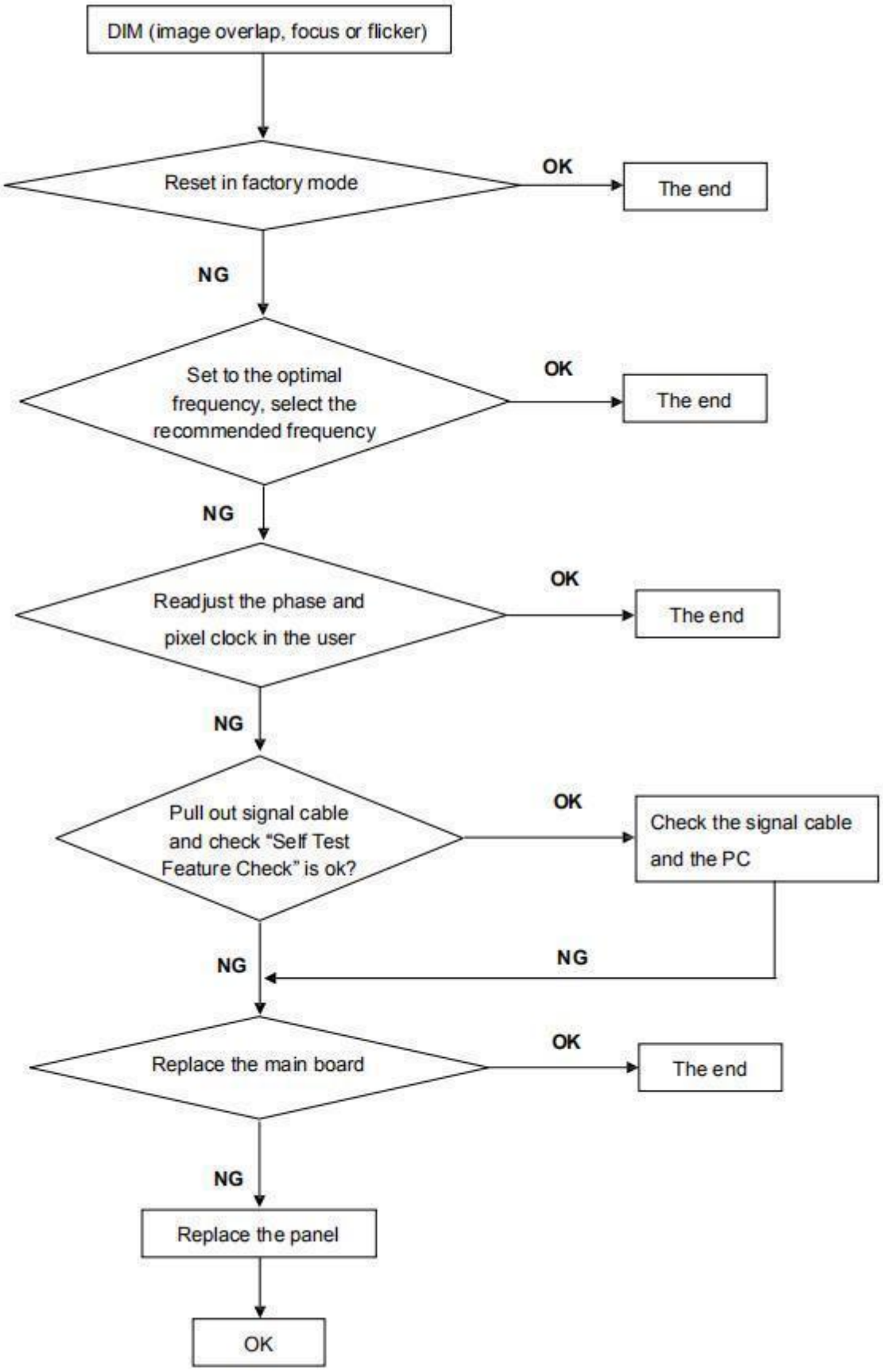
4.1 No Power



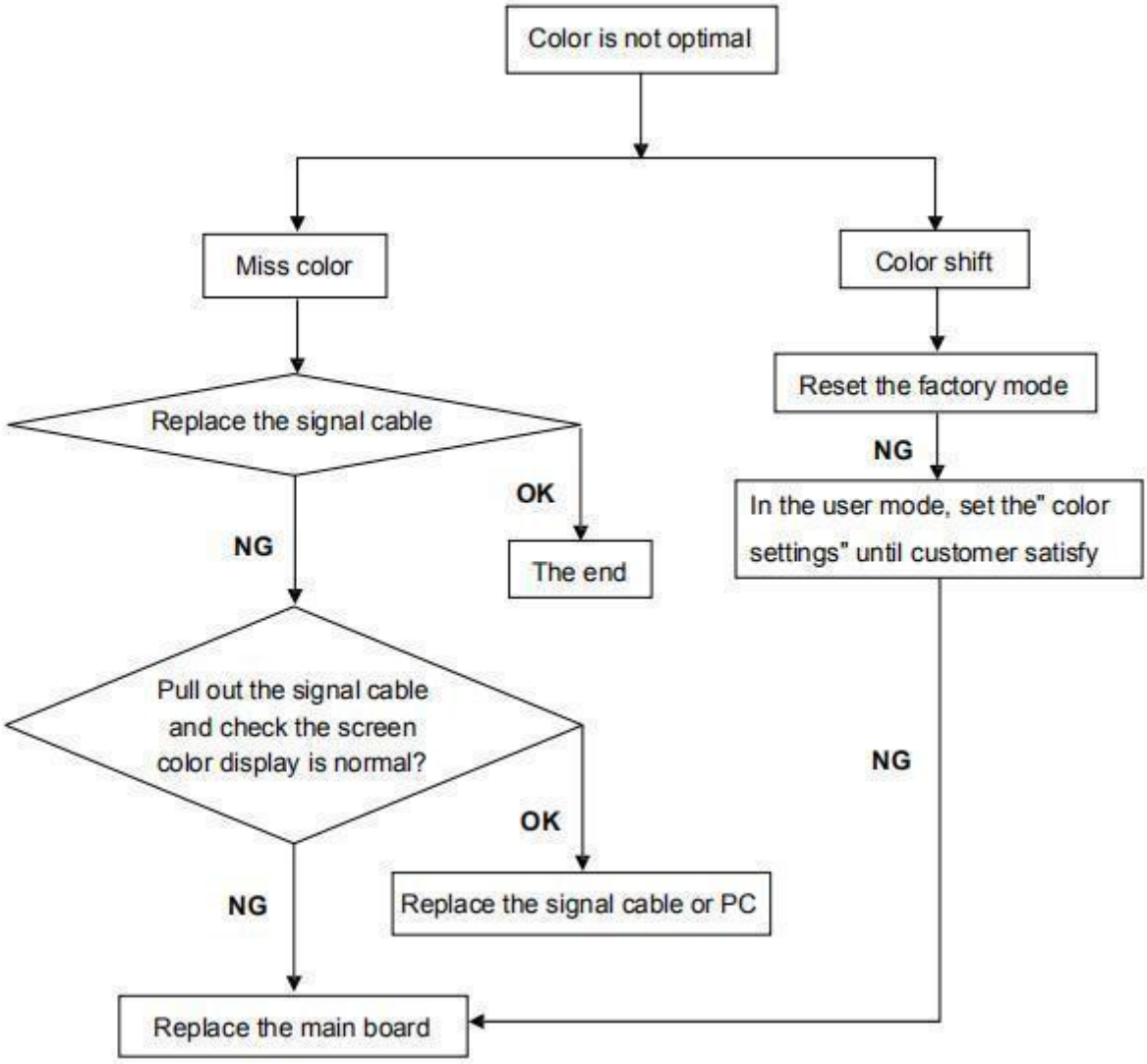
4.2 No Video (LED White)



4.3 DIM


DIM (image overlap, focus or flicker)
Reset in factory mode
OK
The end
NG
Set to the optimal frequency, select the recommended frequency
OK
The end
NG
Readjust the phase and pixel clock in the user
OK
The end
NG
Pull out signal cable and check "Self Test Feature Check" is ok?
OK
Check the signal cable and the PC
NG
NG
Replace the main board
OK
The end
NG
Replace the panel
OK

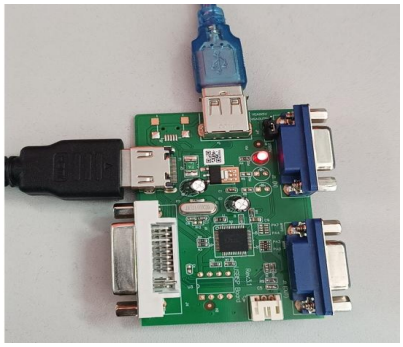
4.4 Color is not optimal



5. Firmware and DDC Instruction
Note: Take model CB272 G for example.

5.1 F/W Upgrade SOP for MSTAR

5.1.1 Materials



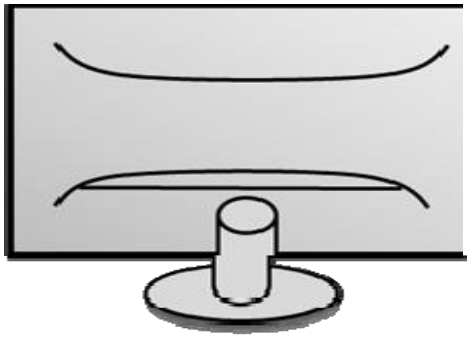
ISP JIG(P/N：109-01010101R1)



HDMI cable



P C



Monitor

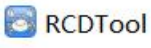


ISP TOOL

5.1.2 Connection

5.1.3 Steps：

1.Copy the program file/FW to be burned to the computer.
The tool:

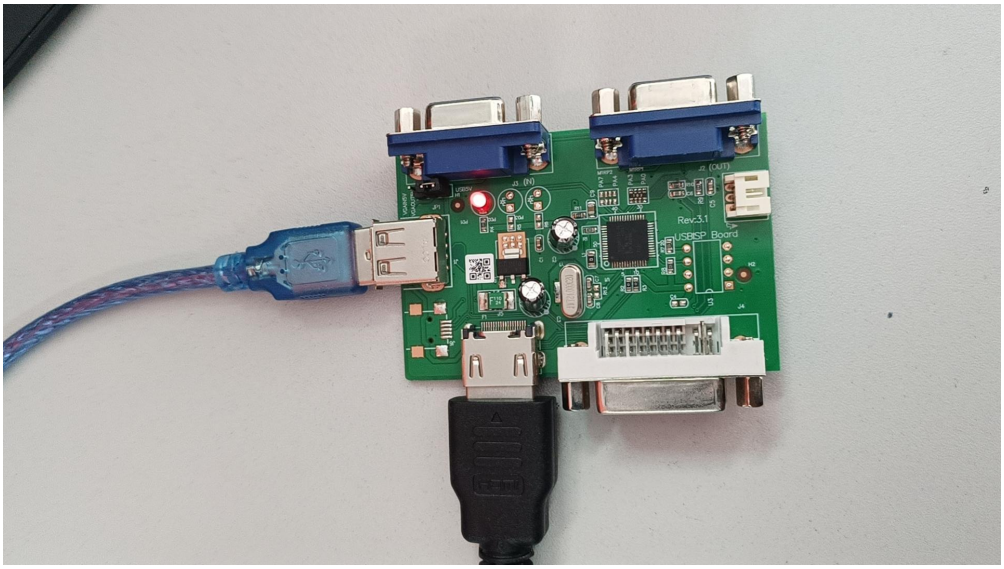


The program file/FW to be burned：



2.Connect the HDMI data output interface of the burning tool to the display signal interface or the driver board interface and turn on the power.

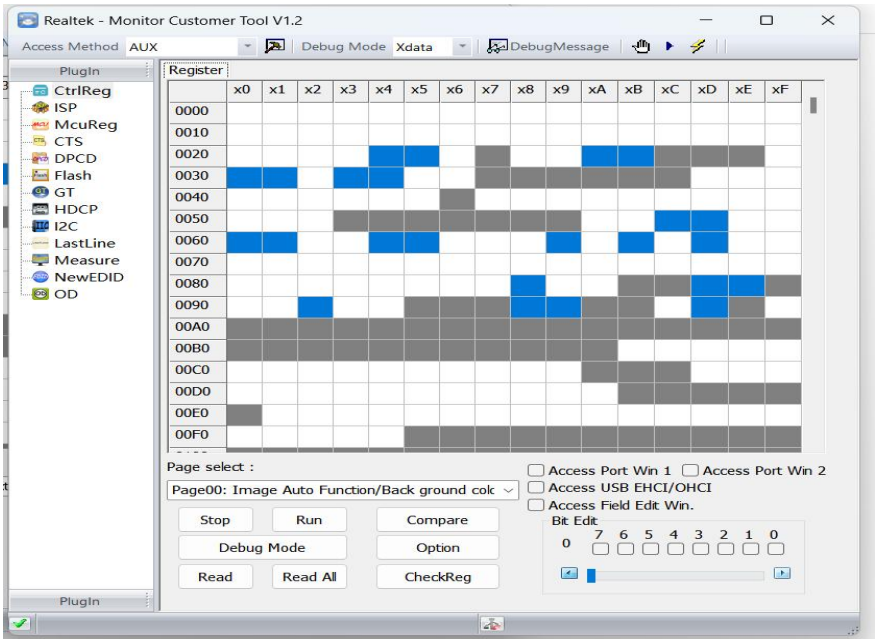
3.Connect one end of the HDMI cable of the LCD to the HDMI port of the burning tool.



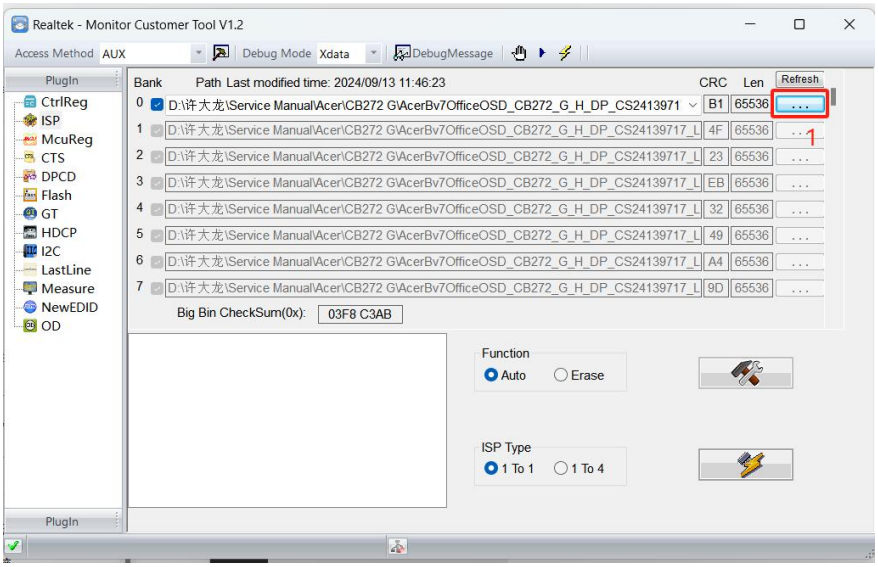
4.Connect the USB interface of the burner to the USB interface of the computer mainframe or the USB interface of the notebook for FW burning and upgrading



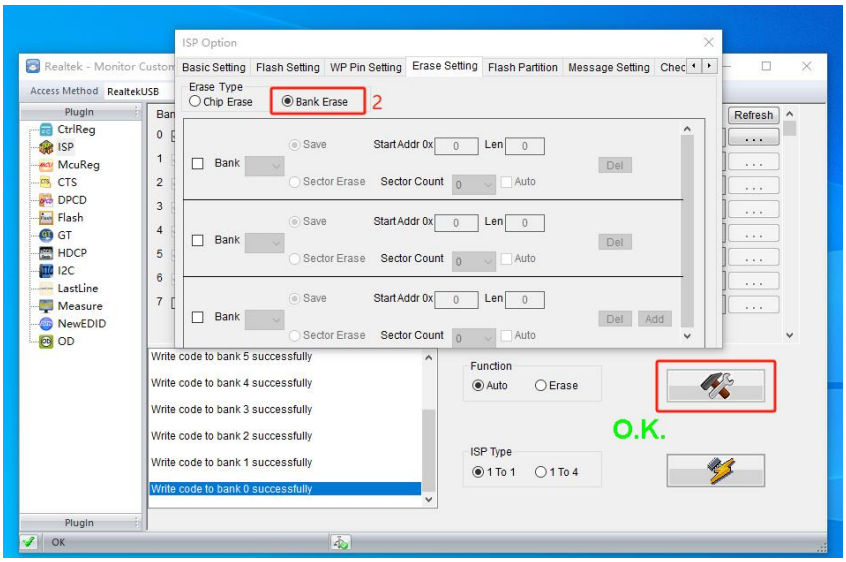
5.Open the burning software "RCD_tool" on the computer mainframe or notebook, and double-click it to display the interface below



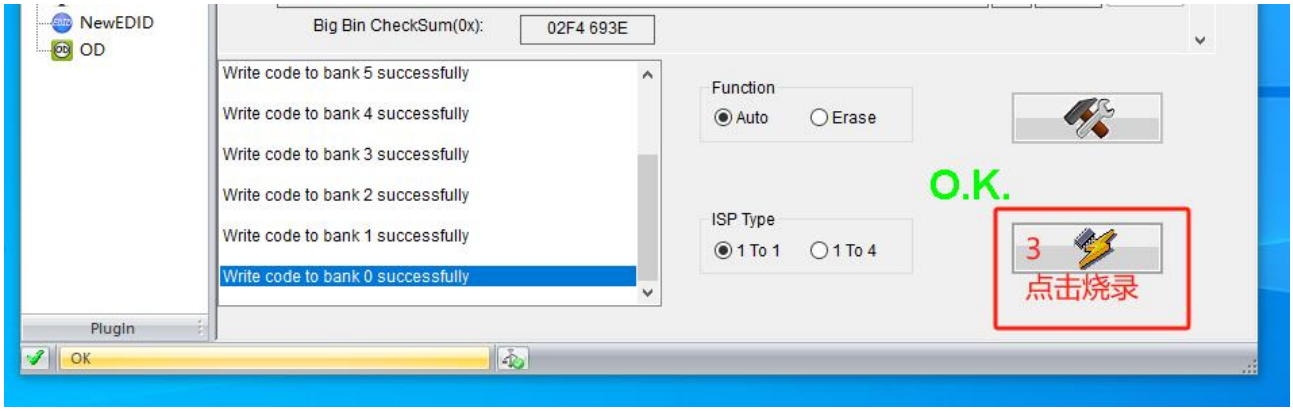
6.Click "ISP" ,Click "..." and then select the corresponding FW.



7.Click “ ” and click “Bank Erase”.



8.Click“ ” to burn.

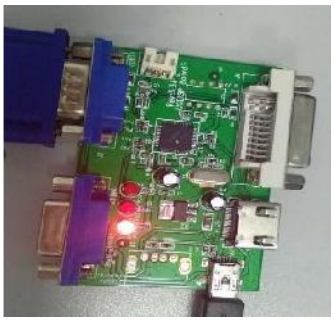


5.2 EDID writing SOP by HDMI single port

5.2.1 Materials



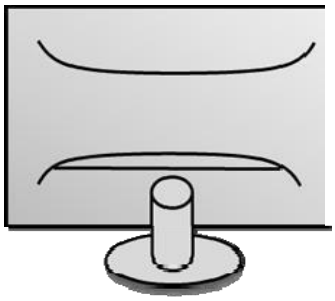
HDMI cable



ISP TOOL



PC



Monitor



DDC tool

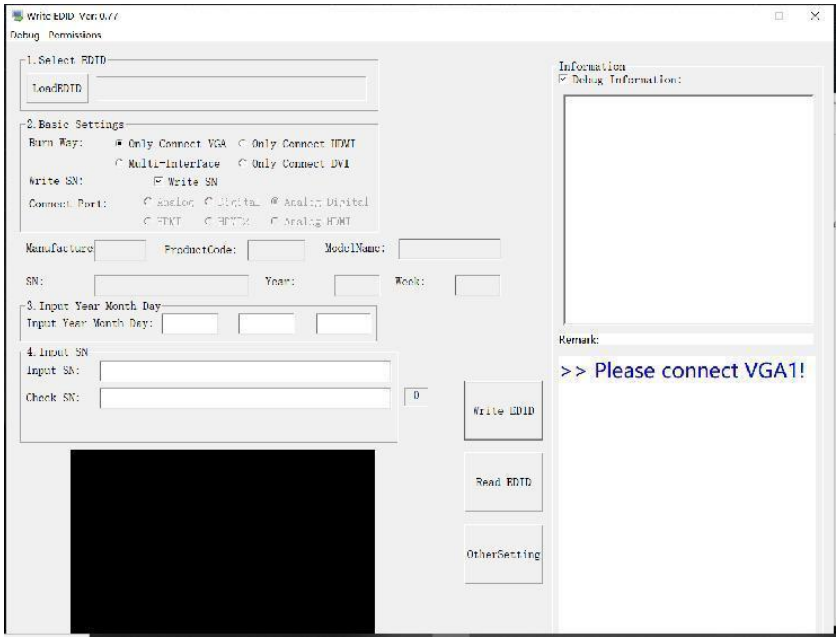
5.2.2 Connection(DC on the monitor)

5.2.3 Prepare the EDID written.

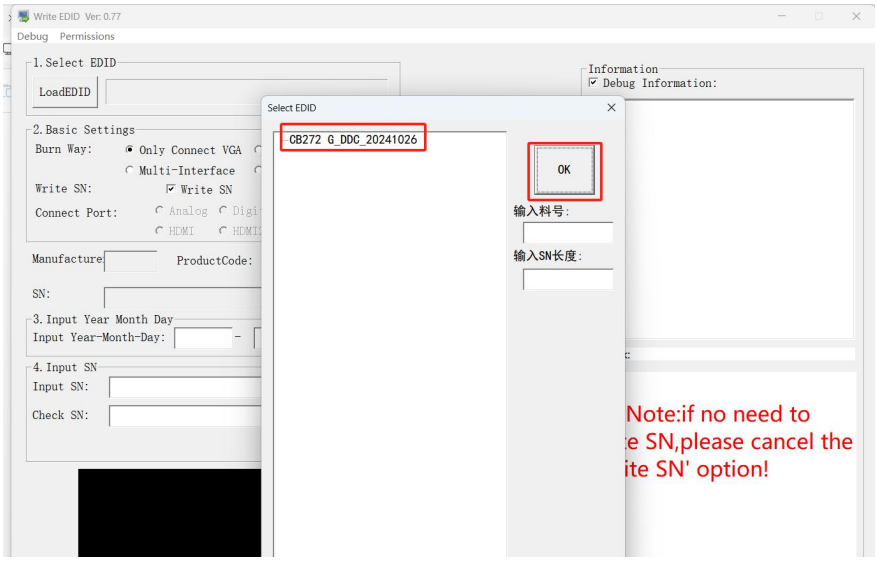
5.2.4 Run the DDC tool

1. Double-click the icon 

to open the tool.

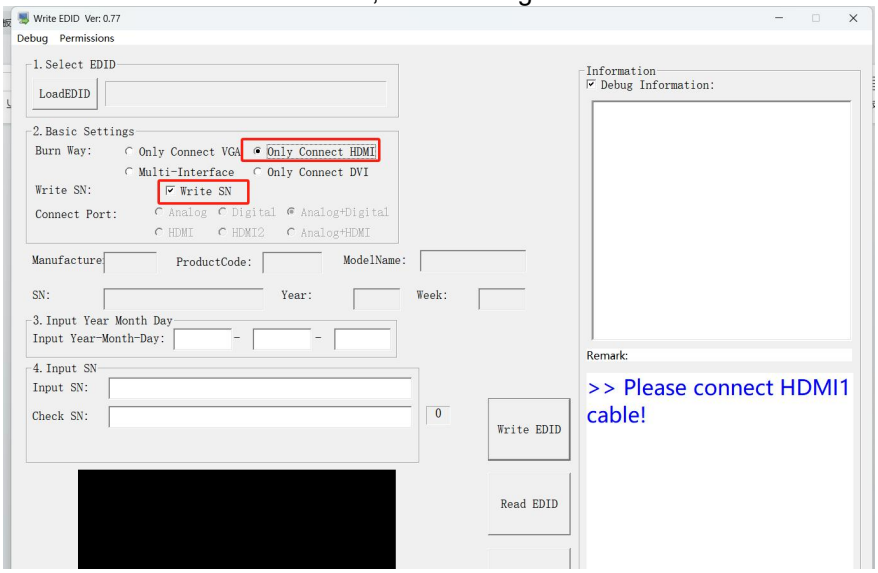


2. Select the EDID folder.

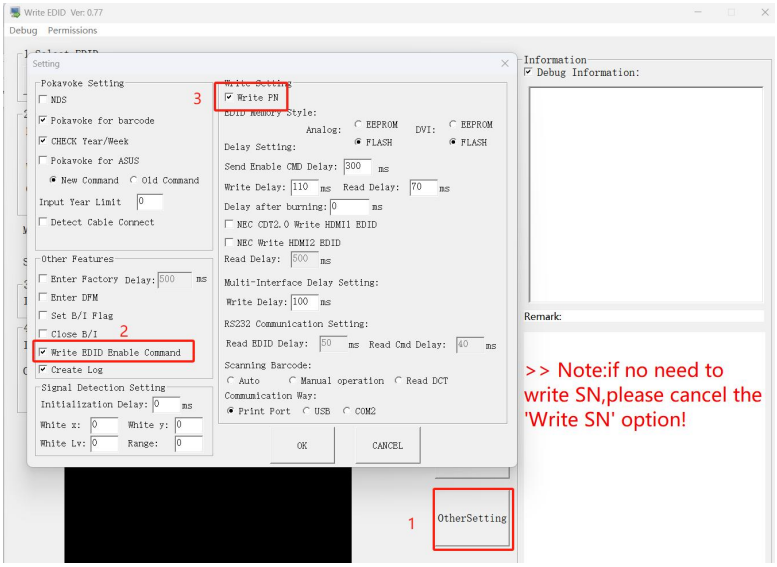


3. Load EDID successful.

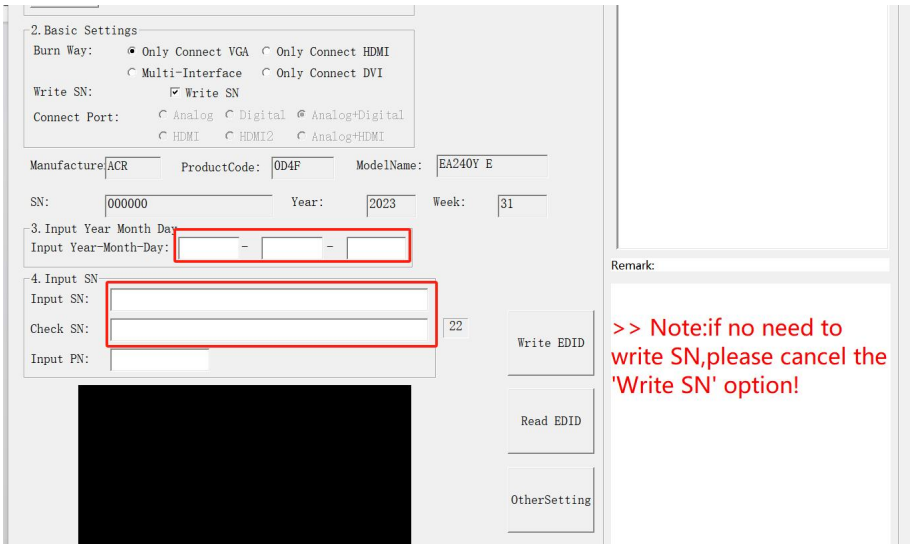
4. Tick the “Only connect HDMI” and “Write SN” , then “Debug Information”.



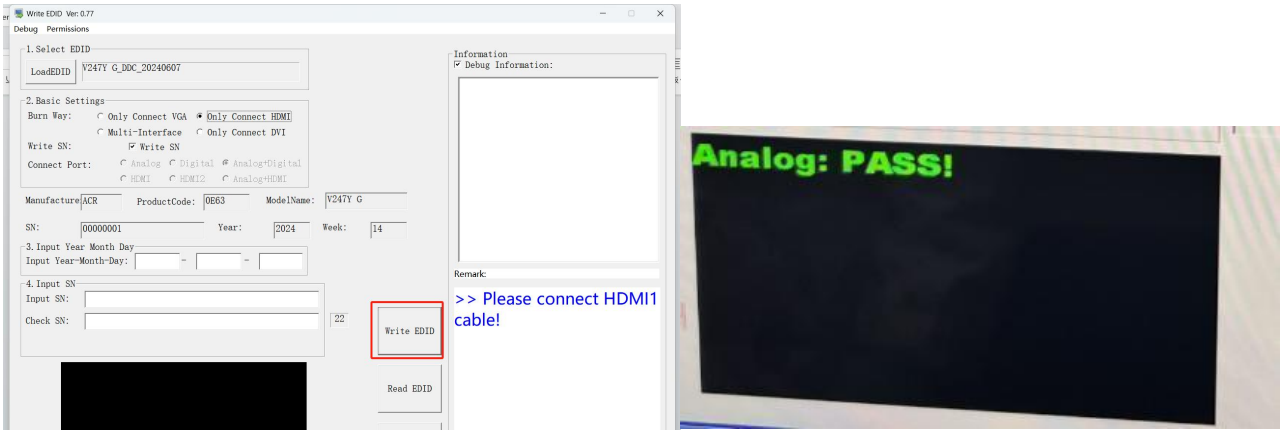
5. Click the “other setting”，tick “Write EDID Enable Command ”,click ensure.Then type in the 8 digit S/N and date.



6.Enter the year、month and day,and then enter SN.



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



5.2.5 Troubleshooting

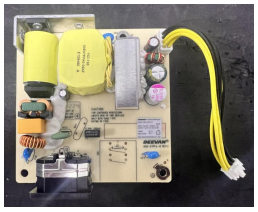
1. Can’t write!

(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 disable write protection then write EDID one by one.

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

6. Bom List

NO	Pic	Description
1		主板，V277 G,H+DP+SPK+Audio out，匹配SG2701B08-1 H.2屏，ME.RT2525.EB351主板，无卤PCB，RTD2525BR-ES-CG-SM,FHD 120Hz,不带HUB，一键开机功能，SHYK
2		电源板,V277 E6,36W,帝闻DSO-36PFJ-12型号，电源线长改为110mm,100-240V~50/60Hz 1A,无卤材质,HZDW
3		液晶模组，2024CEL2级，HK270B3PS-FWF02，V277 E6/CSOT SG2701B08-1/2扩1棱棱中置/低蓝光/6P1.0mm端子/非保税