27" LCD Monitor ACER CM3271K

Service Service



Acer Monitor CM3271K
LIFECYCLE EXTENSION
GUIDE

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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.

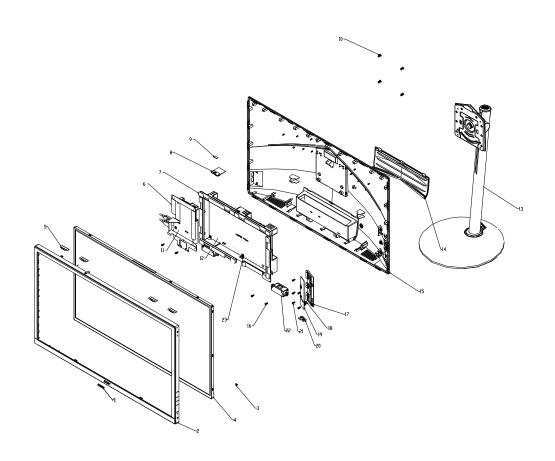
CAUTION -The use of optical instruments with this product will increase eye hazard.

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.
4	750GBU270Q270JN000	LCD M270QAN02.700 SZ AUO	#N/A
8	LEPCFQL7	LED BOARD	55.TFCM2.003
11	USBLQK1	USB BOARD	55.TBRM2.006
12	CBPCJTPC0Q1	MAIN BOARD	#N/A
19	KEPCLQC3	KEY BOARD	0
20	LEPCFQL2	LED BOARD	55.TBRM2.004
	395GLM5151T581COAX	COAXIAL CABLE 51PIN-51PIN 360MM(MB TO PANEL)	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

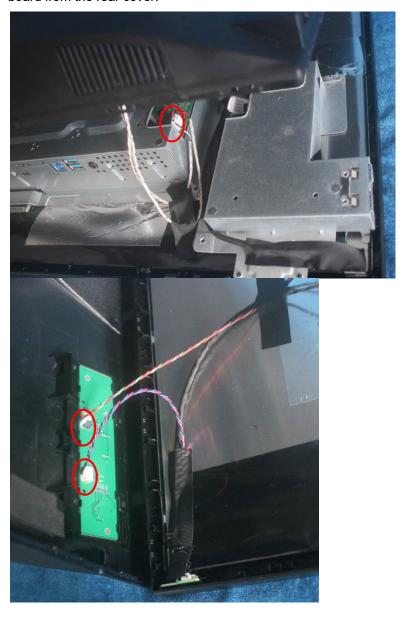
2.1 Disassembly Procedures:
S1 Remove the screws to remove the STAND-BASE ASS'Y.



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



Disconnect the cables (main board to speakers, Led board to key board) and tear up all tapes. Take off the key board from the rear cover.

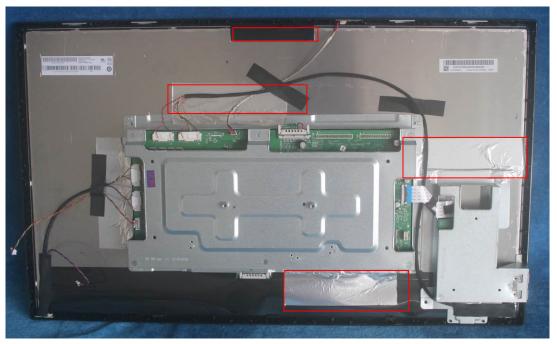


Take off the speakers, unscrew the screws to remove the key board.

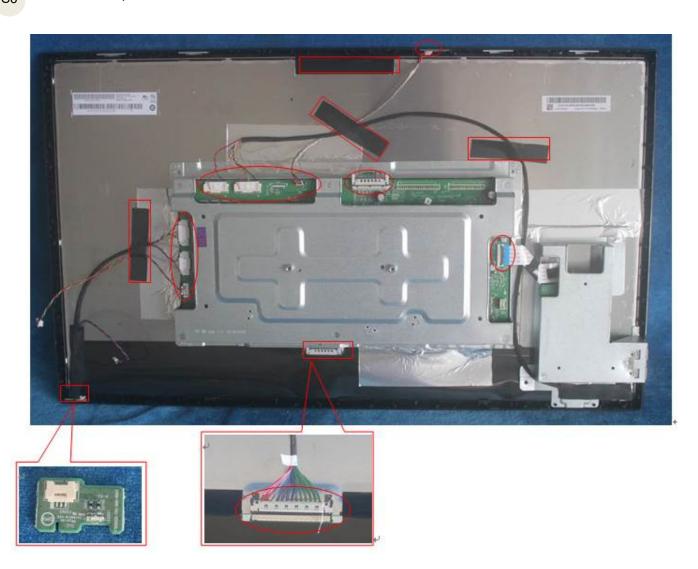




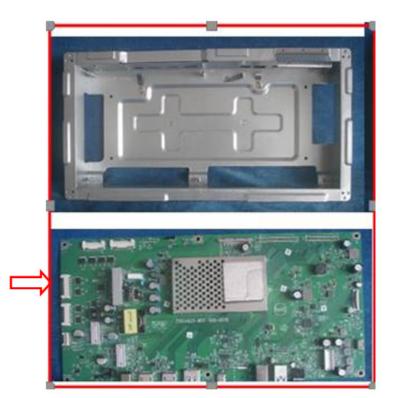
S5 Remove the tapes.



S6 Take off the tapes and disconnect the connectors.

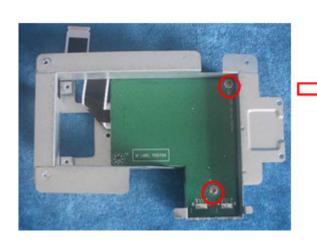








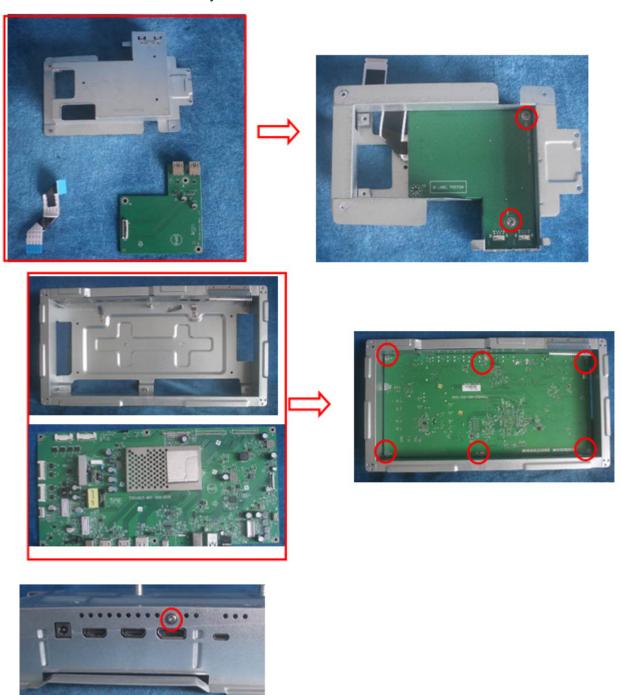




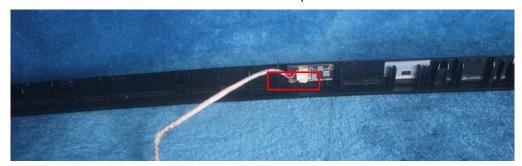


2.2 Assembly Procedures:

Prepare a main board, an USB board and two mainframes. Use screwdriver to tighten the screws till the boards with shields are firmly attached.



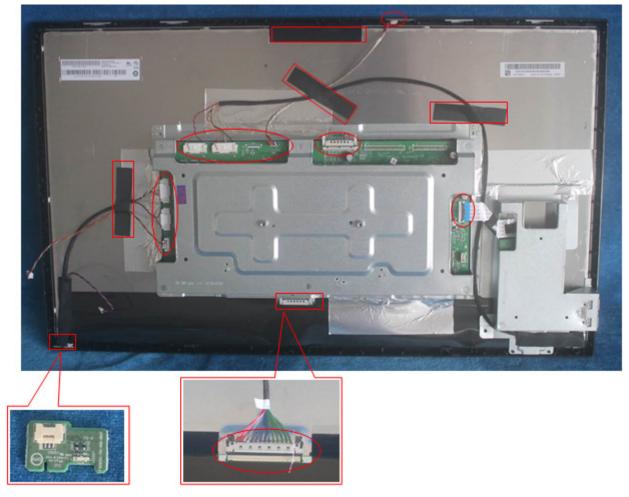
S2 semble the IR board into the Bezel. And then assemble the panel unit.







Assemble the main board and the USB board. Connect the connectors as below. Assemble the LED board. Paste the tapes.



Put the Mylar slice(Note: refer to the last page)marked the information of mainframe position on the panel.

Mylar slice edge must be against the bezel. Put the mainframe along the mark. Holding the mainframe while you are removing the Mylar.

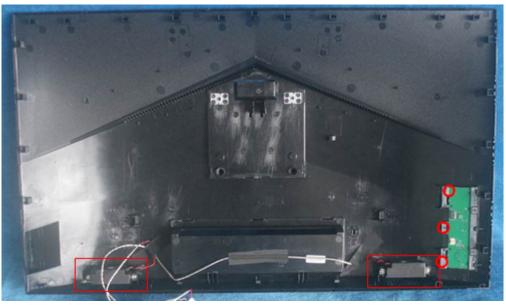


S3

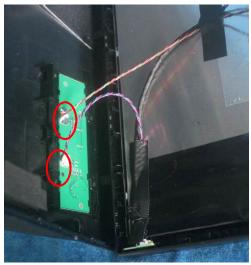
S5 Assemble the key board and the speakers.







S6 Connect the pins and assemble it.





S7 Assemble the rear cover.

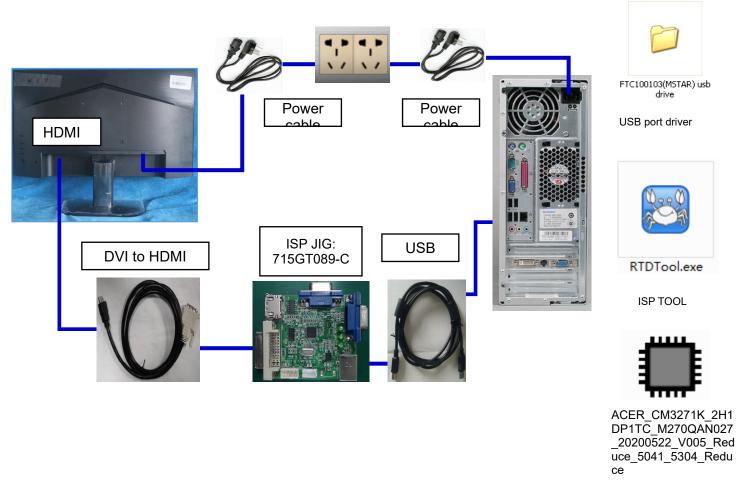






3. Firmware Upgrade Process

1. Materials list and connection



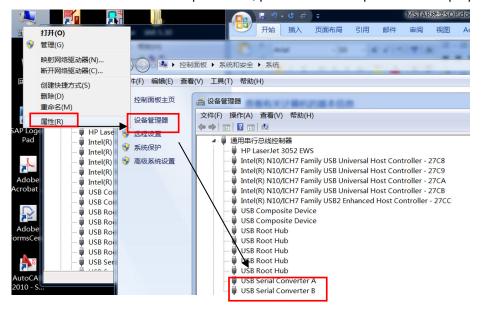
FW

2.Install USB driver.

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"



3. Install RTD tool.

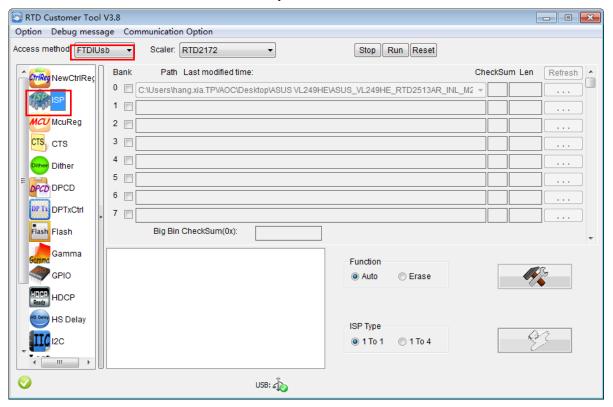
Note: If the F/W Upgrade use the same ISP tool as the EDID writing, you must close the EDID writing tool before running the F/W Upgrade tool.



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

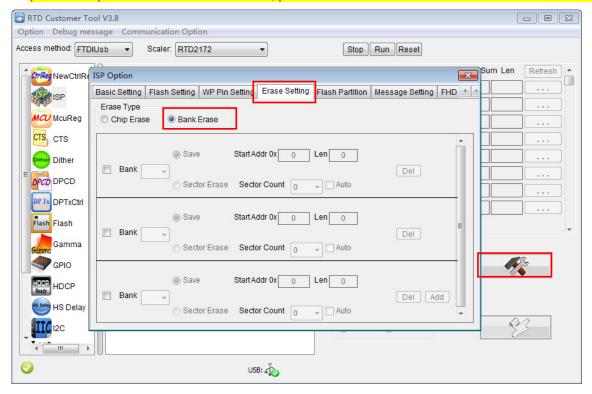
Note: Must to install driver firstly

3.2. Choose the FTDIUSB communication way.



3.3 Click "ISP" and "ISP Option" to set as below.

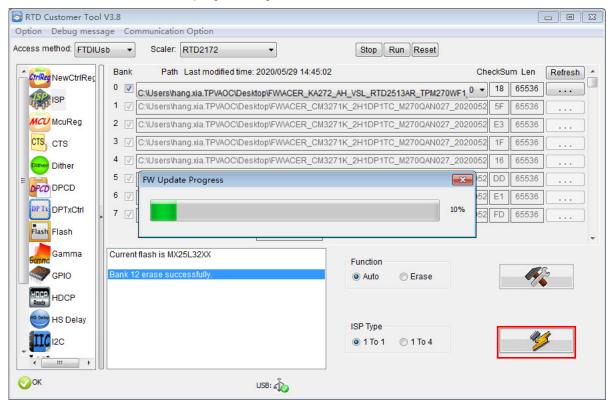
(In order to prevent HDCP KEY data loss, please must load the file name contain the "Reduce" of the firmware)



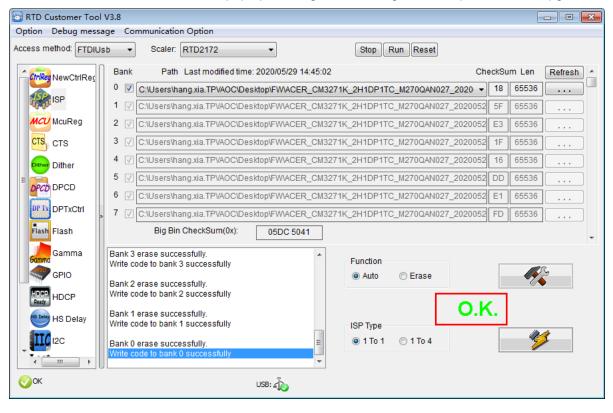
3.4 Close the "ISP Option" window and click the "BigBin" to load the correct F/W.



3.5 Click to start programming.



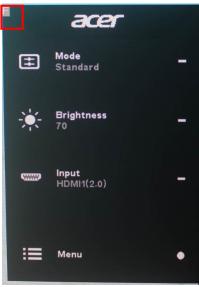
3.6 After about 20 minutes, there will pop up message as below figure which promotes the upgrade successful.

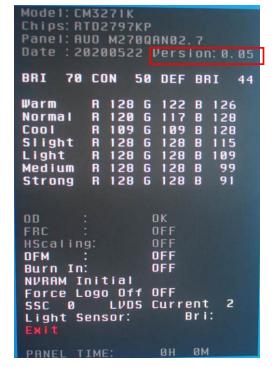


4. Check the FW version after upgrade.

- 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 hot key button and DC on, when the screen lights, release the key and press the left botton again to open the menu with "F" and select "F" to open factory menu.



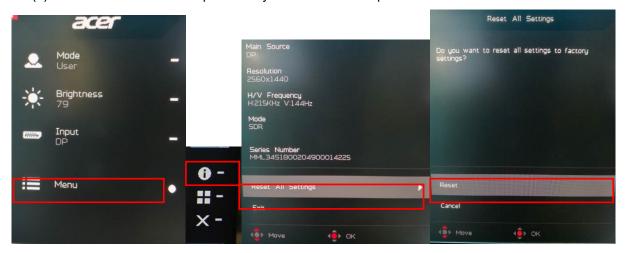




Check this F/W version.

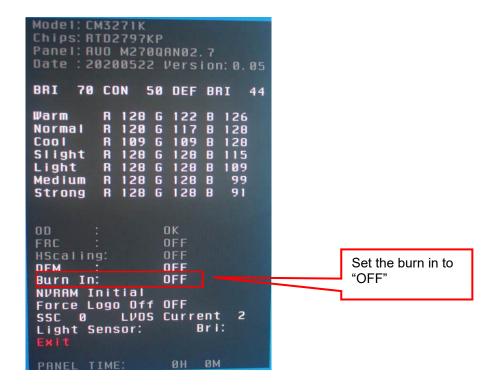
4.2. Do factory reset in user menu.

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



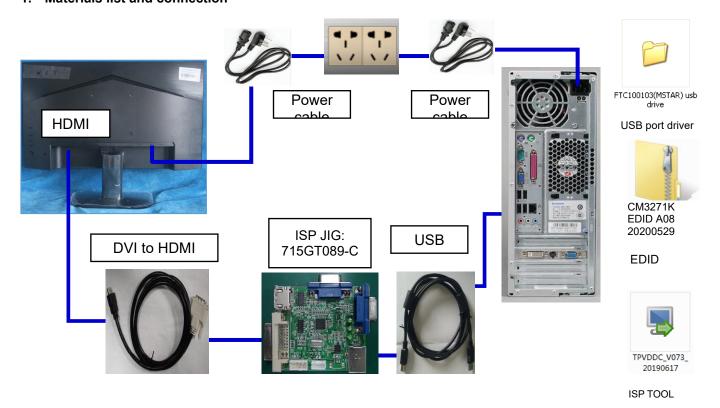
(2)Factory reset will turn off "Burn in" mode which screen color switches among red, green, blue and black.

4.3 How to close the burn in mode:



4. Writing EDID Process

1. Materials list and connection



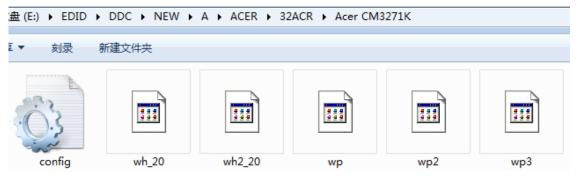
- 2. Install USB driver.
- 3. Prepare the EDID written.
- 3.1. Change the EDID files name as below rule.

HDMI_2.0 EDID — ₩H_2.0.dat HDMI2_2.0 EDID WH2_2.0.dat

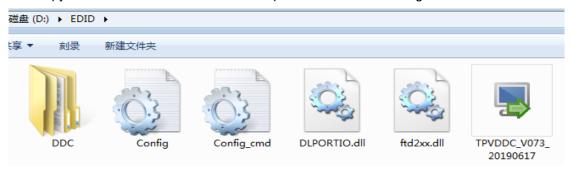
DP EDID — WP.dat DP2 EDID — WP2.dat

DP3 EDID — WP3.dat

3.2. Copy these files to one folder named as Acer CM3271K which must contains "config.ini" file.



3.3. Copy Acer CM3271K to DDC folder and put DDC and ISP tool together.



3.4 Setting the Config as below.



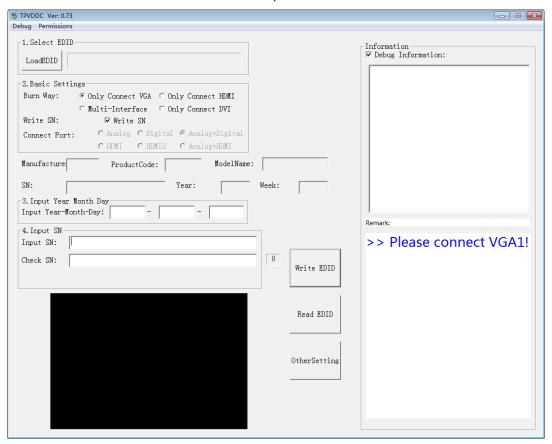
4. Run the ISP tool

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.

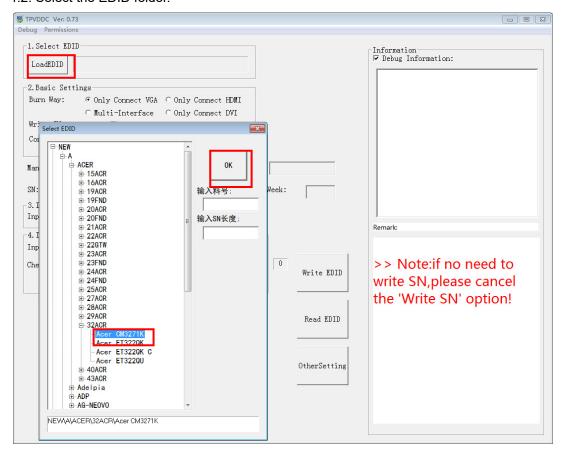


4.1. Double-click the icon

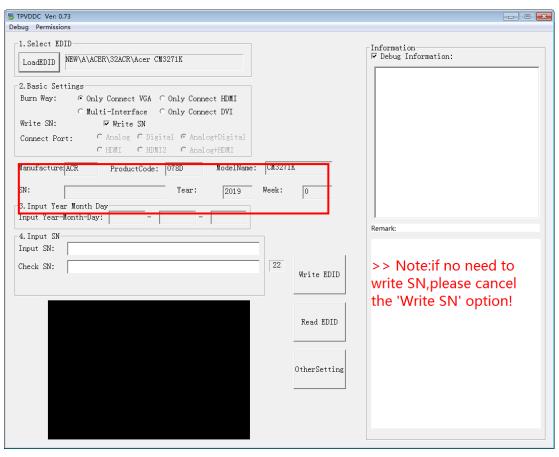
to open the tool.



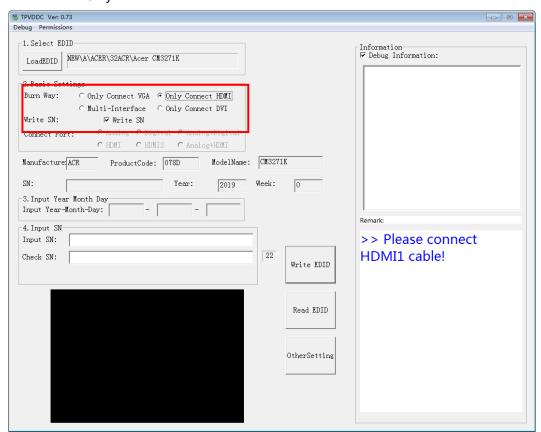
4.2. Select the EDID folder.



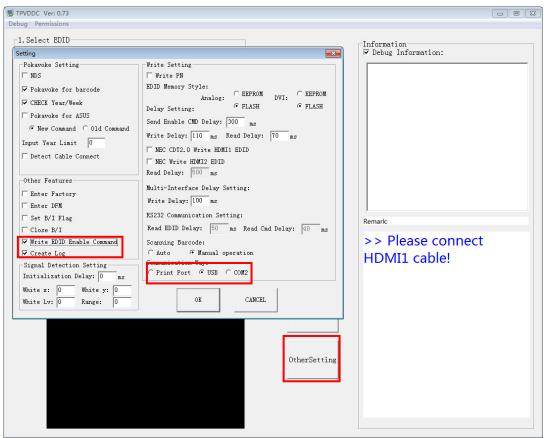
4.3. Load EDID successful.



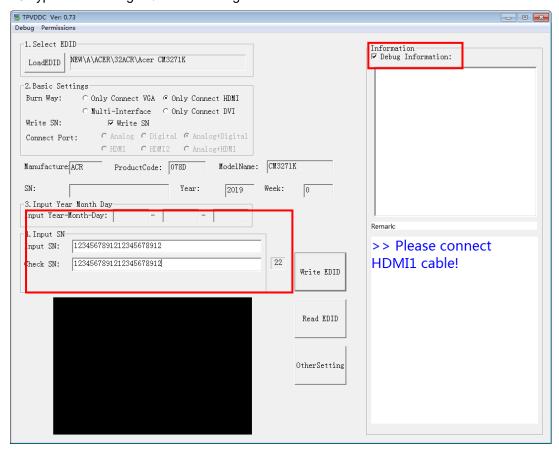
4.4 Tick the "Only connect HDMI" and "Write SN".



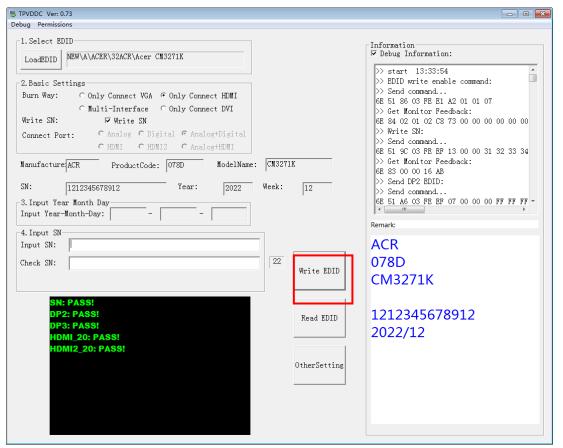
4.5 Set the OtherSetting as below.



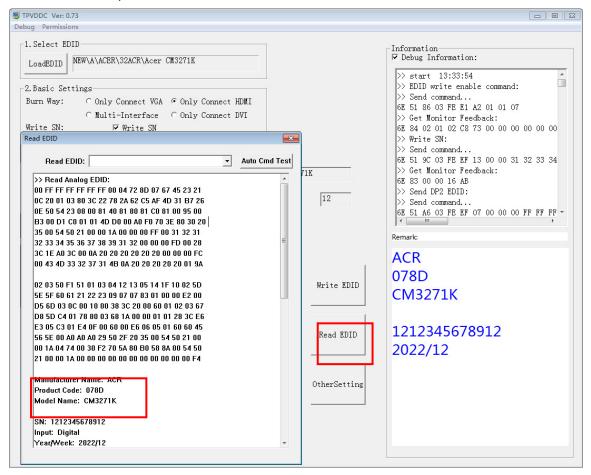
4.6 Type in the 22 digit S/N and "Debug Information".



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
- 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)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 CM3271K 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.
	MAIN BOARD	756GQJCB0BA181000 Q	NA
	ADAPTER	380GLA19565DE307BM	NA
	LED BOARD	LEPCFQL2	55.TBRM2.004
	LED BOARD	LEPCFQL7	55.TFCM2.003
	USB BOARD	USBLQK1	55.TBRM2.006
Tour an angular	KEY BOARD	KEPCLQC3	NA

PANEL	750GBU270Q270JN000	NA
16 OHM 5W 55 *22mm 50mm BOX	378G0050628YAD	23.TFCM2.001
USB CABLE 1800MM	389G0175M02ALG	50.T28M2.003
USB TYPE C CABLE 1800MM	389G1758HAAFCC015 E	50.TCMM2.008
HDMI CABLE 1800MM	389G1848GAAFHH2000	50.TDFM2.001
DP CABLE 1800	389G1878GAA50000AL	NA
COAXIAL CABLE 51PIN-51PIN 360MM(MB TO PANEL)	395GLM5151T581COA X	NA

FFC CABLE 30P- 30P 150mm(MB TO USB)	395G176M0305570000	NA
HARNESS 4P-4P 220MM(MB TO LEPCFQL7)	395GD12504GM002000	NA
HARNESS 3P-3P 200MM(KEY TO LEPCFQL2)	395GH12503WM037000	NA
HARNESS 10P+10P-6P 600/600MM(MB TO LED)	395GH20010AM019000	NA
HARNESS 10P+10P-6P 550/550MM(MB TO LED)	395GH20010WM020000	NA
HARNESS 6P-6P 200MM(MB TO PANEL)	395GK20006WM032000	NA
HARNESS 4P- 2P+2P 500/200MM(MB TO SPK)	395GS20004WM084000	NA

AC POWER CORD 1800 for UK	089G610A18N-IS	NA
FUNCTION KEY BUTTON	A33G2194AEM01S0200	60.TBRM2.004
KEY	Q33G1516AEM01S0100	NA
REAR_COVER	A34G4499AEM0AS0230	NA
IO COVER	A34G4502AEM01S0100	60.TBRM2.007
BEZEL ASSY	705GQICS034595	NA
REFLECTOR	Q35G018500000000DA	60.TBRM2.008

HOOD ASSY	Q37G080740110100FH	60.TFCM2.003
STAND BASE ASSY	Q37G110610110100ZA	60.THBM2.002
MAINFRAME	Q15G427820110100YX	NA
WALL MOUNTING	Q15G222810120100YX	33.TBRM2.005
BKT_MAGNET_BT M	Q15G313410110100ZA	33.TBRM2.001
BKT_USB	Q15G352320110100YM	NA

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/DP Mode (Optional)

Problem	LED status	Remedy
No picture visible	Amber	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.
	Blinking 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.
		OSD Locked: If OSD Lock is on, the LED status set Blinking amber .

Note: Acer monitor is purposed for video and visual display of information obtained from electronic devices.