Service Manual - P2424HEB

Version: 01

Date: 2023/09/05

1. Important Safety Notice

Product Announcement:

This product is certificated to meet RoHS Directive and Lead-Free produced definition. Using approved critical components only is recommended when the situation to replace defective parts. Vender assumes no liability express or implied, arising out of any unauthorized modification of design or replacing non-RoHS parts. Service providers assume all liability.

Qualified Repairability:

Proper service and repair is important to the safe, reliable operation of all series products. The service providers recommended by vender should be aware of notices listed in this service manual in order to minimize the risk of personal injury when perform service procedures. Furthermore, the possible existed improper repairing method may damage equipment or products. It is recommended that service engineers should have repairing knowledge, experience, as well as appropriate product training per new model before performing the service procedures.

NOTICE:

! To avoid electrical shocks, the products should be connected to an authorized power cord, and turn off the master power switch each time before removing the AC power cord.

! To prevent the product away from water or expose in extremely high humility environment.

! To ensure the continued reliability of this product, use only original manufacturer's specified parts.

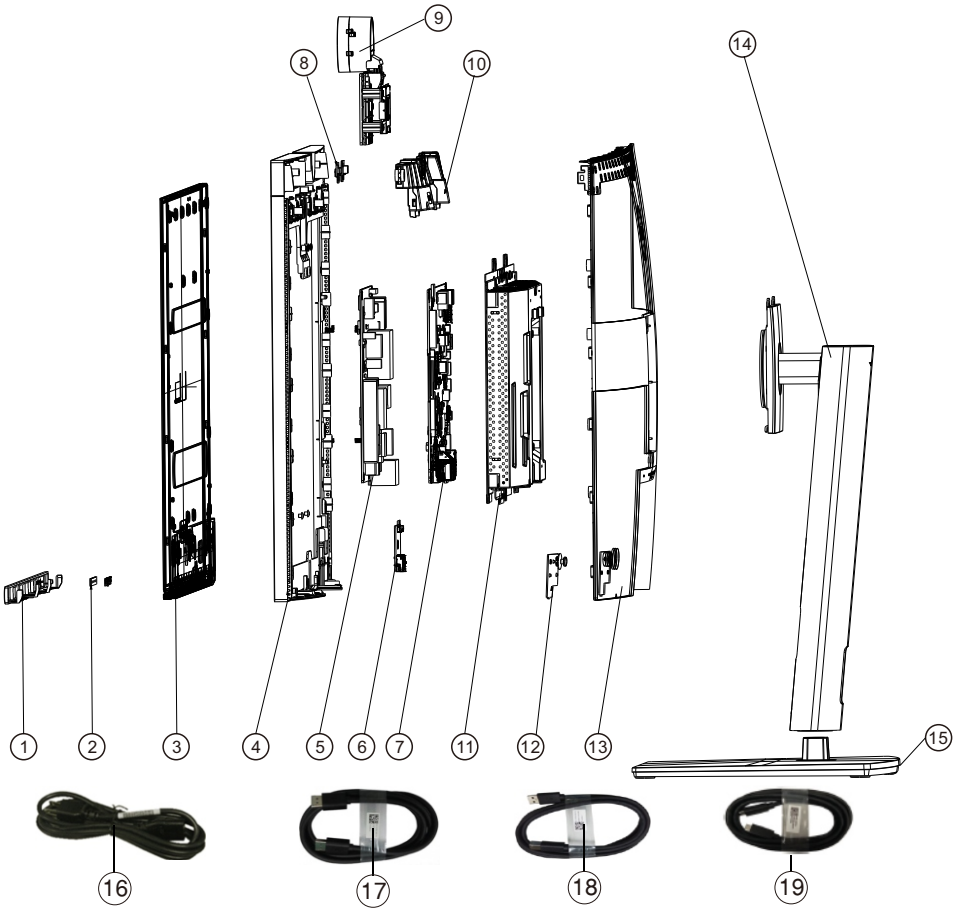
! To ensure following safety repairing behavior, put the replaced part on the components side of PWBA, not solder side.

! To ensure using a proper screwdriver, follow the torque and force listed in assembly and disassembly procedures to unscrew screws.

! Using Lead-Free solder to well mounted the parts.

! The fusion point of Lead-Free solder requested in the degree of 220°C.

2. Exploded view diagram with list of items



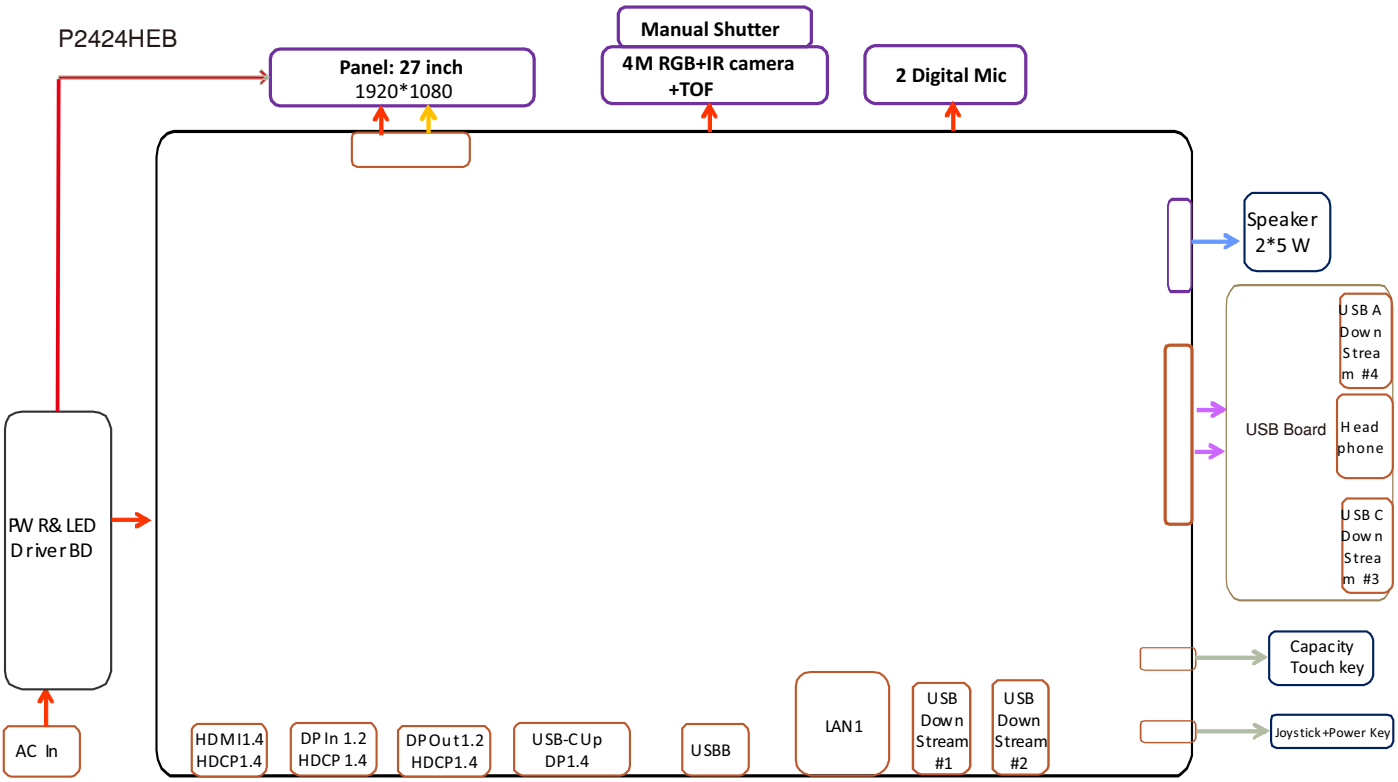
Item	Description	Q'ty	Remark
1	Front Trim	1	For EMEA Only, not for other regions
2	Lens	1	
3	Panel	1	
4	Middle Frame	1	
5	Power Board	1	
6	USB Board	1	
7	Interface Board	1	
8	Micphone Board	1	
9	Webcam Module Safety Mylar	1	
10	Speaker	1	
11	Main Chassis ASSY	1	
12	Joystick Board	1	
13	Rear Cover ASSY	1	
14	Stand Riser	1	
15	Base	1	
16	Power cable	1	See “NOTE”
17	DisplayPort 1.8 M cable	1	See “NOTE”
18	USB 3.2 Gen1 1.8 M Type A to Type B cable upstream cable	1	See “NOTE”
19	USB-C Gen1 1.8 M cable (C to C)(For P2424HEB only)	1	See “NOTE”

NOTE:

For replacement of power cord, connectivity cable and external power supply (if applicable), contact Dell:

1. Go to https://www.dell.com/support.
2. Verify your country or region in the Choose A Country/Region drop-down menu at the bottom-right corner of the page.
3. Click Contact Us next to the country dropdown.
4. Select the appropriate service or support link based on your need.
5. Choose the method of contacting Dell that is convenient for you.

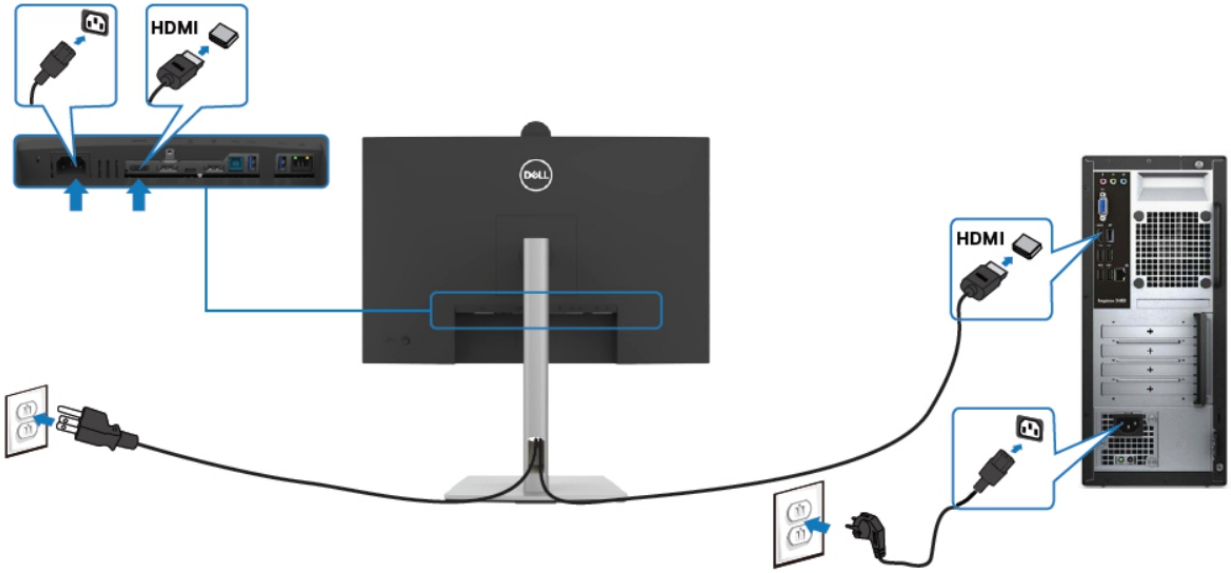
3. Wiring Connectivity Diagram



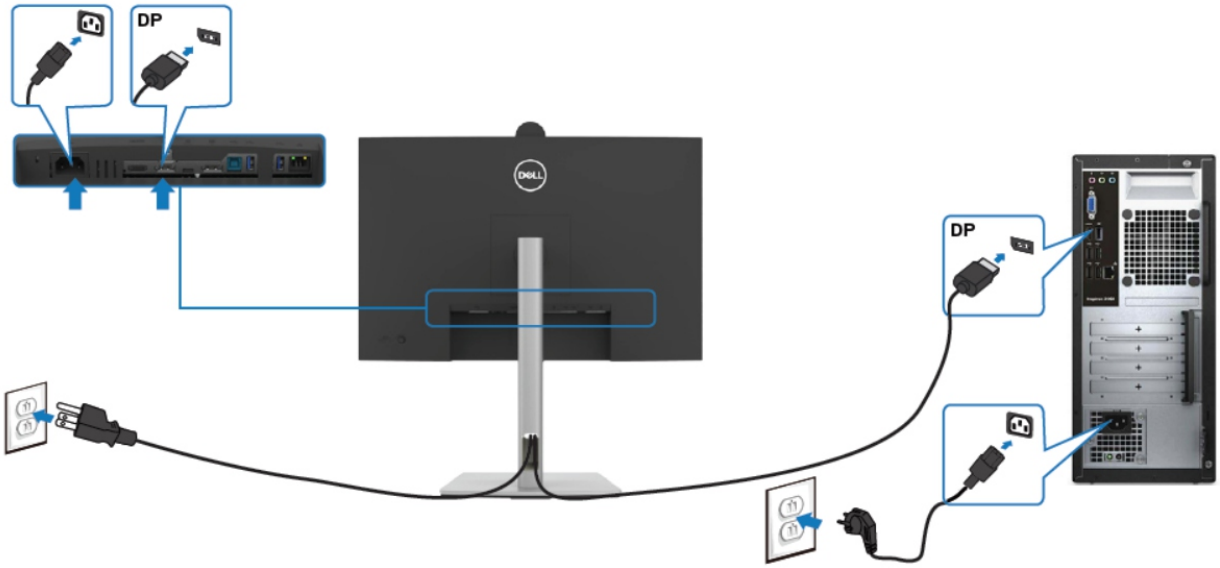
4. How to connect and disconnect power cable/ connectivity cable

WARNING: To change power cable/ connectivity cable, switch off power before unplugging the cable and replugging in required cable.

Connecting the HDMI cable (Optional)

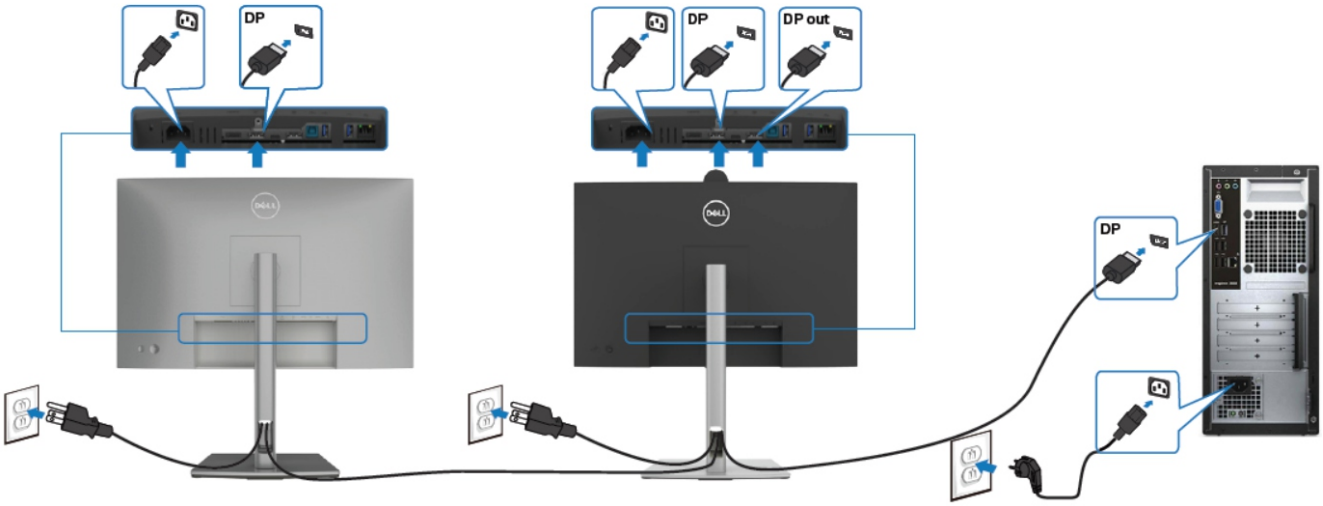


Connecting the DP cable

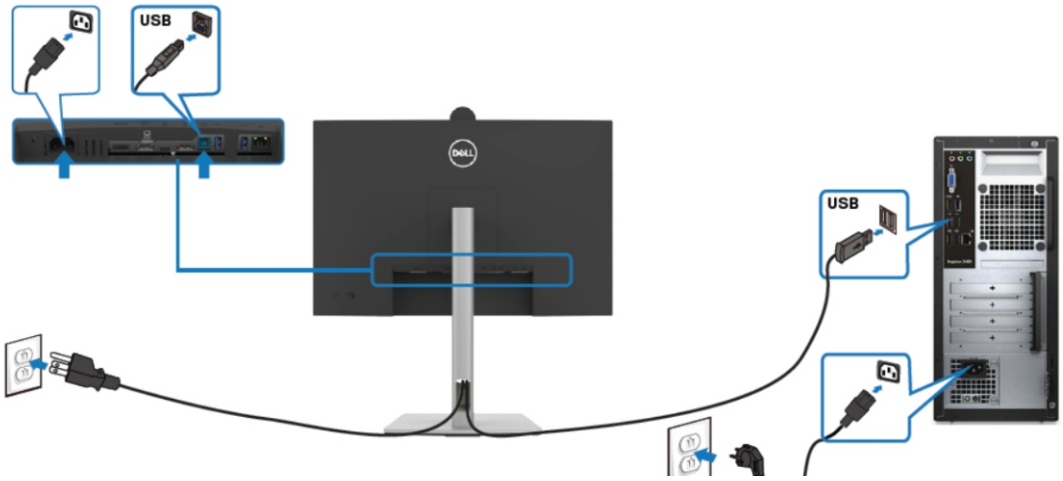


4. How to connect and disconnect power cable/ connectivity cable

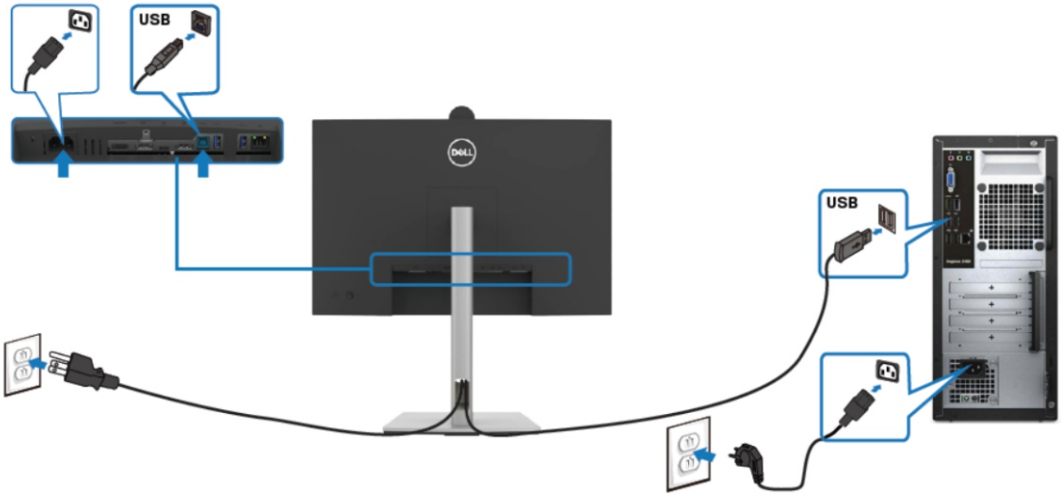
Connecting the monitor for DP Multi-Stream Transport (MST) function



Connecting the USB cable

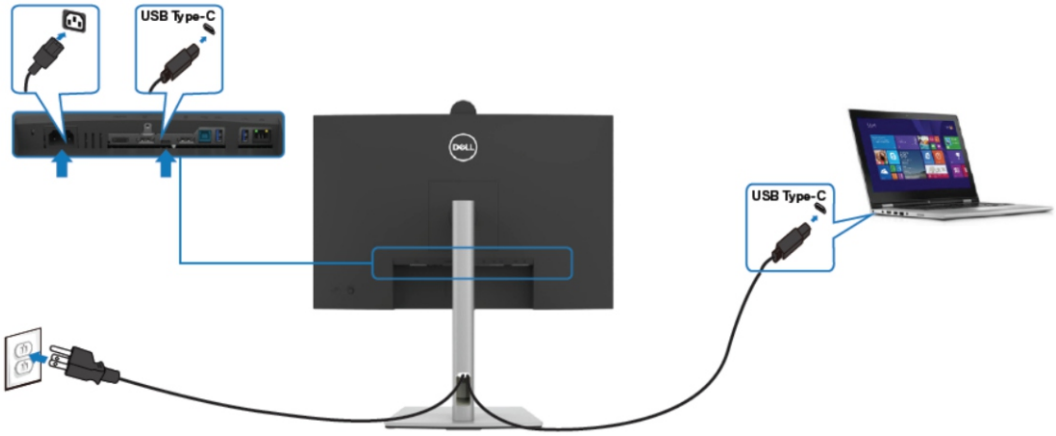


Connecting the USB-C Cable (A to C)

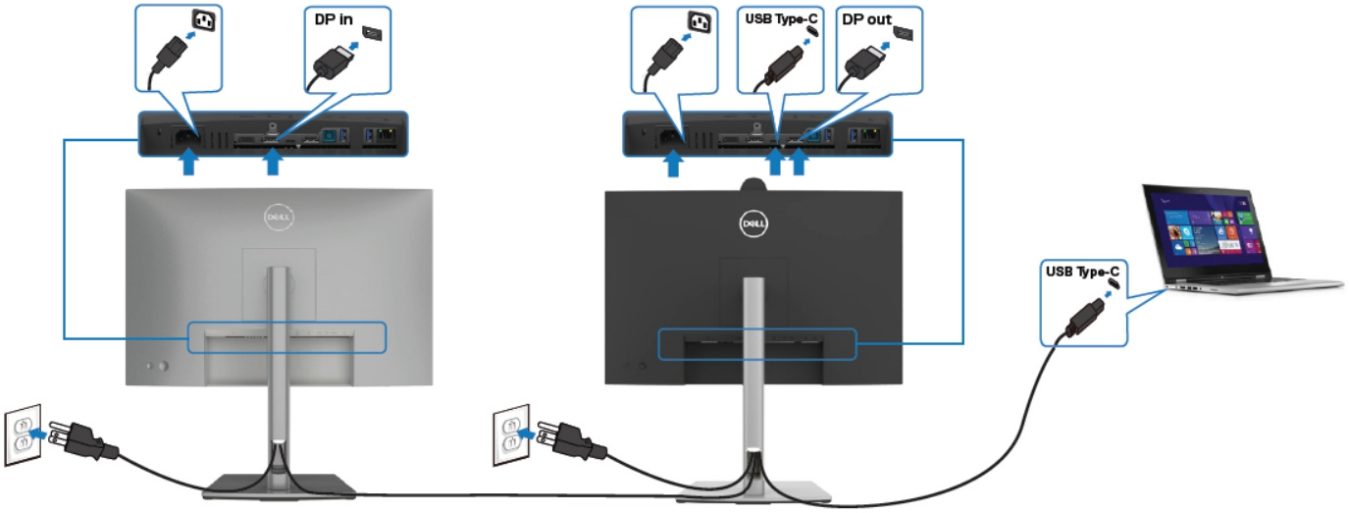


4. How to connect and disconnect power cable/ connectivity cable

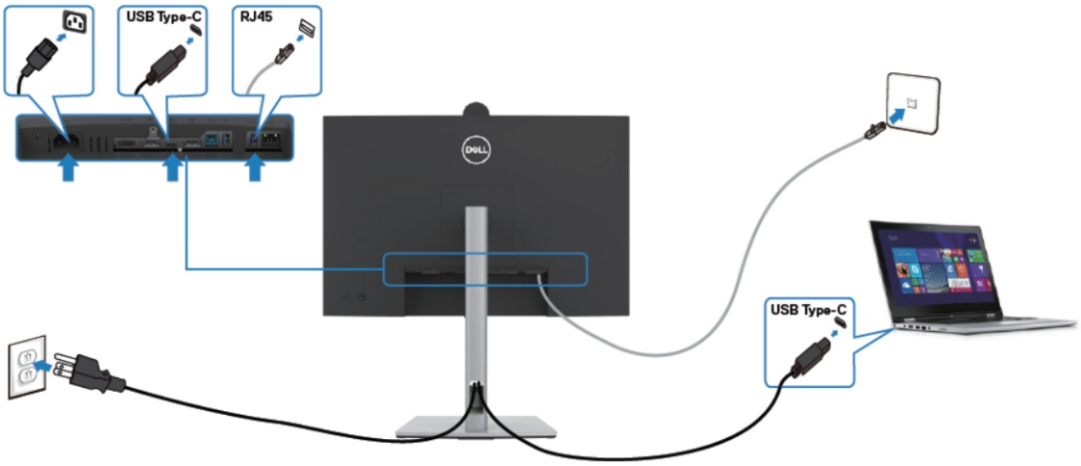
Connecting the USB Type-C cable (C to C) (Optional)



Connecting the monitor for USB-C Multi-Stream Transport (MST) function



Connecting the monitor for RJ45 Cable (Optional)



5. Disassembly and Assembly Procedures

NOTE:
This "Disassembly and Assembly Procedures" is for EMEA only, not for other regions. Please note that Dell will deem warranty void if any disassembly is done on the monitors.

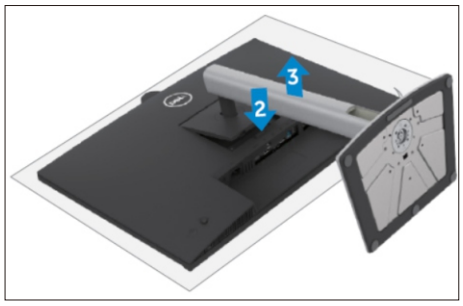
Tool Required:
List the type and size of the tools that would typically can be used to disassemble the product to a point where components and materials requiring selective treatment can be removed.

Tool Description:
- Screwdriver(Phillip head) #1
- Screwdriver(Phillip head) #2
- Penknife
- Soldering iron and absorber

5.1 Disassembly Procedures:

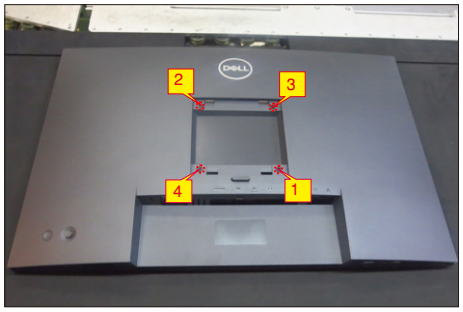
S1

Remove the monitor stand base:
1. Place the monitor on a soft cloth or cushion.
2. Press and hold the stand-release button.
3. Lift the stand up and away from the monitor.



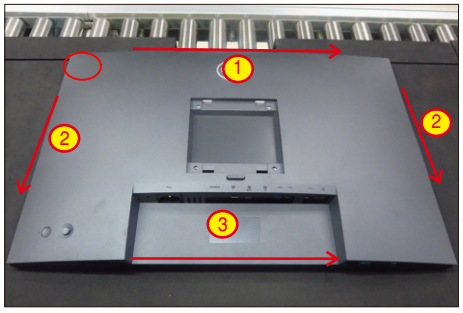
S2

Use a Philips-head screwdriver to remove 4pcs screws for unlocking mechanisms. Remove DP cap.
(No.1~4 screw size=M4x11; Torque=11±1kgfxcm)



S3

Wedge your fingers between rear cover and the middle bezel on the corners of the top side of the monitor to release the rear cover, then use one hand to press the middle bezel, the other hand to pull up carefully the rear cover in order of arrow preference for unlocking mechanisms of rear cover.

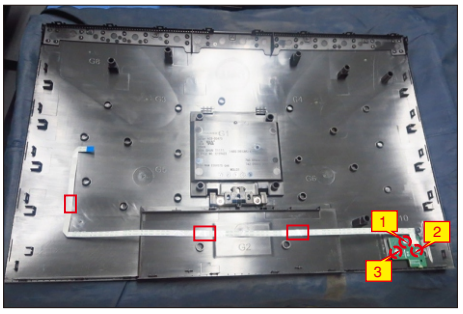


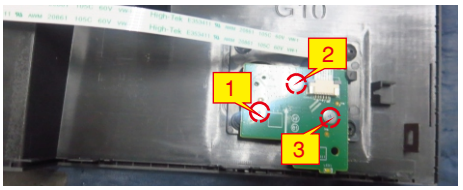
S4

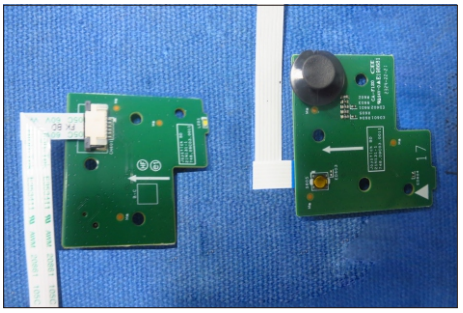
Lift the rear cover up carefully. Disconnect the joystick key cable from the connector of the main board, and then remove the rear cover and put it aside for later disassembling.

S5

Use a Philips-head screwdriver to remove 3pcs screw for unlocking the joystick board, then tear off all the tapes and release the joystick cable.
(No.1~3 screw size=M2x3.3, Torque=1±0.2kgfxcm)

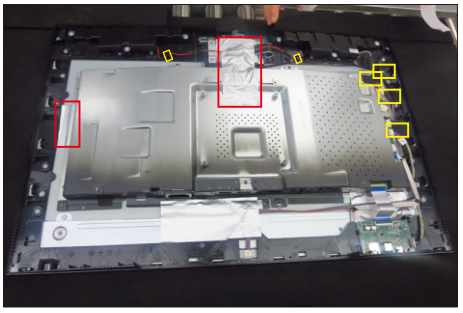






S6

Tear off 2pcs aluminum foil and 4pcs acetate tape for releasing the cables, then release the speaker's cables away from the hooks of the middle frame.

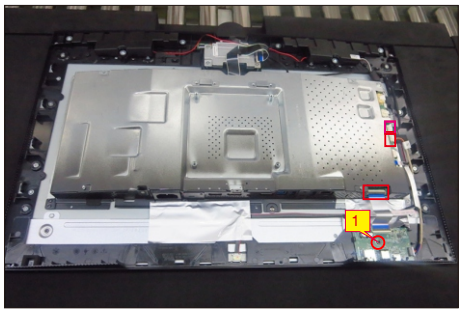


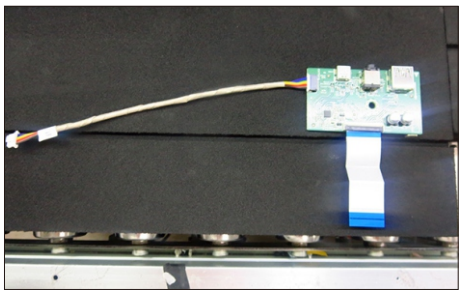
5. Disassembly and Assembly Procedures

S7

Use a Philips-head screwdriver to remove 1pcs screw for unlocking the USB unit with the middle frame, then disconnect the two USB cables and Mic cable away from the connectors of main board. Release the USB board away from the hook of the middle frame.

(No.1 screw size=M3x3,5, Torque=4±0.5 kgfxcm)

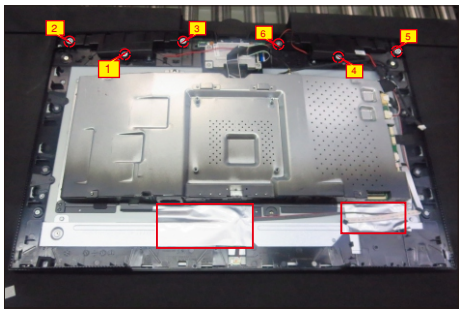




S8

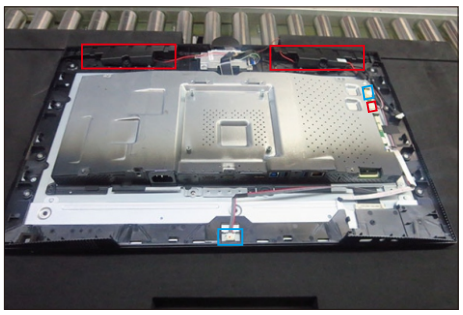
Tearing off 2pcs aluminum foil for releasing the connector and cable. Use a Philips-head screwdriver to remove 6pcs screws for unlocking the speakers with middle frame.

(No.1~6 screw size=M3x6, Torque=4~5kgfxcm)



S9

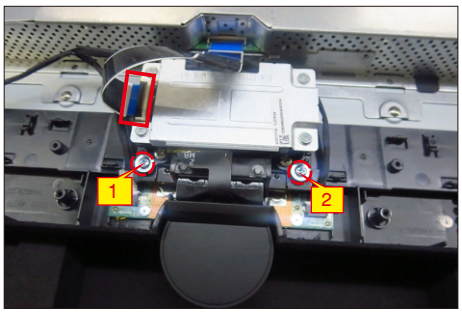
Disconnect the speaker cable away from the board, then release the speakers from the probers of the middle frame. Disconnect the panel lamp cable away from the connectors of the main board and panel.

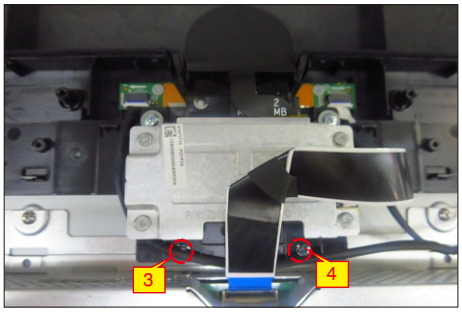


S10

Use a Philips-head screwdriver to remove 4pcs screws for unlocking the camera module with the middle bezel, then disconnect the camera cable from the connector.

(No.1~2 Screw size= M3x3.5, Torque=3 0.5kgfxcm;
No.3~4 Screw size= M3x8, Torque=6±0.5kgfxcm)

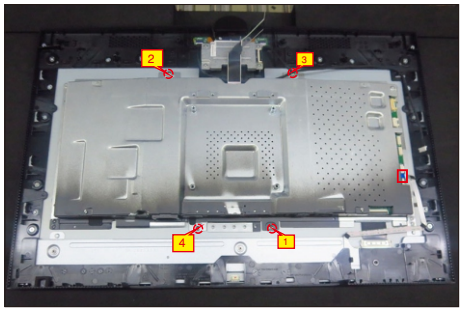




S11

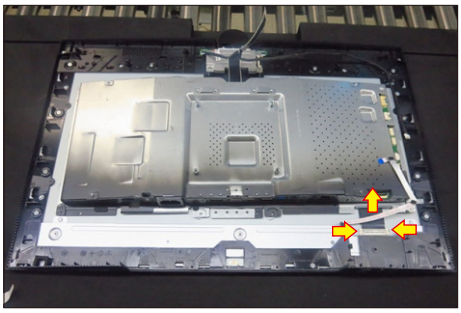
Use a Philips-head screwdriver to remove 4pcs screws for unlocking the bracket chassis with the panel, then disconnect the touch cable away from the connector of the main board.

(No.1~4 Screw size= M3x4, Torque=5±1kgfxcm)

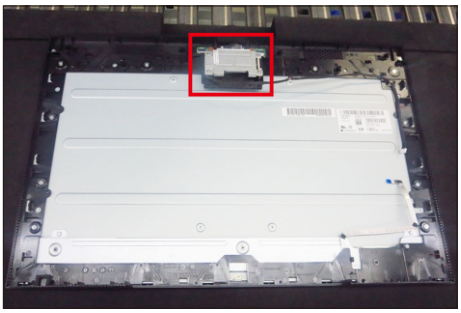


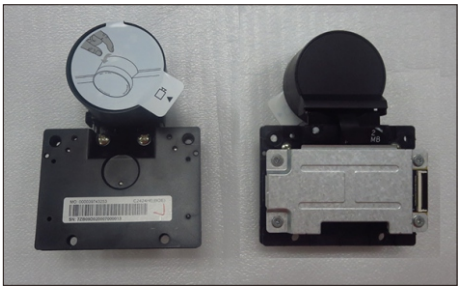
S12

Disconnect the LVDS cable away from the connector of the panel module, then lift up and take away the bracket chassis and put it on a protective cushion.

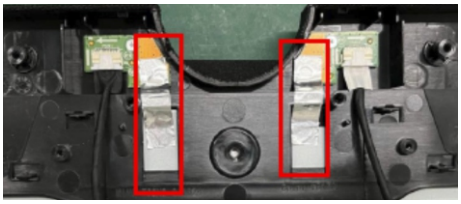


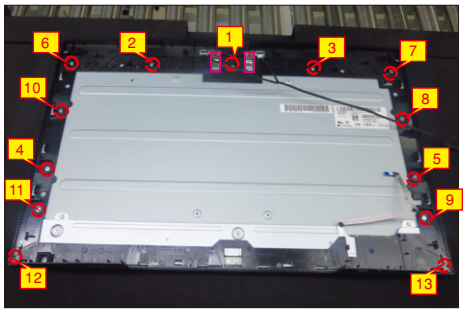
S13 Release the assembled camera unit from the probers of the middle frame and put it aside for later disassembling.





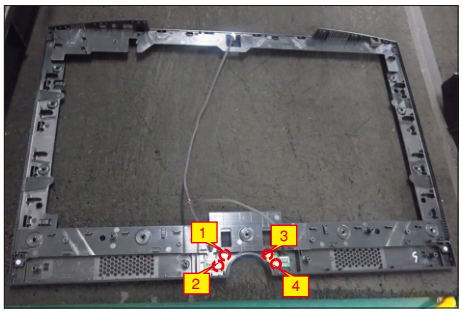
S14 Tear off 2pcs aluminum foil to release the Mic boards
Use a Philips-head screwdriver to remove 13pcs screws for unlocking the middle frame with the panel.
(No.1~11 screw size=M3x4,Torque=3±0.5kgfxcm;
No.12~13 screw size=M2x3.3,Torque=1±0.2kgfxcm)

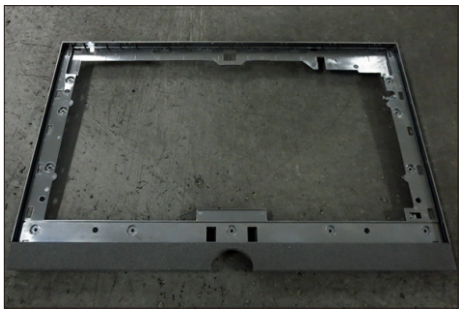




S15 Lift up the middle bezel away from the pane module, then put it on a cushion foam for later disassembling.

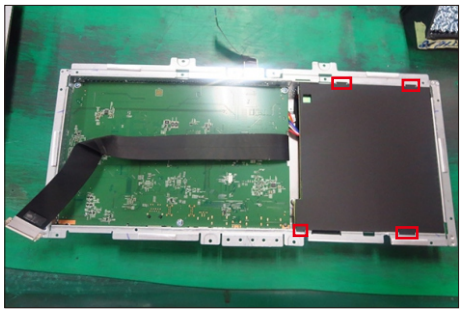
S16 Use a Philips-head screwdriver to remove 4pcs screws for unlocking the left and right Mic boards with the middle frame, then release the two Mic boards away from the middle frame.
(No.1~4 screw size=M2x3.3,Torque=1±0.2kgfxcm)



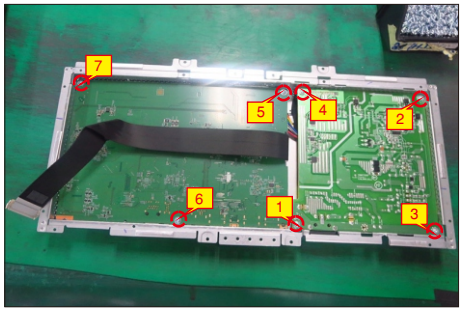


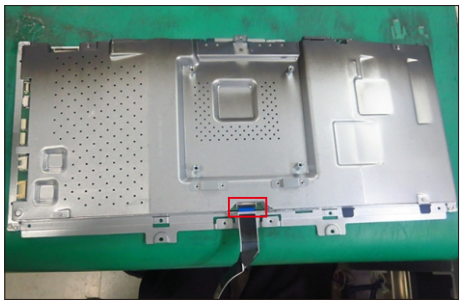
S17 Release the touch key cable away from the panel, then disassemble the front bezel with the panel, then tear off the mylar tape and release the touch board.

S18 Remove the Mylar tape from the hooks of the bracket chassis.

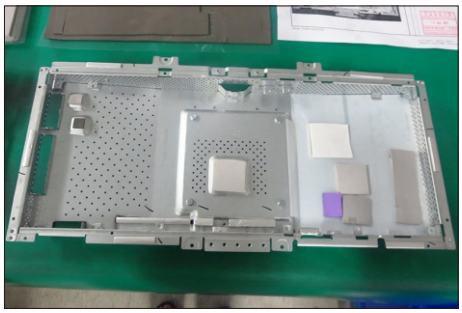


S19 Use a Philips-head screwdriver to remove 7pcs screws for interface board and power board. Turn over the bracket and disconnect the camera cable.
(No.1 screw size=M4x8, Torque=7.5 0.5kgfxcm;
No.2~7 screw size=M4x8, Torque=7.5±0.5kgfxcm)





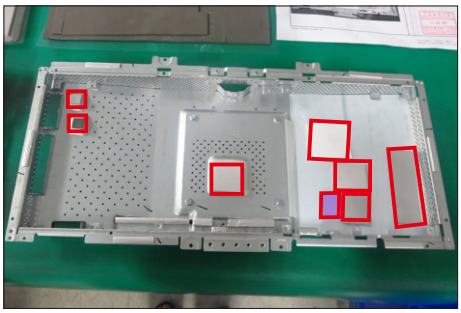
S20 Turn over the bracket and remove the power board and interface board from the bracket chassis module carefully, and then disconnect all of the cables.



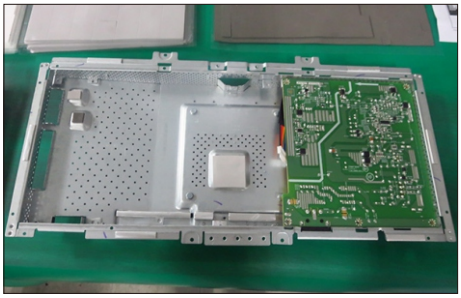
5. Disassembly and Assembly Procedures

5.2 Assembly Procedures:

S1 Place a bracket chassis base on a protective cushion, then stick 7pcs Silicon sheets on the positions as the picture below shown.

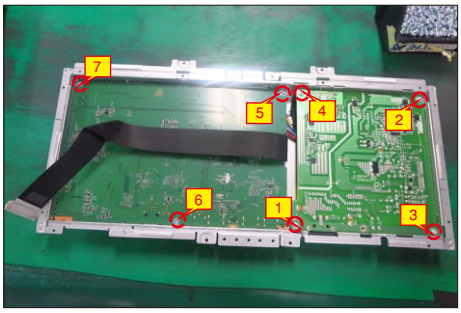


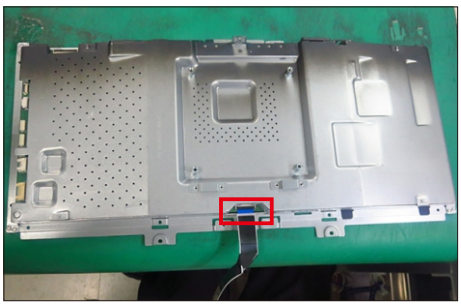
S2 Turn over a power board and put the power board into the bracket chassis, settle the panel power cable to the correct position.



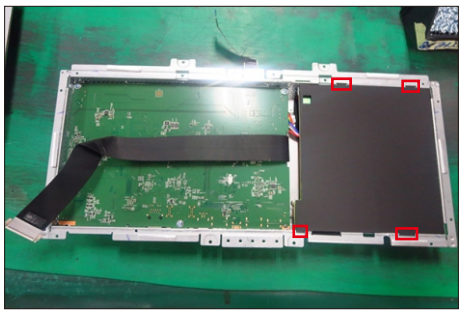
S3 Take a interface board, connect 1pcs LVDS cable to the connector of the interface board, then connect the cable of the power board to the connector of the interface board. Turn over the interface board and locate it into the main chassis. Use a Philips-head screwdriver to tighten 7pcs screws for locking the interface board and power board. Turn over the chassis and connect 1pcs cable to the connector.

(No.1 screw size=M4x8, Torque=7.5±0.5kgfxcm;
No.2~7 screw size=M4x8, Torque=7.5±0.5kgfxcm)

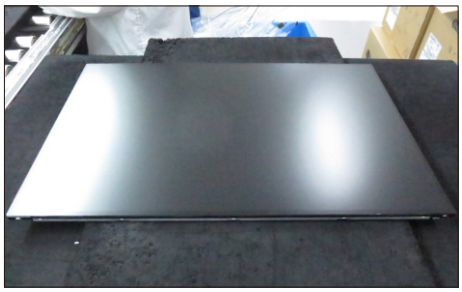


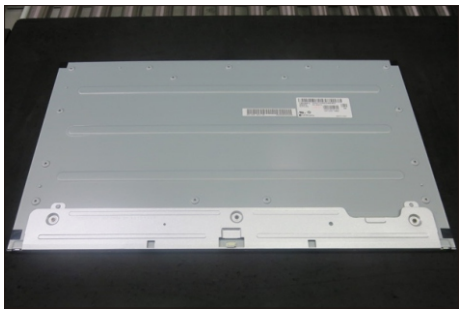


S4 Turn over the bracket chassis, and then take 1pcs black mylar to insert the hooks of the bracket chassis to cover the power board.

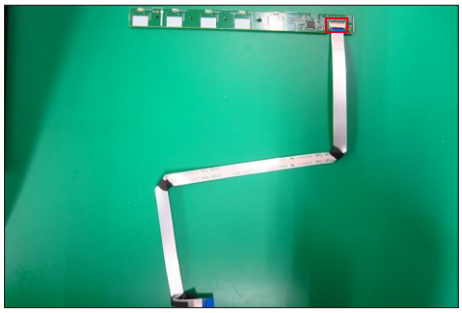


S5 Panel preparation: Take out 1pcs panel module from the carton, remove the protective film by tearing off the tapes, then Examine the panel surface according to inspection criteria. Turn over the panel to place screen faced down for later assembling.

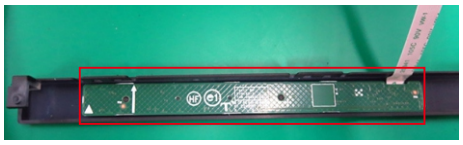


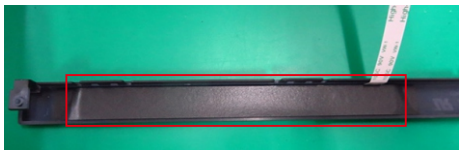


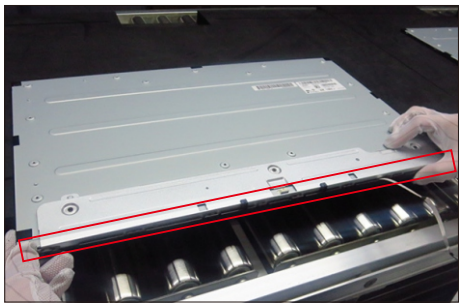
S6 Take1pcs touch board,1pcs key cable and 1pcs front bezel, then connect the key cable to the connector of the board. Tear off the release paper and paste the touch board on the correct position of the front bezel, then paste 1pcs mylar to cover the touch board. Move the front bezel close to the panel module, then assemble the front bezel with the panel module.



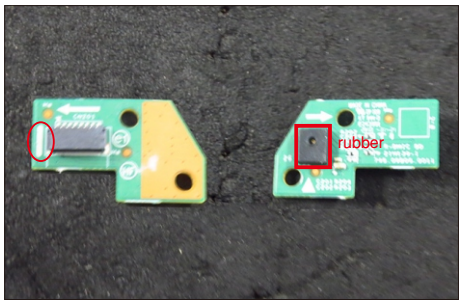
5. Disassembly and Assembly Procedures

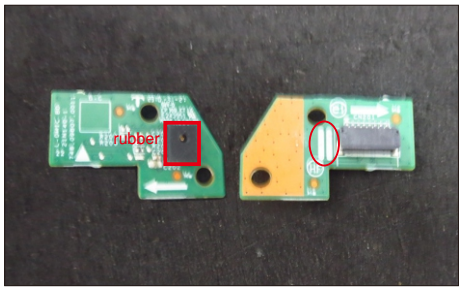


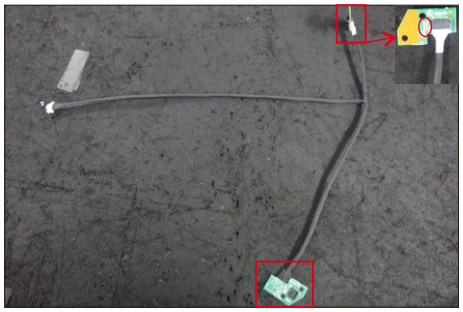




S7 Take 1pcs left Mic board,1pcs right Mic board and some essential cables, then assemble 1pcs rubber with left Mic board and assemble 1pcs rubber with right Mic board, then connect left Mic board right Mic board with cables as the picture below shown.

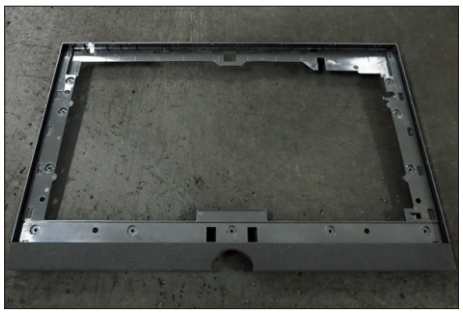


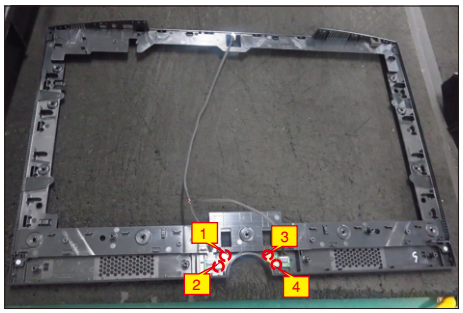




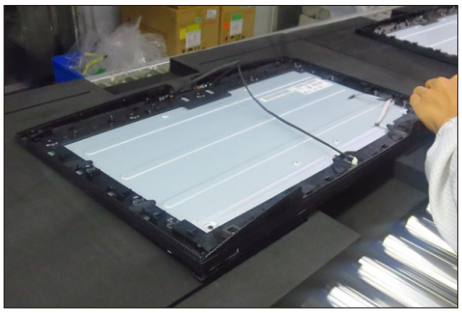
S8 Take 1pcs middle frame with speaker cover, then put the middle frame and locate the Mic boards to the correct positions, then use a Philips-head screwdriver to lock 4pcs screws for locking the left and right Mic boards as the picture below shown.

(No.1~4 screw size=M2x3.3,Torque=1±0.2kgfxcm)



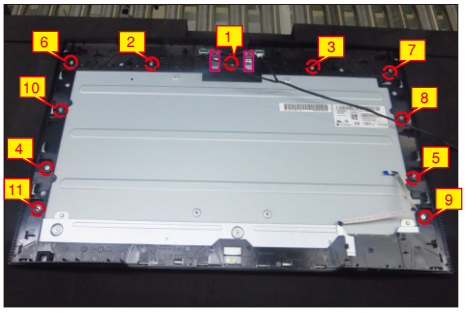


S9 Tear off the release paper on the back of the touch cable and then fix the cable on the back of the panel. Move the middle frame with Mic boards close to the panel unit, then assemble the middle bezel unit with the front bezel and panel module.

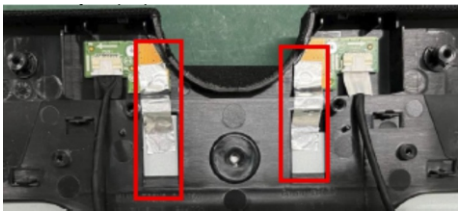


S10 Use a Philips-head screwdriver to lock 11pcs screws for locking the middle frame unit with the panel, then paste 2pcs aluminum foil to fix the Mic board.

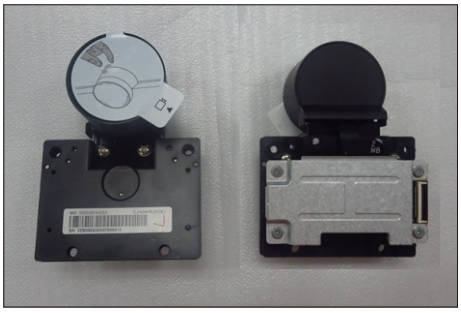
(No.1~11 screw size=M3x4,Torque=3±0.5kgfxcm)



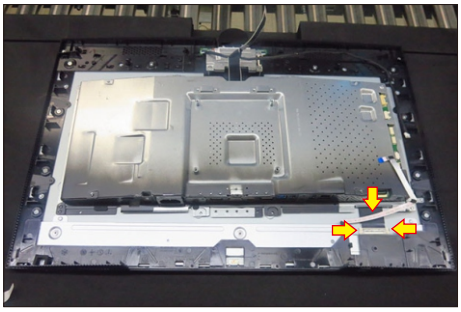
5. Disassembly and Assembly Procedures



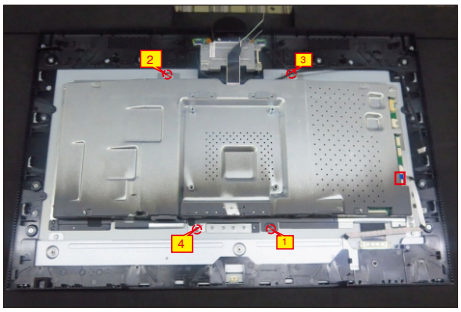
S11 Take 1pcs camera unit assembled in LCM line, then locate the camera unit into the pins of the middle frame.



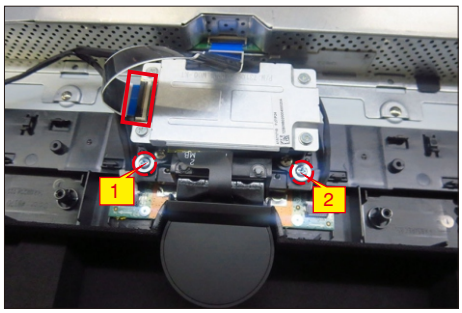
S12 Move the bracket and put it on the back of panel, then connect the LVDS cable to the connector of the panel module.

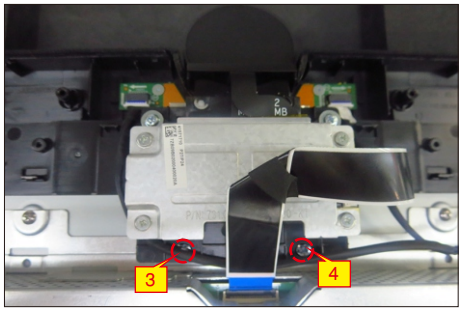


S13 Use a Philips-head screwdriver to tighten 4pcs screws for locking the bracket chassis with the panel, then connect the touch cable to main board.
(No.1~4 Screw size= M3x4, Torque=5±1kgfxcm)

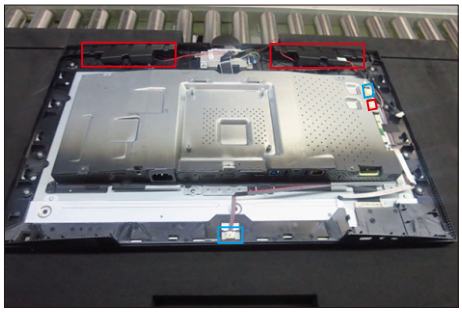


S14 Connect the camera cable to the camera board, then use a Philips-head screwdriver to tighten 4pcs screws for locking the camera unit with the frame.
(No.1~2 Screw size= M3x3.5, Torque=3±0.5kgfxcm;
No.3~4 Screw size= M3x8, Torque=6±0.5kgfxcm)

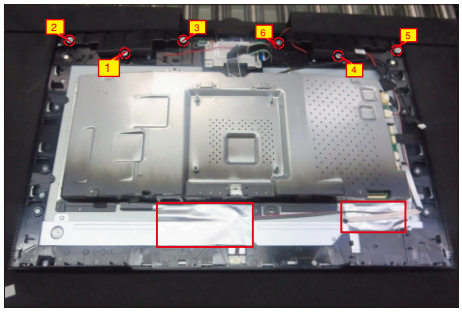




S15 Take a pair of speakers to locate the probers of the middle frame, then locate the speakers' cable to the hooks of the middle bezel, and then connect the speaker's cable to the connector of the main board. Take 1pcs panel lamp cable to connect the main board with the panel.

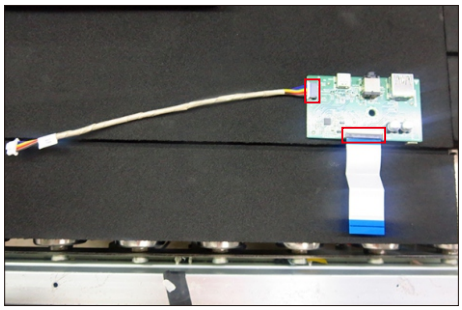


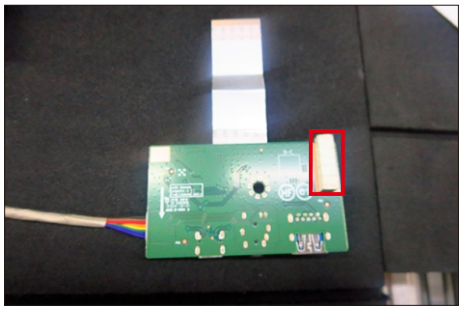
S16 Use a Philips-head screwdriver to tighten 6pcs screws for locking the two speakers with the middle frame, then paste 2pcs aluminum foil on the specific positions to cover the LVDS connector and cables.
(No.1~6 Screw size= M3x6, Torque=4~5kgfxcm)



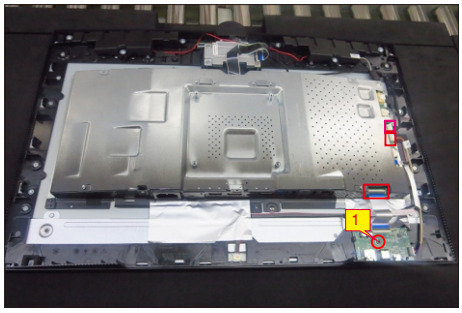
5. Disassembly and Assembly Procedures

S17 Take 1pcs USB board, 2pcs cables and 1pcs conductive foam. Connect the 2pcs cables to the connectors of the USB board, then turn over the board and paste the conductive foam on the back of the USB board.

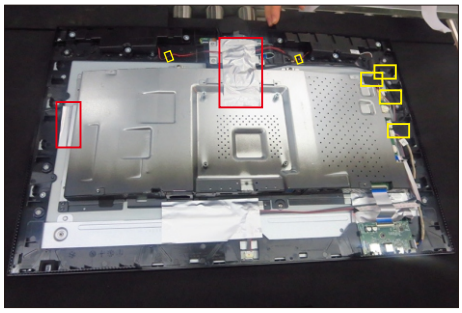




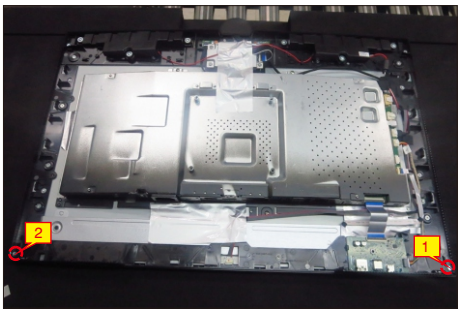
S18 Locate the USB board into the hook of the middle frame. Use a Philips-head screwdriver to tighten 1pcs screw for locking the USB unit with the middle frame, then connect the two USB cables and Mic cable to the connectors of main board.
(No.1 screw size=M3x3.5, Torque=4±0.5 kgfxcm)



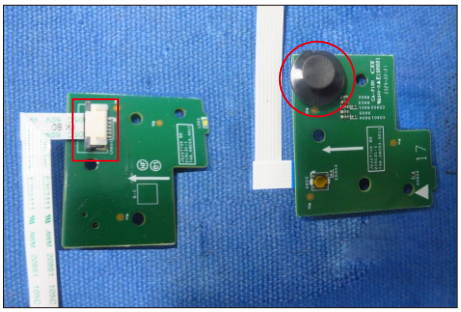
S19 Locate the speakers' cable into the hooks of the middle frame and paste 2pcs aluminum foil and 4pcs acetate tape on the specific positions for fixing the cables as the picture below shown.



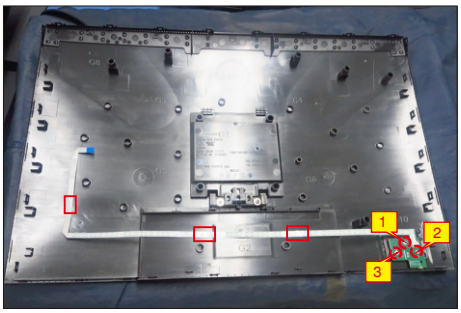
S20 Use a Philips-head screwdriver to tighten 2pcs screws for locking the middle frame with panel and front bezel.
(No.1~2screw size=M2x3.3,Torque=1±0.2kgfxcm)



S21 Take 1pcs joystick key, 1pcs joystick board and 1pcs key cable, then assemble the joystick key with board and connect the key cable to the connector of the key board.



S22 Locate the joystick board to the correct position of the rear cover, then use a Philips-head screwdriver to tighten 3pcs screws for locking the joystick board with rear cover, fix the key cable on the rear cover by 3pcs adhesive tapes on the back of the cable.
(No.1~2 screw size=M2x3.3,Torque=1±0.2kgfxcm)



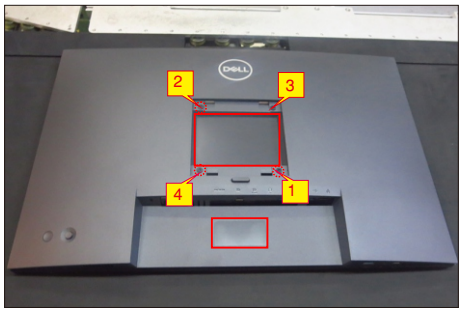
S23

Move the assembled rear cover close to the panel unit, then connect the joystick cable to the connector of interface board. Put down the rear cover and push the rear cover on the positions marked as the picture below shown for mechanisms engagement.

S24

Use a Philips-head screwdriver to tighten 4pcs screws for locking the rear cover with the unit. Paste 2pcs label on the specific positions.

(No.1~4 screw size=M4x11; Torque=11±1kgfxcm)



S25

Insert a DP out Cap into the DP out connector. Take a stand base close to the monitor. Fit the two tabs on the upper part of the stand into the grooves, and then lower the stand so that the monitor mounting area snaps onto the stand.

S26

Lift up the monitor to check the gap between the front bezel and the panel, then provide power supply and a video signal to the monitor, then turn on the monitor for functionality check.

Troubleshooting

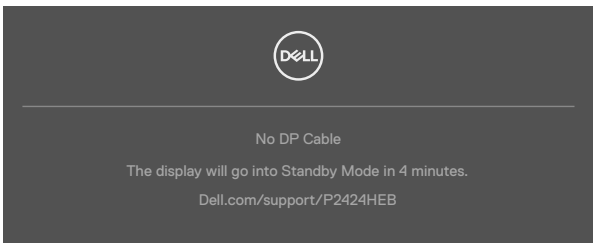
⚠ **WARNING: Before you begin any of the procedures in this section, follow the Safety Instructions.**

Self-test

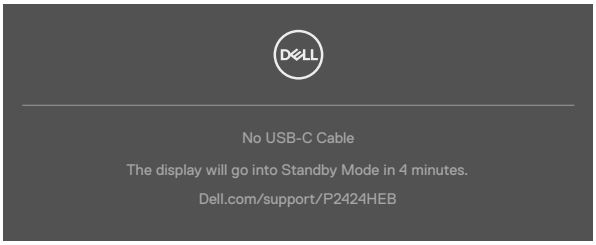
Your monitor provides a self-test feature that allows you to check whether your monitor is functioning properly. If your monitor and computer are properly connected but the monitor screen remains dark, run the monitor self-test by performing the following steps:

1. Turn off both your computer and the monitor.
2. Unplug the video cable from the back of the computer. To ensure proper Self-Test operation, remove all digital and the analog cables from the back of computer.
3. Turn on the monitor.

The floating dialog box should appear on-screen (against a black background), if the monitor cannot sense a video signal and is working correctly. While in self-test mode, the power LED remains white. Also, depending upon the selected input, one of the dialogs shown below will continuously scroll through the screen.



or

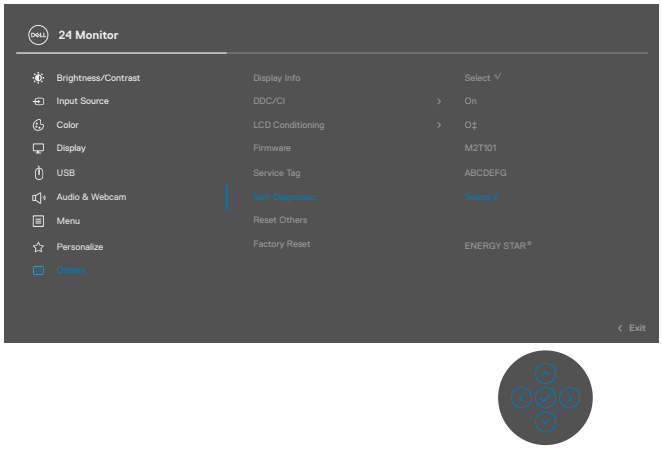


4. This box also appears during normal system operation if the video cable becomes disconnected or damaged.
5. Turn off your monitor and reconnect the video cable; then turn on both your computer and the monitor.

If your monitor screen remains blank after you use the previous procedure, check your video controller and computer, because your monitor is functioning properly.

Built-in diagnostics

Your monitor has a built-in diagnostic tool that helps you determine if the screen abnormality you are experiencing is an inherent problem with your monitor, or with your computer and video card.



To run the built-in diagnostics:

1. Ensure that the screen is clean (no dust particles on the surface of the screen).
2. Select OSD items of Self-Diagnostics in Others feature.
3. Press the joystick button to start the diagnostics. A gray screen is displayed.
4. Observe if the screen has any defects or abnormalities.
5. Toggle the joystick once again until a red screen is displayed.
6. Observe if the screen has any defects or abnormalities.
7. Repeat steps 5 and 6 until the screen displays green, blue, black, and white colors. Note any abnormalities or defects.

The test is complete when a text screen is displayed. To exit, toggle the joystick control again.

If you do not detect any screen abnormalities upon using the built-in diagnostic tool, the monitor is functioning properly. Check the video card and computer.

Common Problems

The following table contains general information about common monitor problems you might encounter and the possible solutions:

Common Symptoms	What you experience	Possible solutions
No Video/ Power LED off	No picture	· Ensure that the video cable connecting the monitor and the computer is properly connected and secure. · Verify that the power outlet is functioning properly using any other electrical equipment. · Ensure that the power button is depressed fully. · Ensure that the correct input source is selected in the **Input Source** menu.
No Video/ Power LED on	No picture or no brightness	· Increase brightness and contrast controls via OSD. · Perform monitor self-test feature check. · Check for bent or broken pins in the video cable connector. · Run the built-in diagnostics. · Ensure that the correct input source is selected in the **Input Source** menu.
Missing Pixels	LCD screen has spots	· Cycle power on-off. · Pixel that is permanently off is a natural defect that can occur in LCD technology. · For more information on Dell Monitor Quality and Pixel Policy, see Dell Support site at: **https://www.dell.com/pixelguidelines**.
Stuck-on Pixels	LCD screen has bright spots	· Cycle power On-Off. · Pixel that is permanently off is a natural defect that can occur in LCD technology. · For more information on Dell Monitor Quality and PixelPolicy, see Dell Support site at: **https://www.dell.com/pixelguidelines**.
Brightness Problems	Picture too dim or too bright	· Reset the monitor to factory settings. · Adjust brightness and contrast controls via OSD.
Safety Related Issues	Visible signs of smoke or sparks	· Do not perform any troubleshooting steps. · Contact Dell immediately.

6. Trouble Shooting Instructions

Common Symptoms	What you experience	Possible solutions
Intermittent Problems	Monitor malfunctions on & off	· Ensure that the video cable connecting the monitor to the computer is connected properly and is secure. · Reset the monitor to factory settings. · Perform monitor self-test feature check to determine if the intermittent problem occurs in self-test mode.
Missing Color	Picture missing color	· Perform monitor self-test. · Ensure that the video cable connecting the monitor to the computer is connected properly and is secure. · Check for bent or broken pins in the video cable connector.
Wrong Color	Picture color not good	· Change the settings of the Preset Modes in the Color menu OSD depending on the application. · Adjust R/G/B value under Custom Color in Color menu OSD. · Change the Input Color Format to PC RGB or YPbPr in the Color menu OSD. · Run the built-in diagnostics.
Image retention from a static image left on the monitor for a long period of time	Faint shadow from the static image displayed appears on the screen	· Set the screen to turn off after a few minutes of screen idle time. These can be adjusted in Windows Power Options or Mac Energy Saver setting. · Alternatively, use a dynamically changing screensaver.
Mic/Webcam does not work	· USB cable not plug in or not select the correct USB source · Not set the monitor Mic/ webcam as the default device	· Plug in the USB Cable (Type-A to Type-B or Type-C to Type-C), and if you connect both USB-C port, please switch the USB source in the OSD menu. · Select the monitor Mic/webcam as the default in the PC side. · Touch the Mic button and make sure the Mic mute LED is dark.

Product specific problems

Problem	What you experience	Possible solutions
Screen image is too small	Image is centered on screen, but does not fill entire viewing area	· Check the Aspect Ratio setting in the Display menu OSD. · Reset the monitor to factory settings.
Cannot adjust the monitor with the joystick control on the rear of the monitor	OSD does not appear on the screen	· Turn off the monitor, unplug the monitor power cable, plug it back, and then turn on the monitor.
No Input Signal when user controls are pressed	No picture, the LED light is white	· Check the signal source. Ensure the computer is not in the power saving mode by moving the mouse or pressing any key on the keyboard. · Check whether the signal cable is plugged in properly. Connect the signal cable again, if necessary. · Reset the computer or video player.
The picture does not fill the entire screen	The picture cannot fill the height or width of the screen	· Due to different video formats (aspect ratio) of DVDs, the monitor may display in full screen. · Run the built-in diagnostics.
No image when using DP connection to the PC	Blank screen	· Verify which DP standard is your Graphics Card certified to. Download and install the latest graphics card driver. · Some DP 1.1a graphics card cannot support DP 1.2/1.4 monitors.
No image when using USB Type-C connection to computer, laptop, and so on	Blank screen	· Verify if the USB Type-C interface of the device can support DP alternate mode. · Verify if the device required more than 90 W power charging. · USB Type-C interface of device cannot support DP alternate mode. · Set Windows to Projection mode. · Ensure that the USB Type-C cable is not damaged.

6. Trouble Shooting Instructions

Problem	What you experience	Possible solutions
No charging when using USB Type-C connection to computer, laptop, and so on	No charging	· Verify if the device can support one of 5 V/9 V/15 V/20 V charging profiles. · Verify if the Notebook requires a >90 W power adaptor. · If the Notebook requires a >90 W power adaptor, it may not charge with the USB Type-C connection. · Ensure that you use only Dell approved adapter or the adapter that comes with the product. · Ensure that the USB Type-C cable is not damaged.
Intermittent charging when using USB Type-C connection to computer, laptop, and so on	Intermittent charging	· Check if the maximum power consumption of device is over 90 W. · Ensure that you use only Dell approved adapter or the adapter that comes with the product. · Ensure that the USB Type-C cable is not damaged.
No image when using USB Type-C MST	Blank screen or 2nd DUT is not Prime mode	· USB Type-C input, Go to OSD menu, under Display Info check the Link Rate is HBR2 or HBR3, if Link Rate is HBR2, suggest to use USB Type-C to DP cable to turn on MST.
No network connection	Network dropped or Intermittent	· Do not toggle Off/On the power button when network is connected, keeps the power button On.

6. Trouble Shooting Instructions

Problem	What you experience	Possible solutions
The LAN port is not functioning	OS setting or cable connection issue	· Ensure that the latest BIOS and drivers for your computer are installed on your computer. · Ensure that the RealTek Gigabit Ethernet Controller is installed in the Windows Device Manager. · If your BIOS Setup has a LAN/GBE Enabled/ Disabled option, make sure it is set to Enabled. · Ensure that the Ethernet cable is connected securely on the monitor and the hub/router/ firewall. · Check the status LED of the Ethernet cable to confirm connectivity. Re-connect both ends of the Ethernet cable if the LED is not lit. · First power off the Computer and unplug the Type-C cable and power cord of the monitor. Then, power on the computer, plug in the monitor power cord and Type-C cable.
Monitor buttons (Mute / Volume down / Volume up / Hookswitch) not working with Microsoft Teams® App	Monitor buttons (Mute / Volume down / Volume up / Hookswitch) not working on Microsoft Teams® App with Chrome OS / Ubuntu	Use Microsoft Teams® App to perform the below tasks: · Call Icon to accept / hang up call · Volume down / Volume up adjustment · Mic mute / unmute · Video on / off
Headset with Mic (3.5mm combo jack) not working with monitor mute / unmute button	Headset with Mic (3.5mm combo jack) not working with monitor mute / unmute button	· Use UC App (e.g. Microsoft Teams, Skype for Business, Zoom, etc.) Mic Icon to mute / unmute · Select 'Echo Cancelling Speakerphone' audio path in the 'Sounds Setting' on UC application. · Connect the USB-C to C cable or USB-A to B cable.

6. Trouble Shooting Instructions

Problem	What you experience	Possible solutions
When press either Volume down / Volume up or Mute button, LED not blink	When press either Volume down / Volume up or Mute button, LED not blink when connected to HDMI or DP only	Connect USB-A to USB-B cable
Webcam or Mic not working	Webcam or Mic not working when connected to HDMI or DP only	Connect USB-A to USB-B cable
Ethernet port (RJ45) cannot connect to internet	Ethernet port (RJ45) cannot connect to internet on Win 10 / Win 11	Change the LAN Controller Power Saving from Enable to Disable
No sound coming from the speakers	No sound coming from the speakers when play audio/ video on your system	• Ensure that you have set the default playback device as Echo Cancelling Speakerphone or DELL P2424HEB on your system. • Turn Off the monitor, unplug the monitor power cord, replug it, and then turn On the monitor. • Reset the monitor to Factory Settings.
Speaker volume is low / sounds soft	Speaker volume is low / sounds soft when speaker option is DELL P2424HEB in Sound setting interface	• Increase the speaker volume of DELL P2424HEB to maximum in the Sound setting interface • Press the Volume Up button to increase the speaker volume of DELL P2424HEB • If you select **DELL P2424HEB** audio path, please ensure that the **Echo Cancelling Speakerphone** volume is set to medium or high. Else, the **DELL P2424HEB** maximum volume may sound soft because it is limited by the **Echo Cancelling Speakerphone** volume. For example, when the Echo Cancelling Speakerphone volume is at 50%, and the **DELL P2424HEB** volume is set to 100% will have the same sound level as the former.

6. Trouble Shooting Instructions

Problem	What you experience	Possible solutions
Webcam is not detected	Webcam is not detected in the Windows Device Manager	· Ensure that the USB upstream cable is connected between the monitor and the computer or notebook. · Ensure that the 'Webcam & Presence Sensor' in OSD is set as Enable. · Reconnect the USB upstream cable to the computer or notebook.
Webcam cannot connect / Webcam disconnected	Could not detect Monitor camera / Could not switch back to the PC camera	· Reset the monitor to Factory Settings. · Turn Off the monitor, unplug the monitor power cord, replug it, and then turn On the monitor. · Select the Monitor camera again in the Camera / Video setting of your UC conference application.
Microphone is muted	Microphone is muted in the Windows Device Manager	· Ensure that the USB upstream cable is connected between the monitor and the computer or notebook. · Ensure that the 'Microphone' in OSD is set as Unmute. · Reconnect the USB upstream cable to the computer or notebook. · Ensure that the microphone is enabled/ unmuted on the monitor. If the microphone mute LED is lighting up in static red (indicates microphone muted), press the microphone button to unmute the microphone. · Ensure that the monitor's microphone is selected and enabled/unmuted on the setting in the UC application.

6. Trouble Shooting Instructions

Problem	What you experience	Possible solutions
Microphone volume is low / sounds soft	Microphone volume is low / sounds soft to the other participant when in audio/video call	· Ensure the Mute button's LED go dark (indicates microphone unmuted). · Adjust the distance between the user and the microphone. The user should avoid sitting too far away from the microphone. The most optimum distance between the user and the microphone is 70 cm. · Ensure that the monitor's microphone is selected and enabled/unmuted on the setting in the UC application. · Increase the microphone volume in the Sound setting interface at the PC side / in the UC application.
Front buttons don't work	No response on the UC application when press on the buttons located on the speaker	· Ensure that the USB upstream cable (Type-A to Type-B or Type-C to Type-C) is connected from the PC to the monitor. · Ensure that the USB is assign to the port which usb USB cable plug in, see **USB** in OSD menu. · For some UC platforms / applications, the Mute function works by pressing the Mute button, but the Mute Icon on the UC platform is not sync (Icon shows unmute).
Webcam image looks over-exposed	Webcam image shows over-exposed background	· Adjust the environment lighting condition. Ensure the monitor is setup at a well lighted environment, preferably under ceiling lights. The user should avoid a dim / dark background. The user should avoid direct facing a window with bright sunlight. · Alternatively, you may use Dell Peripheral Manager to adjust the webcam setting on color.
Webcam image looks grainy / dark	Webcam image appears grainy / dark	· Adjust the environment lighting condition. Ensure the monitor is setup at a well lighted environment, preferably under ceiling lights. The user should avoid a dim environment.

6. Trouble Shooting Instructions

Problem	What you experience	Possible solutions
Webcam image looks blurry	Webcam image appears blurry / not clear.	· Use a clean and slightly damp cloth to wipe the surface of the front webcam. · Adjust the distance between the user and the camera. The user should avoid sitting too far away from the camera. The most optimum distance between the user and the camera is 70 cm.
Teams Microphone volume	Teams Microphone volume is lower than Zoom	· This is normal behavior as the volume specifications are different between Teams and Zoom.
Teams/Zoom small window distorted	Teams/Zoom small window image distorted	· This is normal behavior. The resolution of the small images are compressed when the main image is in high resolution (2K). If a lower resolution (720P & 1080P) is selected, there will not be any difference between the images.
Image quality poor	The image quality of the monitor was poor	Always poor: · Check that your computer is USB 3.0-capable. · Some computers have USB 3.0, USB 2.0, and USB 1.1 ports. Ensure that the correct USB port is used. Sometime poor: · Network will effect the image quality,ensure your network is fine.
Proximity sensor does not work	Presence detection/wake-up not working	· When using Teams/Zoom call, the wake up function not working is normal. · It works when a user is not using Teams/ Zoom.
The recording video blurred out.	Change monitor Camera resolution to 480p, Record with the camera app, save and playback the recording. There will show Mosaic in the video.	· Change monitor camera resolution to 720p or higher.

6. Trouble Shooting Instructions

Problem	What you experience	Possible solutions
The USB device cannot work on 2nd monitor (MST)	Platform connect to dock with USB-C cable. Connect 1st monitor with DP cable and a USB-A to USB-C cable to Docking. Connect DP cable from 1st monitor (DP Out) to 2nd monitor (DP Port). Connect USB A-C cable from 1st monitor (USB-A) to 2nd monitor (USB-C). The USB device cannot work on 2nd monitor.	· Exceed USB hub topology · Workaround: Option 1: Without the dock, just direct connect the computer and the two monitors. Option 2: If a dock is needed, do not use the USB hub of the 2nd monitor.
Notebook not charging via USB-C	Notebook ≥ 180W not charging when connected to P2424HEB monitor USB-C port	· Connect the Notebook with Power adaptor
Notebook cannot power on	When the Notebook battery is at 0%, Notebook cannot power on when connecting USB-C cable to monitor	· Connect the Notebook with Power adaptor

Problem	What you experience	Possible solutions
The wireless mouse does not work smoothly and pauses.	Connect USB up-stream cable to the DUT. More than one meter away, 2.4Ghz mouse does not work.	· Workaround: a) connect to Quick Access Port b) Connect USB 2.4Ghz dongle via USB-A Male to Female cable (0.5M)
Black screen shows up on monitor after Mac book restarting system under lid closing.	When you close the lid of your Mac book and restart your Mac book, the monitor will show black screen.	· Move the mouse or hit the keyboard to wake up the Mac book. · Turn on the monitor setting of fast wakeup, Personalize -> Fast Wakeup -> on.

Microsoft® Teams® / Skype for Business® specific problems

Problem	What you experience	Possible solutions
The **Teams** button is not working	Short press on the **Teams** button does not bring up Teams application to the foreground	· Ensure that the USB upstream cable (Type-A to Type-B or Type-C to Type-C) is connected from the PC to the monitor. · Ensure that the Teams application is signed in and is already running at the background. The Teams button's LED will light in static white. · Ensure that the Teams account is provisioned / setup as 'Teams Only' mode. The tenant administrator should enable the account to 'Teams Only' mode. · Teams button will only work with Teams application in 'Teams Only' mode. Setting might vary in corporate environment, resulting in Teams button not working on the monitor. Please check with your system administrator.

Universal Serial Bus (USB) specific problems

Specific Symptoms	What you experience	Possible solutions
USB interface is not working	USB peripherals are not working	• Check that your display is turned ON. • Reconnect the upstream cable to your computer. • Reconnect the USB peripherals (downstream connector). • Turn off the monitor and turn it on again. • Reboot the computer. • Certain USB devices such as portable hard drives require higher power source; connect the drive to the computer directly.
super speed USB 3.2 Gen 1 interface is slow.	super speed USB 3.2 Gen 1 peripherals working slowly or not working at all	• Check that your computer is USB 3.0-capable. • Some computers have USB 3.0, USB 2.0, and USB 1.1 ports. Ensure that the correct USB port is used. • Reconnect the upstream cable to your computer. • Reconnect the USB peripherals (downstream connector). • Reboot the computer.
Wireless USB peripherals stop working when a USB 3.0 device is plugged in	Wireless USB peripherals responding slowly or only working as the distance between itself and its receiver decreases	• Increase the distance between the USB 3.0 peripherals and the wireless USB receiver. • Position your wireless USB receiver as close as possible to the wireless USB peripherals. • Use a USB-extender cable to position the wireless USB receiver as far away as possible from the USB 3.0 port.

6. Trouble Shooting Instructions

Problem	What you experience	Possible solutions
The **Hookswitch** button is not working	Short press on the **Hookswitch** button does not answer call	• Ensure that the USB upstream cable (Type-A to Type-B or Type-C to Type-C) is connected from the PC to the monitor. • Ensure that the Teams account is provisioned / setup as 'Teams Only' mode. The tenant administrator should enable the account to 'Teams Only' mode.
The **Mute** button is not working	Press on the **Mute** button does not mute and unmute microphone	• Ensure that the USB upstream cable (Type-A to Type-B or Type-C to Type-C) is connected from the PC to the monitor. • Ensure that the Mute button's LED will go dark (indicates microphone unmuted). • Ensure that the Teams account is provisioned / setup as 'Teams Only' mode. The tenant administrator should enable the account to 'Teams Only' mode.
Webcam no image	Webcam no image when using Skype for Business (SfB)	• Ensure that the USB upstream cable (Type-A to Type-B or Type-C to Type-C) is connected from the PC to the monitor. • Select 'DELL Monitor RGB Webcam' as the camera in Skype Video Device setting.
Webcam being occupied	Webcam being occupied and can't be used	• Avoid running multiple conference softwares at the same time. While you are using 'conference software A', close the other 'conference software B'.