

Dell Pro 22 Monitor

E2226H

Simplified Service Manual

Notes, cautions, and warnings

 **NOTE:** A NOTE indicates important information that helps you make better use of your product.

 **CAUTION:** A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

 **WARNING:** A WARNING indicates a potential for property damage, personal injury, or death.

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Safety instructions

Use the following safety guidelines to protect your monitor from potential damage and to ensure your personal safety. Unless otherwise noted, each procedure in this document assumes that you have read the safety information that shipped with your monitor.

NOTE: Before using the monitor, read the safety information that is shipped with your monitor and printed on the product. Keep the documentation at a secure location for future reference.

CAUTION: The possible long-term effect of listening to audio at high volume through the headphones (on monitors that support it) can damage your hearing ability.

WARNING: Use of controls, adjustments, or procedures other than those specified in this documentation may result in exposure to shock, electrical hazards and/or mechanical hazards.

- Place the monitor on a solid surface and handle it carefully.
- The screen is fragile and can be damaged if dropped or pressed with a sharp object.
- Ensure that your monitor is electrically rated to operate with the AC power available in your location.
- Keep the monitor in room temperature. Excessive cold or hot conditions can have an adverse effect on the liquid crystal of the display.
- Connect the power cable from the monitor to a wall outlet that is near and accessible. See [Connecting your monitor](#).
- Do not place or use the monitor on a wet surface or near water.
- Do not subject the monitor to severe vibration or high impact conditions. For example, do not place the monitor inside a car trunk.
- Unplug the monitor when it is going to be left unused for an extended period.
- To avoid electric shock, do not attempt to remove any cover or touch the inside of the monitor.
- Read these instructions carefully. Keep this document for future reference. Follow all warnings and instructions that are marked on the product.
- Certain monitors can be wall-mounted using the VESA mount that is sold separately. Ensure to use the correct VESA specifications as mentioned in the wall-mounting section of the User's Guide.

For information about safety instructions, see the *Safety, Environmental, and Regulatory Information (SERI)* document that is shipped with your monitor.

Before working inside your monitor

Steps

1. Save and close all open files and exit all running applications.
2. Turn off your monitor.
3. Disconnect your monitor and all attached devices from their electrical outlets.
4. Disconnect all attached network devices and peripherals, such as the keyboard, mouse, and dock from your monitor.
- ⚠ **WARNING:** To disconnect a network cable, first unplug the cable from your monitor and then unplug the cable from the network device.
5. Remove any media card and optical disc from your monitor, if applicable.

After working inside your monitor

⚠ **CAUTION:** Leaving stray or loose screws inside your monitor may severely damage it.

Steps

1. Replace all screws and ensure that no stray screws remain inside your monitor.
2. Connect any external devices, peripherals, or cables you removed before working on your monitor.
3. Reinsert any media cards, discs, or any other parts that you removed before working on your monitor.
4. Connect your monitor and all attached devices to their electrical outlets.
5. Turn on your monitor.

Views of E2226H monitor

Front view

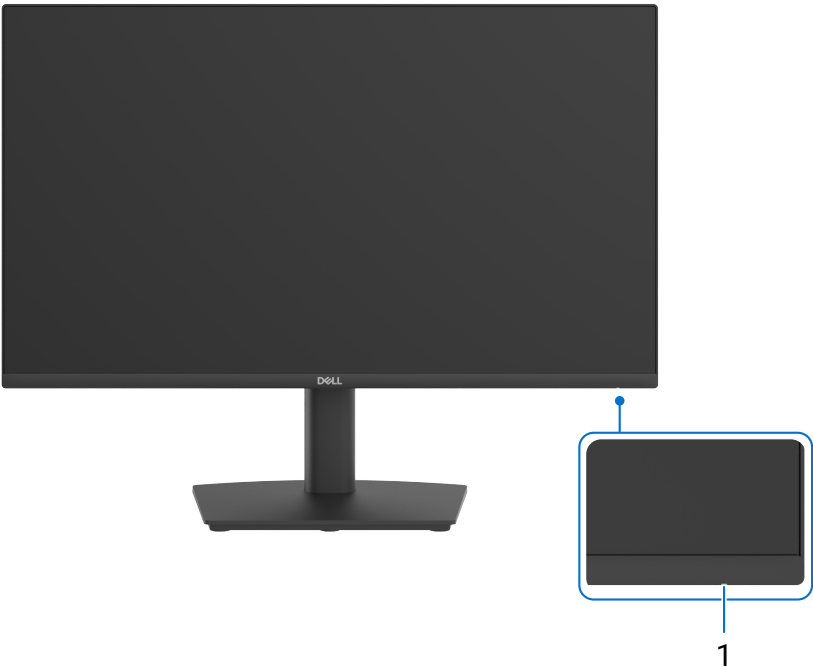


Figure 1. Front view

Table 1. Components and descriptions.

Label	Description	Function
1	Power LED Indicator	Solid white light indicates that the monitor is turned on and is functioning. Blinking white light indicates that the monitor is in Standby Mode.

Back view

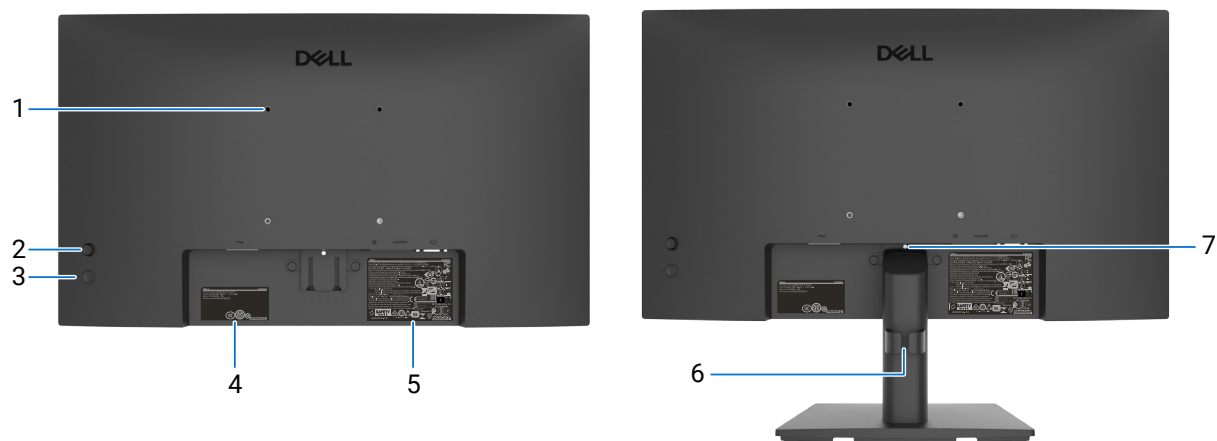


Figure 2. Back view

Table 2. Components and descriptions.

Label	Description	Function
1	VESA mounting 4 holes (100 mm x 100 mm) - behind attached VESA cover	Wall-mount the monitor using VESA-compatible Wall-mount kit.
2	Joystick	Use it to control the OSD menu.
3	Power button	To turn the monitor on or off.
4	Regulatory label (including MyDell QR code, serial number, and Service Tag label)	See this label if you need to contact Dell for technical support. The Service Tag is a unique alphanumeric identifier that allows Dell service technicians to identify your monitor's specifications and access warranty information.
5	Regulatory information label	Lists the regulatory approvals.
6	Cable-management guide	To organize the cables.
7	Stand release button	Release stand from the monitor.

Side view



Figure 3. Side view

Bottom view

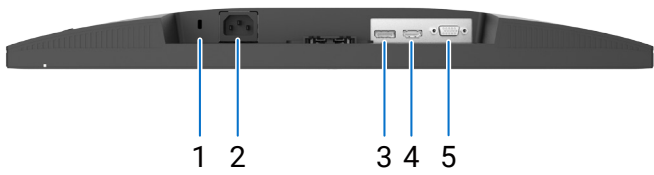


Figure 4. Bottom view

Table 3. Components and descriptions.

Label	Description	Function
1	Security-lock slot	Secures the monitor with a security cable lock (sold separately).
2	 Power connector	Connects the power cable.
3	 DisplayPort 1.4 port	Connects to your computer with the DisplayPort cable.
4	 HDMI 1.4 port	Connects your computer with the HDMI cable.
5	 VGA port	Connects to your computer with the VGA cable.

Major components of E2226H monitor

The following image shows the major components of monitor.

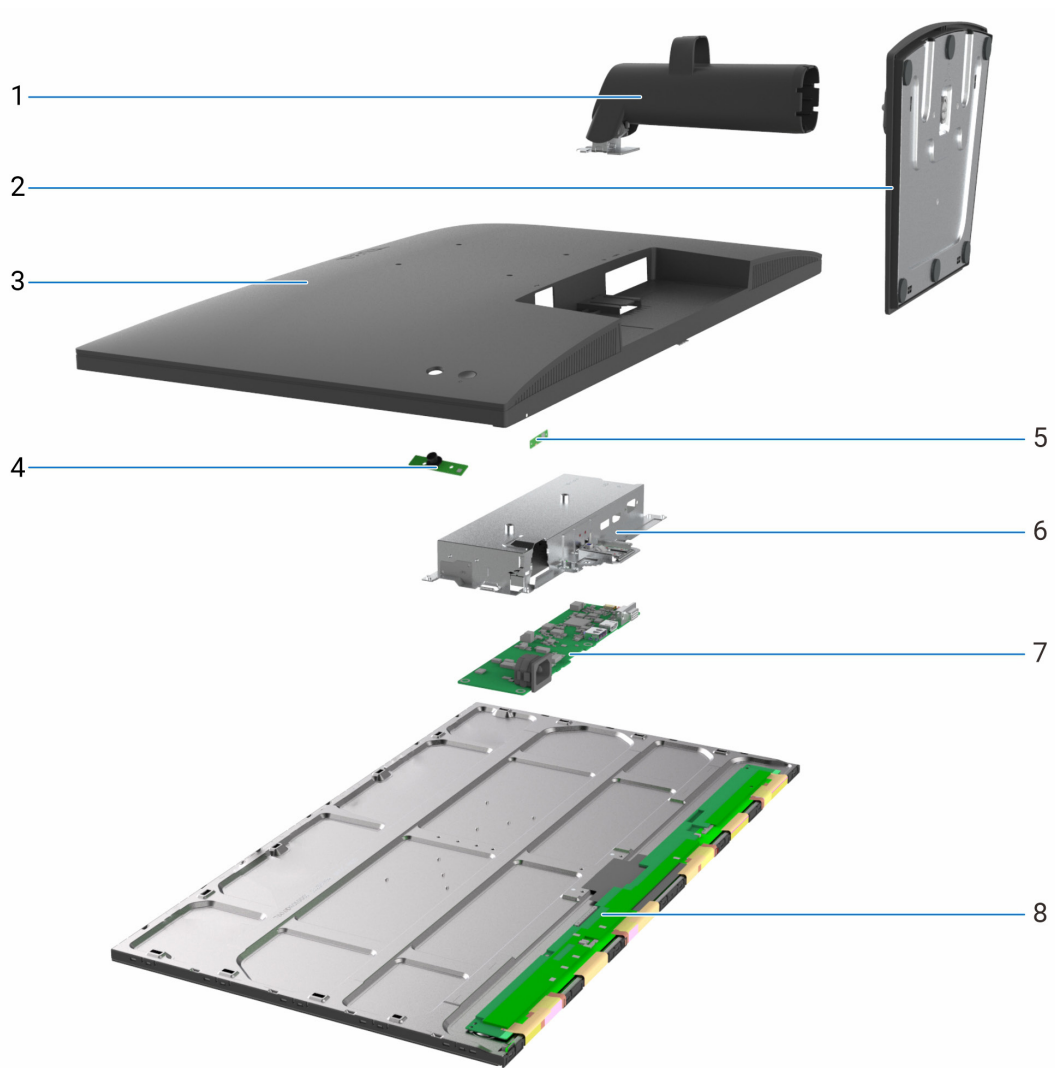


Figure 5. Major Components of E2226H monitor

Table 4. Major components.

Callout	Description
1	Stand riser
2	Stand base
3	Back cover
4	Keypad board
5	LED board
6	Main chassis
7	Main board
8	Display panel

Wiring connectivity diagram

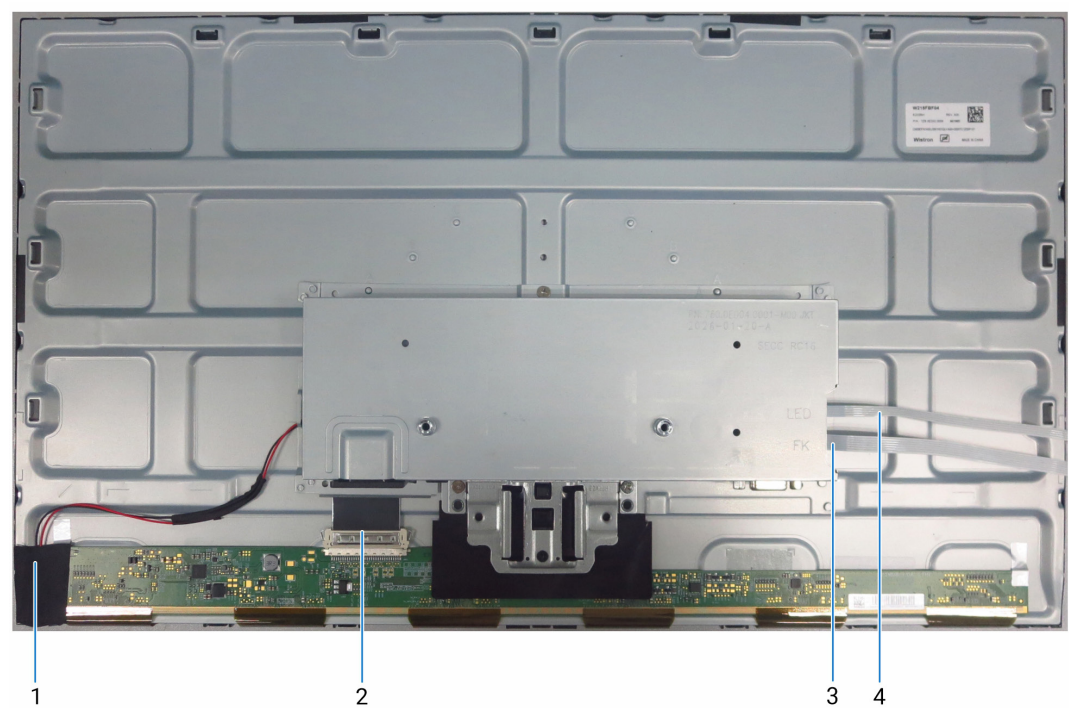


Figure 6. Wiring connectivity diagram

Table 5. Wiring connectivity diagram.

Callout	Description
1	Lightbar cable
2	Low Voltage Differential Signaling (LVDS) cable
3	Keypad cable
4	LED cable

Connecting your monitor

- ⚠ WARNING:** Before you begin any of the procedures in this section, follow the [Safety instructions](#).
- ⚠ WARNING:** For your safety, be sure that the grounded power outlet you plug the power cable into is accessible to the operator and located as close to the equipment as possible. To disconnect power from the equipment, unplug the power cable from the power outlet by grasping the plug firmly. Never pull on the cord.
- ⚠ WARNING:** A certified power supply cord has to be used with this equipment. The relevant national installation and/or equipment regulations should be considered. A certified power supply cord not lighter than ordinary polyvinyl chloride flexible cord according to IEC 60227 (designation H05VV-F 3G 0.75 mm² or H05VVH2-F2 3G 0.75 mm²) should be used.
- ① NOTE:** Dell monitors are designed to work optimally with the Dell-supplied cables inside the box. Dell does not guarantee the video quality and performance if non-Dell cables are used.
- ① NOTE:** Route the cables through the cable-management slot before connecting them.
- ① NOTE:** Do not connect all the cables to the computer at the same time.
- ① NOTE:** The images are for illustration purposes only. The appearance of the computer may vary.

To connect your monitor to the computer:

1. Turn off your computer and disconnect the power cable.
2. Connect the DP/HDMI cable from your monitor to the computer.
3. Connect the power cable to the monitor and the wall outlet.
4. Turn on your monitor.
5. Select the correct input source from the OSD Menu on your monitor and then turn on your computer.

Connecting the DP cable



Figure 7. Connecting the DP cable

Connecting the HDMI cable



Figure 8. Connecting the HDMI cable

Disassembly and reassembly

CAUTION: The information in this section is intended for authorized service technicians in the EMEA region. Dell prohibits users from disassembling the monitor, and any damage that is caused by unauthorized servicing will not be covered under the warranty.

Recommended tools

Tool Description:

- Phillips screwdriver #0
- Phillips screwdriver #2
- Nut driver 5 mm
- Penknife

Screw list

- NOTE:** When removing screws from a component, it is recommended to note the screw type, the quantity of screws, and then place them in a screw storage box. This is to ensure that the correct number of screws and correct screw type is restored when the component is replaced.
- NOTE:** Some monitors have magnetic surfaces. Ensure that the screws are not left attached to such surfaces when replacing a component.
- NOTE:** Screw color may vary depending on the configuration ordered.

Table 6. Components and descriptions.

Component	Screw type	Quantity	Screw image
Back cover	M4x6	2	
Keypad board	M2x3.3	2	
Main chassis	M3x3	3	
Main Board	M3x6	3	
Main board groundwire	M4x8	1	
VGA connector	M3x8	2	

Stand

Removing the stand

Prerequisites

1. Follow the procedure in [Before working inside your monitor.](#)

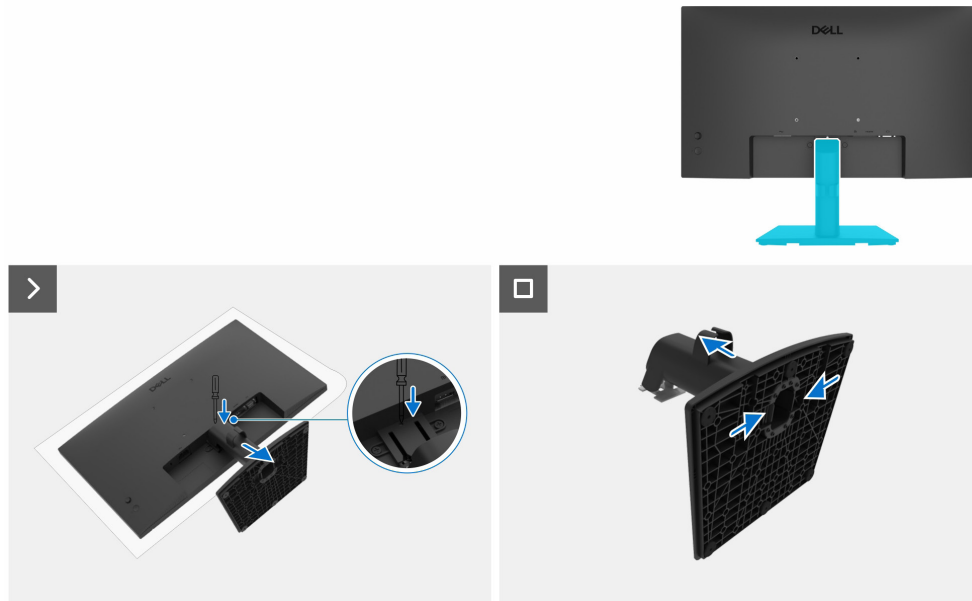


Figure 9. Removing the stand

Steps

1. Place the monitor on a soft cloth or cushion on the desk.
2. Use a long and thin screwdriver to push the release button.
3. While keeping the release button pressed, pull the stand out from the monitor.
4. Press the quick release tab on the bottom of the base to separate the stand base from the stand riser.

Installing the stand

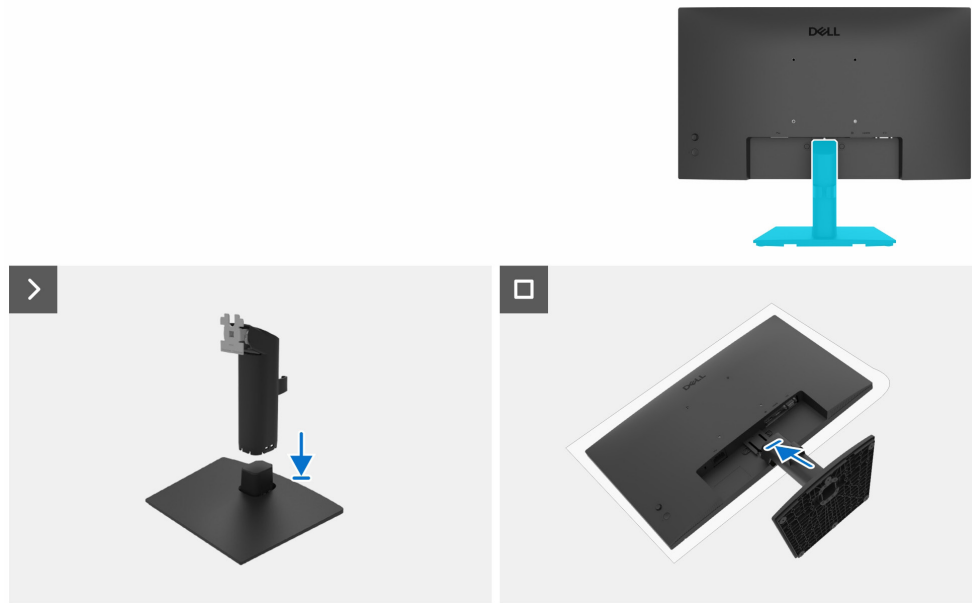


Figure 10. Installing the stand

Steps

1. Place the monitor stand base on a stable tabletop.
2. Slide the monitor stand body in the correct direction down onto the stand base until it clicks into place.
3. Place the monitor on a soft cloth or cushion near the edge of the desk.
4. Align the stand assembly bracket with the monitor groove.
5. Insert the stand assembly towards the monitor until it locks in place.

Next steps

1. Follow the procedure in [After working inside your monitor.](#)

Back cover

Removing the back cover

Prerequisites

1. Follow the procedure in [Before working inside your monitor.](#)
2. Remove the [stand](#).

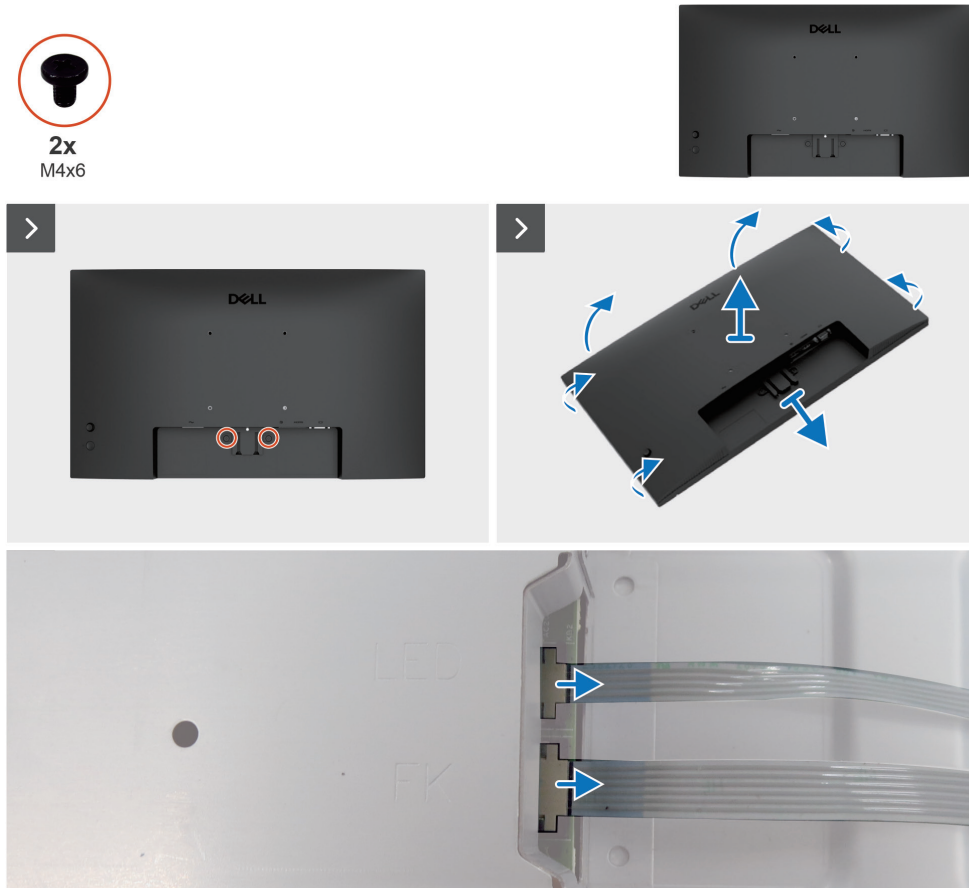


Figure 11. Removing the back cover

Steps

1. Remove the two screws (M4x6) to release the back cover.
2. Using both hands, gently pry the back cover off, starting from the top side, then moving to the left and right sides.
3. Partially lift the back cover from the bottom edge.
4. Disconnect the keypad cable and LED cable from the connectors on the main board.
5. Remove the back cover from the display assembly.

Installing the back cover

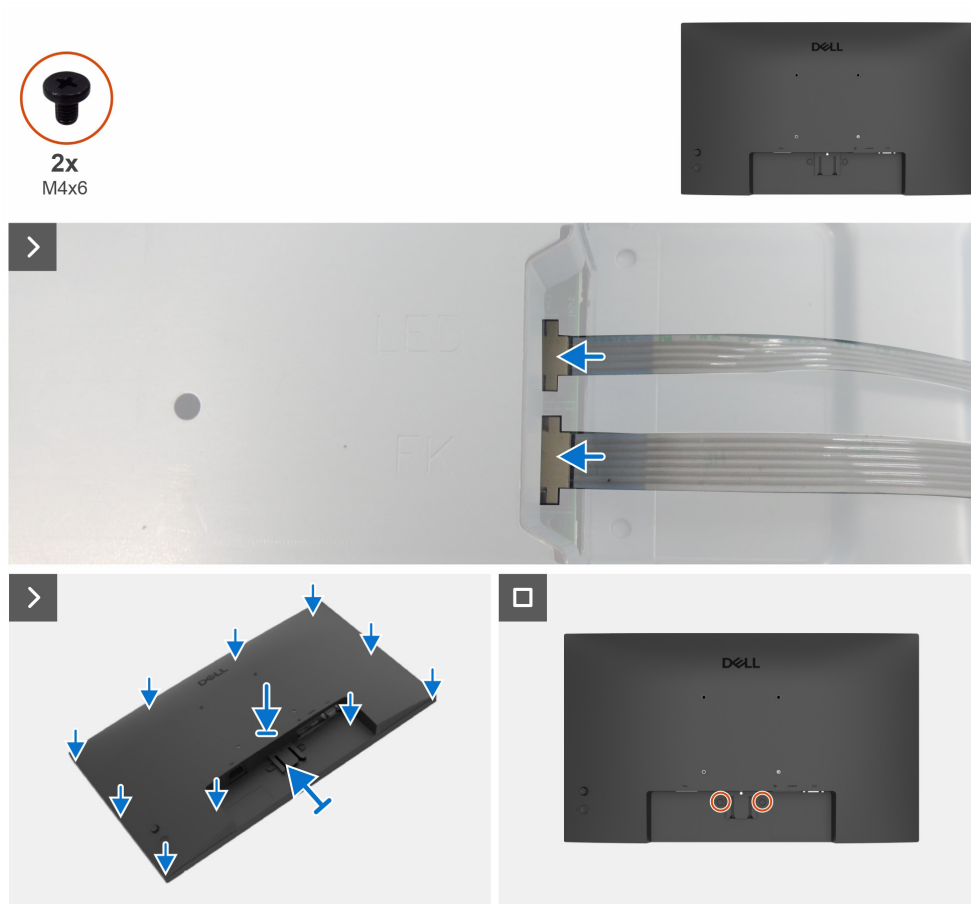


Figure 12. Installing the back cover

Steps

1. Connect the LED cable and keypad cable to the connectors on the main board.
2. Align the back cover with the main chassis, then press along the sides to snap the back cover into place.
3. Replace the two screws (M4x6) to secure the back cover to the monitor.

Next steps

1. Install the [stand](#).
2. Follow the procedure in [After working inside your monitor](#).

Keypad board

Removing the keypad board

Prerequisites

1. Follow the procedure in [Before working inside your monitor.](#)
2. Remove the [stand.](#)
3. Remove the [back cover.](#)

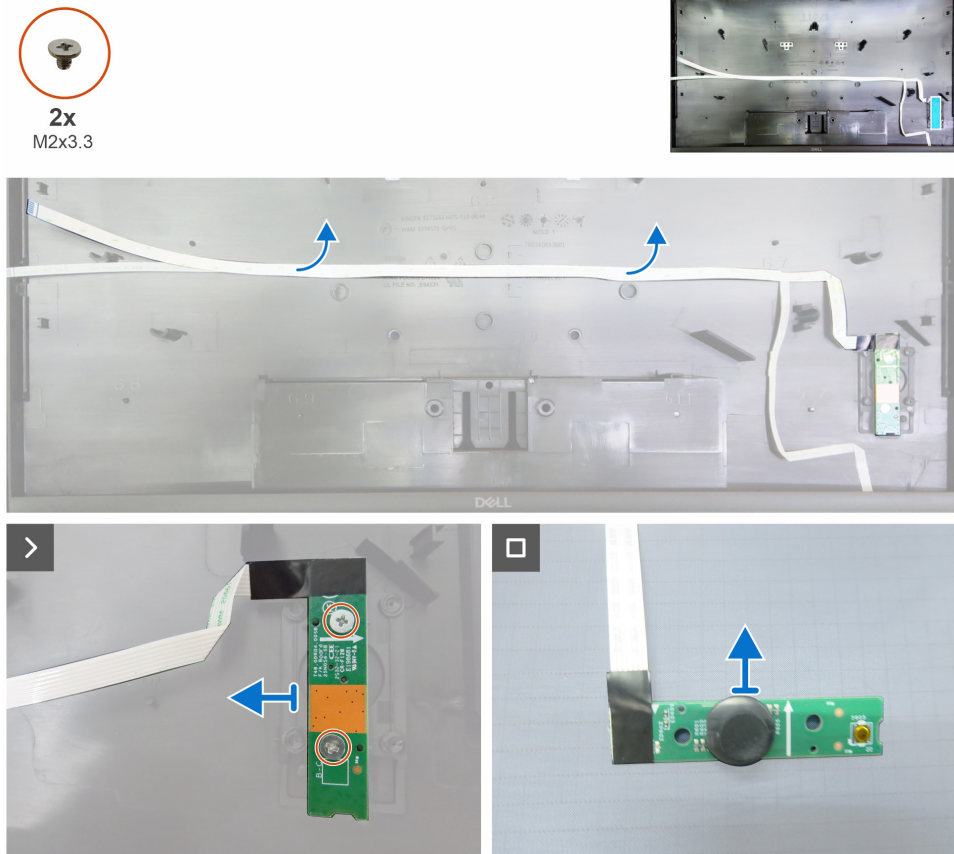


Figure 13. Removing the keypad board

Steps

1. Peel the double-sided tape that secures the keypad cable to the back cover.
2. Remove the two screws (M2x3.3) that secure the keypad board to the back cover.
3. Remove the keypad board from the pins on the back cover.
4. Remove the joystick key from the keypad board.

Installing the keypad board

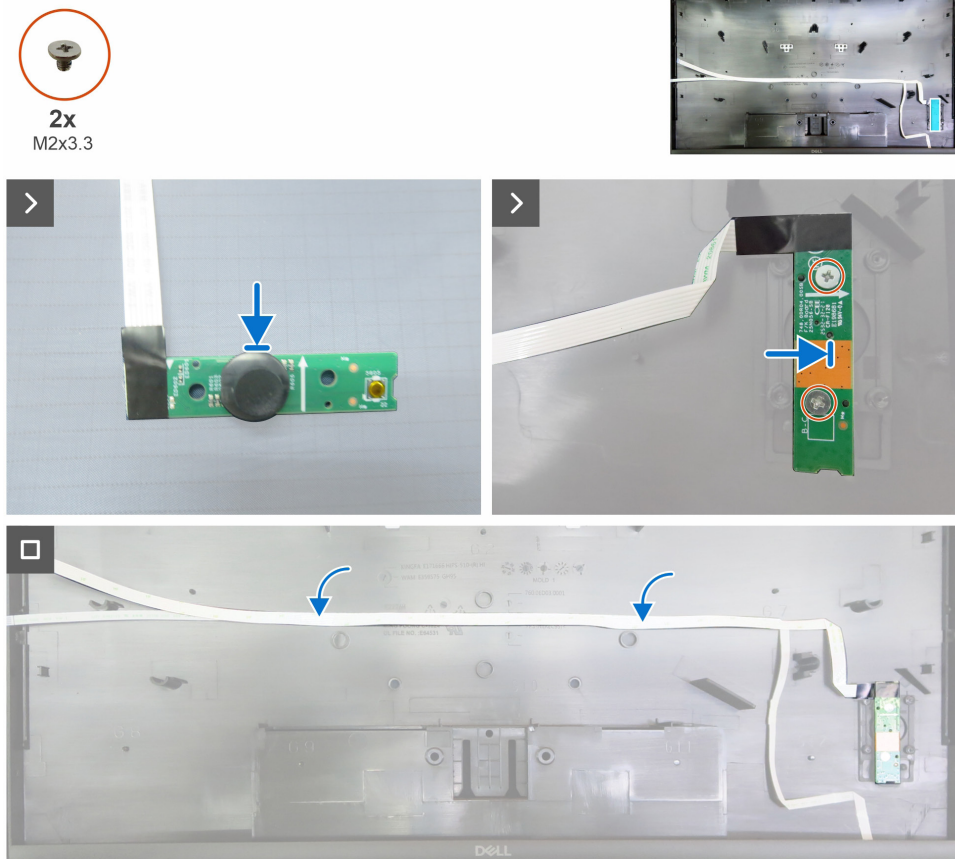


Figure 14. Installing the keypad board

Steps

1. Replace the joystick key to the keypad board.
2. Align the holes on the keypad board with the screw holes on the back cover, and place it down.
3. Replace the two screws (M2x3.3) that secure the keypad board to the back cover.
4. Adhere the double-sided tape to secure the keypad cable to the back cover.

Next steps

1. Install the [back cover](#).
2. Install the [stand](#).
3. Follow the procedure in [After working inside your monitor](#).

LED board

Removing the LED board

Prerequisites

1. Follow the procedure in [Before working inside your monitor.](#)
2. Remove the [stand.](#)
3. Remove the [back cover.](#)
4. Remove the [keypad board.](#)

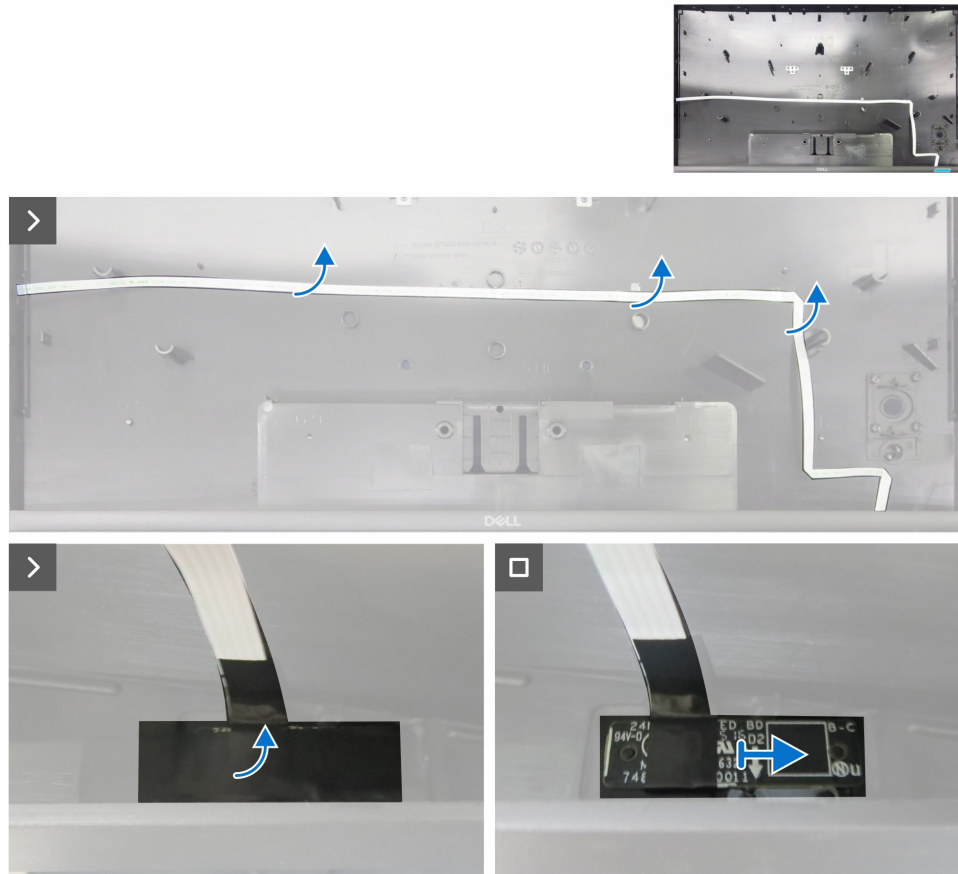


Figure 15. Removing the LED board

Steps

1. Peel the double-sided tape that secures the LED cable to the back cover.
2. Peel the mylar tape from the LED board.
3. Remove the LED board from the pins on the back cover.

Installing the LED board

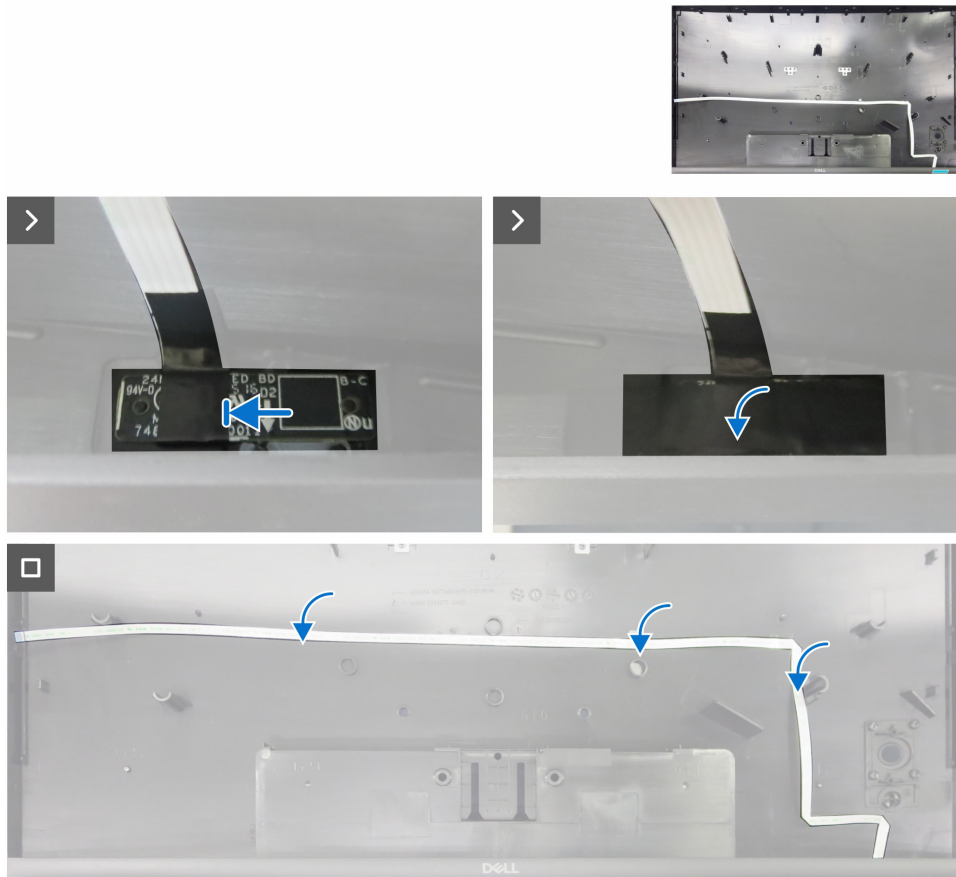


Figure 16. Installing the LED board

Steps

1. Align the holes on the LED board with the pins on the back cover, and place it in the slots.
2. Adhere the mylar tape to cover the LED board.
3. Adhere the double-sided tape to secure the LED cable to the back cover.

Next steps

1. Install the [keypad board](#).
2. Install the [back cover](#).
3. Install the [stand](#).
4. Follow the procedure in [After working inside your monitor](#).

Main chassis

Removing the main chassis

Prerequisites

1. Follow the procedure in [Before working inside your monitor](#).
2. Remove the [stand](#).
3. Remove the [back cover](#).
4. Remove the [keypad board](#).
5. Remove the [LED board](#).

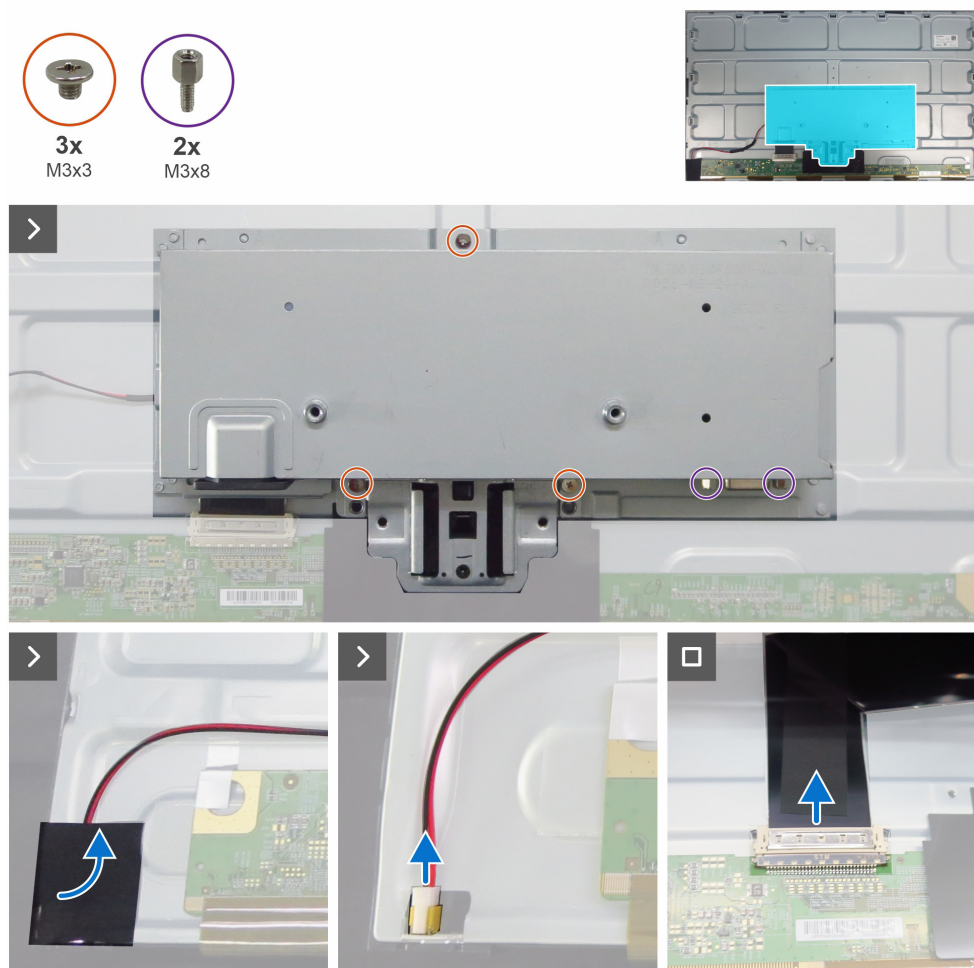


Figure 17. Removing the main chassis

Steps

1. Remove the three screws (M3x3) that secure the main chassis to the display panel.
2. Remove the two screws (M3x8) that secure the VGA connector to the main chassis.
3. Peel the acetate tape and disconnect the lightbar cable from the connector on the display panel.
4. Disconnect the LVDS cable from the connector on the display panel.
5. Lift and remove the main chassis from the display panel.

Installing the main chassis

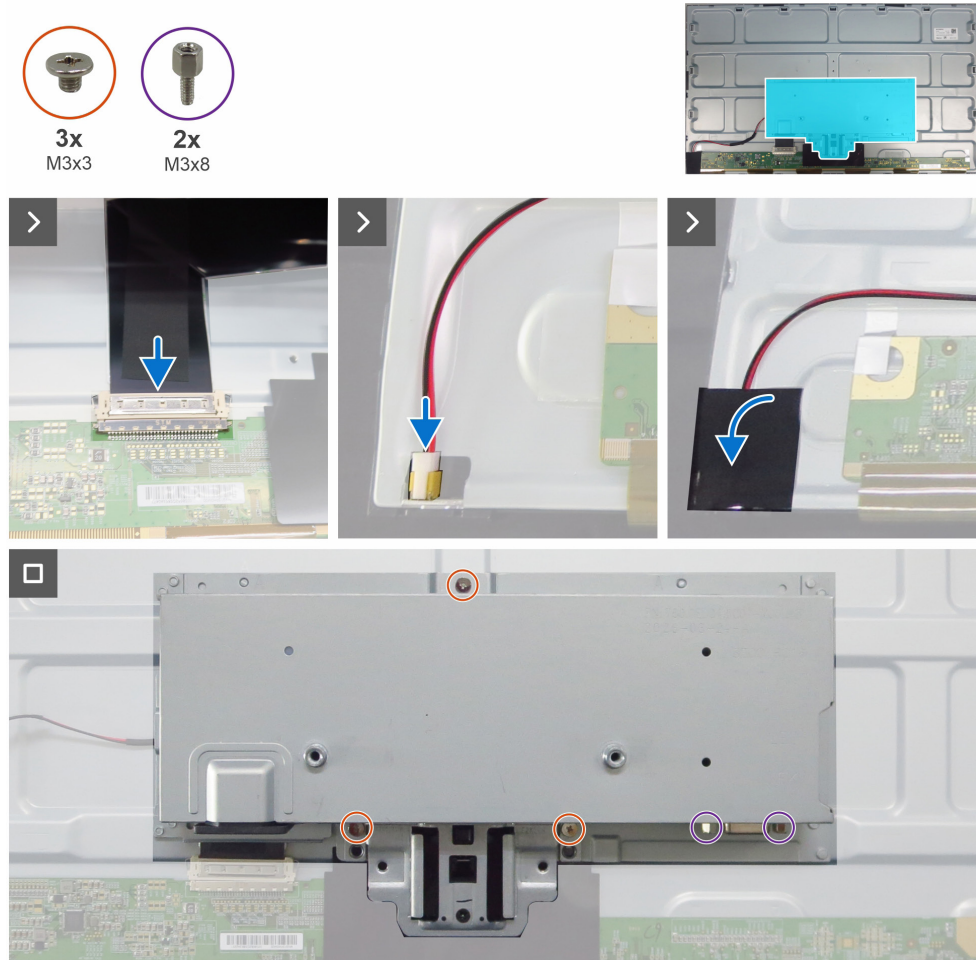


Figure 18. Installing the main chassis

Steps

1. Align the holes on the main chassis with the screw holes on the display panel, and place it down.
2. Connect the LVDS cable to the connector on the display panel.
3. Connect the lightbar cable to the display panel and adhere the acetate tape on the lightbar cable.
4. Replace the two screws (M3x8) to secure the VGA connector.
5. Replace the three screws (M3x3) that secure the main chassis to the display panel.

Next steps

1. Install the [LED board](#).
2. Install the [keypad board](#).
3. Install the [back cover](#).
4. Install the [stand](#).
5. Follow the procedure in [After working inside your monitor](#).

Main board

Removing the main board

Prerequisites

1. Follow the procedure in [Before working inside your monitor.](#)
2. Remove the [stand.](#)
3. Remove the [back cover.](#)
4. Remove the [keypad board.](#)
5. Remove the [LED board.](#)
6. Remove the [main chassis.](#)

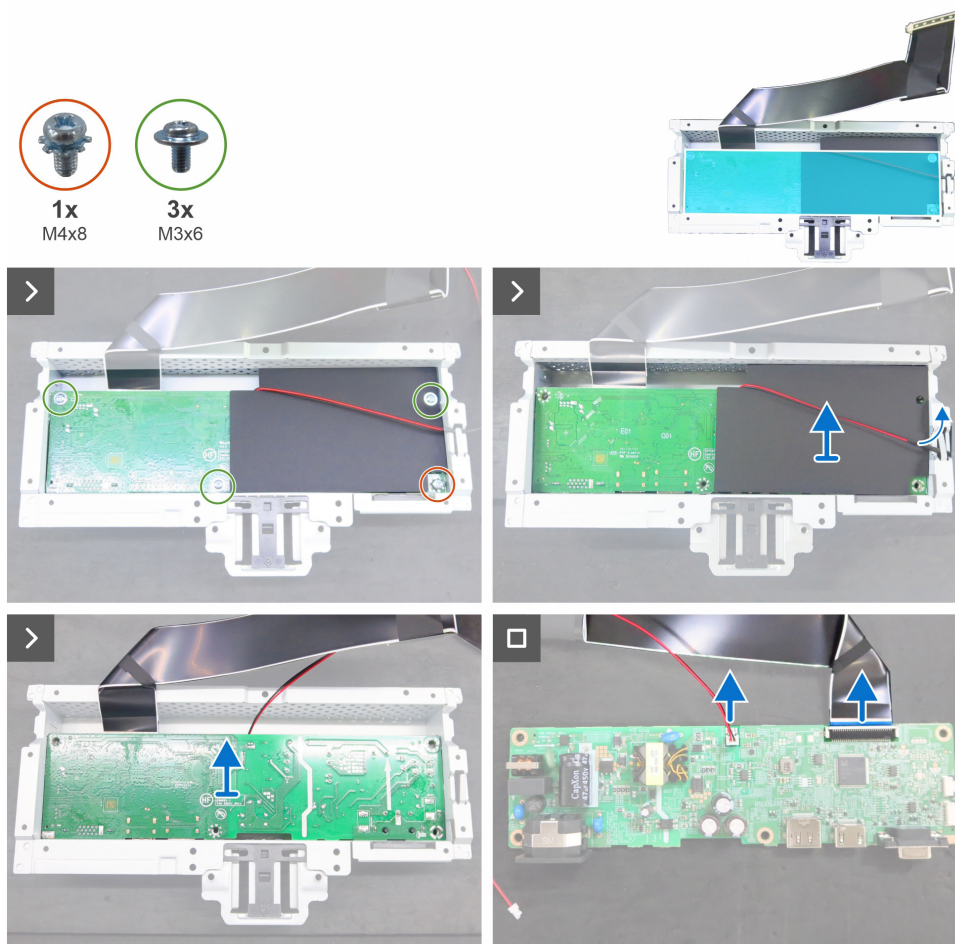


Figure 19. Removing the main board

Steps

1. Remove the screw (M4x8) and the three screws (M3x6) that secure the Mylar sheet and main board to the main chassis.
2. Unroute the lightbar cable from the routing guides on the main chassis.
3. Remove the Mylar sheet from the slot in the main chassis.
4. Remove the main board from the main chassis.
5. Disconnect the lightbar cable and LVDS cable from the connectors on the main board.

Installing the main board

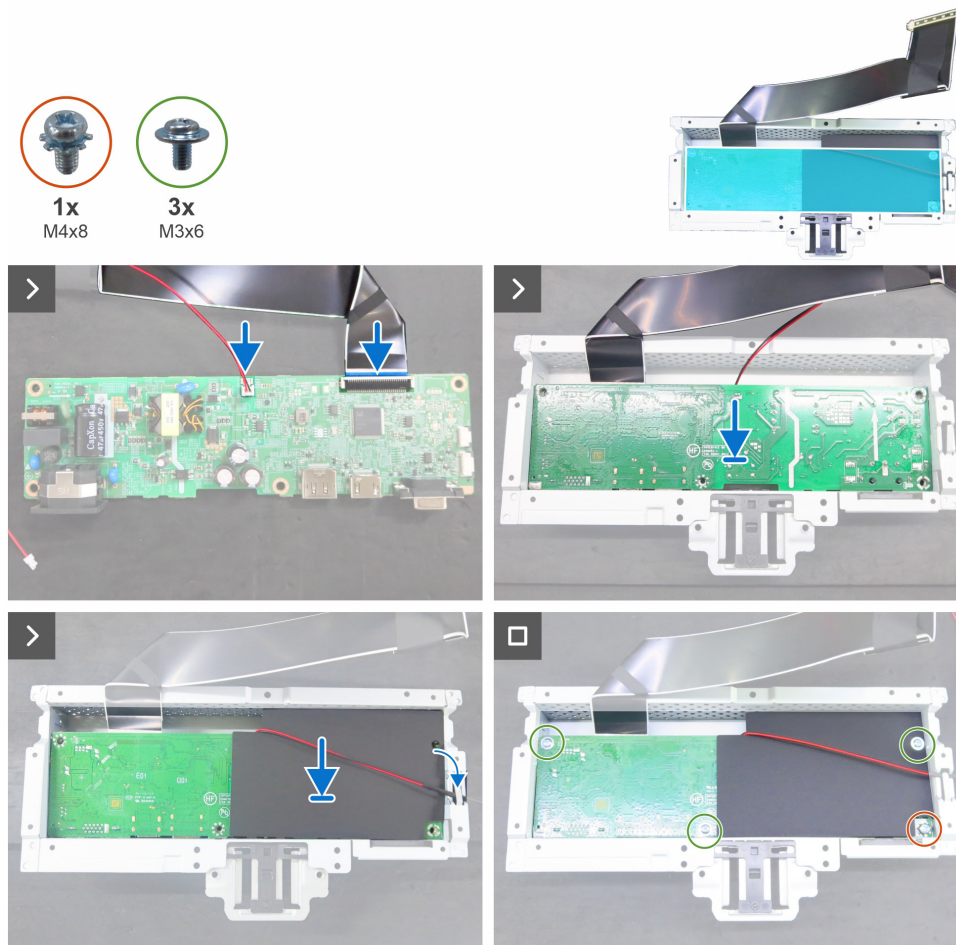


Figure 20. Installing the main board

Steps

1. Connect the LVDS cable and lightbar cable to the connectors on the main board.
2. Align the screw holes on the main board with the screw holes on the main chassis, and place it down.
3. Insert the Mylar sheet into the slot on the main chassis.
4. Replace the three screws (M3x6) and the screw (M4x8) to secure the main board to the main chassis.
5. Route the lightbar cable through the routing guides on the main chassis.

Next steps

1. Install the [main chassis](#).
2. Install the [LED board](#).
3. Install the [keypad board](#).
4. Install the [back cover](#).
5. Install the [stand](#).
6. Follow the procedure in [After working inside your monitor](#).

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.

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

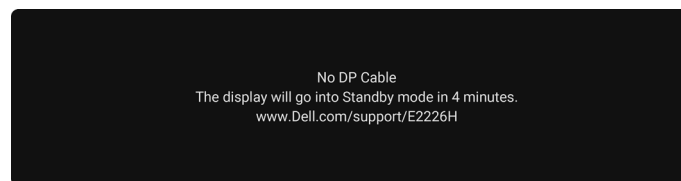


Figure 21. DP cable disconnected warning message

4. This dialog box also appears during normal operation if the video cable is 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 still remains blank after performing the above steps, it indicates the monitor is functioning properly. Check the video controller and computer.

Built-in diagnostics

Your monitor includes a built-in diagnostic tool to help you identify whether the screen abnormality is due to an issue with the monitor itself or with your computer and video card.

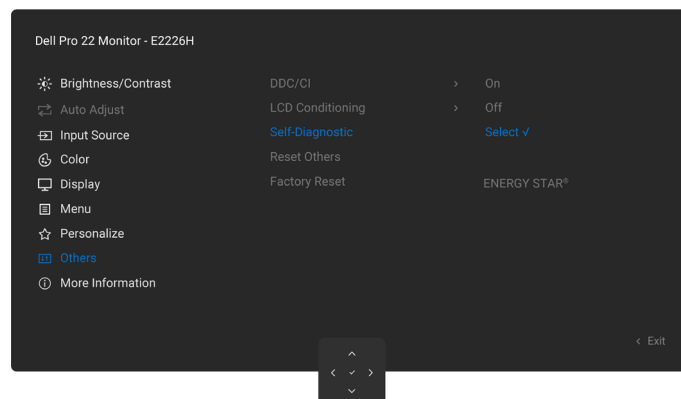


Figure 22. Built-in diagnostics

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 that you might encounter and the possible solutions:

⚠ WARNING: The monitor LCD panel duty cycle is designed for 18 hours per day, 7 days a week. Usage beyond the designed duty cycle may result in premature reduction in panel backlight luminance, which may not be covered under warranty.

Table 7. Common problems

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 you have pressed the power button properly. - 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 through 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 Display Pixel Guidelines.
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 Pixel Policy, see Dell Display Pixel Guidelines.
Brightness problems	Picture too dim or too bright	- Reset the monitor to factory settings. - Adjust brightness and contrast controls through OSD.
Safety-related issues	Visible signs of smoke or sparks	- Do not perform any troubleshooting steps. - Contact Dell immediately.
Intermittent problems	Monitor malfunctions on and 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 a monitor Built-in diagnostics. - 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	- Try different Preset Modes in Color settings OSD. - Adjust R/G/B value under Custom Color in the Color menu OSD. - Change the Input Color Format to RGB or YCbCr in the Color settings 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 the Windows Power Options or Mac Energy Saver setting. - Alternatively, use a dynamically changing screensaver.
The screen image is too small	Image is centered on the screen, but does not fill the entire viewing area	- Check the Aspect Ratio setting in the Display menu OSD. - Reset the display to factory settings.

Common symptoms	What you experience	Possible solutions
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. • Check whether the OSD menu is locked. If yes, move and hold the joystick Up, Down, Left, or Right navigation keys for 4 seconds to unlock.
No input signal when user controls are pressed	No picture; the LED light is white	• Check the signal source. Ensure that the computer is not in the power saving mode by moving the mouse or pressing any key on the keyboard. • Ensure the video cable is securely connected. If needed, disconnect and reconnect the cable to confirm a proper connection. • 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.

Contacting Dell

To contact Dell for sales, technical support, or customer service issues, see [Contact Support at Dell Support Site](#).

- ① **NOTE:** Availability varies by country or region and product, and some services may not be available in your country or region.
- ① **NOTE:** If you do not have an active Internet connection, you can find contact information about your purchase invoice, packing slip, bill, or Dell product catalog.

Revision History

The following table provides the revision history of this document:

Table 8. Revision history

Revision	Date	Description
A00	July 2026	Original publish date.