

Dell 24 200Hz Monitor SE2425HG

Dell 27 200Hz Monitor SE2725HG

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.

 **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.

 **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.

- 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 at 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 SE2425HG/SE2725HG monitor

Front view

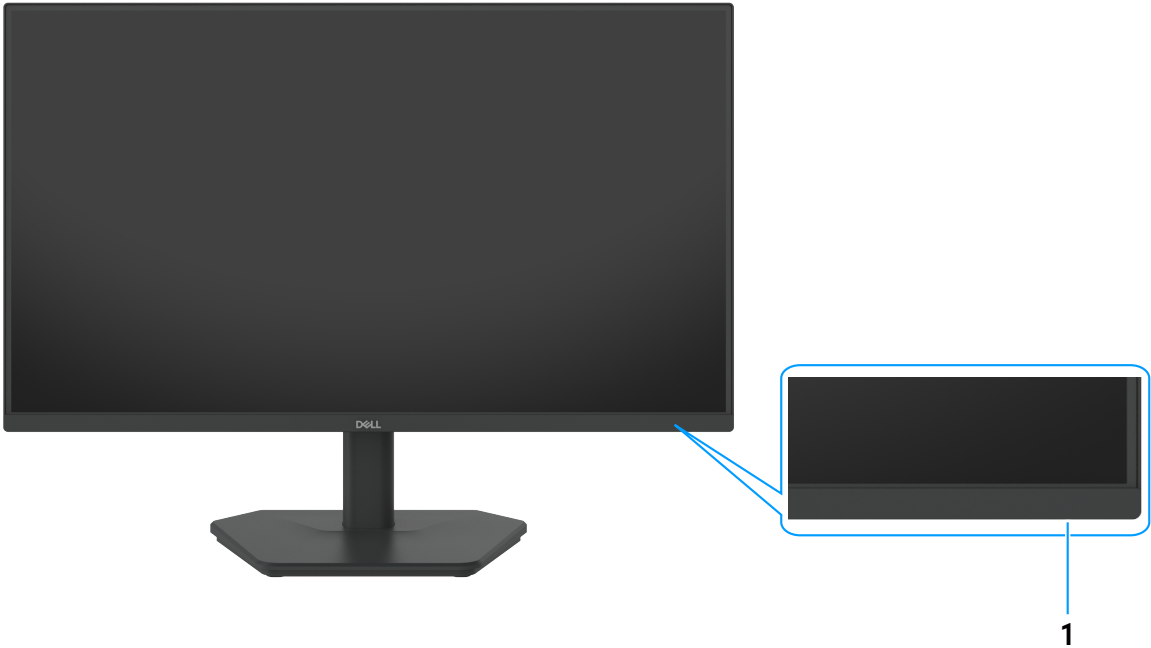


Figure 1. Front view

Table 1. Components and descriptions.

Label	Description	Function
1	Power button (with 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

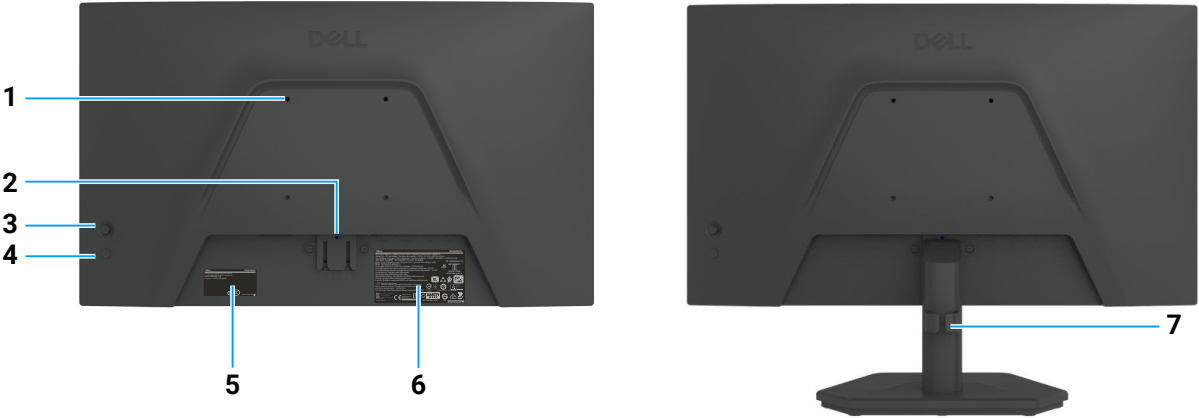


Figure 2. Back view

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	Stand release button	Releases the stand from the monitor.
3	Joystick	Use it to control the OSD menu.
4	Power button	To turn the monitor on or off.
5	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.
6	Regulatory information label	Lists the regulatory approvals.
7	Cable-management clip	Used to organize cables by inserting them through the slot.

Bottom view

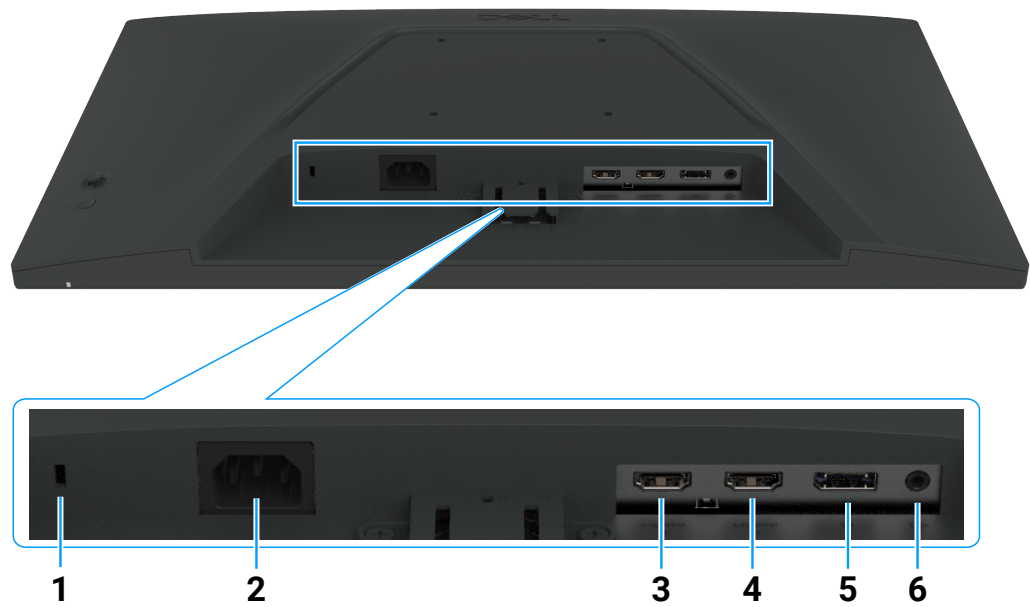


Figure 3. Bottom view

Table 3. Components and descriptions.

Label	Description	Function
1	Security lock slot (based on Kensington Security Slot)	Secures the monitor with security cable lock (sold separately).
2	Power connector	Connect the power cable.
3, 4	HDMI 2.1 port (2)	Connect your computer using the HDMI cable.
5	DisplayPort 1.4 port	Connect your computer using the DisplayPort cable.
6	Audio headphone out port	Connect external headphones.

Major components of SE2425HG/SE2725HG monitor

The following image shows the major components of monitor.

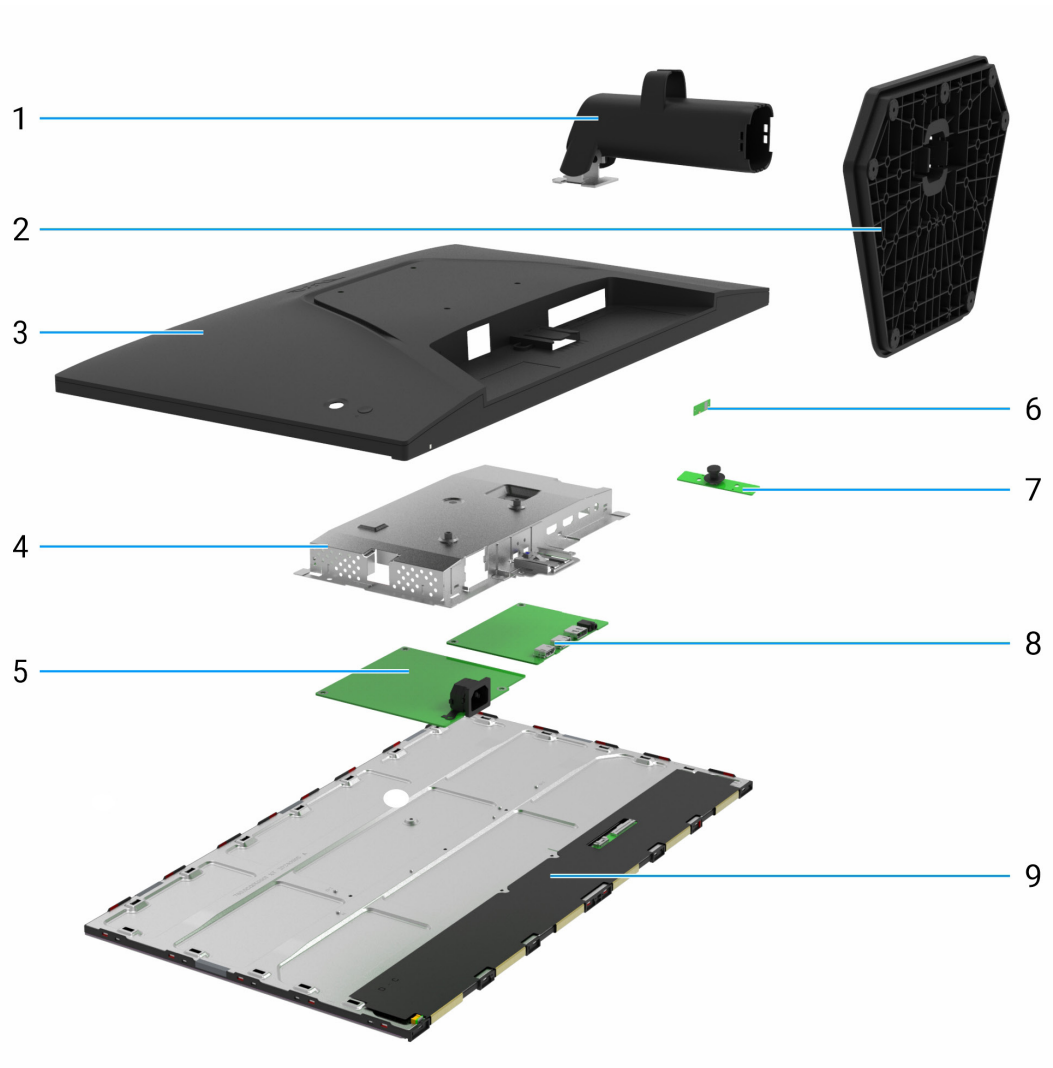


Figure 4. Major Components of SE2425HG/SE2725HG monitor

Table 4. Major components.

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

Wiring connectivity diagram

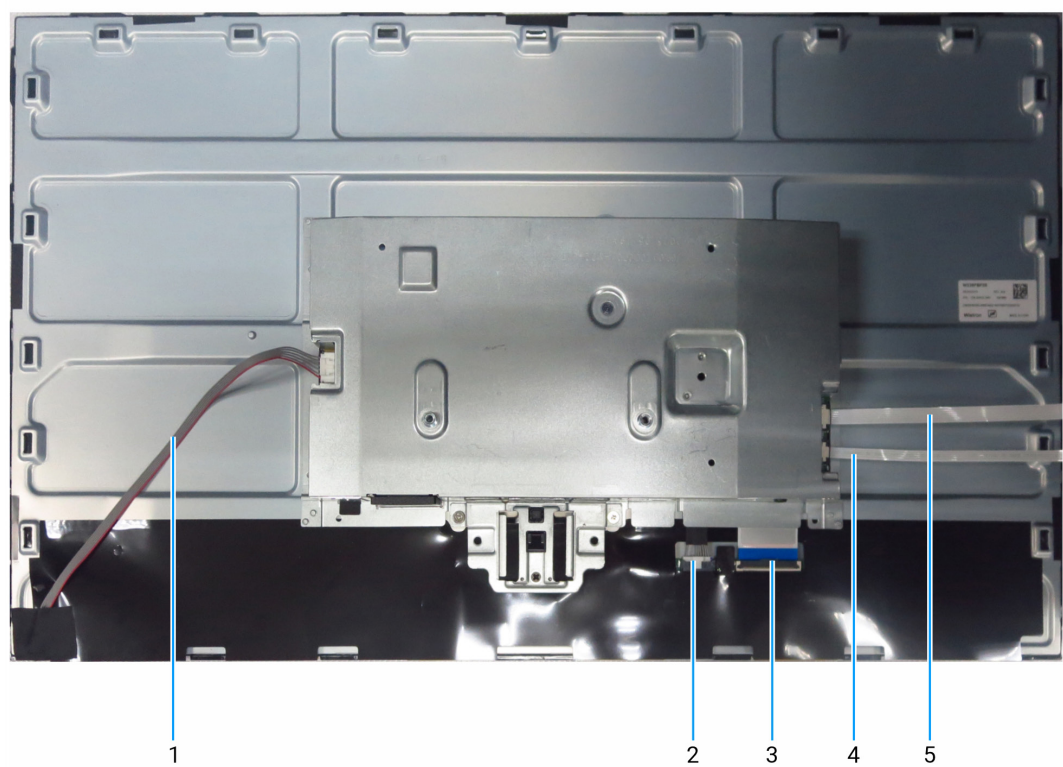


Figure 5. Wiring connectivity diagram

Table 5. Wiring connectivity diagram

Callout	Description
1	Lightbar cable
2	T-CON cable
3	Low Voltage Differential Signaling (LVDS) cable
4	LED cable
5	Keypad 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.

ⓘ 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.

ⓘ NOTE: Route the cables through the cable-management slot before connecting them.

ⓘ NOTE: Do not connect all the cables to the computer at the same time.

ⓘ 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 HDMI/DisplayPort cable from your monitor to the computer.
3. Turn on your monitor.
4. Select the correct input source from the OSD Menu on your monitor and then turn on your computer.

ⓘ NOTE: SE2425HG/SE2725HG default setting is DisplayPort 1.4. A DisplayPort 1.1 graphics card may not display normally. Please refer to [Product specific problems – No image when using DP connection to the PC](#) to change the default setting.

Connecting the HDMI cable (Optional)



Figure 6. Connecting the HDMI cable

Connecting the DisplayPort cable



Figure 7. Connecting the DisplayPort 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
- 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	
Main chassis	M3x3	3	
Key board	M2x3.3	2	
Main Board	M3x6	2	
Power board groundwire	M4x8	1	
Power board	M3x6	3	

Stand

Removing the stand

Prerequisites

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



Figure 8. Removing the stand

Steps

1. Place the monitor on a soft cloth or cushion on the desk.
2. Use a long, 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

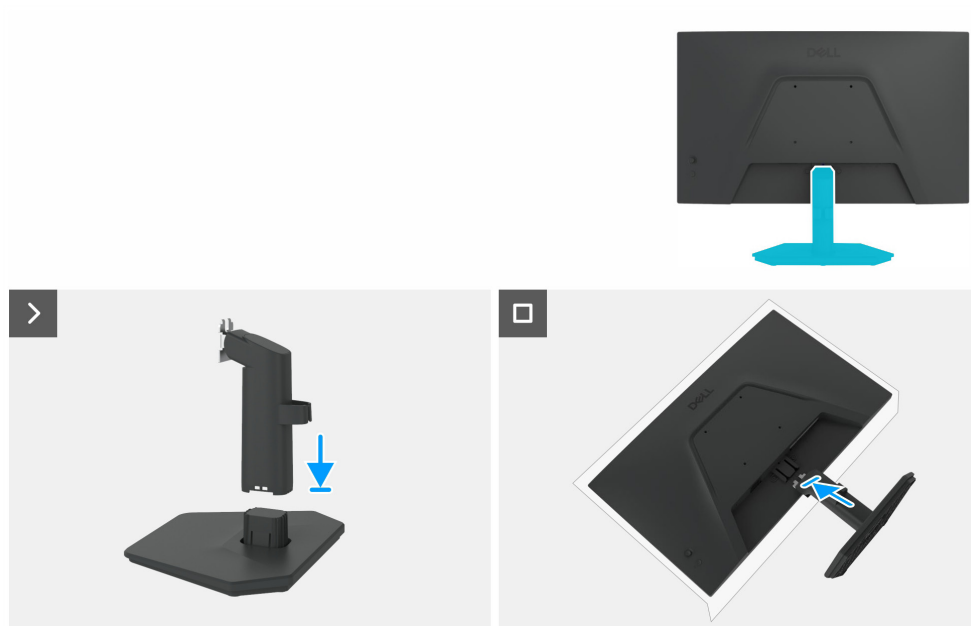


Figure 9. Installing the stand

Steps

1. Place the monitor stand base on a stable tabletop.
2. Slide the monitor stand body down onto the stand base in the correct direction 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 groove on the back of the monitor.
5. Insert the stand assembly into 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](#).

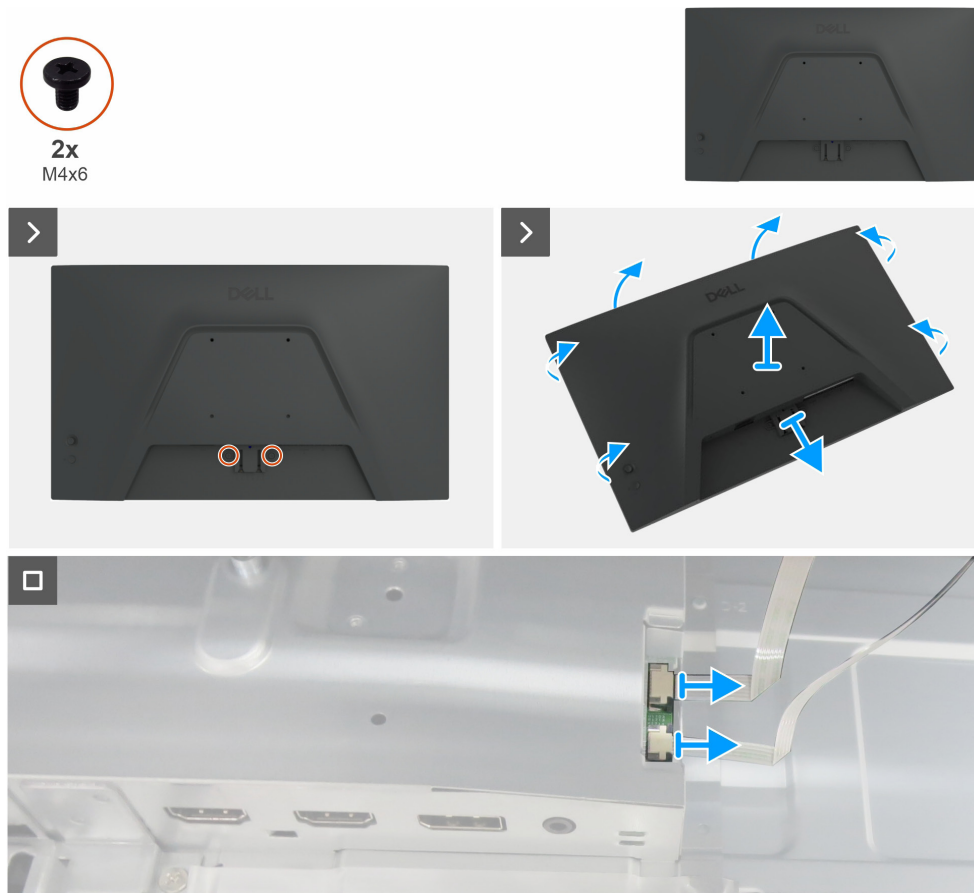


Figure 10. Removing the back cover

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 their connectors on the main board.
5. Remove the back cover from the display assembly.

Installing the back cover

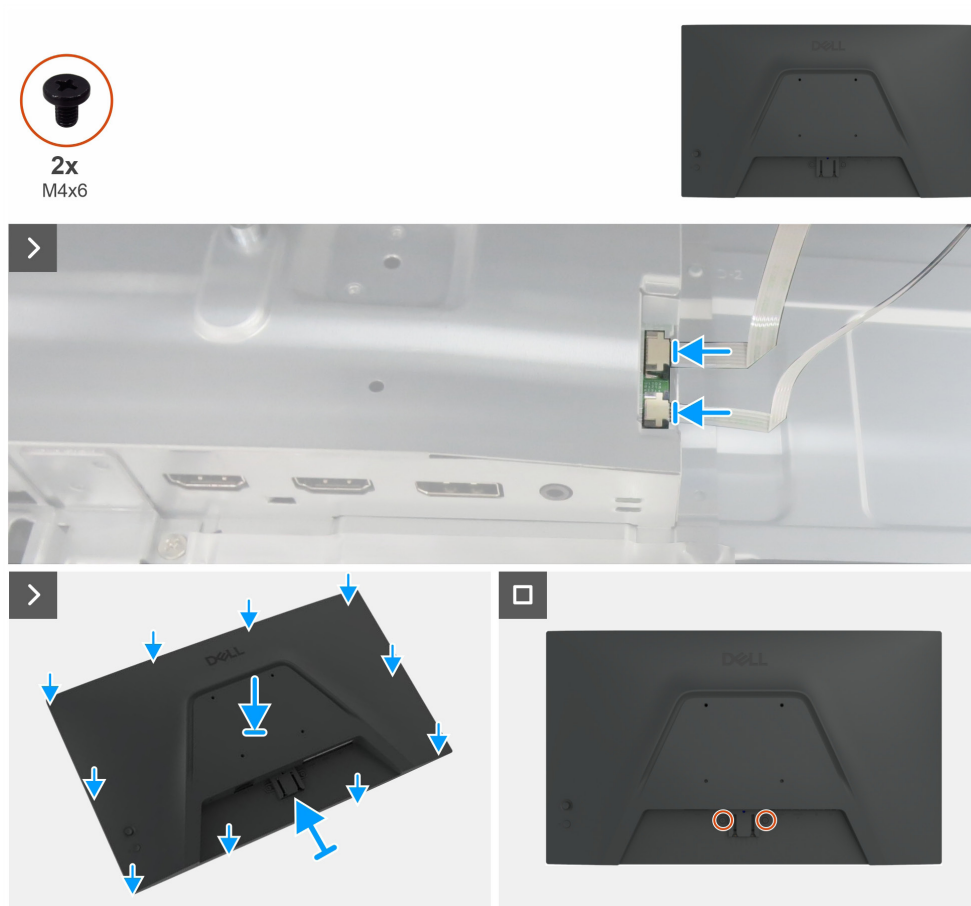


Figure 11. Installing the back cover

Steps

1. Connect the keypad cable and LED cable to the connectors on the main board.
2. Align the slots on the back cover with the slots on 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](#).

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](#).

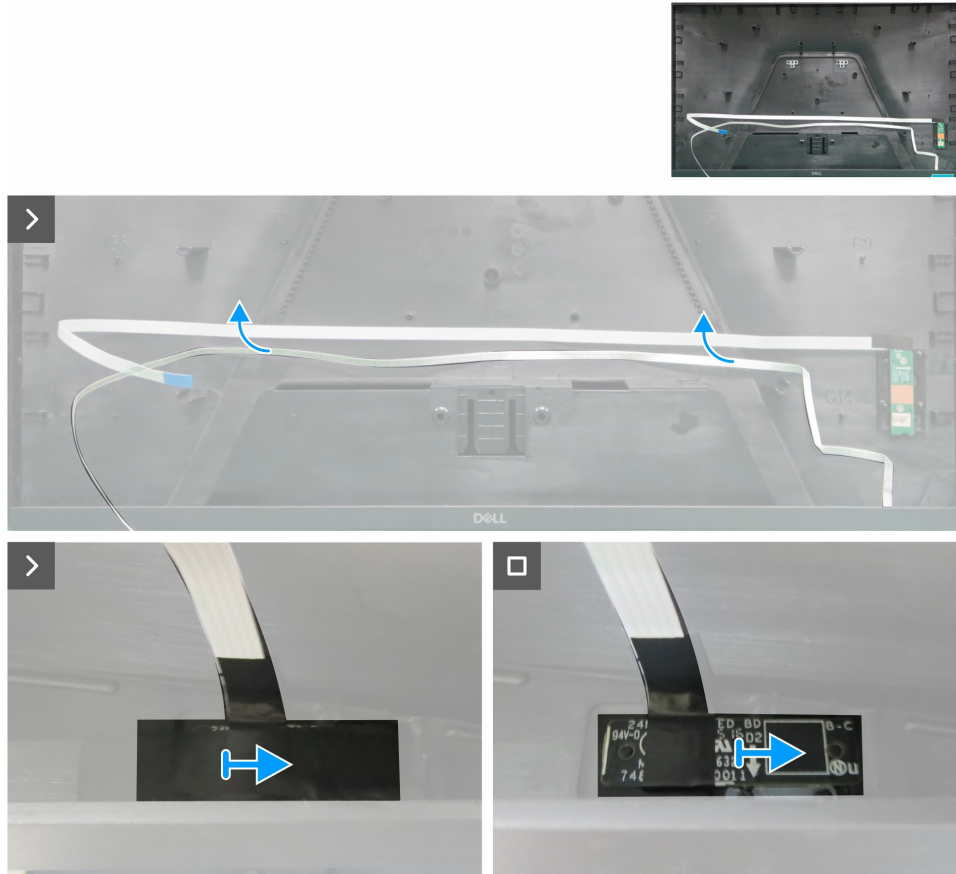


Figure 12. Removing the LED board

Steps

1. Peel off 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

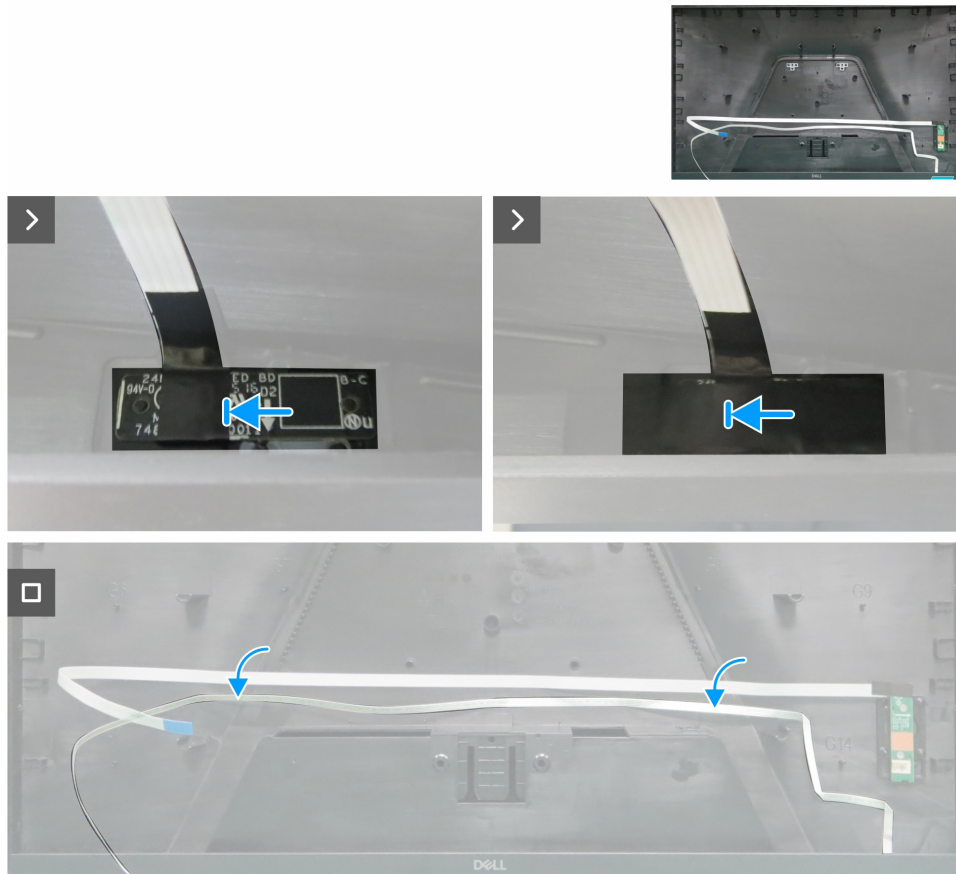


Figure 13. Installing the LED board

Steps

1. Align the holes on the LED board with the pins on the back cover, and place it down.
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 [back cover](#).
2. Install the [stand](#).
3. 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.](#)
4. Remove the [LED board.](#)

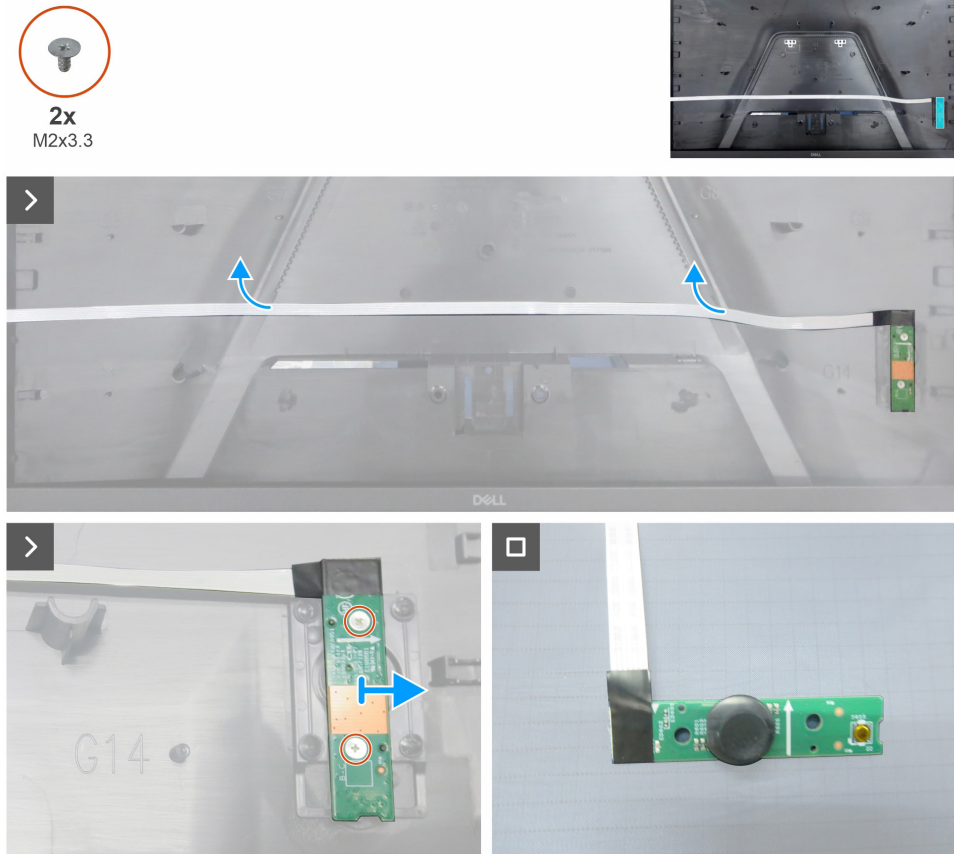


Figure 14. Removing the keypad board

Steps

1. Peel off 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

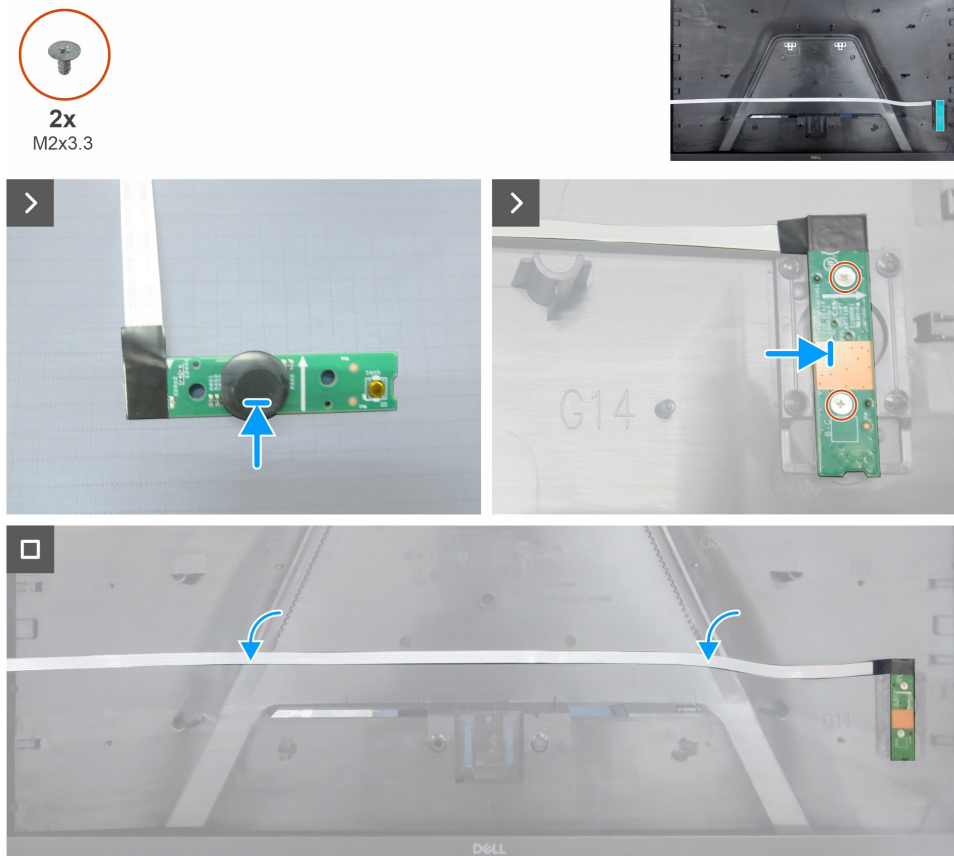


Figure 15. Installing the keypad board

Steps

1. Attach 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 [LED 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 [LED board.](#)
5. Remove the [keypad board.](#)

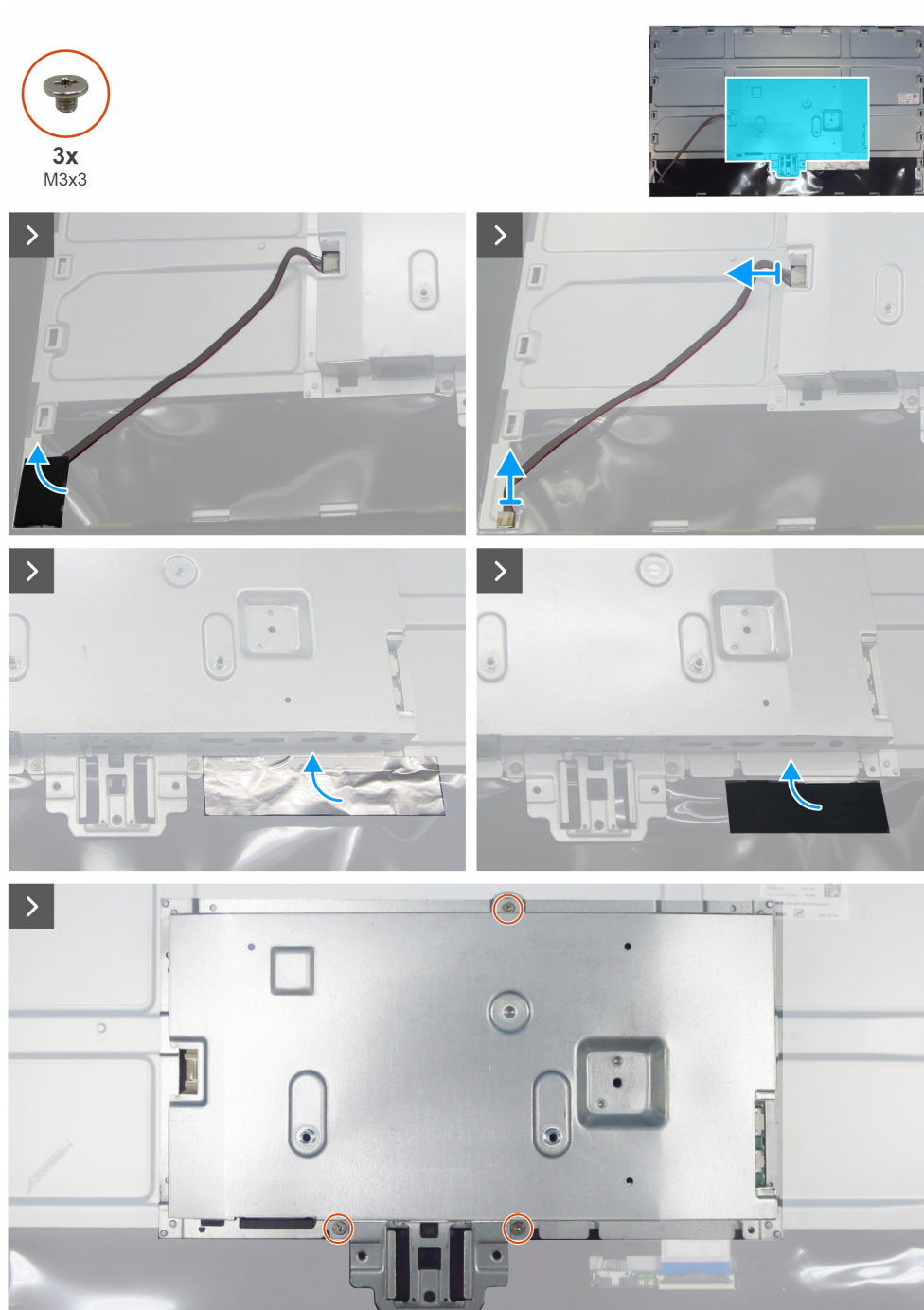


Figure 16. Removing the main chassis

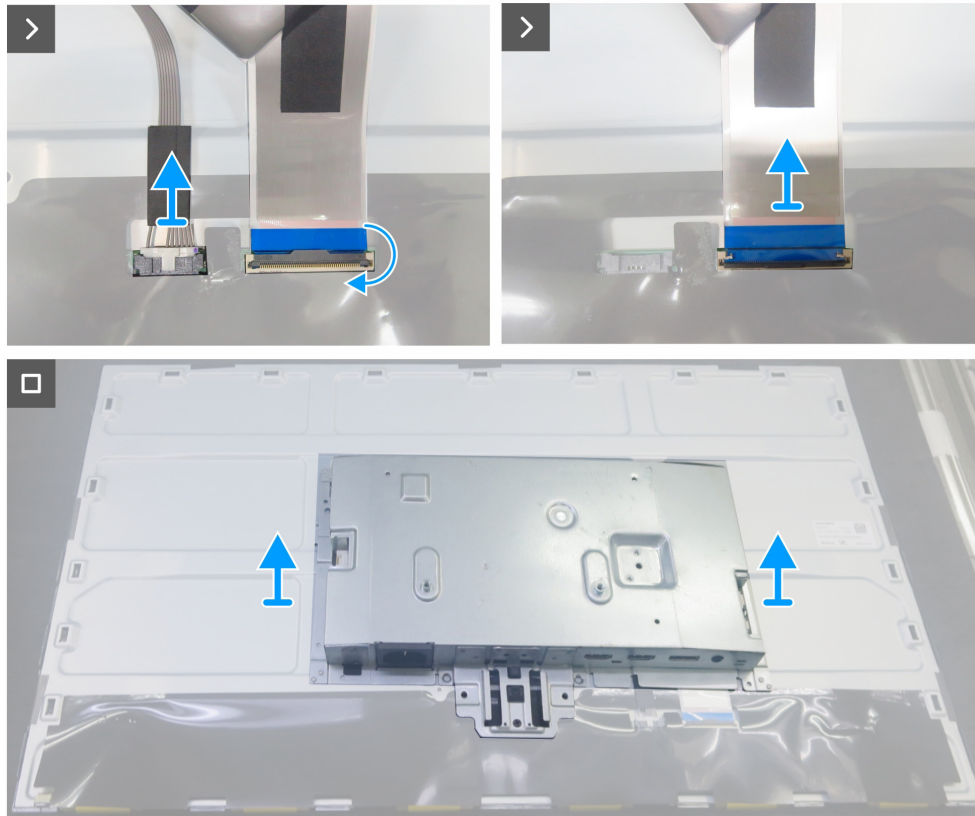


Figure 17. Removing the main chassis

Steps

1. Peel off the acetate tape and disconnect the lightbar cable from the connectors on the display panel and power board.
2. Peel off the aluminum foil and tape from the two connectors.
3. Remove the three screws (M3x3) that secure the main chassis to the display panel.
4. Disconnect the LVDS cable and T-CON cable from the connectors on the display panel.
5. Lift and remove the main chassis from the display panel.

Installing the main chassis

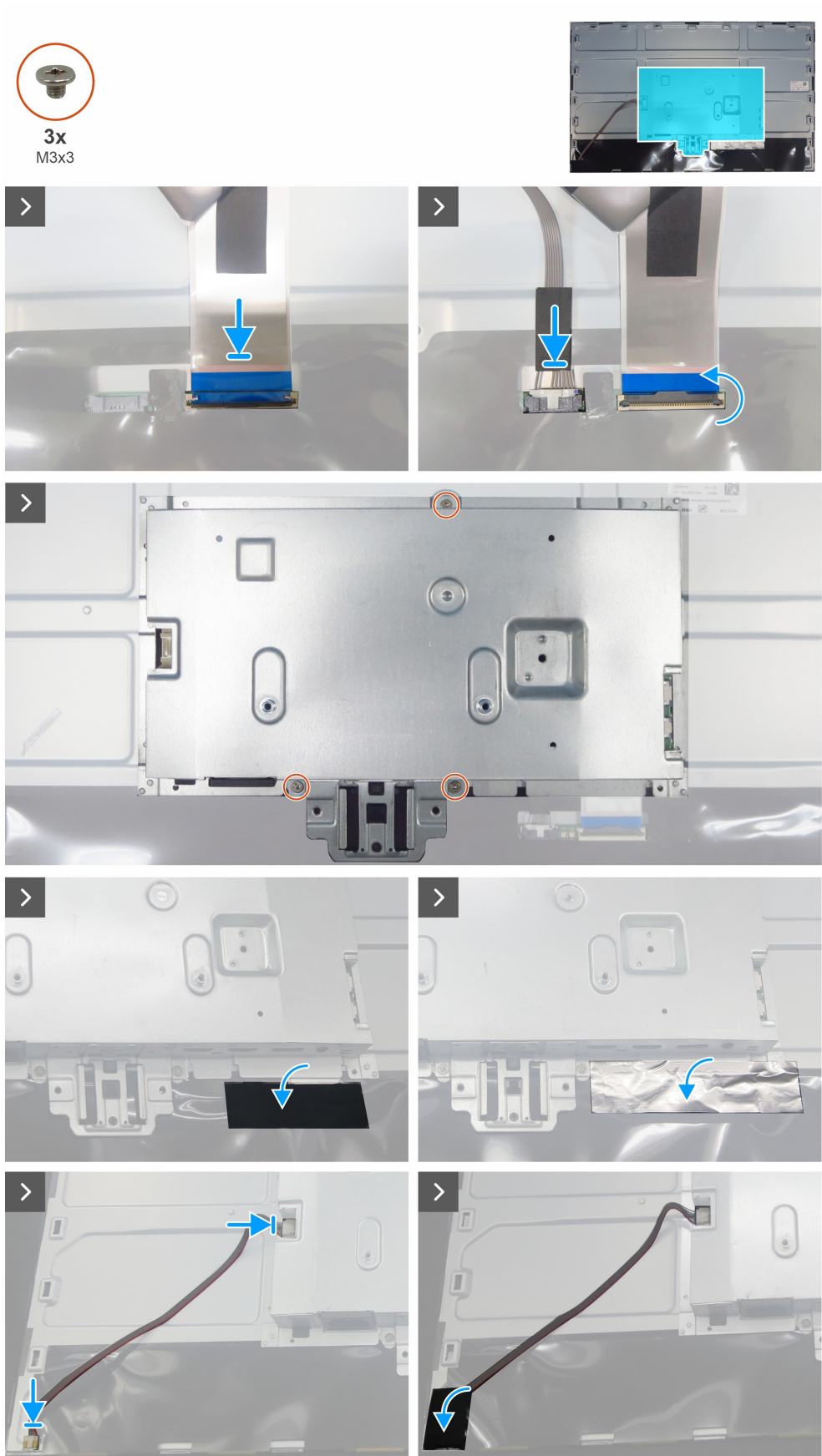


Figure 18. Installing the main chassis

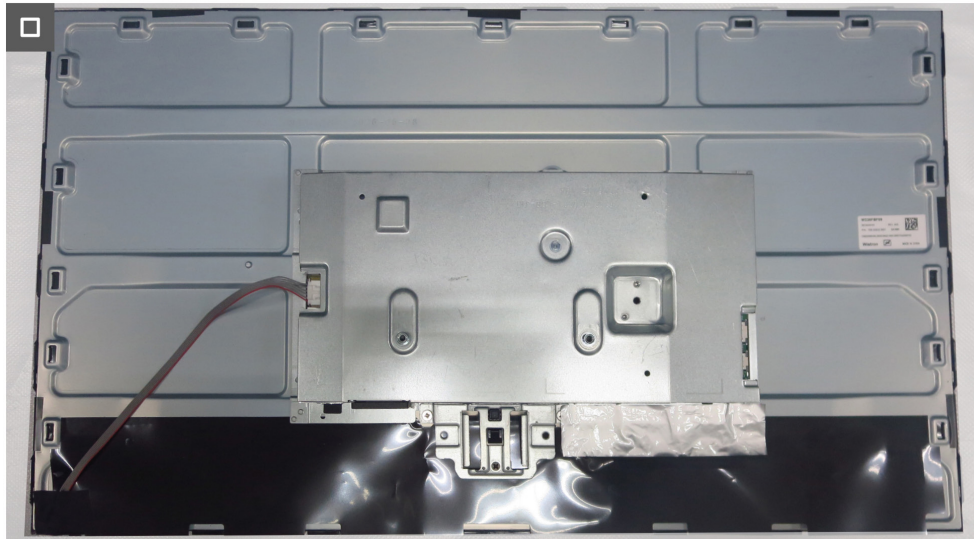


Figure 19. Installing the main chassis

Steps

1. Connect the LVDS cable and T-CON cable to the connectors on the display panel.
2. Align the holes on the main chassis with the screw holes on the display panel, and place it down.
3. Replace the three screws (M3x3) that secure the main chassis to the display panel.
4. Adhere the acetate tape to cover the LVDS and T-CON connectors.
5. Adhere the aluminum foil to cover the LVDS and T-CON connectors.
6. Connect the lightbar cable to the display panel and power board.
7. Adhere the acetate tape to cover the lightbar connector.

Next steps

1. Install the [keypad board](#).
2. Install the [LED 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 [LED board.](#)
5. Remove the [keypad board.](#)
6. Remove the [main chassis.](#)

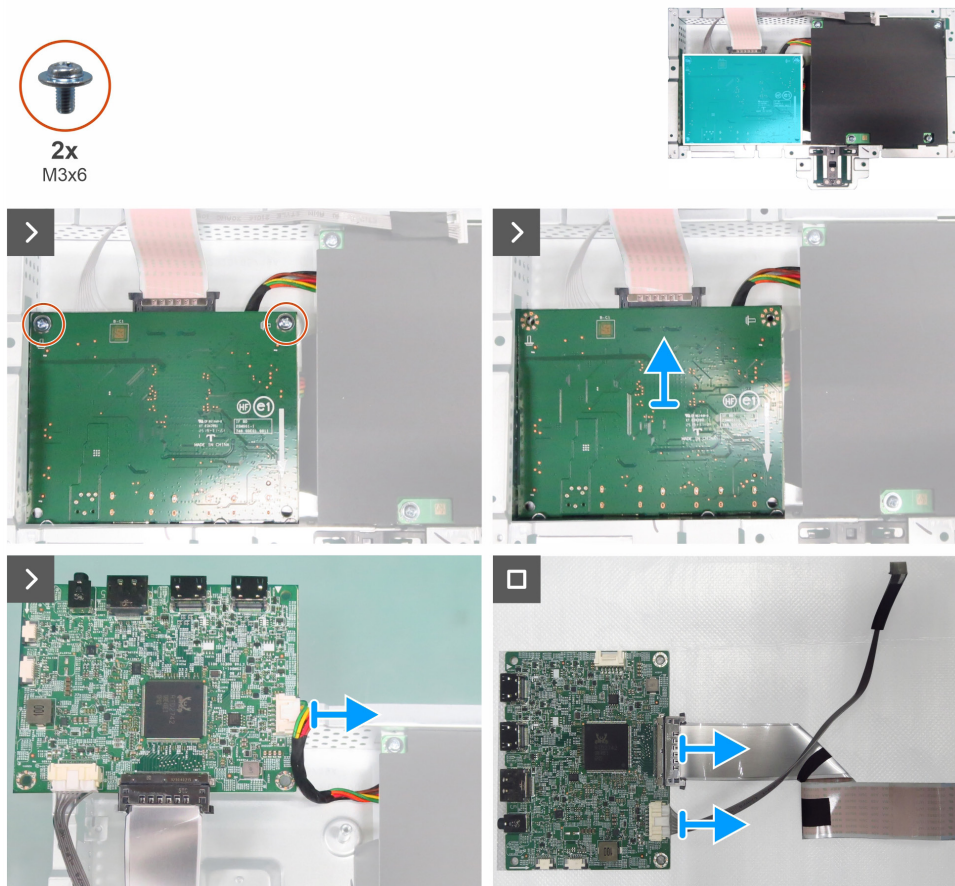


Figure 20. Removing the main board

Steps

1. Remove the two screws (M3x6) that secure the main board to the main chassis.
2. Disconnect the power cable from the main board.
3. Remove the main board, and disconnect the T-CON and LVDS cables from their connectors on the main board.

Installing the main board

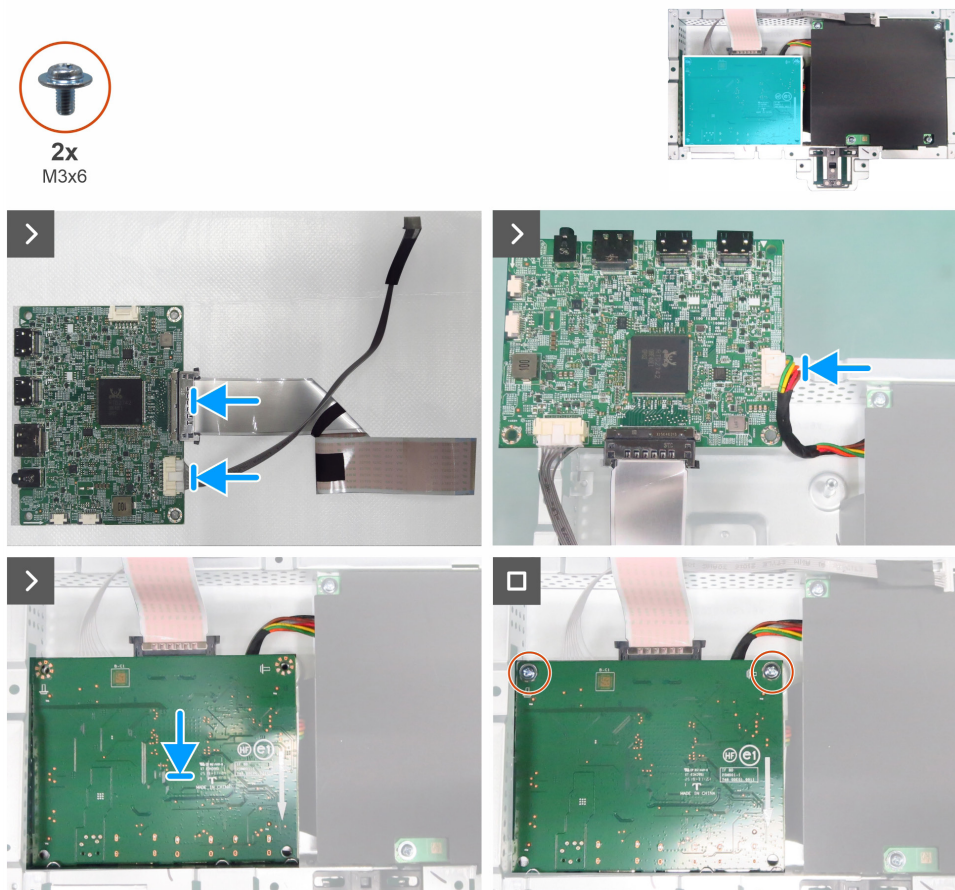


Figure 21. Installing the main board

Steps

1. Connect the T-CON and LVDS cables to the connectors on the main board.
2. Connect the power cable to the main board and then place the main board onto the main chassis.
3. Align the screw holes on the main board with the screw holes on the main chassis, and place it down.
4. Replace the two screws (M3x6) to secure the main board to the main chassis.

Next steps

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

Power board

Removing the power board

Prerequisites

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

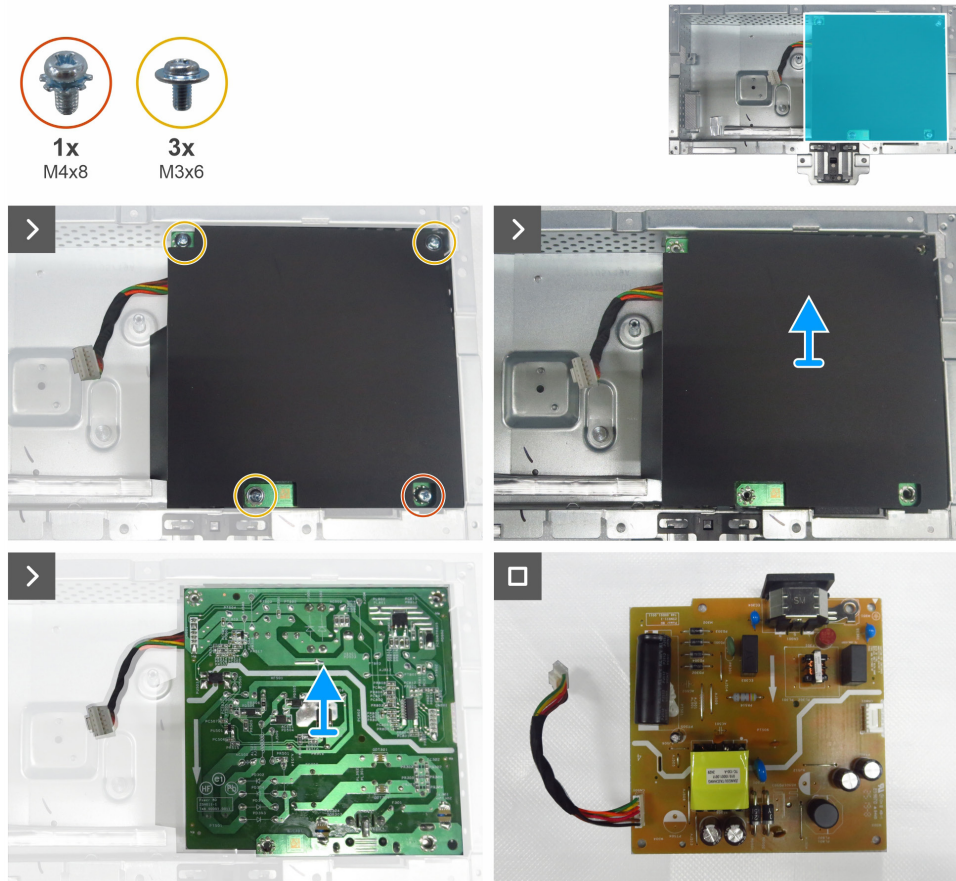


Figure 22. Removing the power board

Steps

1. Remove the screw (M4x8) and the three screws (M3x6) that secure the Mylar sheet and power board to the main chassis.
2. Remove the Mylar sheet from the slots in the main chassis.
3. Remove the power board from the main chassis.

Installing the power board

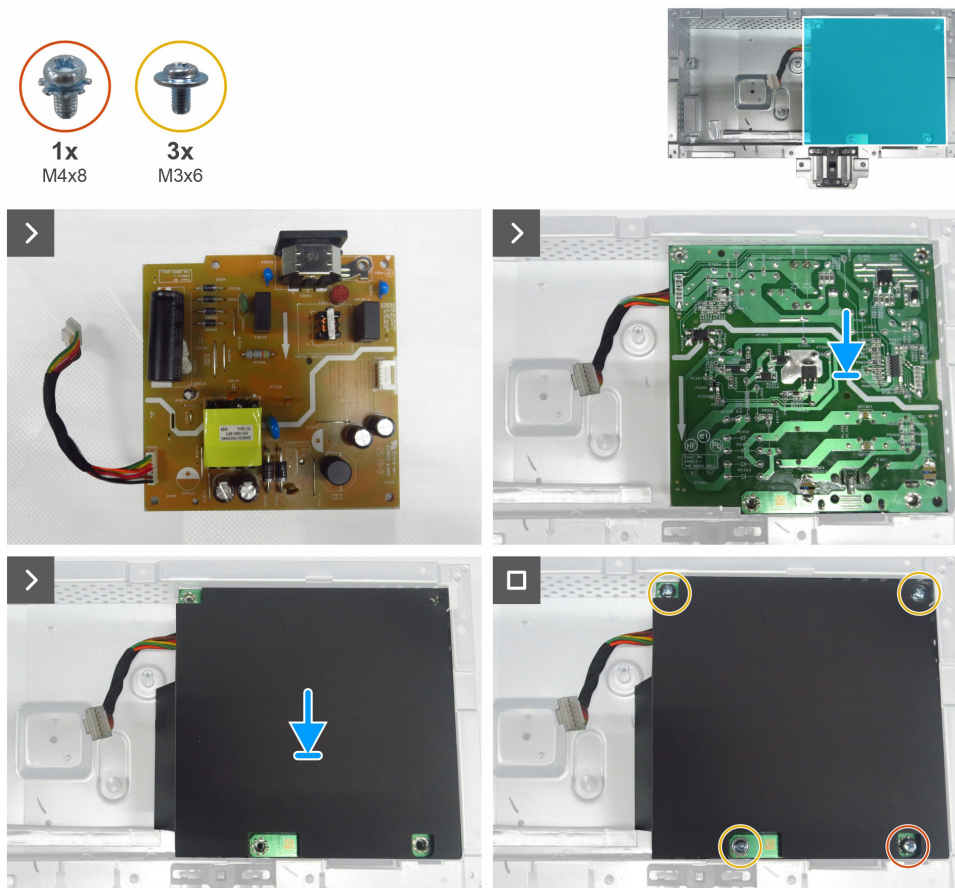


Figure 23. Installing the power board

Steps

1. Align the screw holes on the power board with the screw holes on the main chassis, and place it down.
2. Insert the Mylar sheet into the slots on the main chassis.
3. Replace the three screws (M3x6) and the one screw (M4x8) that secure the power board to the main chassis.

Next steps

1. Install the [main board](#).
2. Install the [main chassis](#).
3. Install the [keypad board](#).
4. Install the [LED board](#).
5. Install the [back cover](#).
6. Install the [stand](#).
7. 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 includes a self-test feature that allows you to check whether it 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 analog cables from the back of the computer.
3. Turn on the monitor.

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

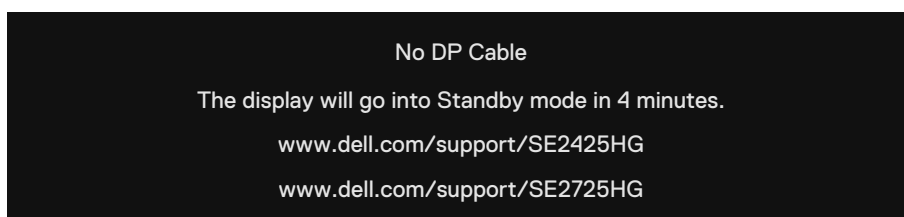


Figure 24. Warning message-No DP Cable

or

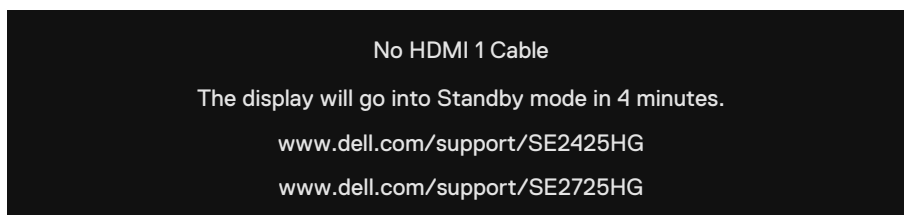


Figure 25. Warning message-No HDMI 1 Cable

or

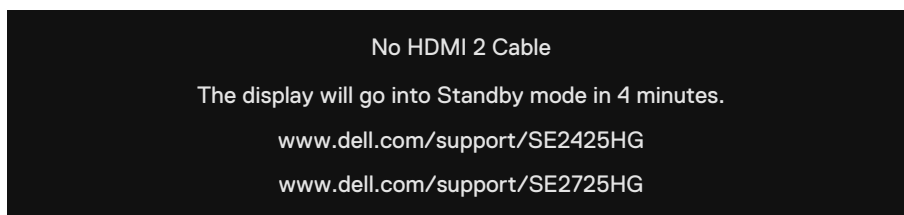


Figure 26. Warning message-No HDMI 2 Cable

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 remains blank after performing the above steps, check your video controller and computer, as the 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.

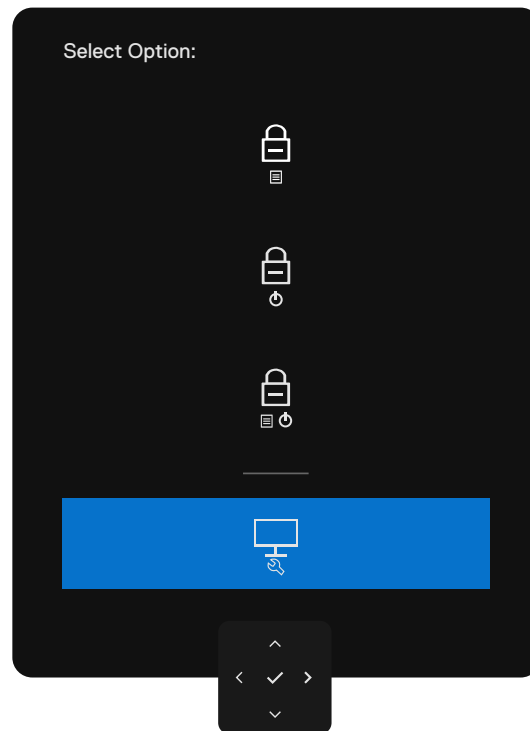


Figure 27. Self-Diagnostic

To run the built-in diagnostics:

1. Ensure that the screen is clean (free of dust particles on the surface).
2. Press the left directional navigation of the joystick for four seconds until a menu appears on the screen.
3. Using the joystick control, highlight the **Diagnostics**  option and 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 no screen abnormalities are detected 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. For more information, see Self-Diagnostic. • Ensure that the correct input source is selected in the Input Source menu.
Missing pixels	LCD screen has spots	• Cycle power on and off. • A pixel that is permanently off is a natural defect that can occur in LCD technology. • For more information about Dell Monitor Quality and Pixel Policy, see www.dell.com/pixelguidelines
Stuck-on pixels	LCD screen has bright spots	• Cycle power on and off. • A pixel that is permanently on is a natural defect that can occur in LCD technology. • For more information about Dell Monitor Quality and Pixel Policy, see www.dell.com/pixelguidelines
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 a 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 is 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	A faint shadow from the static image that is 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.

Product-specific problems

Table 8. Product-specific problems

Specific symptoms	What you experience	Possible solutions
The screen image is too small	The 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.
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 in, and then turn on the monitor. • Check whether the OSD menu is locked. If yes, move and hold the joystick forward/back/left/right for 4 seconds to unlock it.
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 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	Black screen	• Verify which DP standard (DP 1.1a or DP 1.4) your graphics card is certified to. Download and install the latest graphics card driver. • Some DP 1.1a graphics cards cannot support DP 1.4 monitors.

Contacting Dell

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

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