

Dell Pro P 22 Monitor

P2226H

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 included 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 monitor that support it) may cause damage to 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 hit 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 the cables](#).
- Do not place and 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 open 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 keyboard, mouse, and dock from your monitor.
- CAUTION:** 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 any loose or misplaced 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. Replace 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 P2226H monitor

Side view



Figure 1. Side view

Front view



Figure 2. Front view with the monitor stand

Table 1. Components and descriptions

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

Back view



Figure 3. Back view

Table 2. Components and descriptions

Label	Description	Use
1	VESA mounting holes (4) (100 mm x 100 mm)- behind attached VESA cover	Wall-mount the monitor using VESA-compatible wall mount kit (100 mm x 100 mm). NOTE: Wall-mount kit is not shipped with your monitor and is sold separately.
2	Regulatory label	Lists the regulatory approvals.
3	Stand release button	Releases the stand from the monitor.
4	MyDell QR code, serial number, and Service Tag label	Refer to this label if you must contact Dell for technical support. The Service Tag is a unique alphanumeric identifier that enables Dell service technicians to identify the hardware components in your monitor and access warranty information.
5	Joystick	Use to control the OSD menu. (For more information, see Operating the monitor in the User's Guide.)
6	Power button	To turn the monitor on or off.
7	Cable-management slot	Use to organize cables by inserting them through the slot.

Bottom view

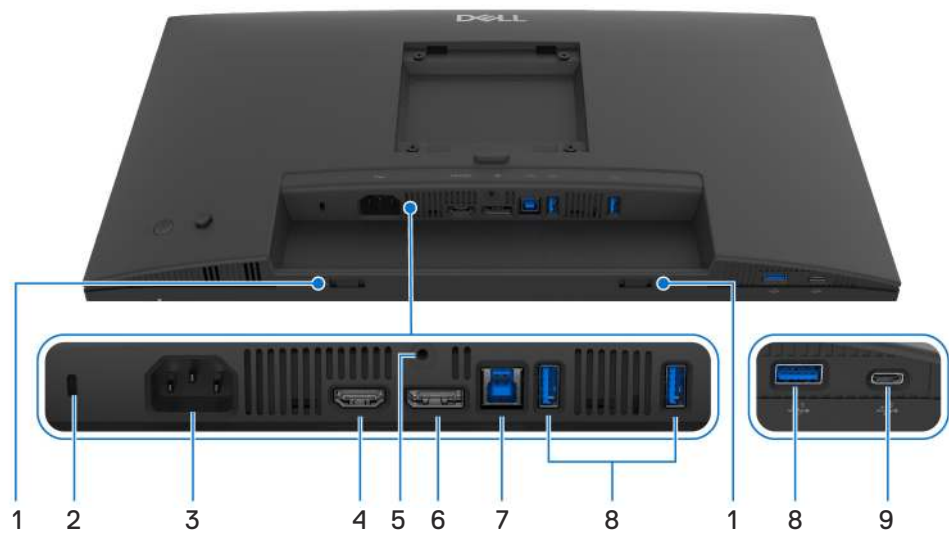


Figure 4. Bottom view without monitor stand

Table 3. Components and descriptions

Label	Description	Use
1	Soundbar slots	Attach your external Soundbar (sold separately) to the monitor by aligning the magnetic tabs on the soundbar with the slots on the monitor.
2	Security-lock slot (based on Kensington Security Slot)	Secures the monitor with a security lock (purchased separately) to prevent unauthorized movement of your monitor.
3	 Power port	Connect the power cable (shipped with your monitor).
4	 HDMI port	Connect your computer with the HDMI cable shipped with your monitor (for selected countries only).
5	Stand-lock feature	To lock the stand to the monitor using an M3 x 6 mm screw (screw not included).
6	 DisplayPort	Connect your computer with the DisplayPort cable.
7	 USB 5Gbps Type-B upstream port	Connect the USB cable that came with your monitor to the computer. Once this cable is connected, you can use the USB connectors on the monitor.
8	 USB 5Gbps Type-A downstream ports	Connect your USB device.* i NOTE: To use this port, you must connect the USB cable (shipped with your monitor) to the USB upstream port on the monitor and to your computer.
9	 USB-C 5Gbps downstream ports	Connect your USB device.* i NOTE: To use this port, you must connect the USB cable (shipped with your monitor) to the USB upstream port on the monitor and to your computer.

*To prevent signal interference, avoid connecting other USB devices to the adjacent port when using a wireless USB device on a USB downstream port.

Major components of your monitor

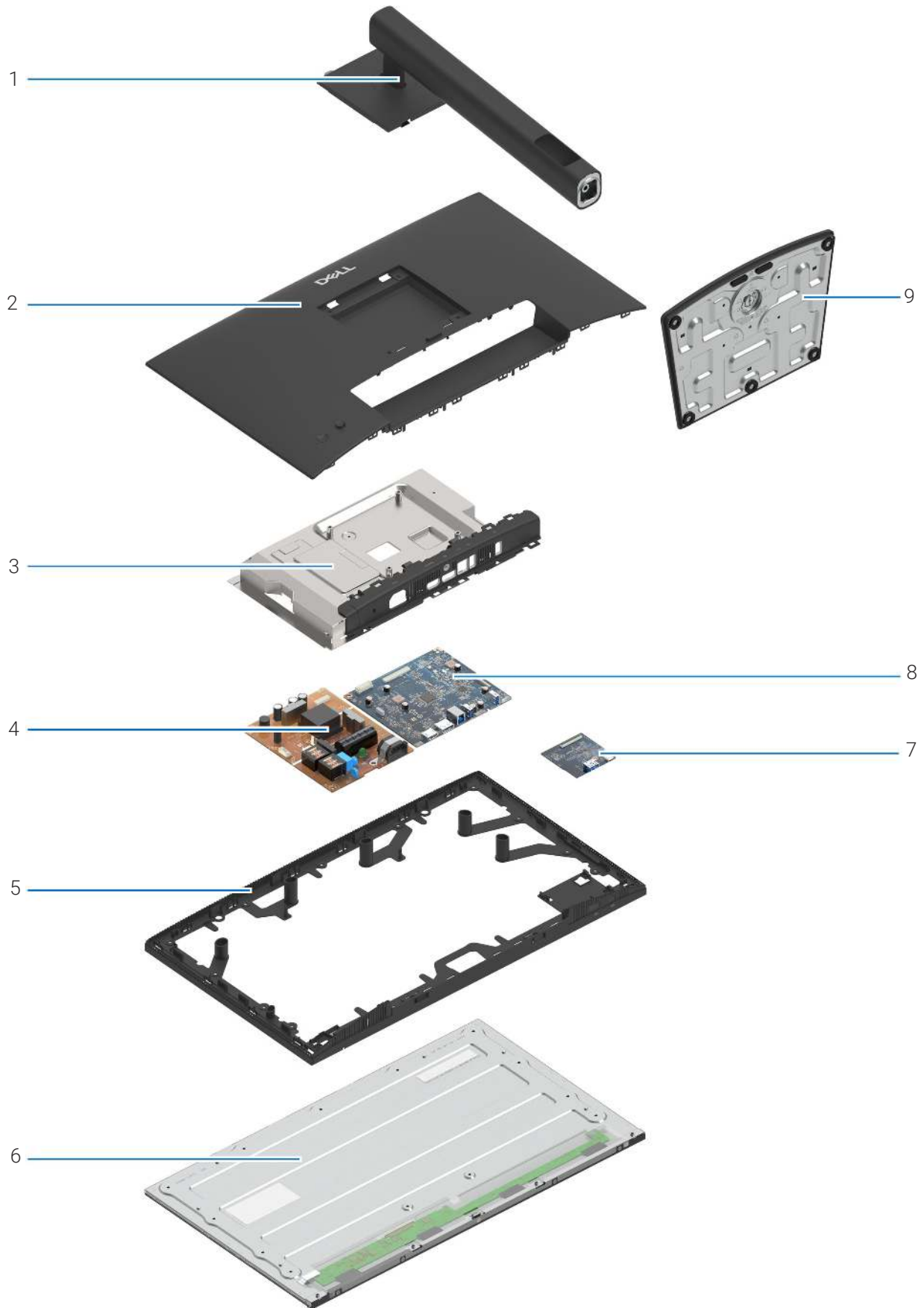


Figure 5. Major components

Table 4. Components

Item	Description
1	Stand riser
2	Back cover
3	Metal shield
4	Power board
5	Middle Frame
6	Panel
7	USB board
8	Interface board
9	Stand base

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

1. Go to [Dell Support Site](#).
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.

Wiring connectivity diagram



Figure 6. Wiring connectivity on display assembly

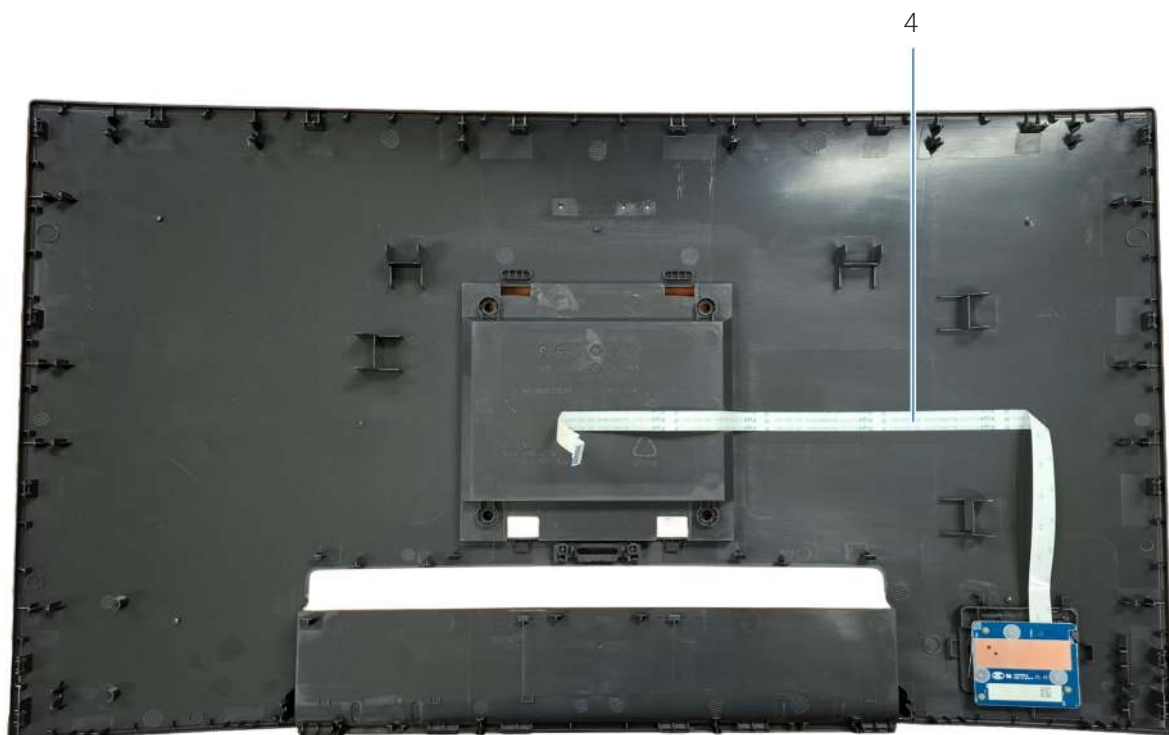


Figure 7. Wiring connectivity on display back cover

Table 5. Cables

Item	Description
1	Backlight cable
2	LVDS (Low-Voltage Differential Signaling) cable
3	USB board cable
4	Control board cable

Connecting the cables

⚠ WARNING: Before you begin any of the following procedures, follow the [Safety Instructions](#).

- i 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.
- i NOTE:** Route the cables through the cable management slot before connecting them.
- i NOTE:** Do not connect all the cables to the computer simultaneously.
- i NOTE:** The images are for the purpose of illustration 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 DisplayPort cable (shipped with your monitor) or HDMI cable (purchased separately*) from your monitor to the computer.
3. Connect the USB Type-B upstream port on the monitor and an appropriate USB port on your computer with the supplied USB cable (see [Bottom view](#) for details).
4. Connect the USB peripherals to the USB downstream ports on the monitor.
5. Plug the power cables for your computer and monitor into a nearby outlet.
6. Turn on the monitor and the computer.

If your monitor displays an image, installation is complete. If it does not display an image, see [Common problems](#).

*HDMI cable is shipped with the monitor in selected countries only. Check with the sales representative of the respective country.

Connecting the DisplayPort (DisplayPort to DisplayPort) cable

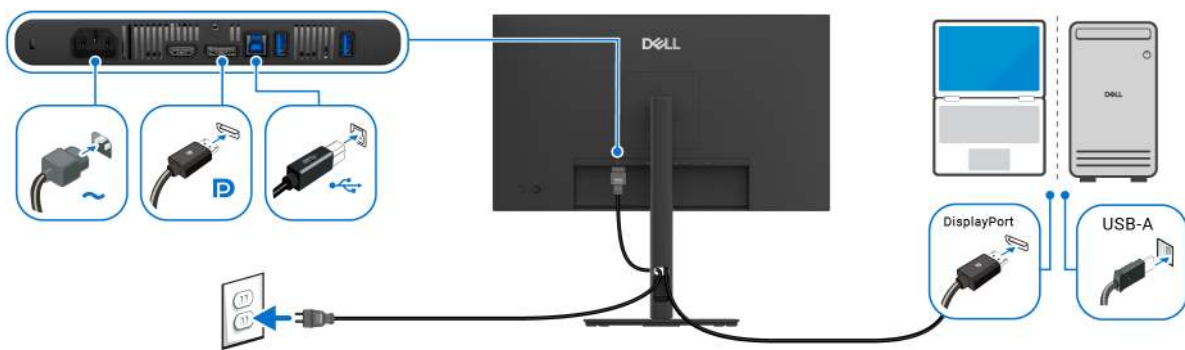


Figure 8. DisplayPort connection

Connecting the HDMI cable (optional)

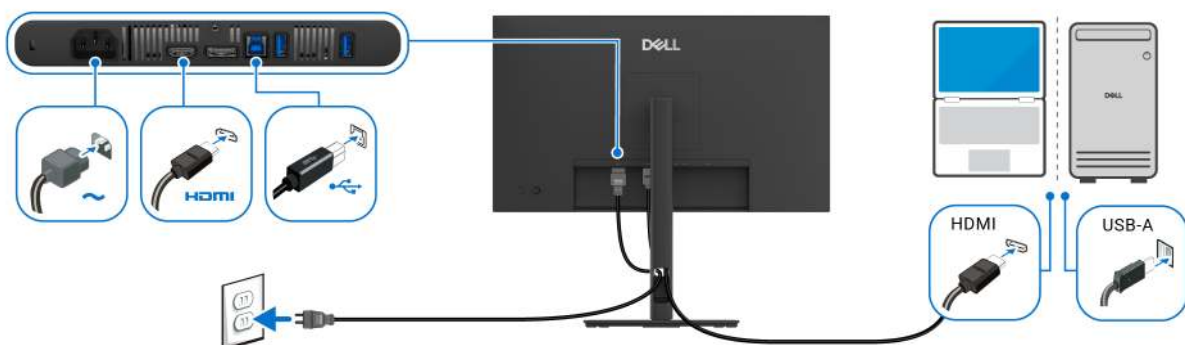


Figure 9. HDMI connection

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 caused by unauthorized servicing will not be covered under the warranty.

Recommended tools

- Phillips screwdriver #0
- Phillips screwdriver #2
- Plastic scribe

Screw list

- i 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.
- i NOTE:** Some computers have magnetic surfaces. Ensure that the screws are not left attached to such surfaces when replacing a component.
- i NOTE:** Screw color may vary with the configuration ordered.

Table 6. Screw list

Component	Screw type	Quantity	Screw image
Back cover	M4*10	4	
Power board	M3*9	3	
Interface board	M3*9	2	

Stand

Removing the stand

Prerequisites

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

- ① **NOTE:** To prevent scratches on the screen when removing the stand, ensure that the monitor is placed on a soft surface and handle it carefully.
- ① **NOTE:** The following steps are specifically for removing the stand that is shipped with your monitor. If you are removing a stand that you purchased from any other source, follow the setup instructions that are included with the stand.

Steps

1. Place the monitor on a soft cloth or cushion.
2. Press and hold the stand release button at the back of the display.
3. Lift the stand assembly up and away from the monitor.

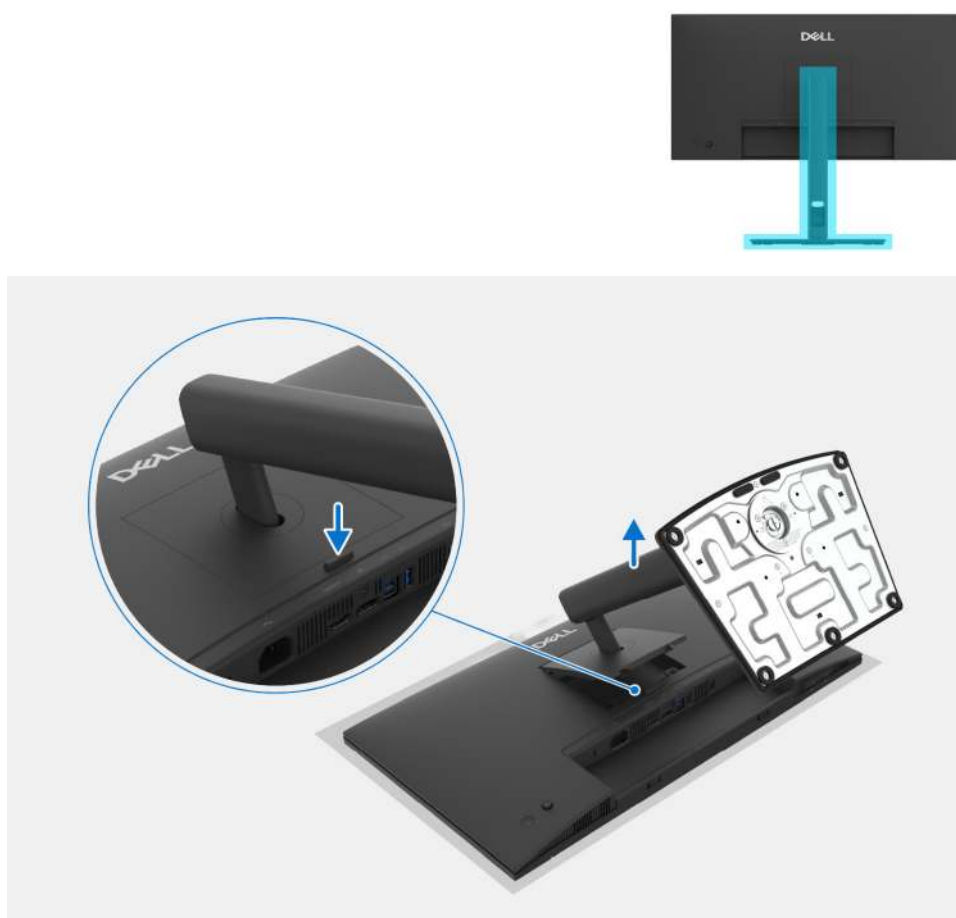


Figure 10. Removing the stand

Installing the stand

1. Carefully insert the tabs on the stand riser into the slots on the display back cover and press down the stand assembly to snap it into place.

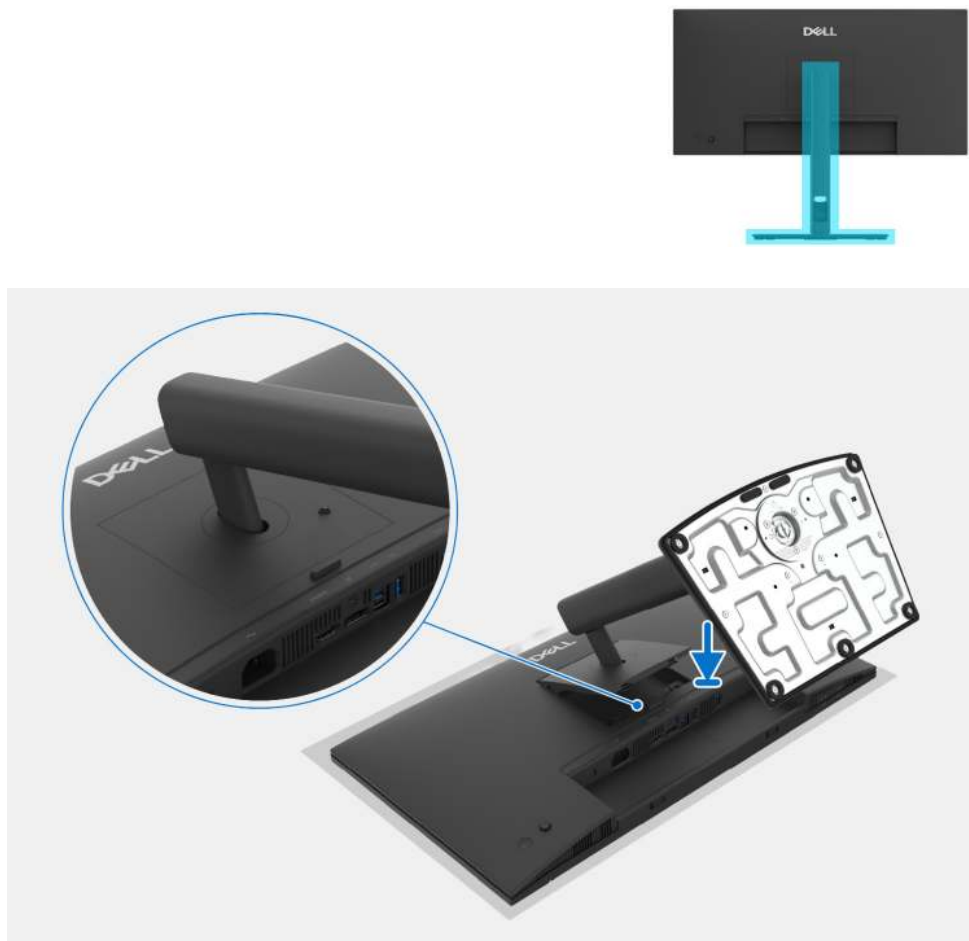


Figure 11. Installing the stand

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](#).

Steps

1. Remove the four screws (M4x10) that secure the back cover to the display assembly.
2. Using a plastic scribe, pry the back cover starting from the edge of the monitor.
3. Carefully lift the display back cover.
4. Disconnect the control board cable from the connector on the interface board.
5. Remove the back cover away from the monitor.



4x
M4x10



Figure 12. Removing the back cover



Figure 13. Removing the back cover

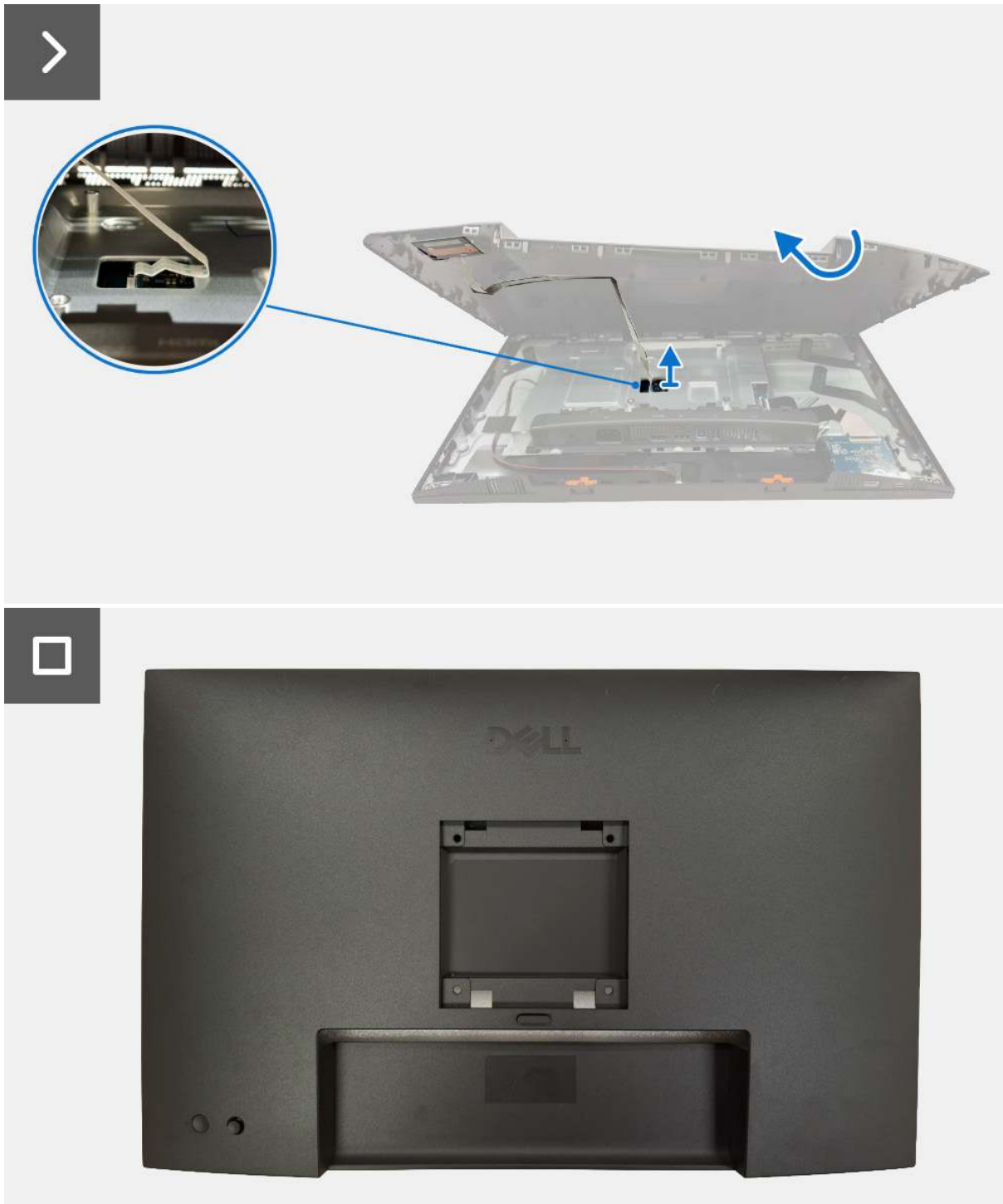


Figure 14. Removing the back cover

Installing the back cover

Steps

1. Connect the control board cable to the connector on the interface board.
2. Align the back cover with the display assembly and snap it into place.
- ① **NOTE:** Align the screw holes on the back cover with the screw holes on the display assembly before applying slight pressure to the back cover.
3. Replace the four screws (M4x10) that secure the back cover to the display assembly.



4x
M4x10

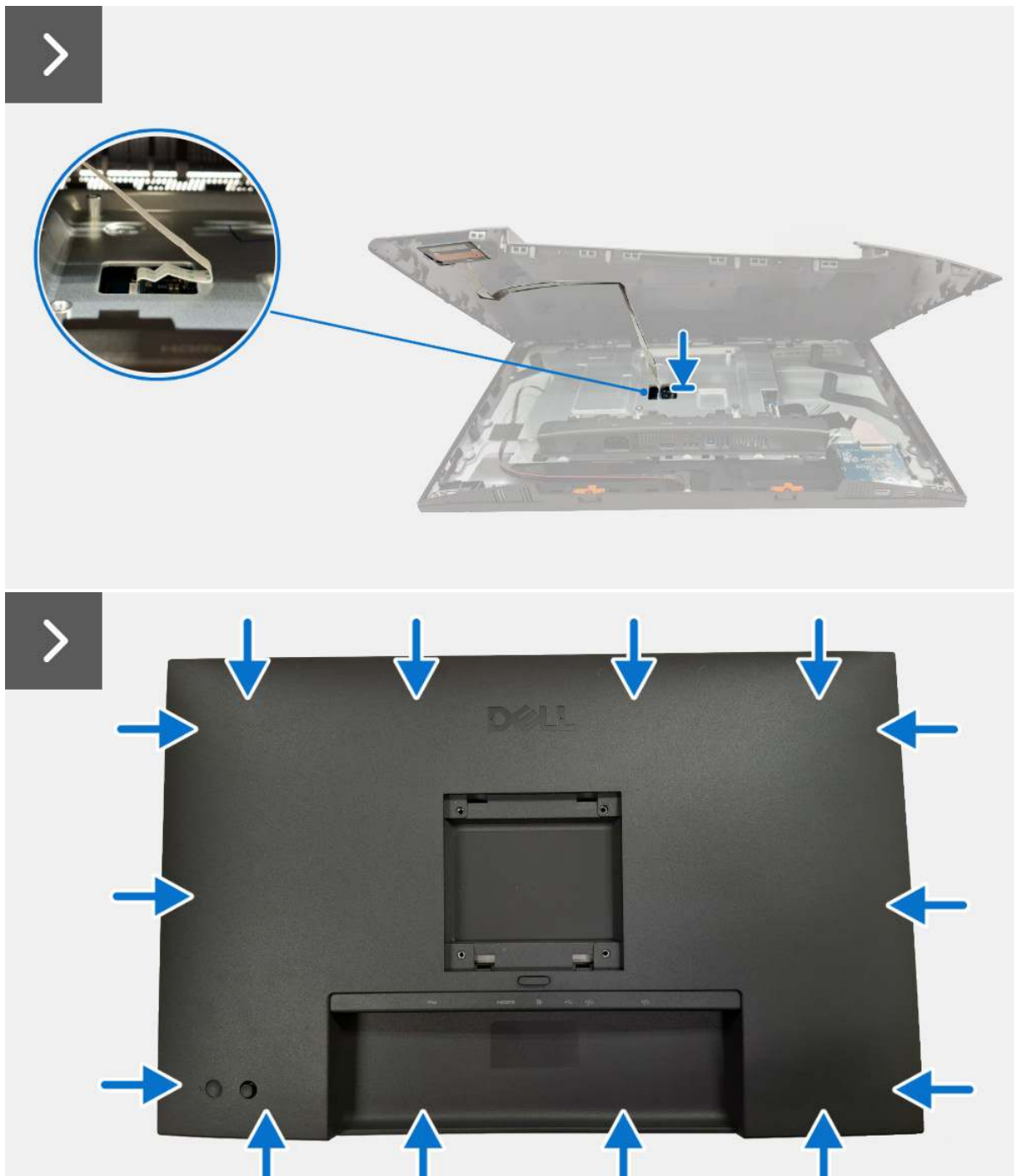


Figure 15. Installing the back cover



Figure 16. Installing the upper back cover

Next steps

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

Metal Shield

Removing the metal shield

Prerequisites

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

Steps

1. Peel the conductive tape on the metal shield, then peel the tapes on the backlight cable and the USB board cable.
2. Disconnect the backlight cable from the connector on the power board, then disconnect the USB board cable from the connector on the interface board.
3. Lift the metal shield and peel the conductive tape that secure the LVDS cable connector to the display panel.
4. Lift the metal shield and peel the yellow tape that secure the LVDS cable connector to the display panel.
5. Lift the metal shield and disconnect the LVDS cable from the connector on the display panel.
6. Lift and remove the metal shield from the display panel.

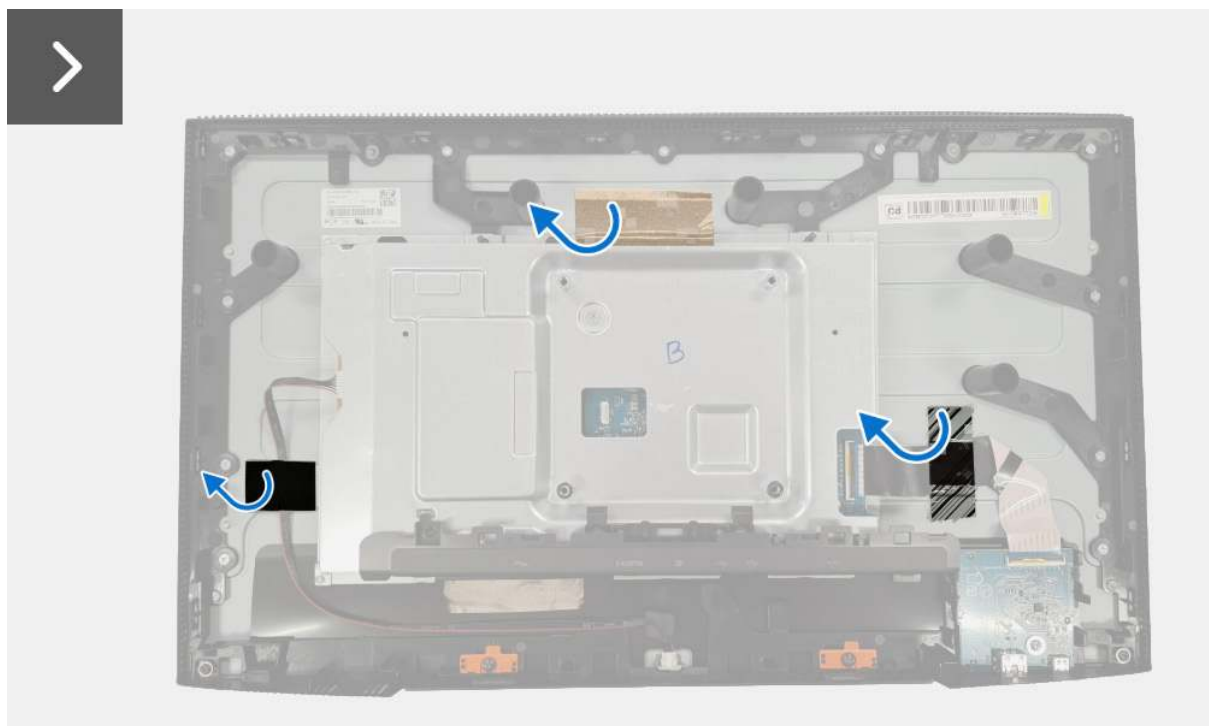
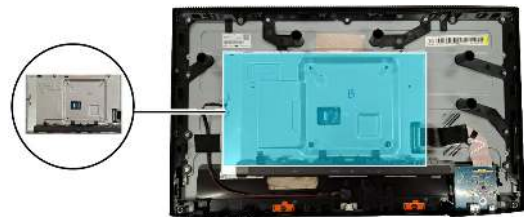


Figure 17. Removing the metal shield

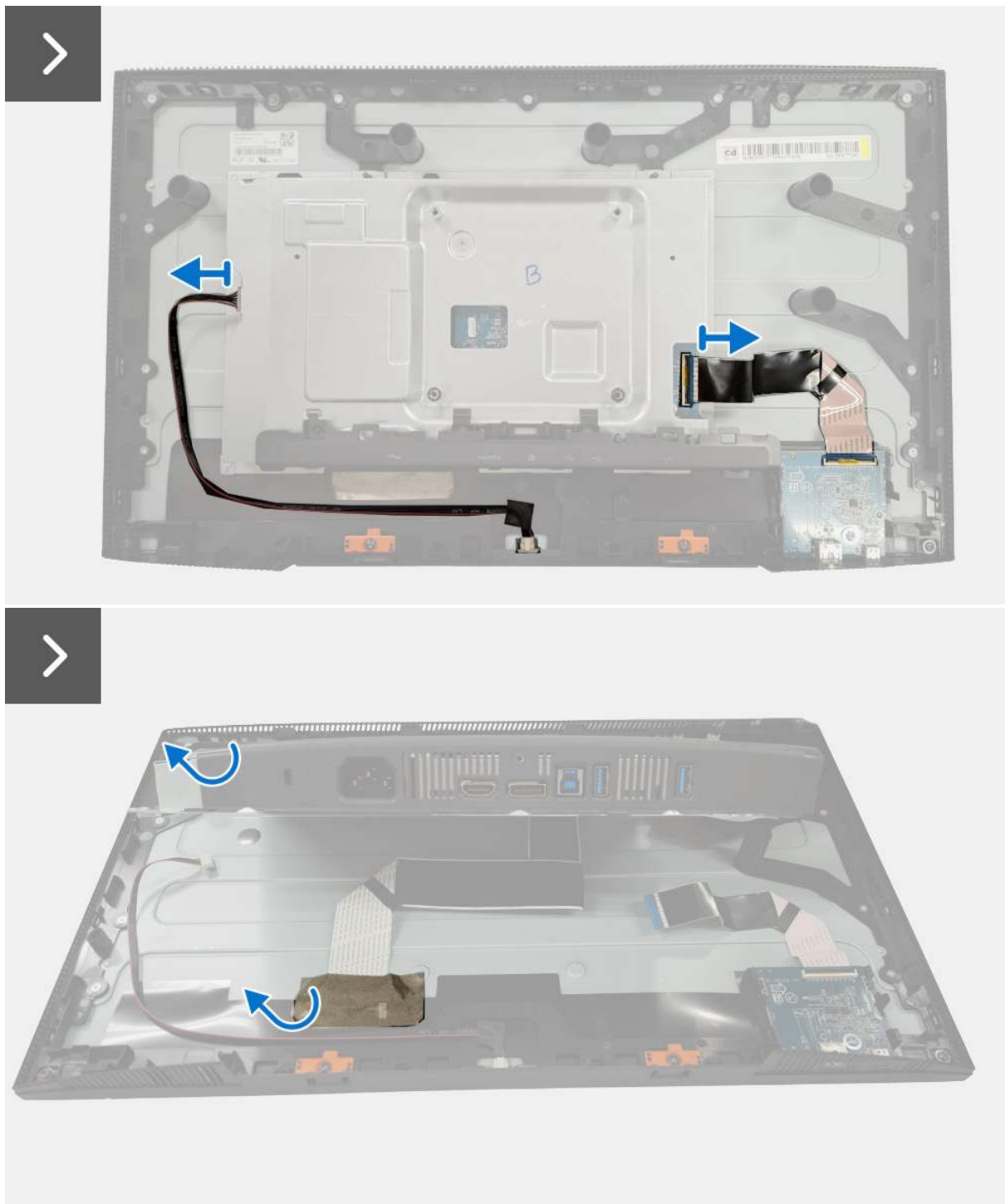


Figure 18. Removing the metal shield

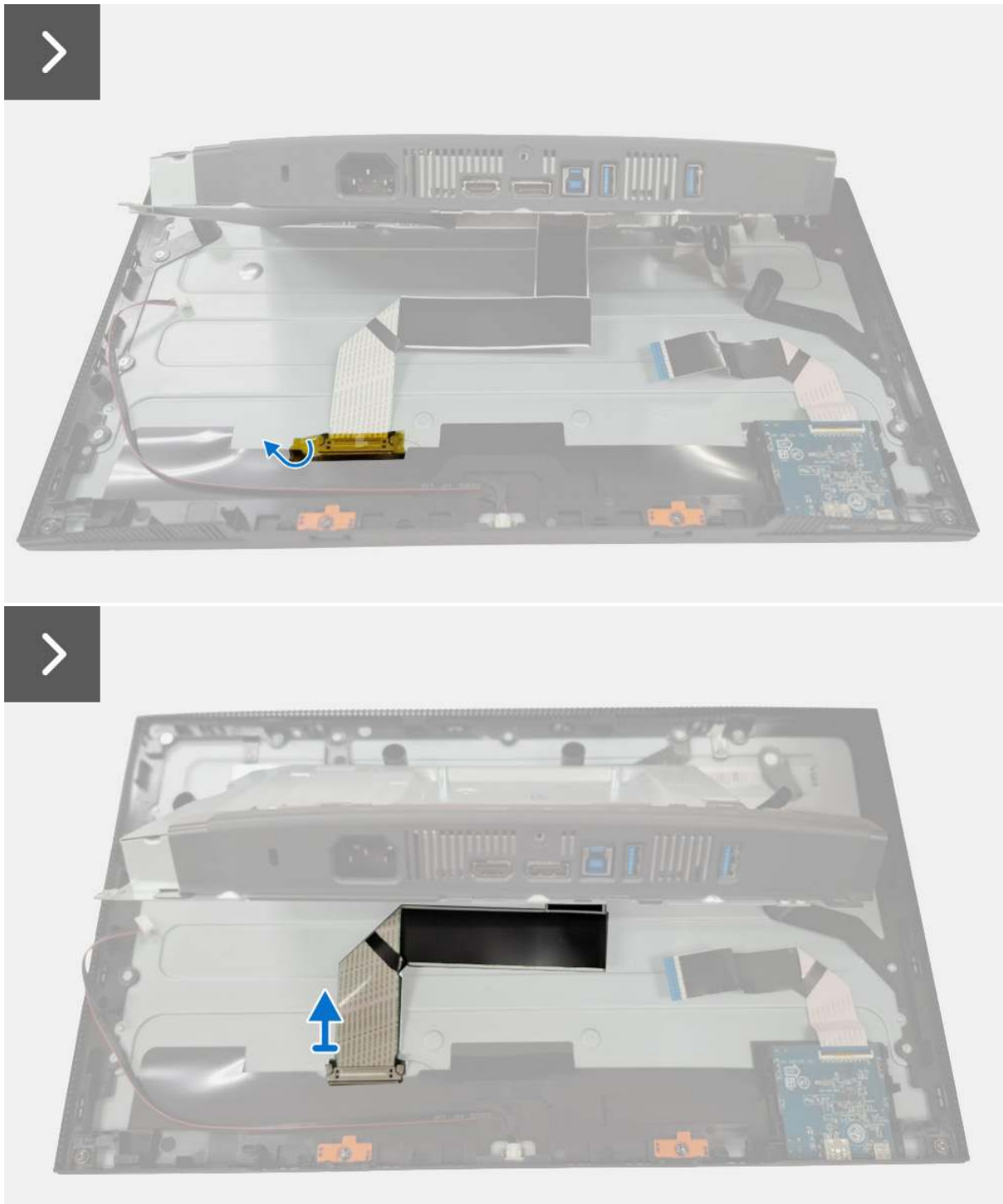


Figure 19. Removing the metal shield



Figure 20. Removing the metal shield

Installing the metal shield

Steps

1. Lift the metal shield and connect the LVDS cable into the connector on the display panel.
2. Adhere the yellow tape that secures the LVDS cable connector to the display panel.
3. Adhere the conductive tape that secures the LVDS cable connector to the display panel.
4. Align and place the metal shield on the display panel.
5. Connect the backlight cable to the connector on the power board, then connect the USB board cable to the connector on the interface board.
6. Adhere the tapes that secure the backlight cable and the USB board cable to the display panel, then adhere the conductive tape that secure the metal shield to the display panel.

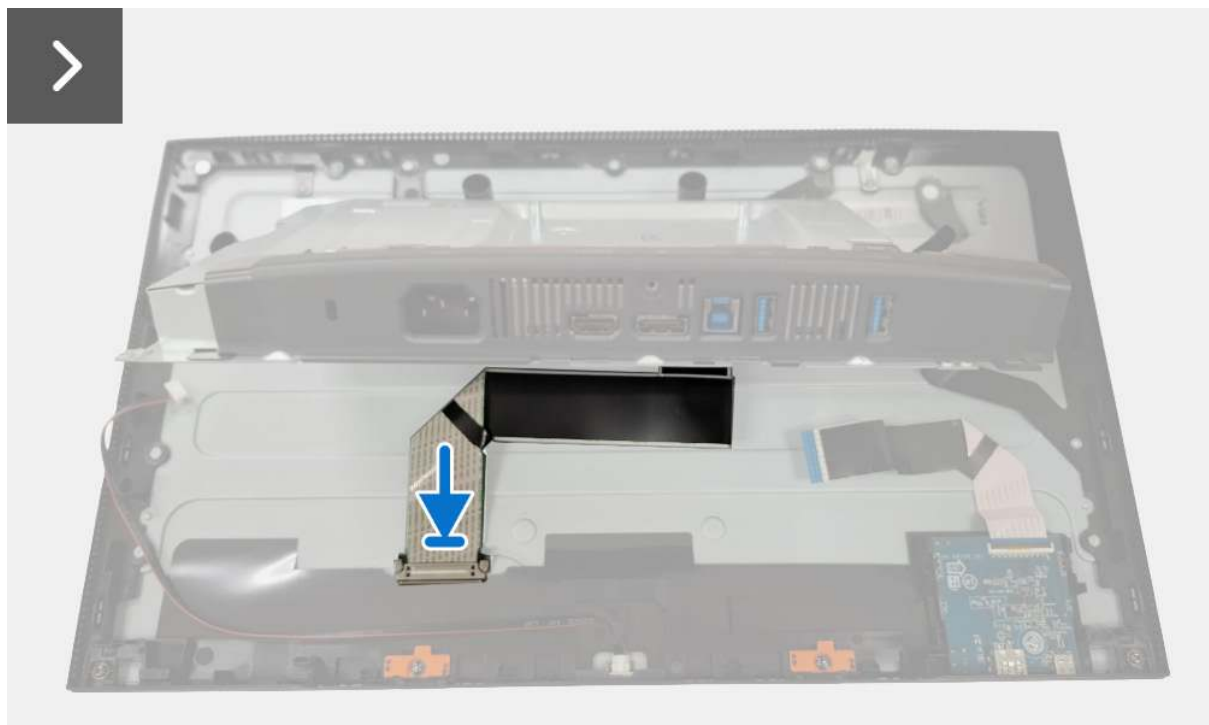
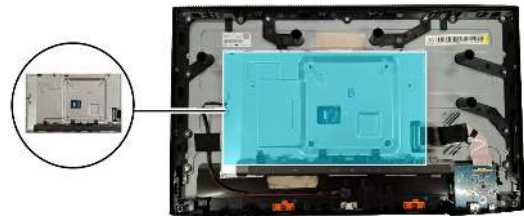


Figure 21. Installing the metal shield

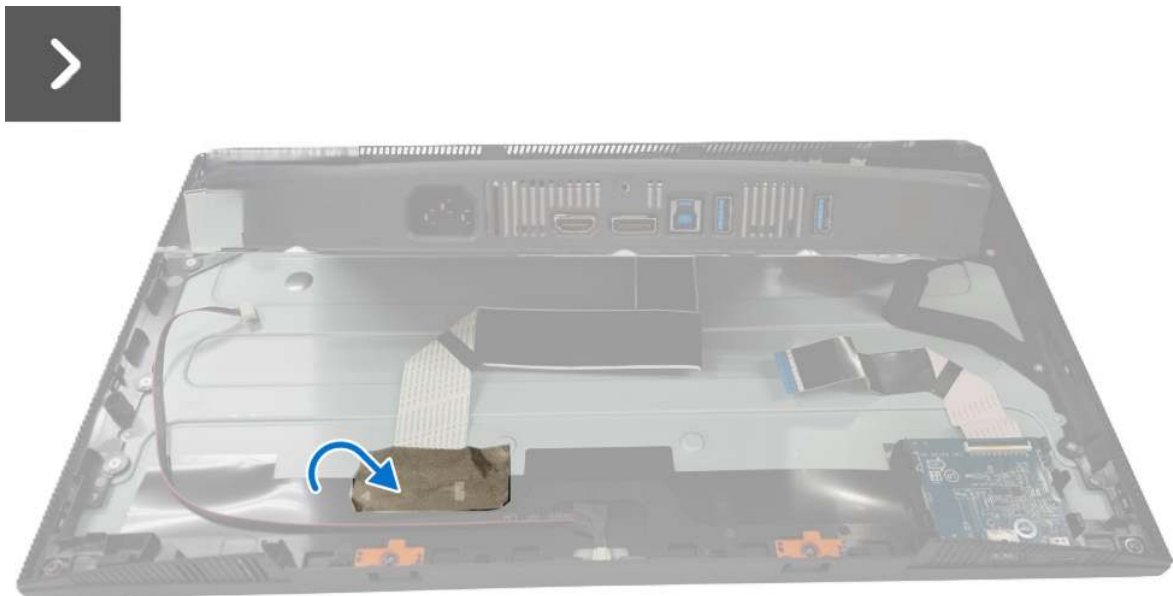


Figure 22. Installing the metal shield



Figure 23. Installing the metal shield

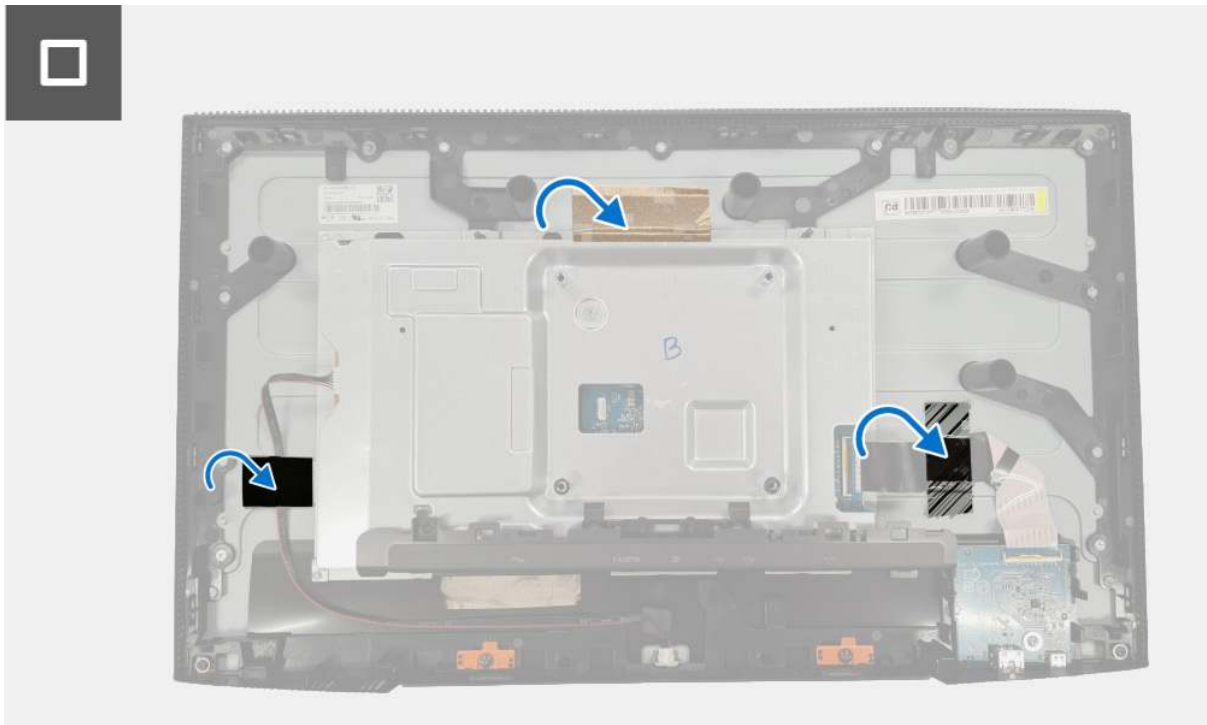


Figure 24. Installing the metal shield

Next steps

1. Install the [back cover](#).
2. Install the [stand](#).
3. 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 [metal shield.](#)

Steps

1. Peel the mylar on the metal shield.
2. Remove the five screws (M3x9) that secure the power board and interface board to the metal shield.
3. Lift the power board and interface board, then remove the power board and interface board from the metal shield.
4. Disconnect the power board cable from the connector on the interface board.

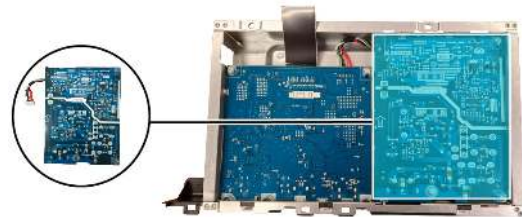


Figure 25. Removing the power board

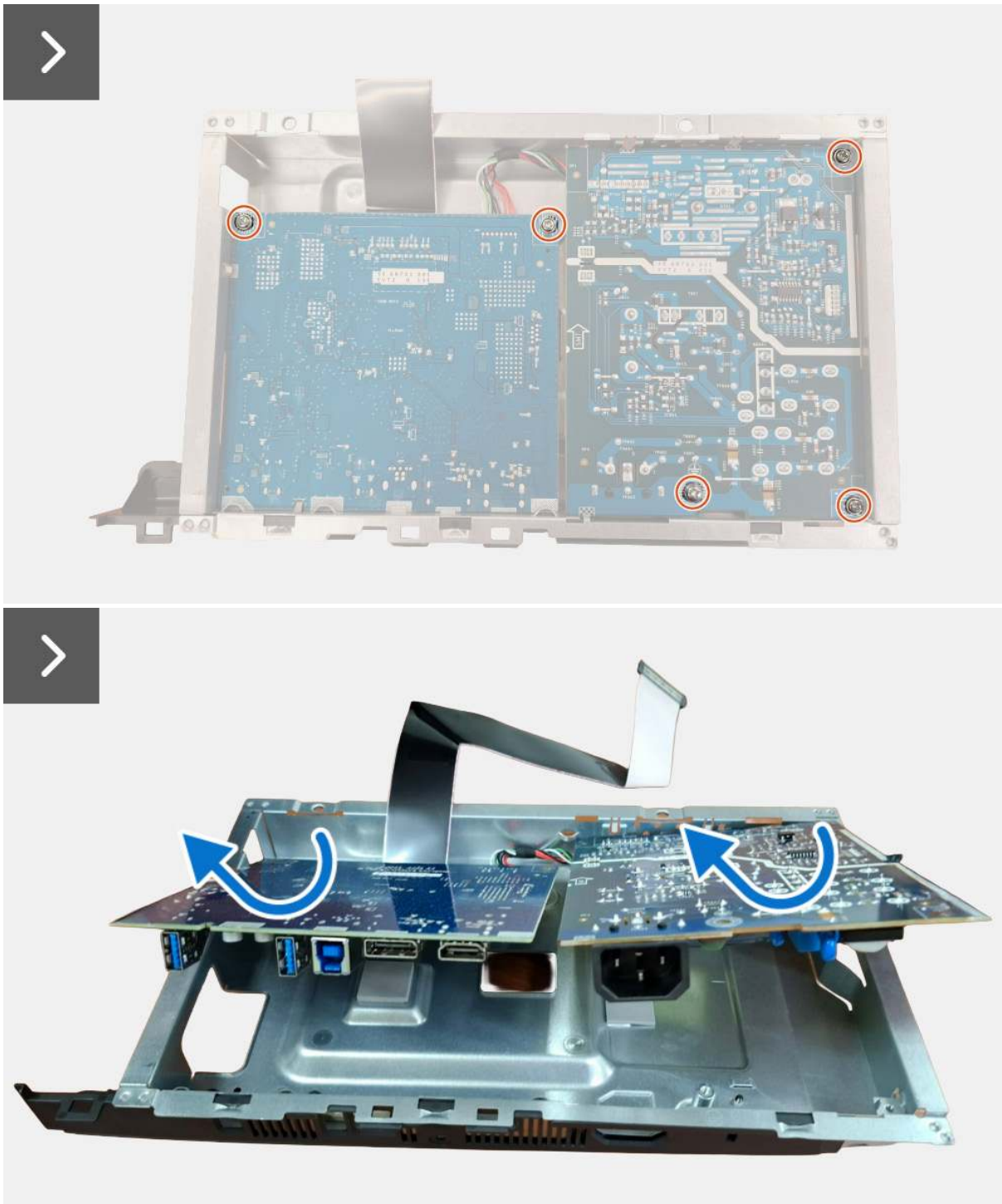


Figure 26. Removing the power board

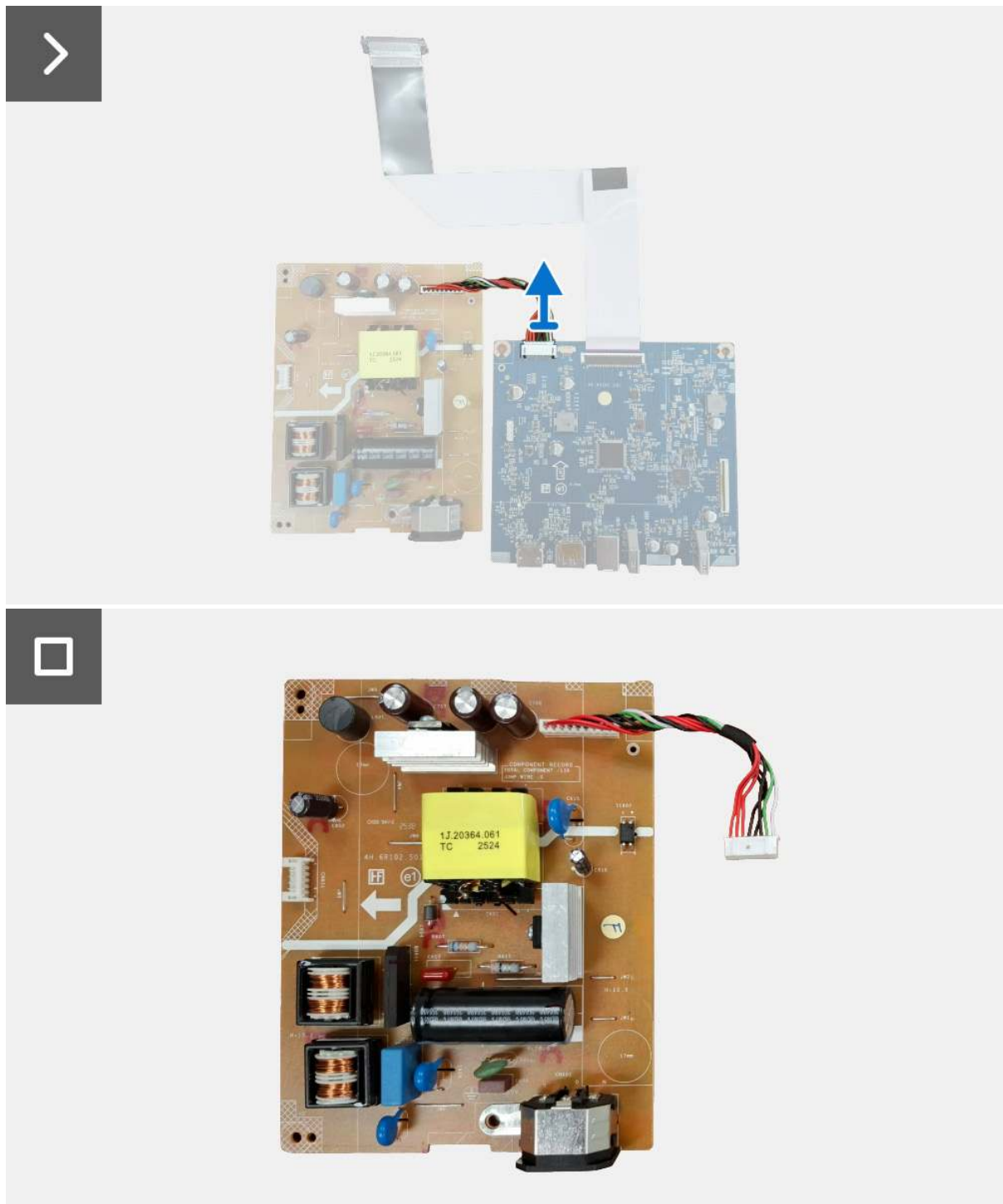


Figure 27. Removing the power board

Installing the power board

Steps

1. Connect the power board cable to the connector on the interface board.
2. Align and place the power board and interface board to the metal shield.
3. Replace the five screws (M3x9) that secure the power board and interface board to the metal shield.
4. Adhere the mylar on the metal shield.

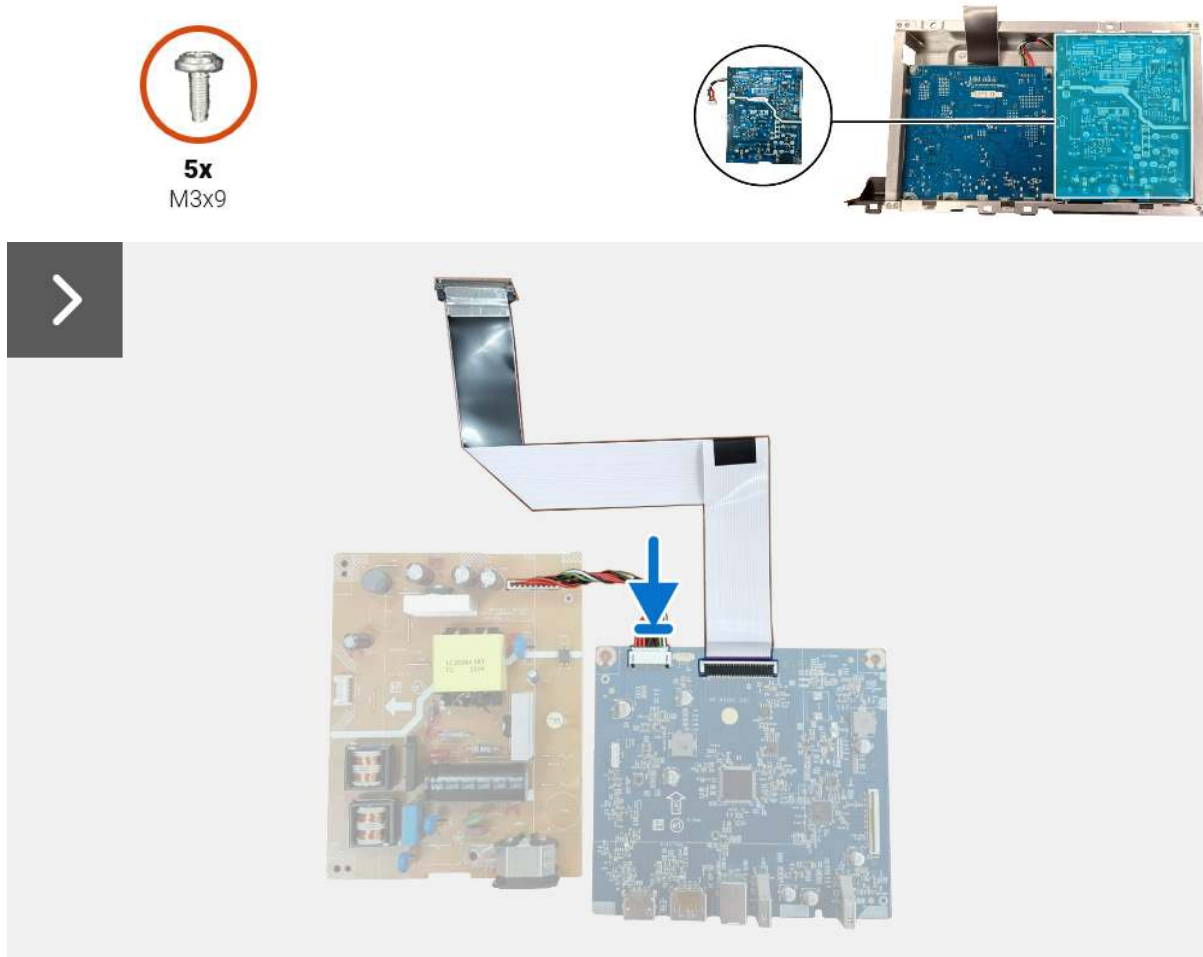


Figure 28. Installing the power board

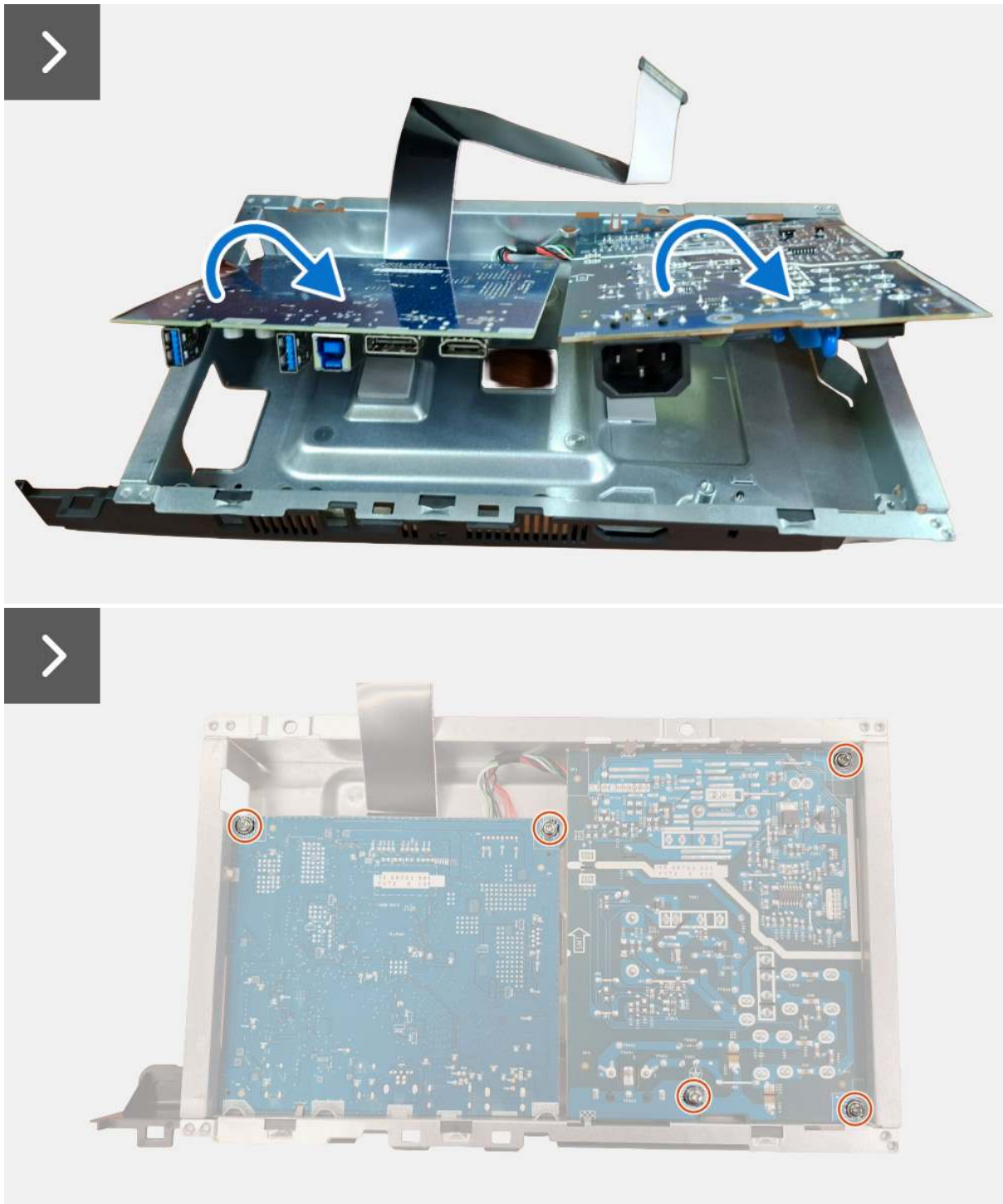


Figure 29. Installing the power board



Figure 30. Installing the power board

Next steps

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

Interface board

Removing the interface board

Prerequisites

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

Steps

1. Disconnect the LVDS cable from the connector on the interface board.

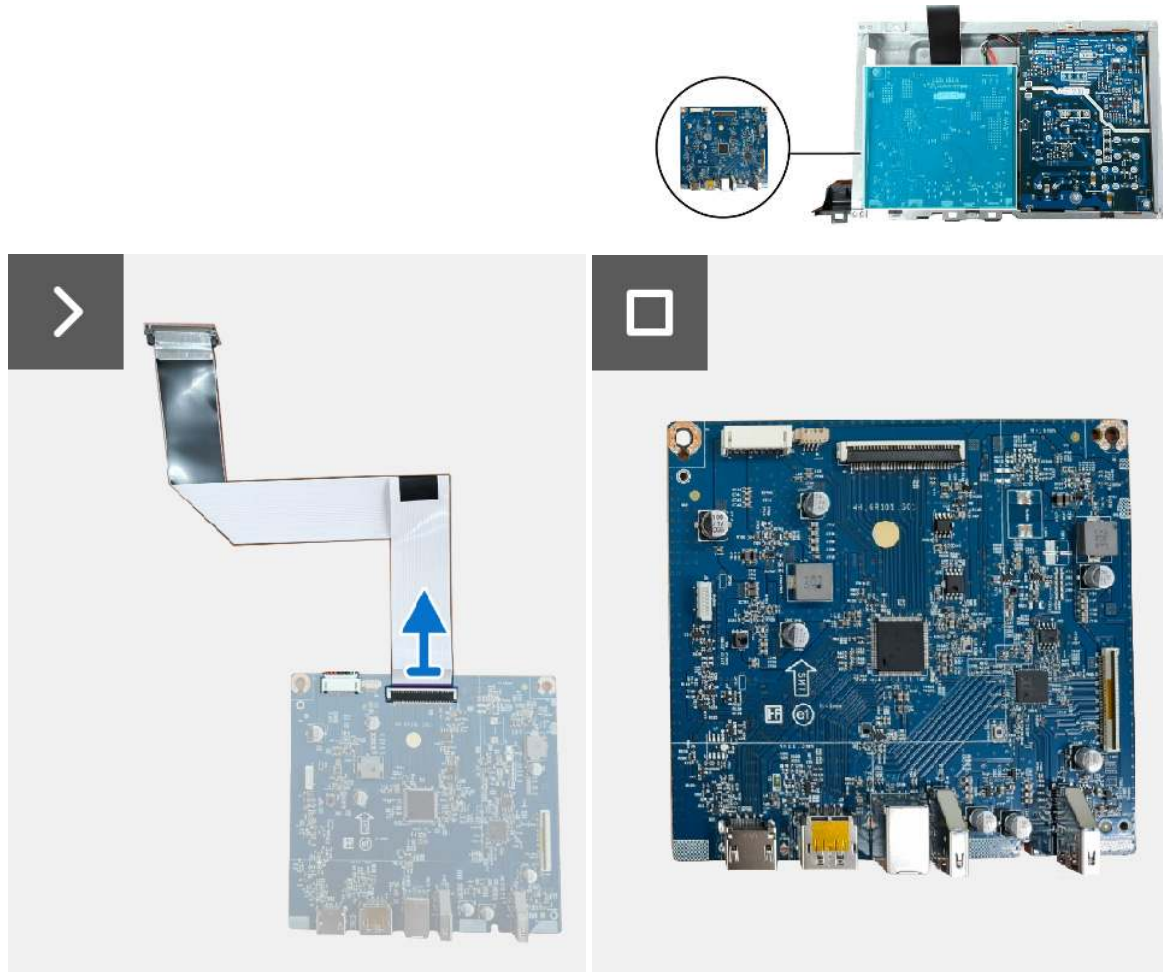


Figure 31. Removing the interface board

Installing the interface board

Steps

1. Connect the LVDS cable to the connector on the interface board.

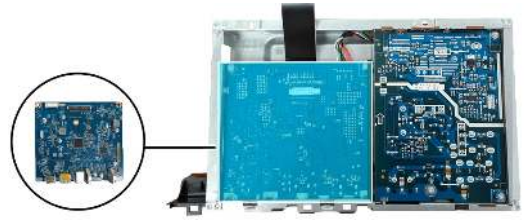


Figure 32. Installing the interface board

Next steps

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

Troubleshooting Instructions

⚠ 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 computer.
3. Turn on the monitor.

If the monitor cannot sense a video signal and is working correctly, the following message appears:

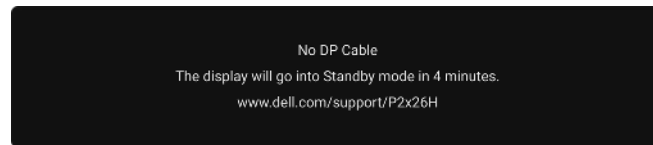


Figure 33. Signal cable disconnected warning message

NOTE: The message may be slightly different according to the connected input signal.

NOTE: While in self-test mode, the power LED remains white.

4. This message 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 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 graphics card.

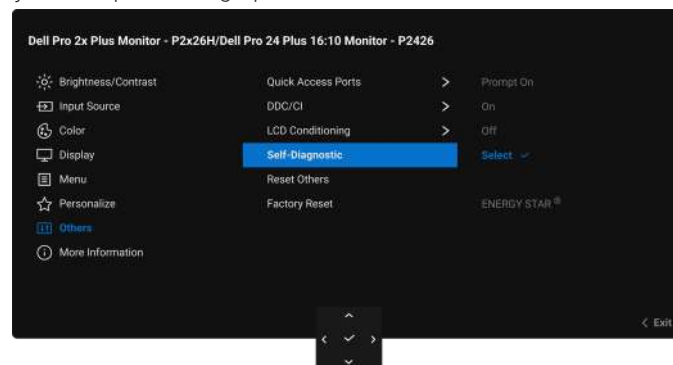


Figure 34. Self-Diagnostic menu

To run the built-in diagnostics:

1. Ensure that the screen is clean (no dust particles on the surface of the screen).
2. Move or press the joystick to launch the Menu Launcher.
3. Move the joystick up to select  and open the Main Menu.
4. Using the joystick, navigate on the OSD menu and select **Others > Self-Diagnostic**.
5. Press the joystick button to start the diagnostics. A gray screen is displayed.
6. Observe if the screen has any defects or abnormalities.
7. Toggle the joystick once again until a red screen is displayed.
8. Observe if the screen has any defects or abnormalities.
9. Repeat steps 7 and 8 until the screen displays green, blue, black, and white colors. Note any abnormalities or defects.

The test is completed 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 graphics 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 a day, 7 days a week. Usage higher than the designed duty cycle may result in premature decrease in panel backlight luminance, which may not be covered under warranty.

Table 7. Common problems and 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 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	- Ensure that the video cable connecting the monitor and the computer is properly connected and secure. - Increase brightness and contrast controls in the Brightness/Contrast menu. - 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 Built-in diagnostics. - Ensure that the correct input source is selected in the Input Source menu.
Poor focus	Picture is fuzzy, blurry, or ghosting	- Eliminate video extension cables. - Reset the monitor to factory settings. For more information, see Factory Reset in the User's Guide. - Change the video resolution to the correct aspect ratio.
Shaky/jittery video	Wavy picture or fine movement	- Reset the monitor to factory settings. For more information, see Factory Reset in the User's Guide. - Check environmental factors. - Relocate the monitor and test in another room.
Missing pixels	LCD screen has spots	- Cycle power On-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 Dell Display Pixel Guidelines.
Stuck-on pixels	LCD screen has bright spots	- Cycle power On-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 Dell Display Pixel Guidelines.
Brightness problems	Picture too dim or too bright	- Reset the monitor to factory settings. For more information, see Factory Reset in the User's Guide. - Adjust brightness and contrast controls using the OSD.
Geometric distortion	The screen is not centered correctly	Reset the monitor to factory settings. For more information, see Factory Reset in the User's Guide.
Horizontal/vertical lines	The screen has one or more lines	- Reset the monitor to factory settings. For more information, see Factory Reset in the User's Guide. - Perform monitor self-test feature check and determine if these lines are also in self-test mode. - Check for bent or broken pins in the video cable connector. - Run the built-in diagnostics. For more information, see Built-in diagnostics.

Common symptoms	What you experience	Possible solutions
Synchronization problems	The screen is scrambled or appears torn	- Reset the monitor to factory settings. For more information, see Factory Reset in the User's Guide. - Perform monitor self-test feature check to determine if the scrambled screen appears in self-test mode. - Check for bent or broken pins in the video cable connector. - Restart the computer in the safe mode.
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. For more information, see Factory Reset in the User's Guide. - 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 self-test feature check. - 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	- Reset all settings under the Color menu to the factory defaults using Reset Color. - Change the Input Color Format to RGB or YCbCr in the Color settings OSD. - Run the built-in diagnostics. For more information, see 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 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.
Video ghosting or overshooting	Video ghosting, shadows or color smear while scrolling	Change the Response Time in the Display menu OSD to Normal or Fast , depending on your application and usage.

Product-specific problems

Table 8. Product-specific problems and solutions.

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 settings in the Display menu OSD. • Reset the monitor to factory settings. For more information, see Factory Reset in the User's Guide.
Cannot adjust the monitor with the joystick	OSD does not appear on the screen	• Turn off the monitor, unplug the 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/right for 4 seconds to unlock (see Lock and Locking the control buttons in the User's Guide).
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. • Check whether the signal cable is plugged in properly. Replug the signal cable 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), the monitor may display in full screen. • Run the built-in diagnostics. For more information, see Built-in diagnostics.
No video at HDMI/DisplayPort port	When connected to some dongle/docking device at the port, there is no video when unplugging/plugging the cable from the laptop	Unplug the HDMI/DisplayPort cable from dongle/docking device, then plug the docking HDMI/DisplayPort cable into the laptop.

Universal Serial Bus (USB) specific problems

Table 9. USB specific problems and solutions.

Specific symptoms	What you experience	Possible solutions
USB interface is not working	USB peripherals are not working	• Check that your monitor is turned on. • Reconnect the upstream cable to your computer. • Reconnect the USB peripherals (downstream connector). • Turn off and then turn on the monitor again. • Reboot your computer. • Some USB devices like external portable HDD require higher electric current; connect the device directly to the computer system.
USB 5Gbps interface is slow	USB 5Gbps peripherals working slowly or not working at all	• Check that your computer is USB 5Gbps-compatible. • Some computers have USB 3.2, 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 5Gbps device is plugged in	Wireless USB peripherals responding slowly or only working as the distance between themselves and their receiver decreases	• Increase the distance between the USB 5Gbps 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 5Gbps port.
Wireless USB mouse does not work properly	When plugged into one of the USB ports on the rear side of the monitor, the Wireless USB mouse lags or freezes during use	Unplug the Wireless USB mouse receiver and re-plug it into an appropriate Quick Access USB port at the bottom of the monitor.

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 and product, and some services may not be available in your country.
- 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 10. Revision history

Revision	Date	Description
A00	March 2026	Original publish date