

# **Dell Pro 75 Plus 4K Touch Monitor**

## **P7525QT**

### 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.

# Contents

<b>Safety instructions</b>	<b>5</b>
Before working inside your monitor	5
After working inside your monitor	5
<b>View of P7525QT monitor</b>	<b>6</b>
Front view	6
Back view	7
Side view	8
Bottom view	9
<b>Major components of P7525QT monitor</b>	<b>10</b>
<b>Wiring connectivity diagram</b>	<b>11</b>
<b>Connecting the cables</b>	<b>12</b>
<b>Dell Pro Micro (optional)</b>	<b>12</b>
Attaching the Dell Pro Micro holder	12
<b>External personal computer connection</b>	<b>14</b>
Connecting the USB cable	14
Connecting the HDMI cable	14
Connecting the DisplayPort cable	14
Connecting the USB Type-C cable	15
Connecting the monitor for DisplayPort Multi-Stream Transport (MST) function	15
Connecting the monitor for the USB-C Multi-Stream Transport (MST) function	15
<b>Connecting the OptiPlex (optional)</b>	<b>16</b>
Connecting the USB cable	16
Connecting the HDMI cable	16
Connecting the DisplayPort cable	16
<b>Disassembly and reassembly</b>	<b>17</b>
<b>Recommended tools</b>	<b>17</b>
<b>Screw list</b>	<b>17</b>
<b>Dell Pro Micro holder</b>	<b>18</b>
Removing the Dell Pro Micro holder	18
Installing the Dell Pro Micro holder	18
<b>Handles</b>	<b>19</b>
Removing the handles	19
Installing the handles	19
<b>Back cover</b>	<b>20</b>
Removing the back cover	20
Installing the back cover	21
<b>Power key board</b>	<b>22</b>
Removing the power key board	22
Installing the power key board	22
<b>Speakers</b>	<b>23</b>
Removing the speakers	23
Installing the speakers	24
<b>Driver board</b>	<b>25</b>
Removing the driver board	25
Installing the driver board	26

<b>T-CON board</b>	<b>27</b>
Removing the T-CON board	27
Installing the T-CON board	28
<b>AC socket module</b>	<b>29</b>
Removing the AC socket module	29
Installing the AC socket module	30
<b>Power board</b>	<b>31</b>
Removing the power board	31
Installing the power board	32
<b>USB board</b>	<b>33</b>
Removing the USB board	33
Installing the USB board	34
<b>Main board</b>	<b>35</b>
Removing the main board	35
Installing the main board	36
<b>Front bezel</b>	<b>37</b>
Removing the front bezel	37
Installing the front bezel	38
<b>Touch board</b>	<b>39</b>
Removing the touch board	39
Installing the touch board	40
<b>IR board</b>	<b>41</b>
Removing the IR board	41
Installing the IR board	42
<b>LED board</b>	<b>43</b>
Removing the LED board	43
Installing the LED board	44
<b>Troubleshooting</b>	<b>45</b>
Self-test	45
Built-in diagnostics	46
Common problems	47
Product-specific problems	48
Universal Serial Bus (USB) specific problems	49
Ethernet problems	49
<b>Contacting Dell</b>	<b>50</b>



# 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.

① **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 supports 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 press 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 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
- ⚠ **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 your monitor.

### 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.

# View of P7525QT monitor

## Front view

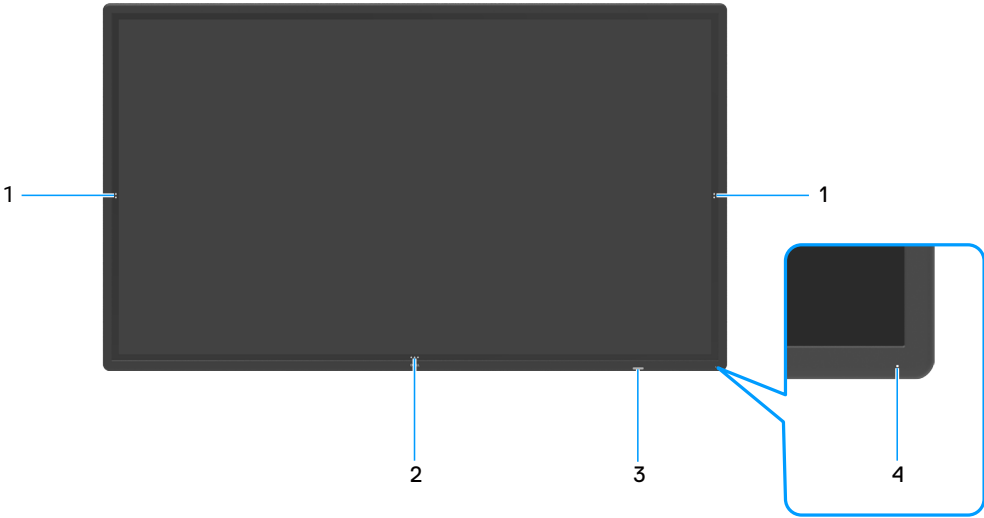
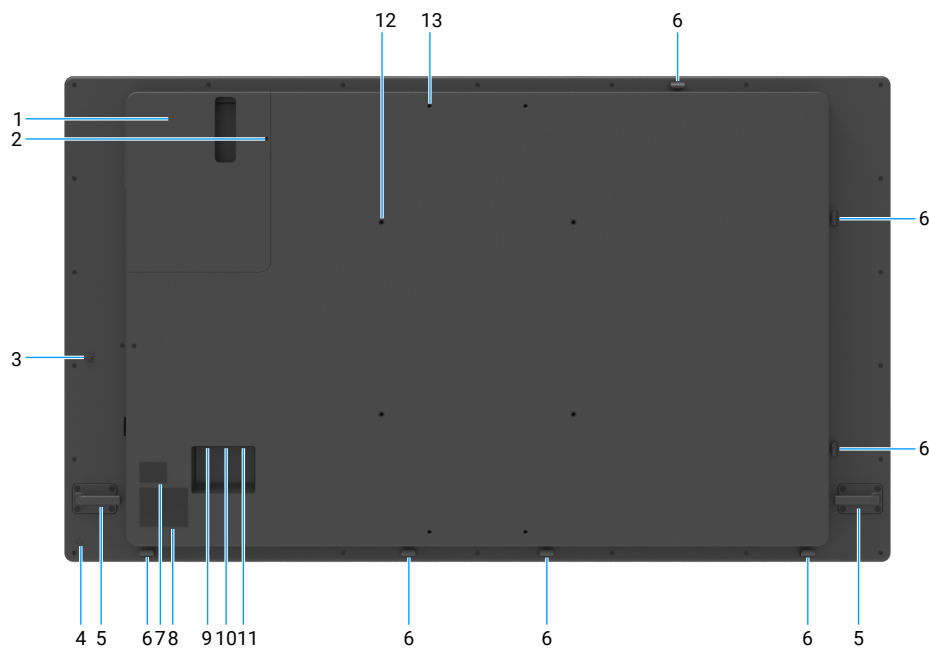


Figure 1. Front view of the monitor

Table 1. Front view descriptions.

Label	Description	Function
1	Screen drop-down touch key	The screen drop down.
2	OSD launcher touch key	OSD launcher.
3	IR lens	To receive a remote control signal.
4	Power LED indicator	Solid white light indicates that the monitor is turned on and functioning normally. Breathing white light indicates that the monitor is in Standby Mode.

## Back view



**Figure 2.** Back view of the monitor

**Table 2.** Components and descriptions.

Label	Description	Function
1	Dell Pro Micro holder	Holds a Dell Pro Micro.
2	Security lock slot	Secures Dell Pro Micro with security cable lock (sold separately).
3	USB Type-C cable clip	Routes USB Type-C cable.
4	Power button	To turn the monitor on and off.
5	Handle (2)	Use to move the display.
6	Cable holder clip (7)	Cable clips on these positions are used to organize the cables.
7	Barcode, serial number, and Service Tag label	See this label if you need to contact Dell for technical support.
8	Regulatory label	List of approved regulatory labels.
9	AC power connector	To connect the display power cable.
10	Dell Micro OptiPlex personal computer power port	AC power for Micro OptiPlex personal computer power adapter (power rating: 100-240 V, ~50/60 Hz, 2.4 A).
11	VB Power port	This port is reserved for future Dell offerings (power rating: 100-240 V, ~50/60 Hz, 2.4 A). Disclaimer only use for Dell offerings.
12	VESA mounting holes (400 x 400 mm)	To mount the display.
13	VB vesa mounting holes	This mounting is reserved for future Dell offerings (screw thread size and depth of M6 x 16).

Side view

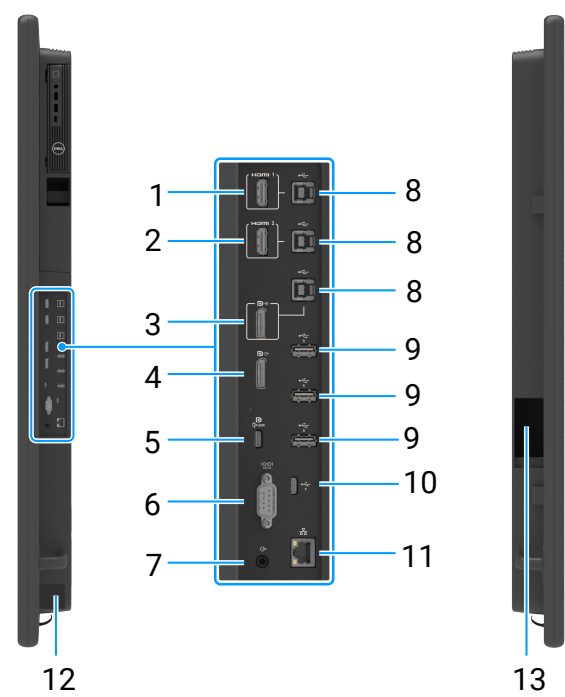




Figure 3. Side view of the monitor

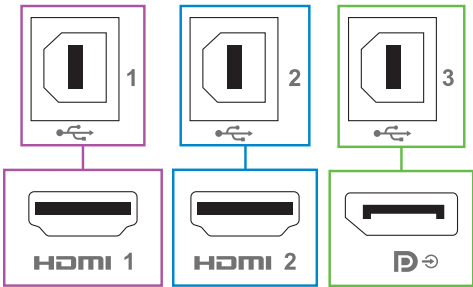
Table 3. Components and descriptions.

Label	Description	Function
1	HDMI 1 port	Connect to your computer or external device using an HDMI cable.
2	HDMI 2 port	
3	DisplayPort (in)	Connect your computer with the DisplayPort cable.
4	DisplayPort (out) 	DP output for MST (Multi-Stream Transport) capable monitor. <b>NOTE:</b> Remove the rubber plug when using DisplayPort out connector.
5	USB Type-C/DisplayPort	Connect to your computer using the USB Type-C cable. The USB Type-C port offers the fastest transfer rate USB 3.2 and the alternate mode with DP 1.4 support the maximum resolution of 3840 x 2160 at 60 Hz, PD 20 V/4.5 A, 15 V/3 A, 9 V/3 A, 5 V/3 A. <b>NOTE:</b> USB Type-C is not supported on Windows versions that are prior to Windows 10.
6	RS232 connector	Remote management and control of display using RS232.
7	Audio line-out port	Connect to external audio peripherals. Only supports 2-channel audio. <b>NOTE:</b> The audio line-out port does not support headphones.
8	USB 5Gbps Type-B upstream ports (3)	Connect the USB cable that comes with your display to the computer. Once this cable is connected, you can use the USB downstream connectors on the display and the touch screen function on the display.
9	USB 5Gbps Type-A downstream ports (3)	Connect your USB device. You can only use this connector after you have connected the USB cable to the computer and the USB upstream connector on the display.
10	USB-C 5Gbps downstream port (15 W) 	The USB Type-C port supports 5 V/3 A. Connect your USB device. To use this port, you must connect the USB Type-C cable (shipped with your monitor) to the USB Type-C upstream port on the monitor and to your computer.
11	RJ45 ethernet connector	Remote Network Management and control of display using RJ45.

Label	Description	Function
12	Serial number, Service Tag label, and Website	See this label if you need to contact Dell for technical support.
13	Side compartment for VB power adapter storage	This cavity is reserved for future Dell offerings.

Input sources and USB pairing

**NOTE:** Make sure to connect both input source cable and USB upstream cable follow below pairing to enable touch function. For example: If you connect HDMI 1 + USB 2, then is no support for touch function.

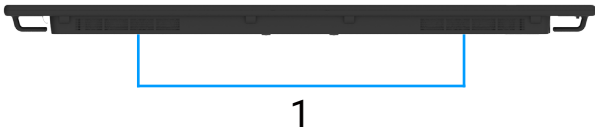


**Figure 4.** Input sources and USB pairing

**Table 4.** Input sources and USB pairing.

Input sources	USB upstream	Touch function ok or not
HDMI 1	USB 1	✓
HDMI 2	USB 2	✓
DP (in)	USB 3	✓

Bottom view



**Figure 5.** Bottom view of the monitor

**Table 5.** Components and descriptions.

Label	Description	Function
1	Built-in speakers (2)	Provides audio output.

# Major components of P7525QT monitor

The following image shows the major components of P7525QT.

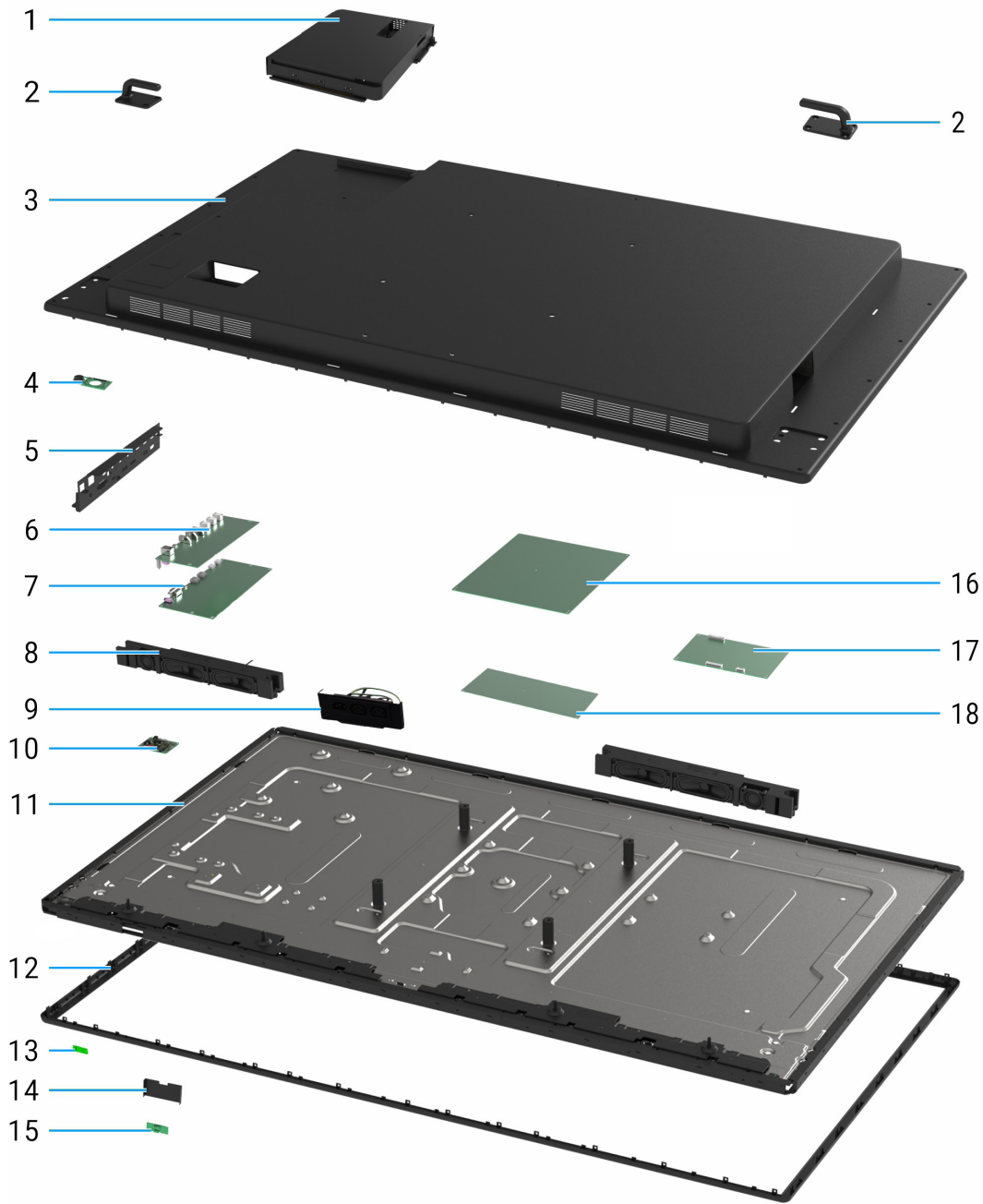


Figure 6. Major components of P7525QT monitor

## Major components

Item	Description	Item	Description	Item	Description
1	Holds a Dell Pro Micro holder	7	Main board	13	LED board
2	Handles	8	Speakers	14	IR bracket
3	Back cover	9	AC socket module	15	IR board
4	Power key board	10	Touch board	16	Power board
5	I/O cover	11	Display panel	17	Driver board
6	USB board	12	Front bezel	18	T-CON board

# Wiring connectivity diagram

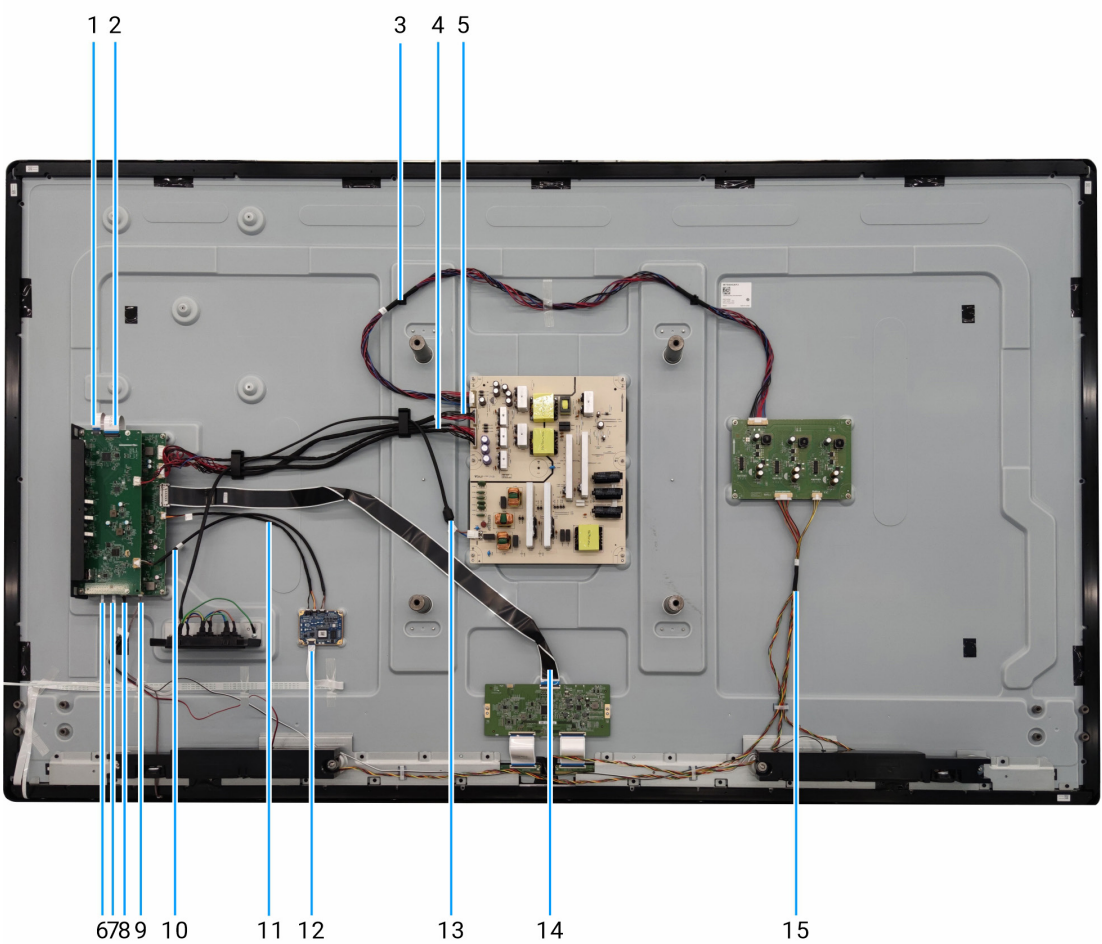


Figure 7. Wiring connectivity diagram

Table 6. Wiring connectivity diagram

Item	Description
1	FFC 1 cable (USB board to main board)
2	FFC 2 cable (USB board to main board)
3	Connective cable 1 (power board to driver board)
4	Connective cable 2 (power board to main board)
5	Connective cable 3 (power board to main board)
6	Power key cable
7	LED cable
8	Speaker cable
9	IR cable
10	Touch cable 1 (touch board to USB board)
11	Touch cable 2 (touch board to main board)
13	Touch cable 3 (touch board to display panel)
14	T-CON cable
15	Lightbar cable

# Connecting the cables

**⚠ WARNING:** Before you begin any of the procedures in this section, follow the [safety instructions](#).

**ⓘ 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:** Do not connect all the cables to the computer simultaneously.

**ⓘ NOTE:** The images are for illustration only. The appearance of the computer may vary.

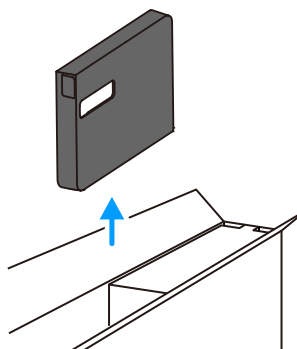
To connect your monitor to the computer:

1. Turn off your computer and disconnect the power cable.
2. Connect the HDMI/DP/USB Type-C/USB 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.

## Dell Pro Micro (optional)

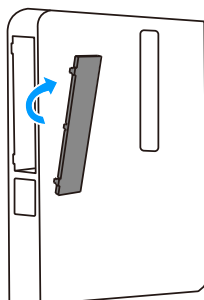
### Attaching the Dell Pro Micro holder

1. Remove the Dell Pro Micro holder from its package.



**Figure 8.** Take out the Dell Pro Micro holder

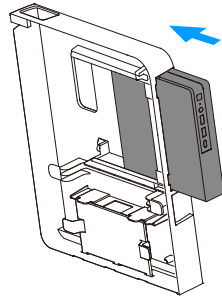
2. Remove the Dell Pro Micro holder front cover.



**Figure 9.** Remove the Dell Pro Micro holder front cover

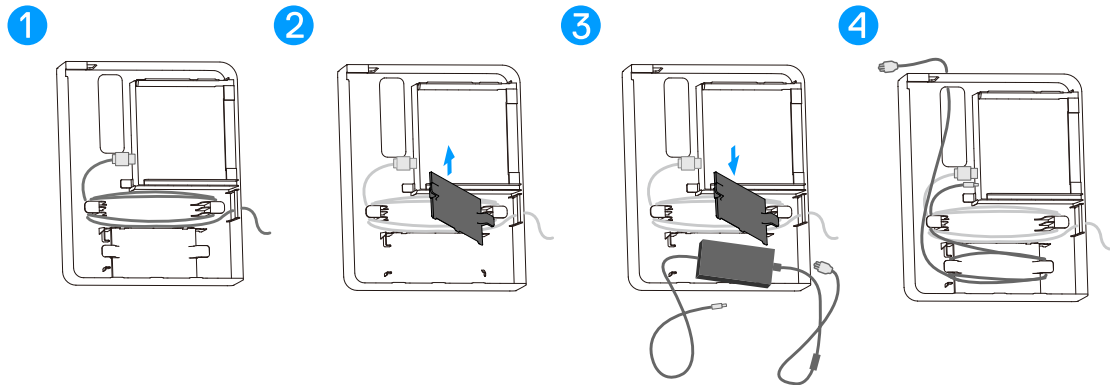


3. Insert the Dell Pro Micro into the respective compartments.



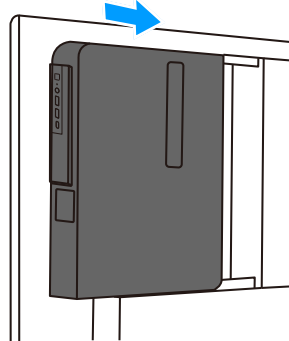
**Figure 10.** Insert the Dell Pro Micro

4. Plug in the power adapter and route the cables using the cable management hooks that are within the Dell Pro Micro holder.



**Figure 11.** Plug in the power adapter and route the cables

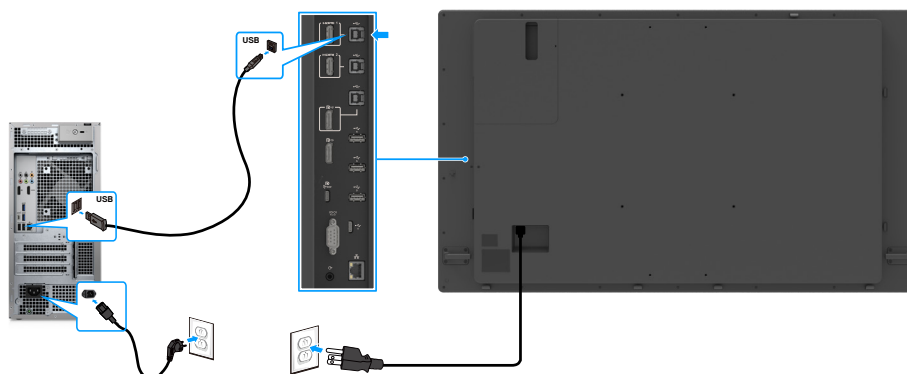
5. Slide the Dell Pro Micro holder back into the monitor.



**Figure 12.** Slide the Dell Pro Micro holder back into the monitor

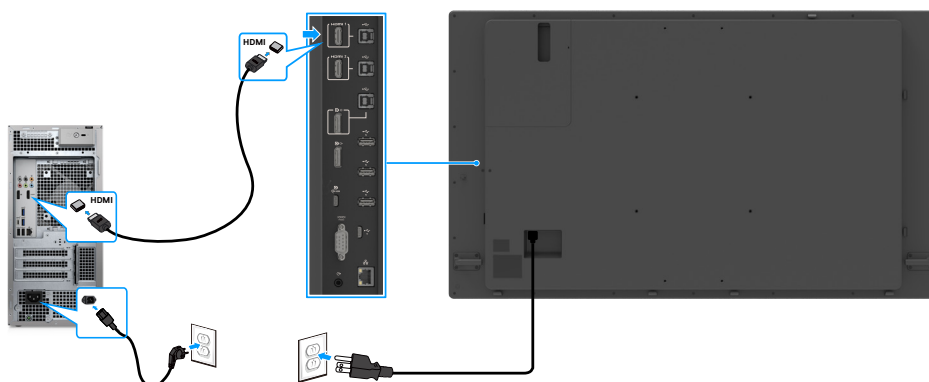
## External personal computer connection

### Connecting the USB cable



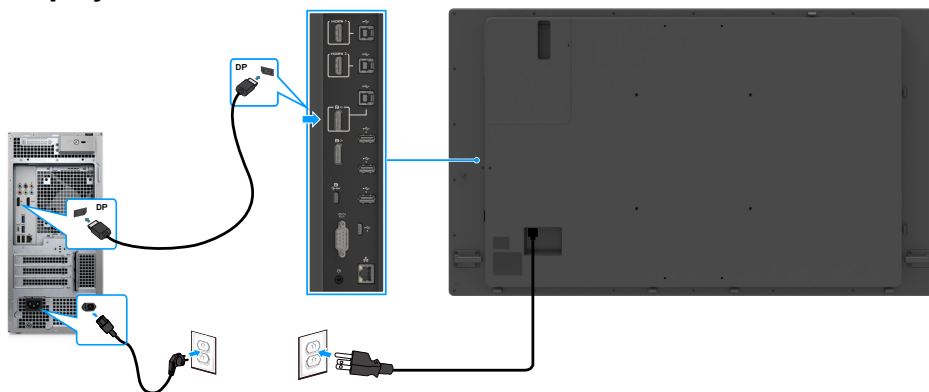
**Figure 13.** Connecting the USB cable

### Connecting the HDMI cable



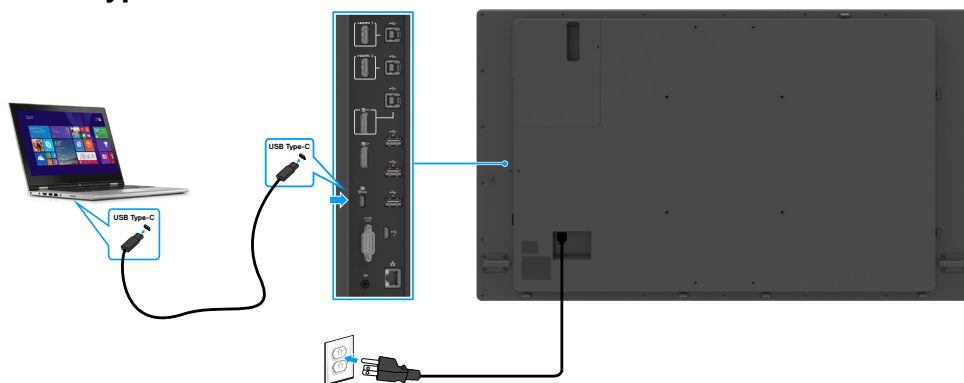
**Figure 14.** Connecting the HDMI cable

### Connecting the DisplayPort cable



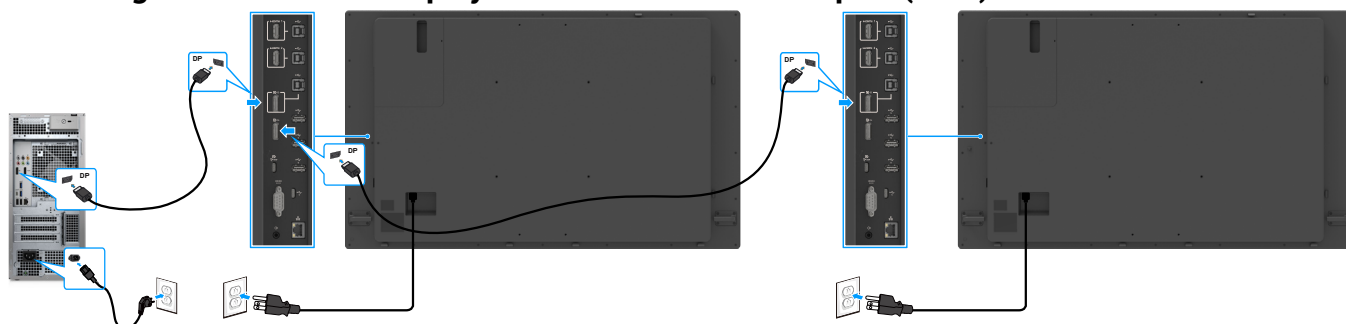
**Figure 15.** Connecting the DisplayPort cable

## Connecting the USB Type-C cable



**Figure 16.** Connecting the USB Type-C cable

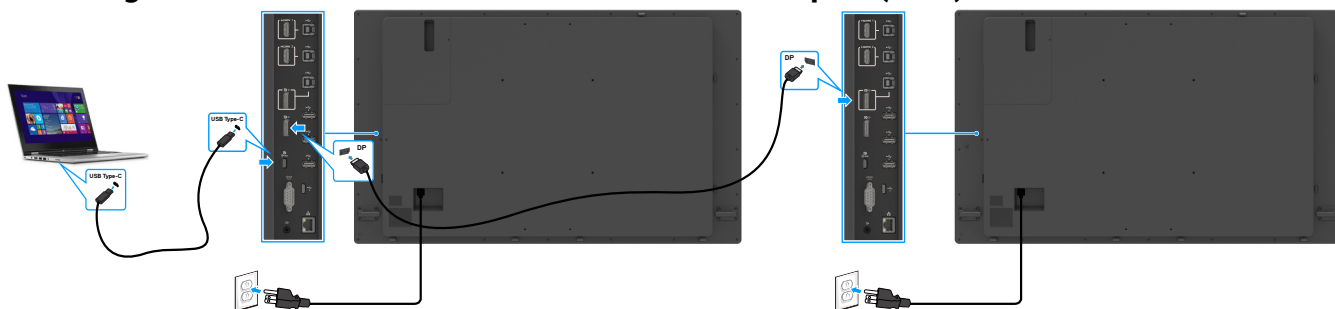
## Connecting the monitor for DisplayPort Multi-Stream Transport (MST) function



**Figure 17.** Connecting the monitor for the DisplayPort Multi-Stream Transport (MST) function

- NOTE:** Supports the DisplayPort MST feature. To use this feature, your computer graphics card must be certified to at least DisplayPort 1.2 with MST option.
- NOTE:** Remove the rubber plug when using DisplayPort out connector.

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

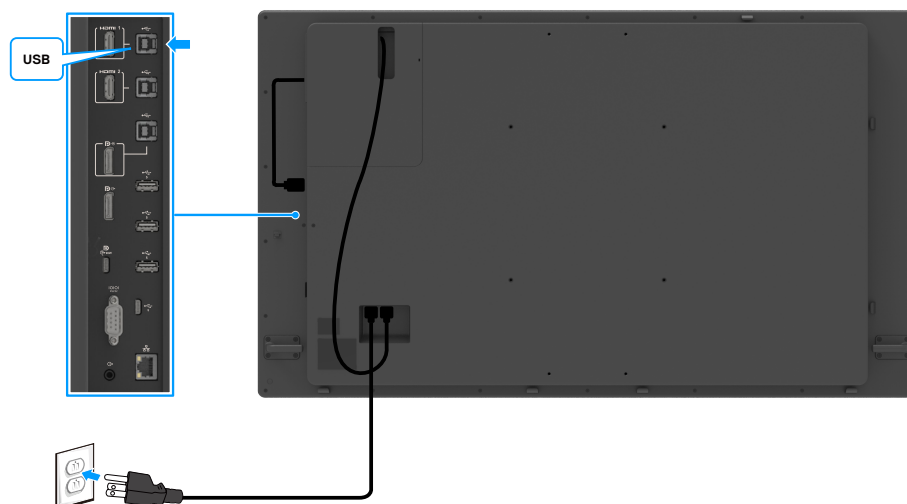


**Figure 18.** Connecting the monitor for the USB-C Multi-Stream Transport (MST) function

- NOTE:** The maximum number of monitors supported through MST is subjected to the bandwidth of the USB-C source.
- NOTE:** Remove the rubber plug when using DisplayPort out connector.

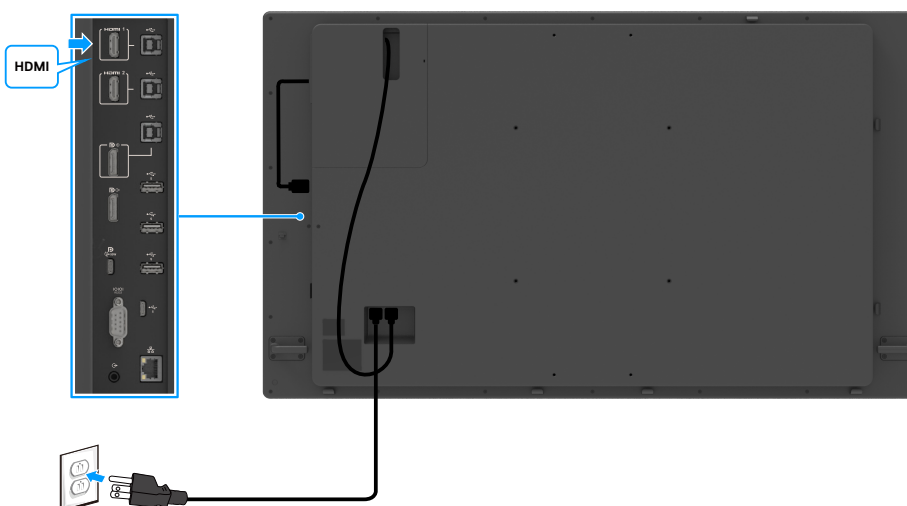
## Connecting the OptiPlex (optional)

### Connecting the USB cable



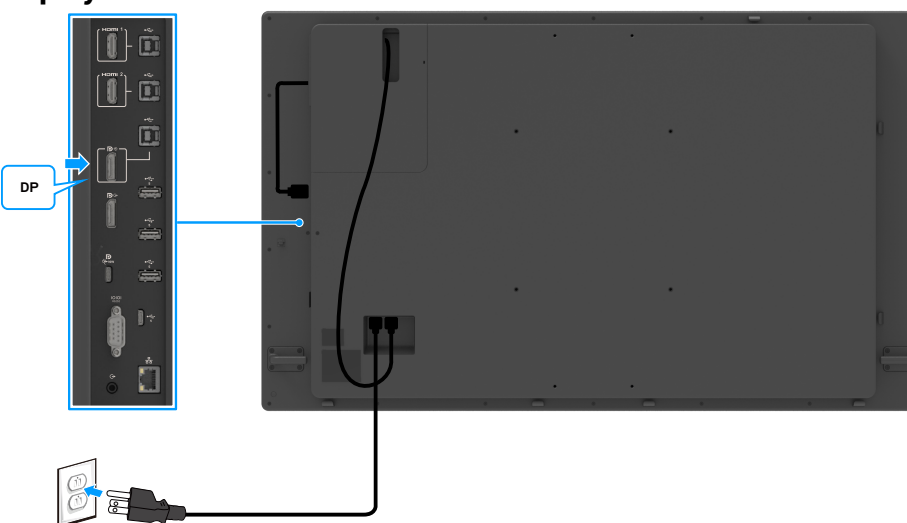
**Figure 19.** Connecting the USB cable

### Connecting the HDMI cable



**Figure 20.** Connecting the HDMI cable

### Connecting the DisplayPort cable



**Figure 21.** 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 caused by unauthorized servicing will not be covered under the warranty.

## Recommended tools
















The procedures in this document may require the following tools:

- Phillips screwdriver #0
- Phillips screwdriver #2
- Nut driver 5 mm
- 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 monitors 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 7. Screw List**

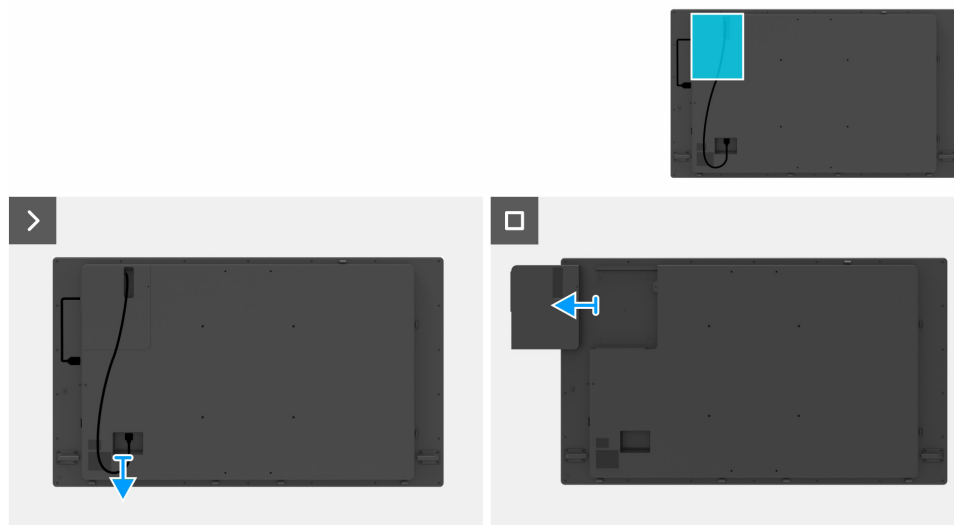
Component	Screw type	Quantity	Screw image
Handles	M6x8	8	
Back cover	M3x9	29	
Power key board	M3x5	2	
Speakers	M4x10	4	
Driver board	M3x6	4	
T-CON board	M3x6	2	
AC socket module	M4x8	1	
AC socket module	M3x6	1	
Power board	M3x6	7	
USB board	M3x6	2	
VGA connector	M3x8	2	
Main board	M3x6	2	
Main Board	M3x18	2	
Front Bezel	M3x4	31	
Touch board	M3x6	2	

## Dell Pro Micro holder

### Removing the Dell Pro Micro holder

#### Prerequisites

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

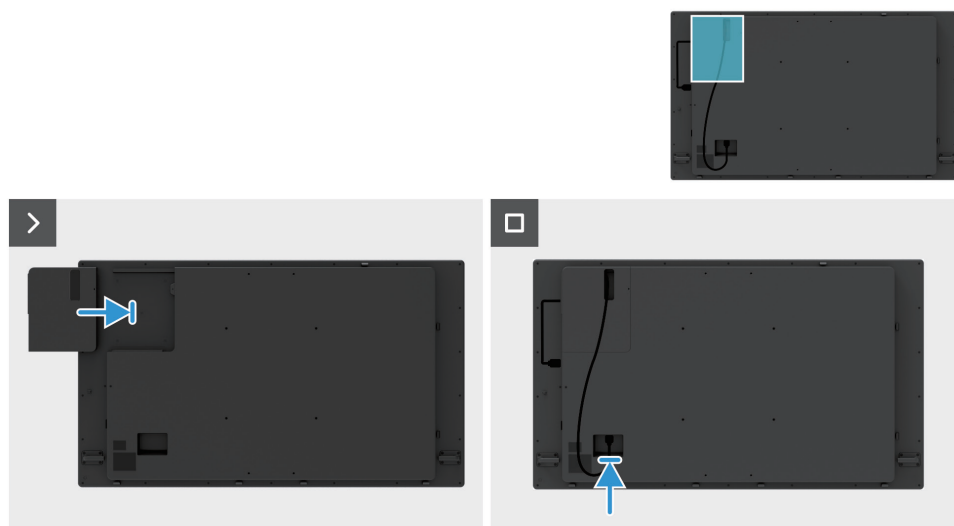


**Figure 22.** Removing the Dell Pro Micro holder

#### Steps

1. Disconnect the cable from the the display monitor.
2. Slide the Dell Pro Micro holder away from the display monitor.

### Installing the Dell Pro Micro holder



**Figure 23.** Installing the Dell Pro Micro holder

#### Steps

1. Slide the Dell Pro Micro holder back into the display monitor.
2. Connect the cable to the display monitor.

#### Next steps

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

# Handles

## Removing the handles

### Prerequisites

1. Follow the procedure in [Before working inside your monitor.](#)
2. Remove the [Dell Pro Micro holder.](#)



**Figure 24.** Removing the handles

### Steps

1. Remove the eight screws (M4x10) that secures the two handles to the back cover.
2. Remove the two handles from the back cover.

## Installing the handles



**Figure 25.** Installing the handles

### Steps

1. Align the slots on the back cover with the slots on the handles, and then place the two handles on the back cover.
2. Replace the eight screws (M4x10) that secure the two handles to the back cover.

### Next steps

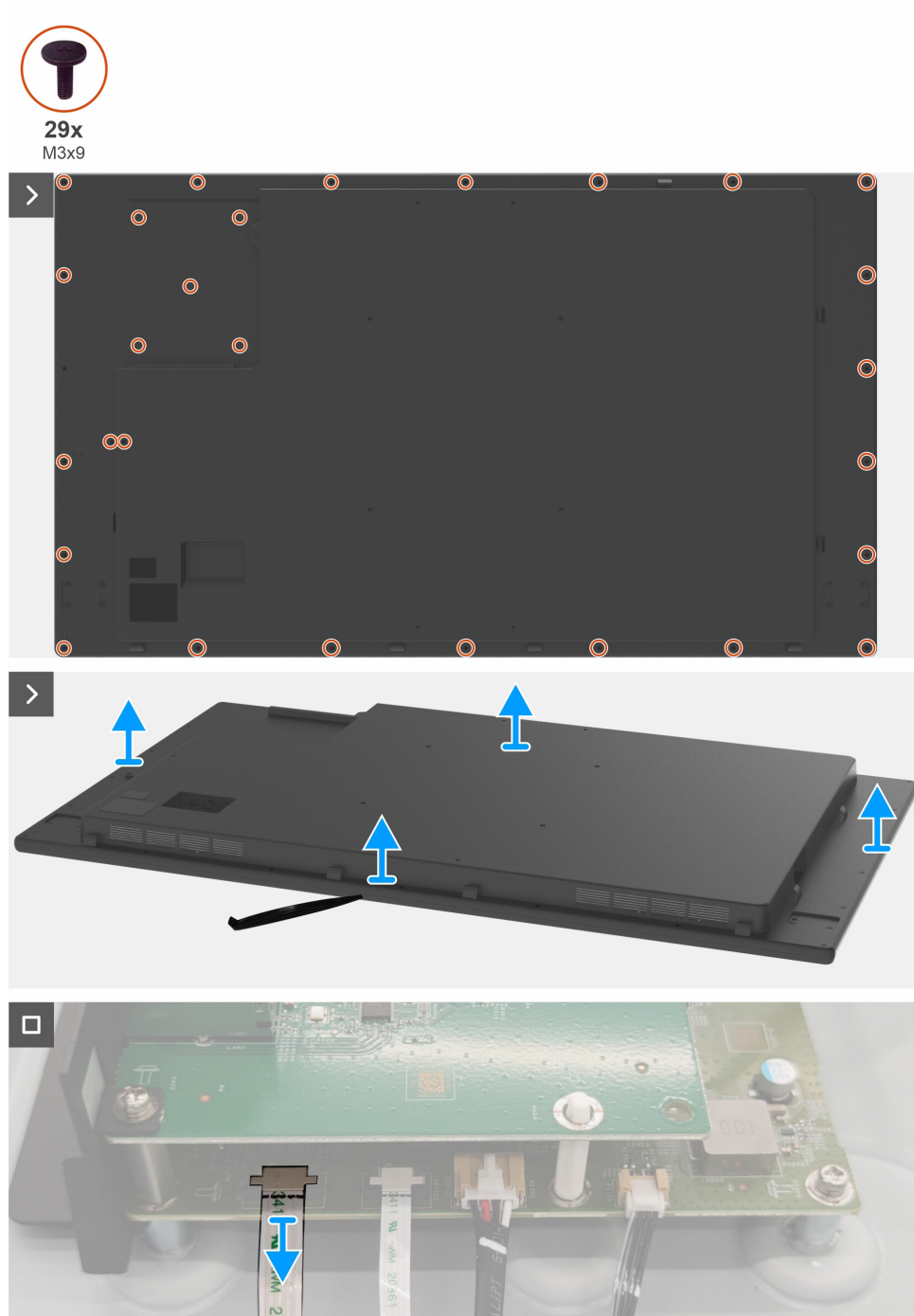
1. Install the [Dell Pro Micro holder.](#)
2. Follow the procedure in [After working inside your monitor.](#)

## Back cover

### Removing the back cover

#### Prerequisites

1. Follow the procedure in [Before working inside your monitor](#).
2. Remove the [Dell Pro Micro holder](#).
3. Remove the [handles](#).



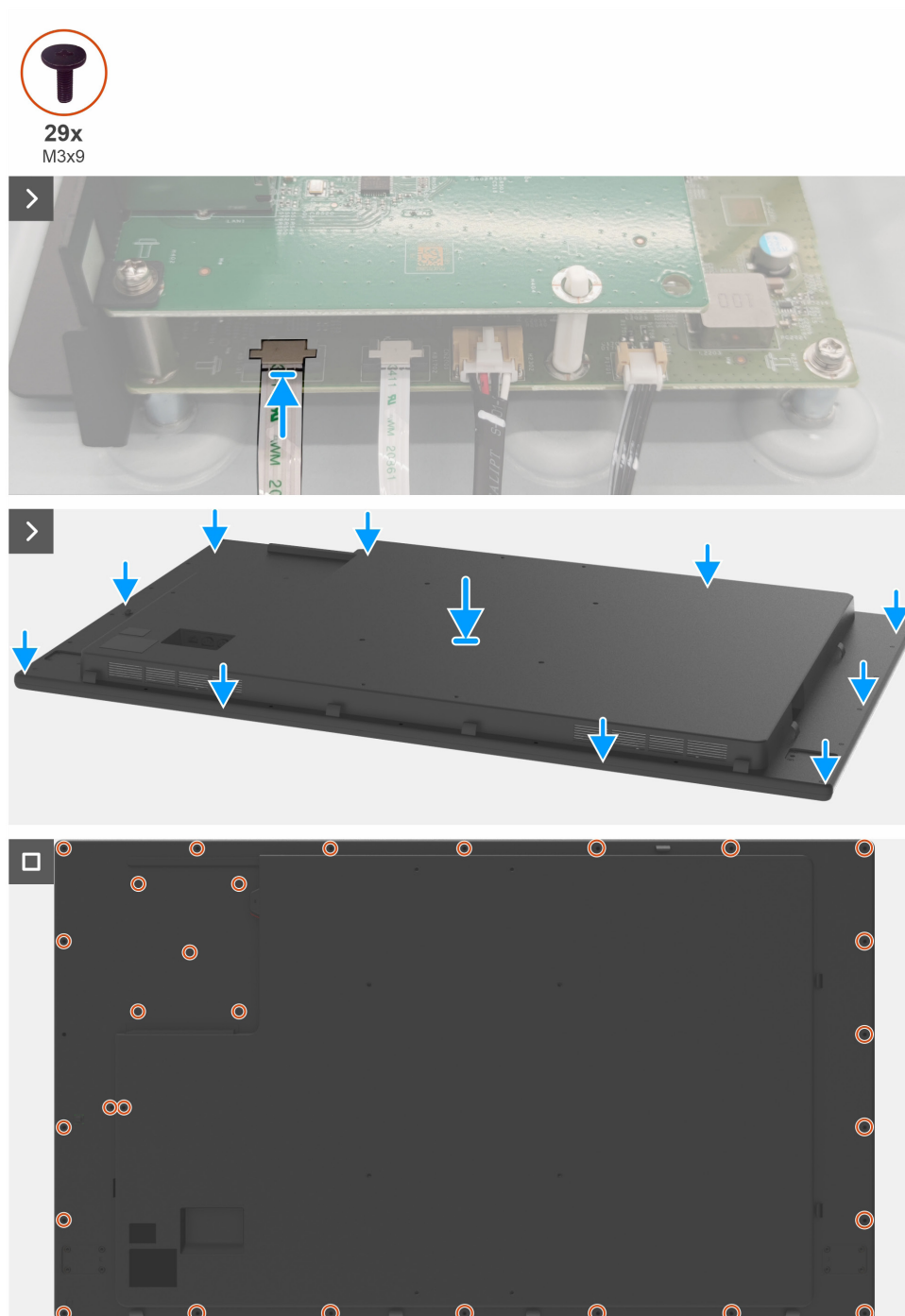
**Figure 26.** Removing the back cover

#### Steps

1. Remove the 29 screws (M3x4) that secure the back cover with the display-assembly base.
2. Using a plastic scribe, pry the back cover starting from the bottom edge of the monitor.
3. Lift the back cover and disconnect the power key cable from the main board.
4. Remove the back cover from the display-assembly base.



## Installing the back cover



**Figure 27.** Installing the back cover

### Steps

1. Connect the power key cable to the main board.
2. Align the slots on the back cover with the slots on the chassis, and then press along the sides to snap the back cover into place.
3. Replace the 29 screws (M3x4) that secure the back cover to the display-assembly base.

### Next steps

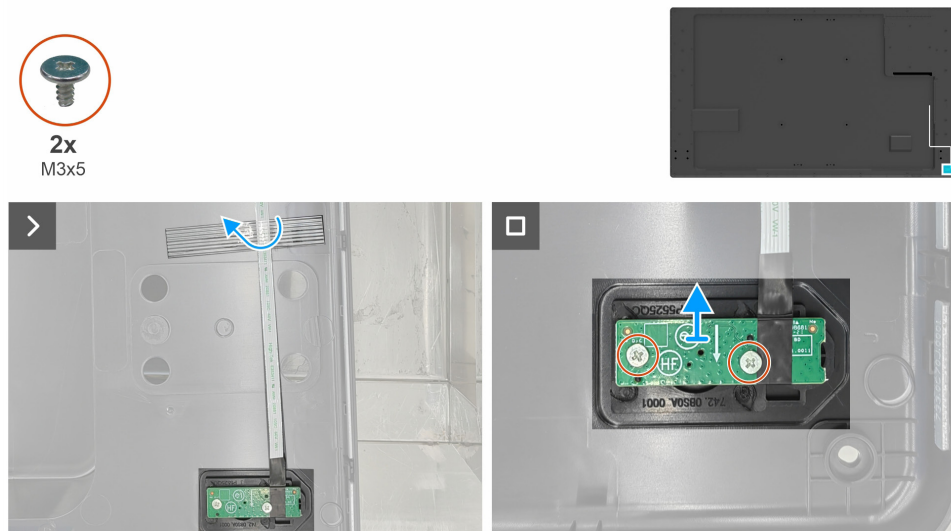
1. Install the [handles](#).
2. Install the [Dell Pro Micro holder](#).
3. Follow the procedure in [After working inside your monitor](#).

## Power key board

### Removing the power key board

#### Prerequisites

1. Follow the procedure in [Before working inside your monitor.](#)
2. Remove the [Dell Pro Micro holder.](#)
3. Remove the [handles.](#)
4. Remove the [back cover.](#)

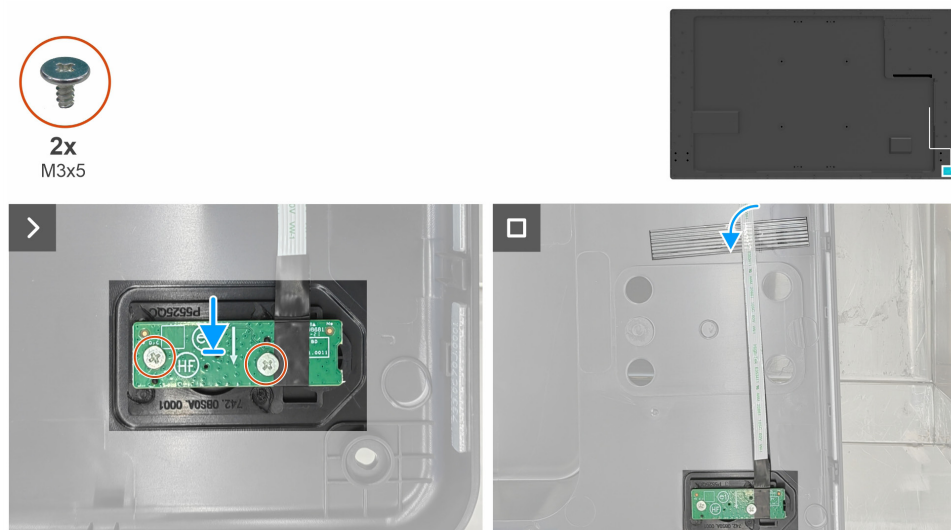


**Figure 28.** Removing the power key board

#### Steps

1. Peel the tape that secures the power key cable to the back cover.
2. Remove the two screws (M3x5) that secure the power key board to the back cover.
3. Remove the power key board from the back cover.

### Installing the power key board



**Figure 29.** Installing the power key board

#### Steps

1. Place the power key board on the back cover.
2. Replace the two screws (M3x5) that secure the power key board to the back cover.
3. Adhere the tape that secures the power key cable to the back cover.

### Next steps

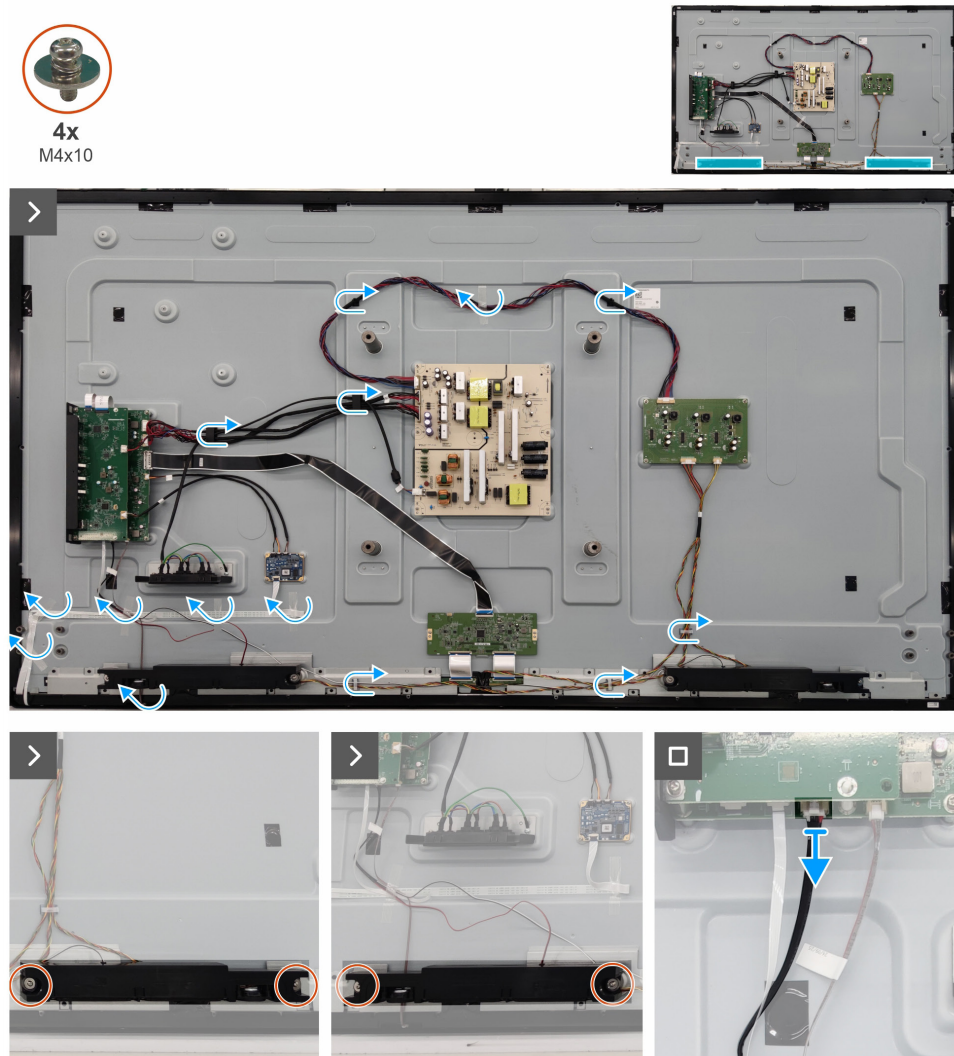
1. Install the [back cover](#).
2. Install the [handles](#).
3. Install the [Dell Pro Micro holder](#).
4. Follow the procedure in [After working inside your monitor](#).

## Speakers

### Removing the speakers

#### Prerequisites

1. Follow the procedure in [Before working inside your monitor](#).
2. Remove the [Dell Pro Micro holder](#).
3. Remove the [handles](#).
4. Remove the [back cover](#).
5. Remove the [power key board](#).

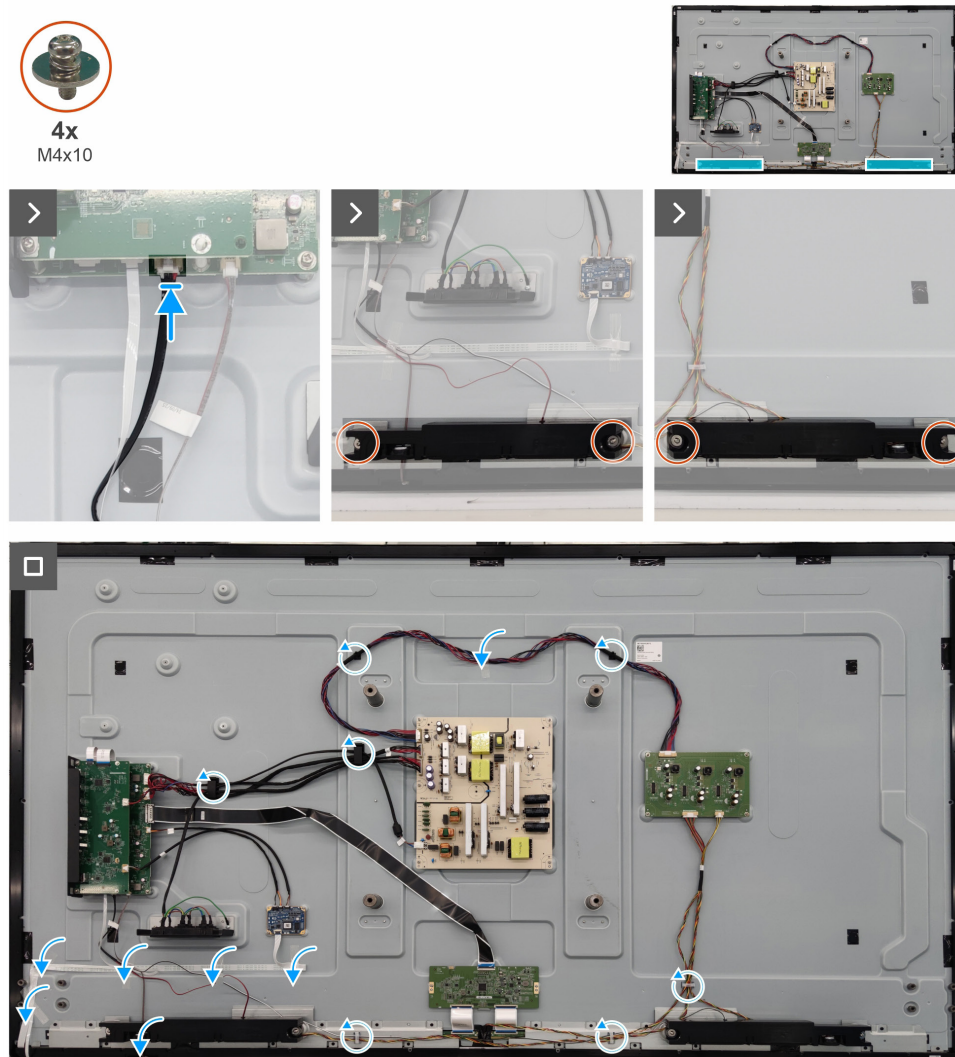


**Figure 30.** Removing the speakers

#### Steps

1. Remove the seven tapes and unlck the seven cable clips.
2. Remove the four screws (M4x10) that secure the two speakers to the display-assembly base.
3. Disconnect the speaker cables from the connector on the main board.
4. Remove the two speakers from the display-assembly base.

## Installing the speakers



**Figure 31.** Installing the speakers

### Steps

1. Align the two speakers with the tabs on the display-assembly base.
2. Replace the four screws (M4x10) that secure the two speakers to the display-assembly base.
3. Connect the speaker cable to the main board.
4. Adhere the seven tapes and lock the seven cable clips to secure the cables.

### Next steps

1. Install the [power key board](#).
2. Install the [back cover](#).
3. Install the [handles](#).
4. Install the [Dell Pro Micro holder](#).
5. Follow the procedure in [After working inside your monitor](#).

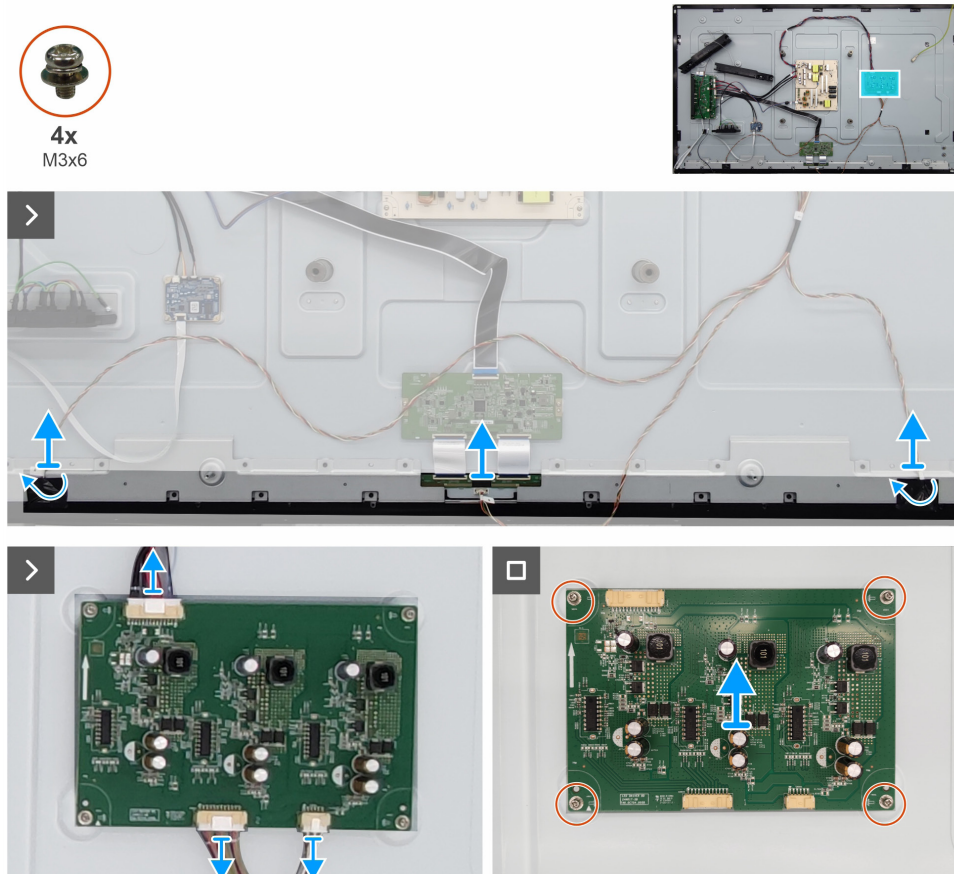


# Driver board

## Removing the driver board

### Prerequisites

1. Follow the procedure in [Before working inside your monitor](#).
2. Remove the [Dell Pro Micro holder](#).
3. Remove the [handles](#).
4. Remove the [back cover](#).
5. Remove the [power key board](#).
6. Remove the [speakers](#).

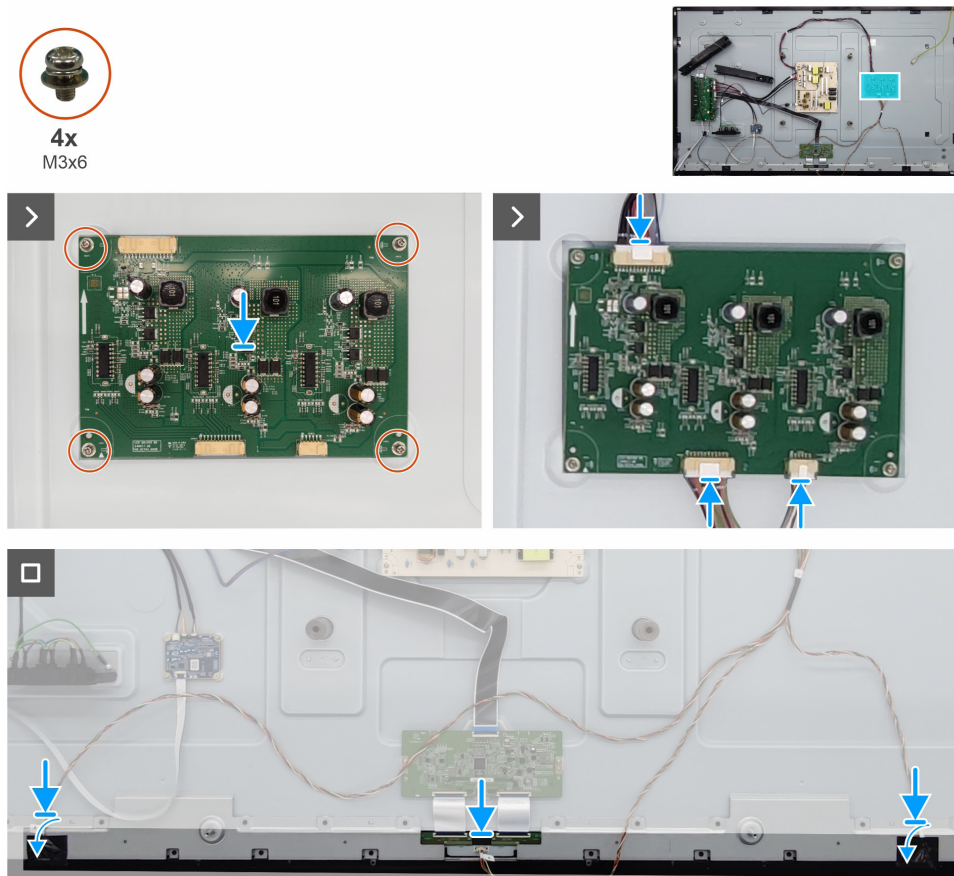


**Figure 32.** Removing the driver board

### Steps

1. Peel the tapes on the lightbar cables (left and right) and disconnect the lightbar cables(left, middle and right) from the connectors on the display panel.
2. Disconnect all the cables from the connectos on the driver board.
3. Remove the four screws (M3x6) that secure the driver to the display-assembly base.
4. Remove the driver board from display-assembly base.

## Installing the driver board



**Figure 33.** Installing the driver board

### Steps

1. Align the screw holes on the driver board with the screw holes on the display-assembly base.
2. Replace the four screws (M3x6) that secure the driver board to the display-assembly base.
3. Connect the lightbar cables and power connective cable to the connectors on the driver board
4. Connect the three lightbar cables to the connectors on the display panel.
5. Adhere the two tapes to secure the lightbar cables on the left and right connectors.

### Next steps

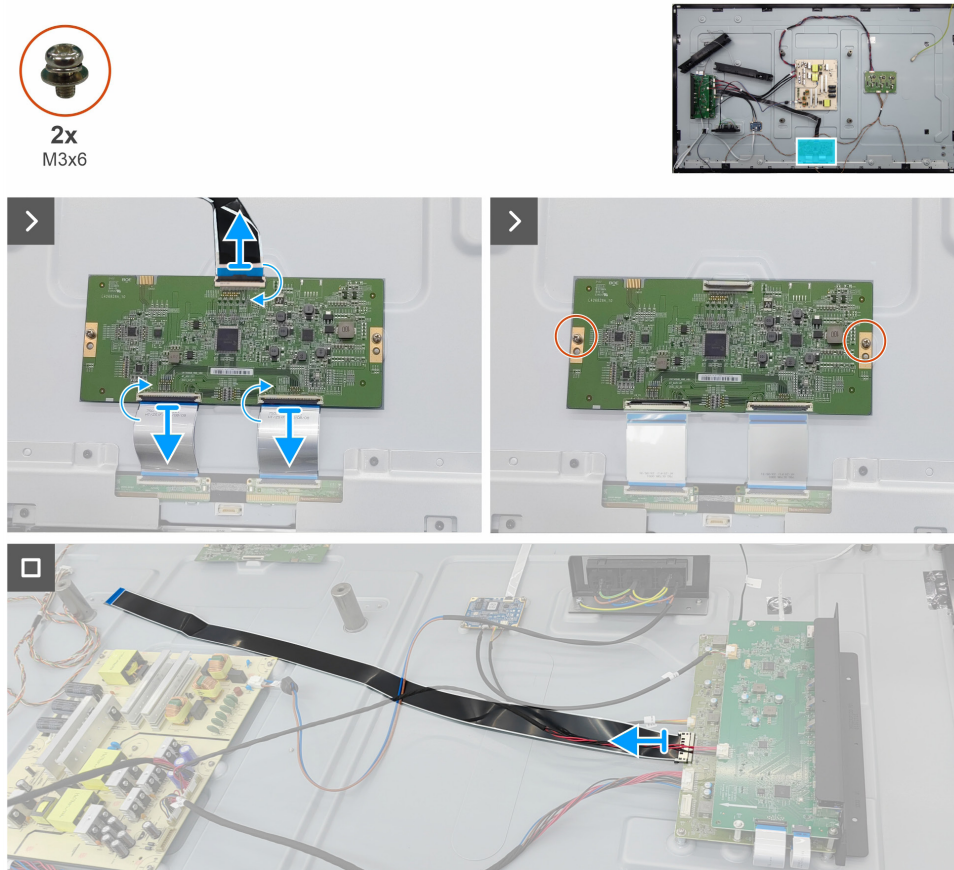
1. Install the [speakers](#).
2. Install the [power key board](#).
3. Install the [back cover](#).
4. Install the [handles](#).
5. Install the [Dell Pro Micro holder](#).
6. Follow the procedure in [After working inside your monitor](#).

# T-CON board

## Removing the T-CON board

### Prerequisites

1. Follow the procedure in [Before working inside your monitor.](#)
2. Remove the [Dell Pro Micro holder.](#)
3. Remove the [handles.](#)
4. Remove the [back cover.](#)
5. Remove the [power key board.](#)
6. Remove the [speakers.](#)
7. Remove the [driver board.](#)

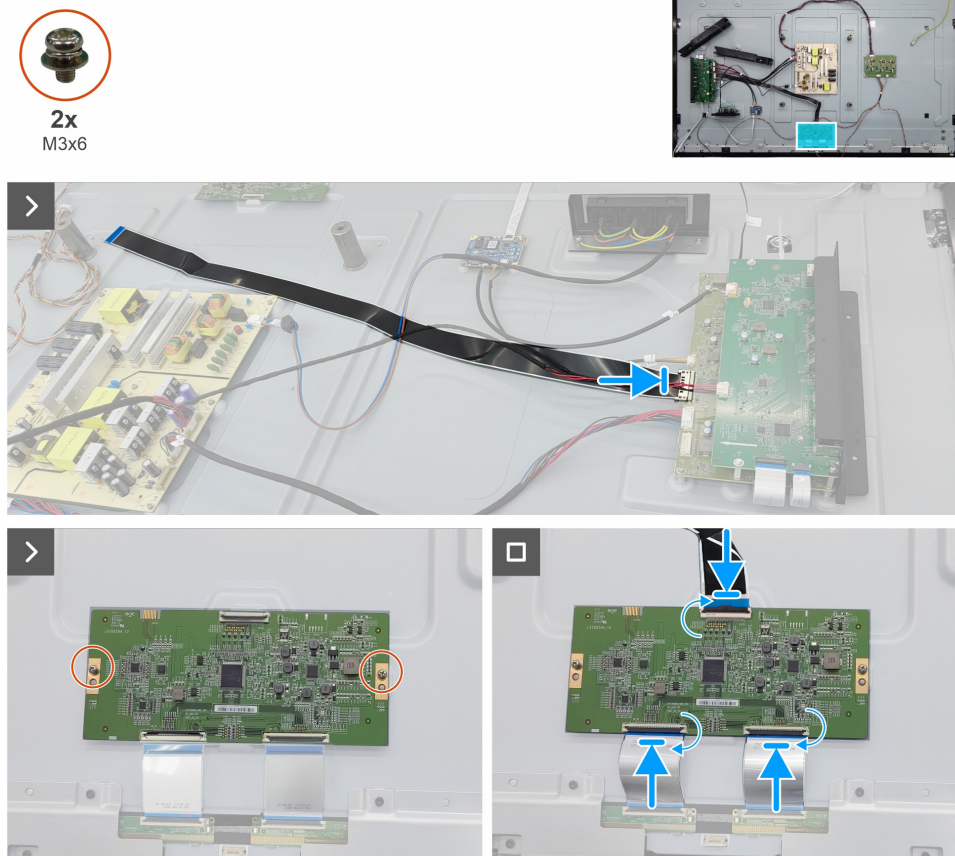


**Figure 34.** Removing the T-CON board

### Steps

1. Disconnect all the cables on the T-CON board.
2. Remove the two screws (M3x6) that secure the T-CON board to the display-assembly base.
3. Remove the T-CON board from display-assembly base.
4. Disconnect the T-CON cable from the connector on the main board.

## Installing the T-CON board



**Figure 35.** Installing the T-CON board

### Steps

1. Connect the touch cable to the connector on the main board.
2. Align the screw holes on the T-CON board with the screw holes on the display-assembly base.
3. Replace the two screws (M3x6) that secure the T-CON board to the display-assembly base.
4. Connect the cables to the T-CON board.

### Next steps

1. Install the [driver board](#).
2. Install the [speakers](#).
3. Install the [power key board](#).
4. Install the [back cover](#).
5. Install the [handles](#).
6. Install the [Dell Pro Micro holder](#).
7. Follow the procedure in [After working inside your monitor](#).

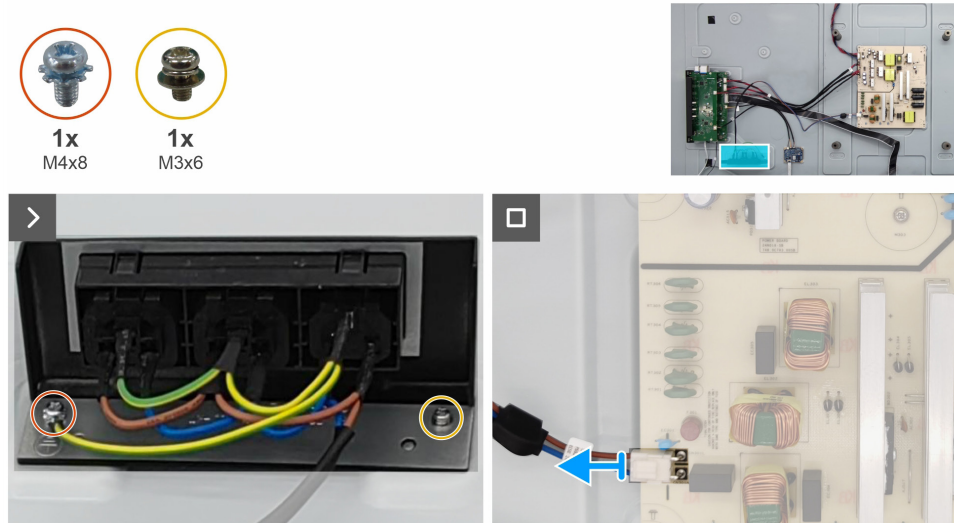


## AC socket module

### Removing the AC socket module

#### Prerequisites

1. Follow the procedure in [Before working inside your monitor.](#)
2. Remove the [Dell Pro Micro holder.](#)
3. Remove the [handles.](#)
4. Remove the [back cover.](#)
5. Remove the [power key board.](#)
6. Remove the [speakers.](#)
7. Remove the [driver board.](#)
8. Remove the [T-CON board.](#)

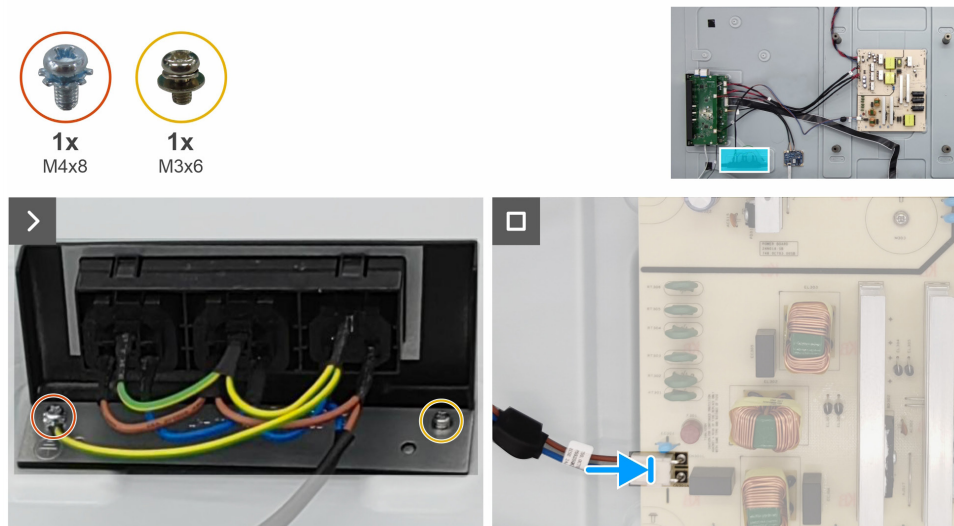


**Figure 36.** Removing the AC socket module

#### Steps

1. Remove the one grounding screw (M4x8) and one screw (M3x6) that secure the AC socket module to the display-assembly base.
2. Disconnect the cable from the power board.
3. Remove the AC socket module from the display-assembly base.

## Installing the AC socket module



**Figure 37.** Installing the AC socket module

### Steps

1. Align the screw holes on the AC socket module with the screw holes on the display-assembly base.
2. Replace the one screws (M3x6) that secures the AC socket module to the display-assembly base.
3. Replace the one screw (m4x8) that secures the grounding wire and AC socket module to the display-assembly base.
4. Connect the cable on the AC socket module to the connector of the power board.

### Next steps

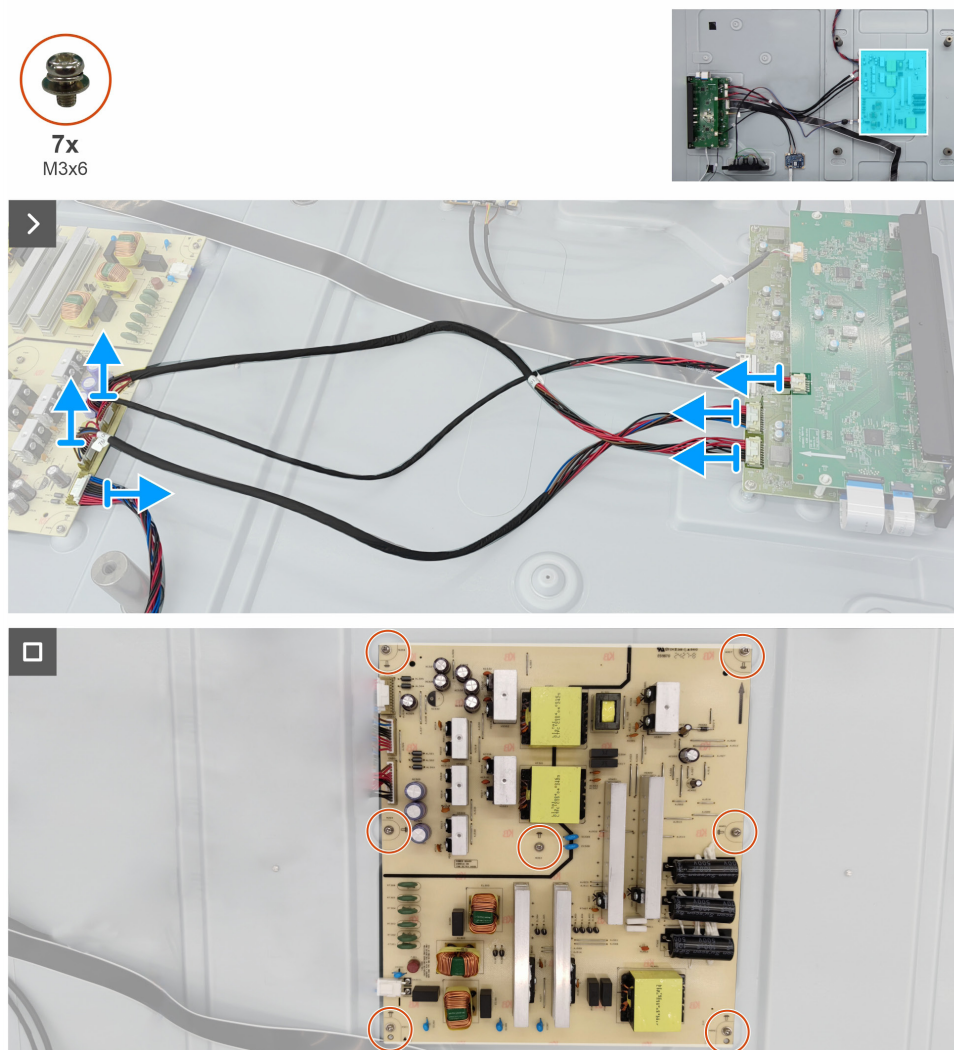
1. Install the [T-CON board](#).
2. Install the [driver board](#).
3. Install the [speakers](#).
4. Install the [power key board](#).
5. Install the [back cover](#).
6. Install the [handles](#).
7. Install the [Dell Pro Micro holder](#).
8. Follow the procedure in [After working inside your monitor](#).

## Power board

### Removing the power board

#### Prerequisites

1. Follow the procedure in [Before working inside your monitor](#).
2. Remove the [Dell Pro Micro holder](#).
3. Remove the [handles](#).
4. Remove the [back cover](#).
5. Remove the [power key board](#).
6. Remove the [speakers](#).
7. Remove the [driver board](#).
8. Remove the [T-CON board](#).
9. Remove the [AC socket module](#).

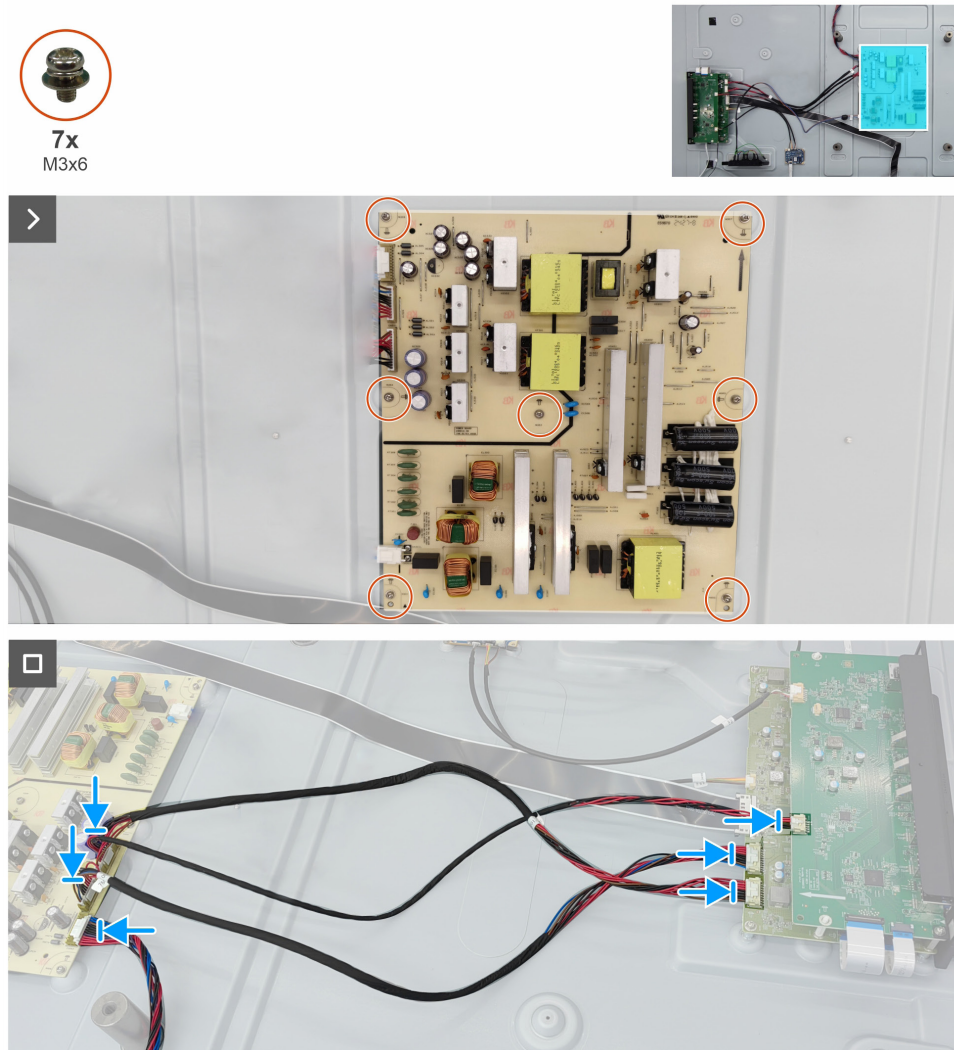


**Figure 38.** Removing the power board

#### Steps

1. Disconnect all the cable on the power board.
2. Remove the seven screws (M3x6) that secure the power board to the display-assembly base.
3. Remove the power board away from the display panel.

## Installing the power board



**Figure 39.** Installing the power board

### Steps

1. Align the screw holes on the power board with the screw holes on the display-assembly base.
2. Replace the seven screws (M3x6) to secure the power board to the display-assembly base.
3. Connect all the cables to the connectors on the power board.

### Next steps

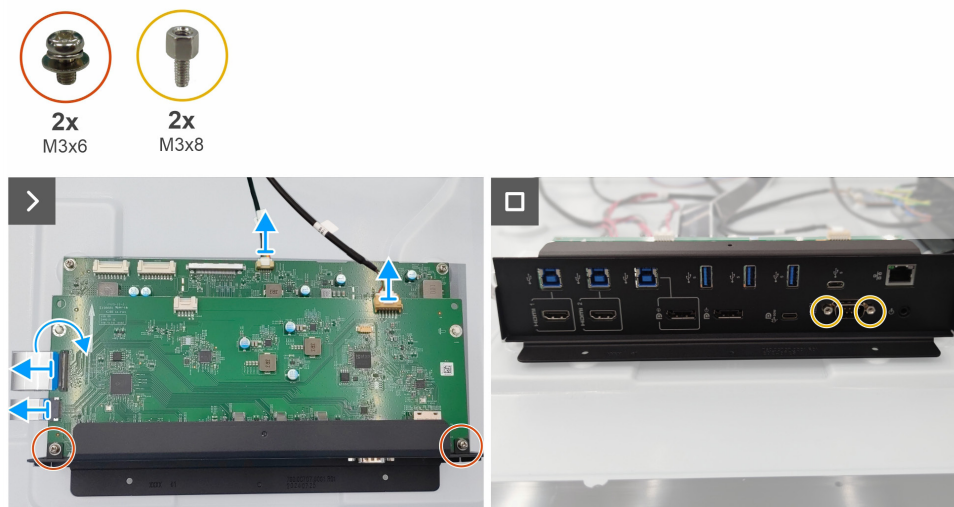
1. Install the [AC socket module](#).
2. Install the [T-CON board](#).
3. Install the [driver board](#).
4. Install the [speakers](#).
5. Install the [power key board](#).
6. Install the [back cover](#).
7. Install the [handles](#).
8. Install the [Dell Pro Micro holder](#).
9. Follow the procedure in [After working inside your monitor](#).

## USB board

### Removing the USB board

#### Prerequisites

1. Follow the procedure in [Before working inside your monitor](#).
2. Remove the [Dell Pro Micro holder](#).
3. Remove the [handles](#).
4. Remove the [back cover](#).
5. Remove the [power key board](#).
6. Remove the [speakers](#).
7. Remove the [driver board](#).
8. Remove the [T-CON board](#).
9. Remove the [AC socket module](#).
10. Remove the [power board](#).



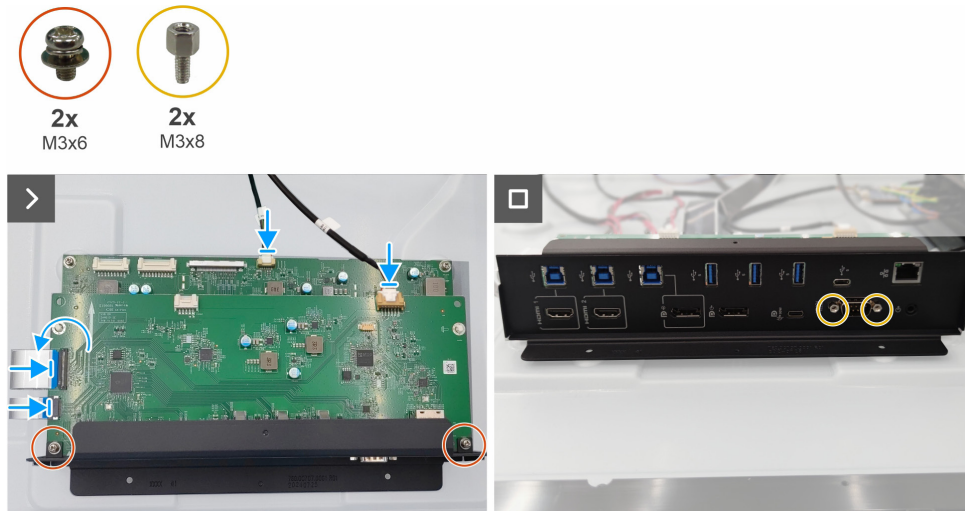
**Figure 40.** Removing the USB board

#### Steps

1. Disconnect all the cables from the connectors on the USB board and main board.
2. Remove the two screws (M3x6) that secure the USB board to the I/O cover.
3. Remove the two screws (M3x8) that secure the VGA connector to the I/O cover.
4. Remove the I/O cover and USB board from the display-assembly base.



## Installing the USB board



**Figure 41.** Installing the USB board

### Steps

1. Align the connector holes on the USB board with the plastic trestles and hex studs.
2. Replace the I/O cover to the USB board.
3. Replace the two screws (M3x6) to secure the USB board to the I/O cover.
4. Replace the two screws (M3x8) to secure the VGA connector to the I/O cover.
5. Connect the cables to the USB board.

### Next steps

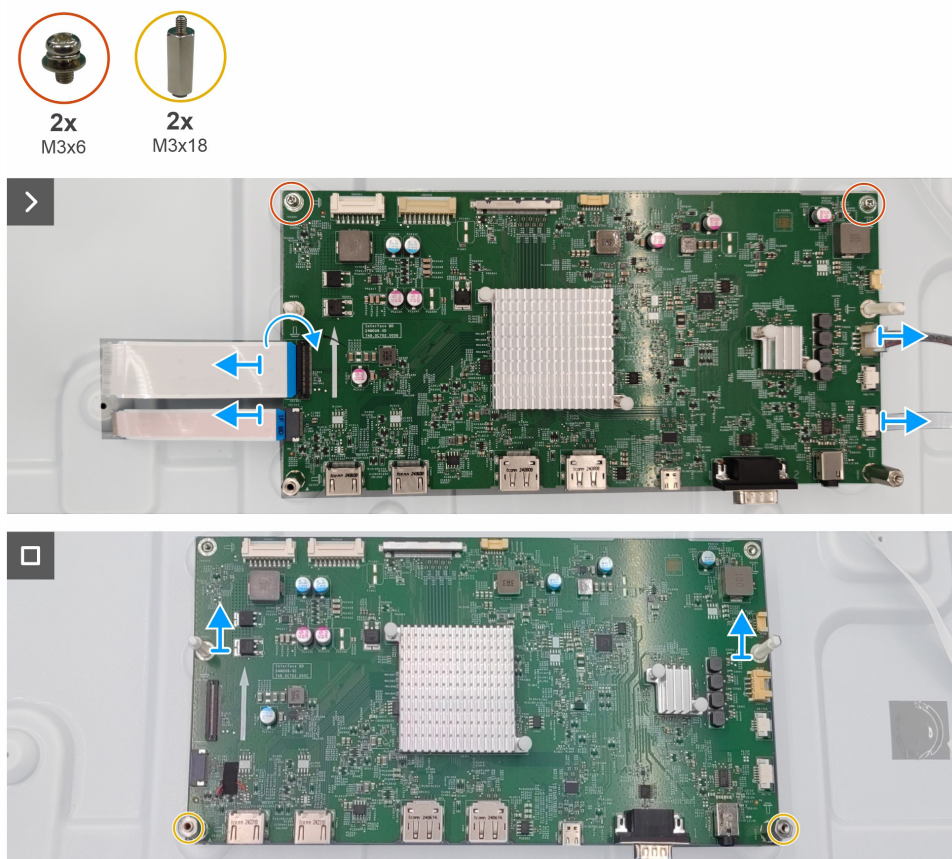
1. Install the [power board](#).
2. Install the [AC socket module](#).
3. Install the [T-CON board](#).
4. Install the [driver board](#).
5. Install the [speakers](#).
6. Install the [power key board](#).
7. Install the [back cover](#).
8. Install the [handles](#).
9. Install the [Dell Pro Micro holder](#).
10. 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 [Dell Pro Micro holder](#).
3. Remove the [handles](#).
4. Remove the [back cover](#).
5. Remove the [power key board](#).
6. Remove the [speakers](#).
7. Remove the [driver board](#).
8. Remove the [T-CON board](#).
9. Remove the [AC socket module](#).
10. Remove the [power board](#).
11. Remove the [USB board](#).

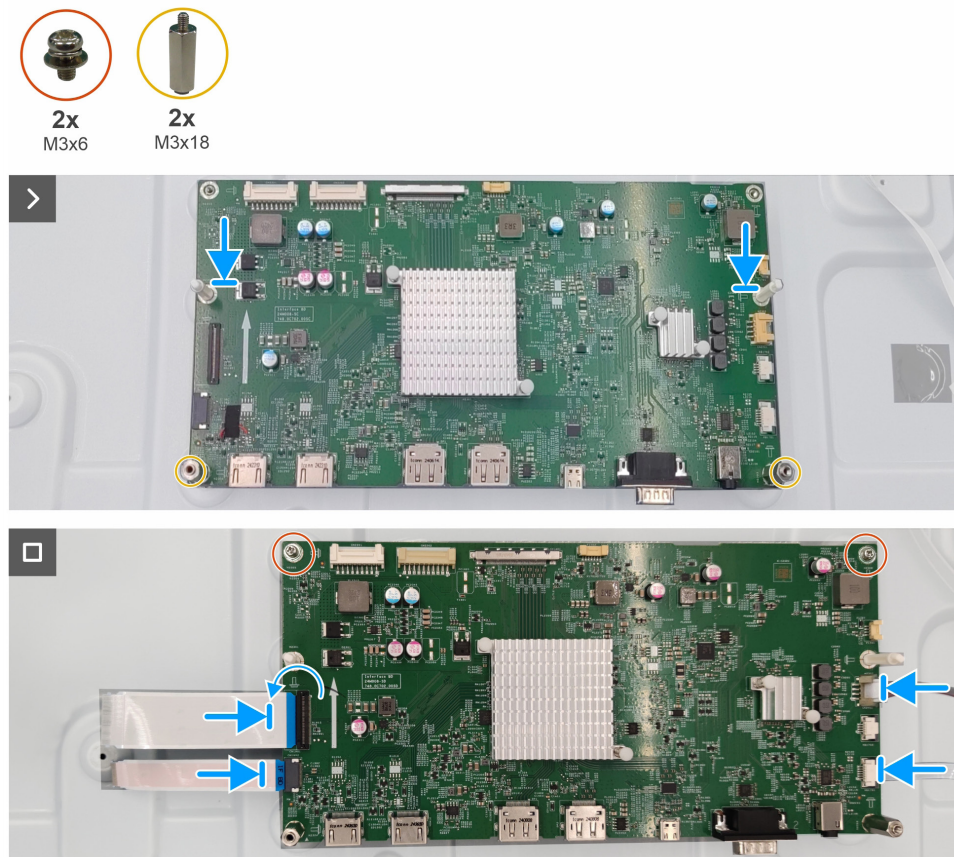


**Figure 42.** Removing the main board

### Steps

1. Disconnect the two FFC cables, IR cable and LED cable from the connectors on the main board.
2. Remove the two plastic trestles from the main board.
3. Remove the two screws (M3x6) and the two hex studs (M3x18) that secure the main board to the display-assembly base.
4. Remove the main board from the display-assembly base.

## Installing the main board



**Figure 43.** Installing the main board

### Steps

1. Align the screw holes on the main board with the the screw holes on the display-assembly base.
2. Replace the two screws (M3x6) and two hex studs (M3x18) that secure the main board to the display-assembly base.
3. Replace the two plastic trestles to the main board.
4. Connect the two FFC cables, IR cable and LED cable to the connectors on the main board.

### Next steps

1. Install the [USB board](#).
2. Install the [power board](#).
3. Install the [AC socket module](#).
4. Install the [T-CON board](#).
5. Install the [driver board](#).
6. Install the [speakers](#).
7. Install the [power key board](#).
8. Install the [back cover](#).
9. Install the [handles](#).
10. Install the [Dell Pro Micro holder](#).
11. Follow the procedure in [After working inside your monitor](#).

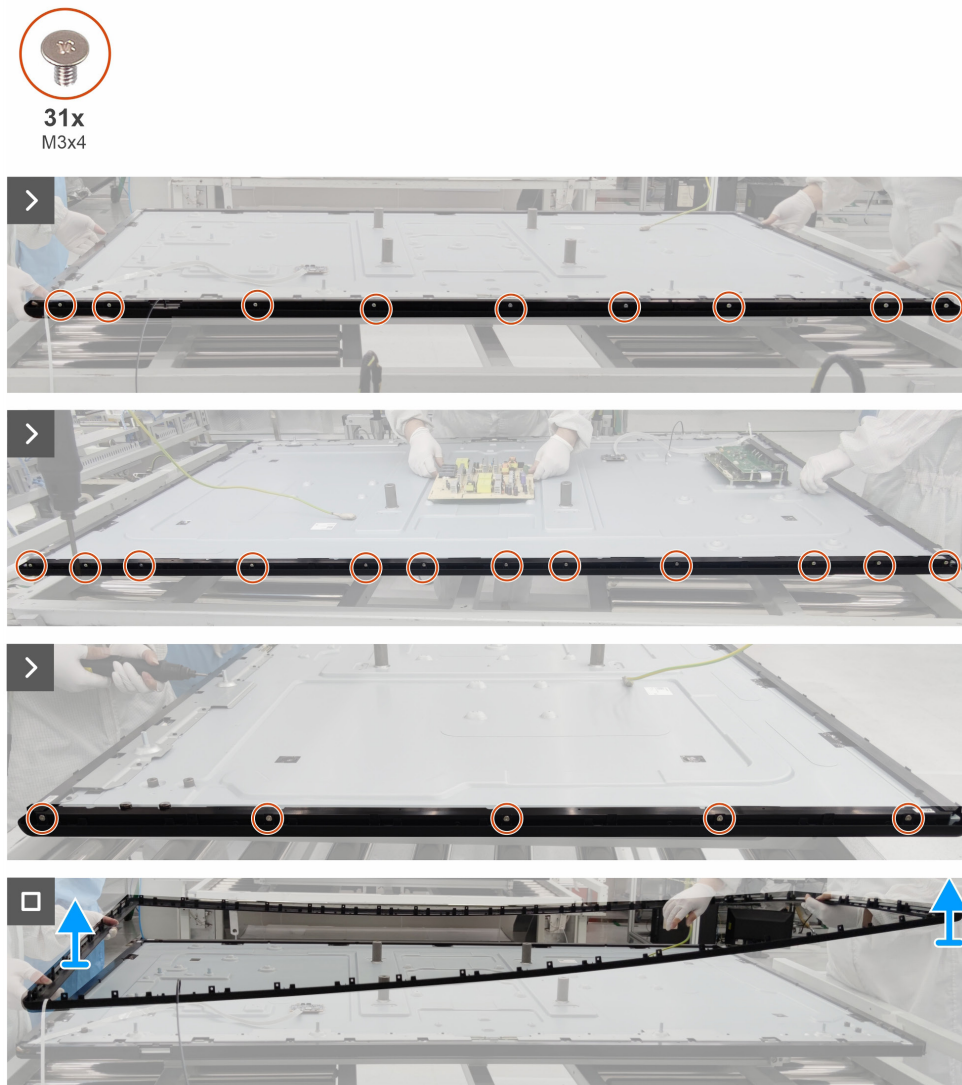


## Front bezel

### Removing the front bezel

#### Prerequisites

1. Follow the procedure in [Before working inside your monitor](#).
2. Remove the [Dell Pro Micro holder](#).
3. Remove the [handles](#).
4. Remove the [back cover](#).
5. Remove the [power key board](#).
6. Remove the [speakers](#).
7. Remove the [driver board](#).
8. Remove the [T-CON board](#).
9. Remove the [AC socket module](#).
10. Remove the [power board](#).
11. Remove the [USB board](#).
12. Remove the [main board](#).

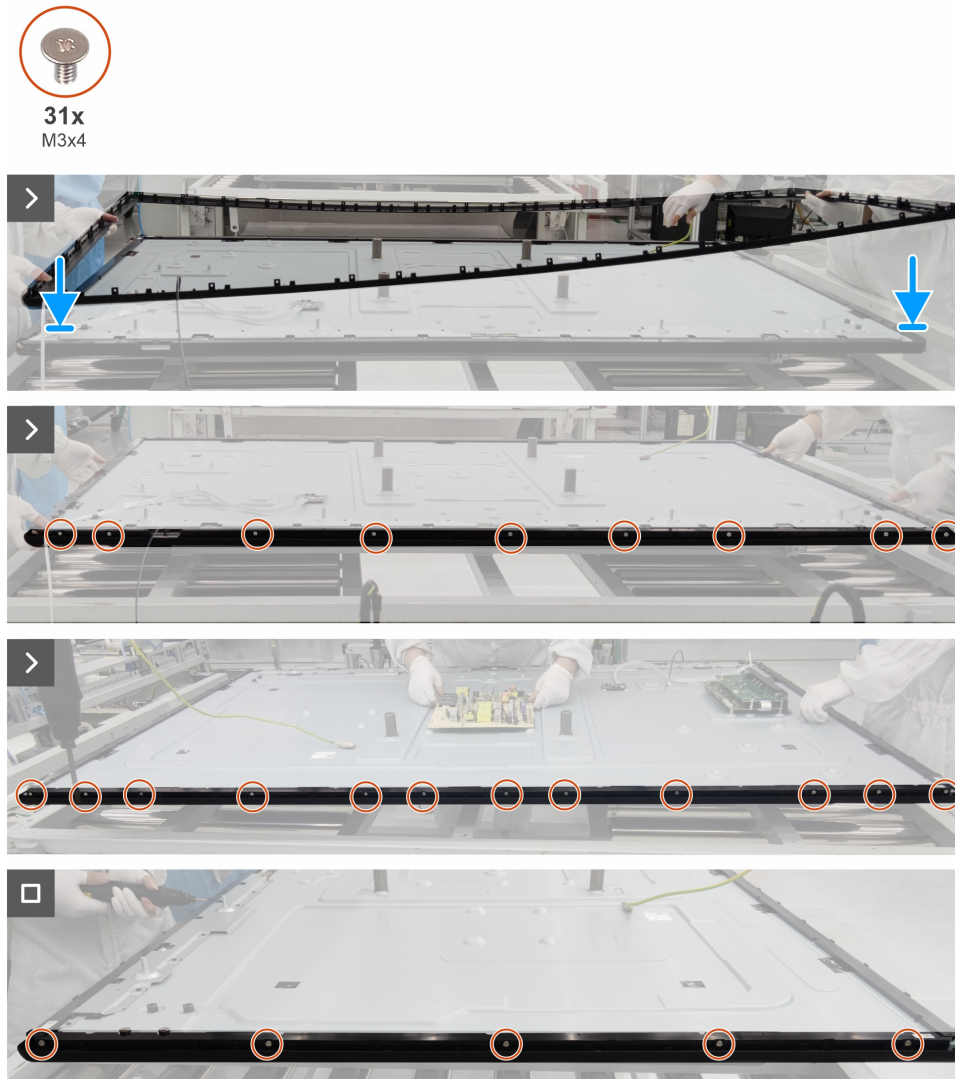


**Figure 44.** Removing the front bezel

#### Steps

1. Remove the 31 (top side: 12, bottom side: 9, left and right side: 5) screws (M3x4) that secure the front bezel to the display panel.
2. Remove the front bezel away from the display panel.

## Installing the front bezel



**Figure 45.** Installing the front bezel

### Steps

1. Place the front bezel and replace the front bezel to the display panel.
2. Replace the 31 screws (M3x4) that secure the front bezel to the display panel.

### Next steps

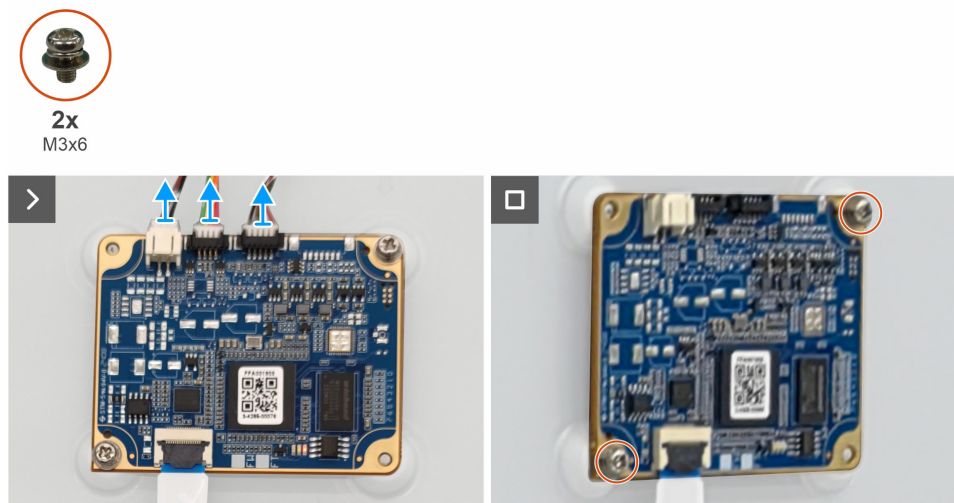
1. Install the [main board](#).
2. Install the [USB board](#).
3. Install the [power board](#).
4. Install the [AC socket module](#).
5. Install the [T-CON board](#).
6. Install the [driver board](#).
7. Install the [speakers](#).
8. Install the [power key board](#).
9. Install the [back cover](#).
10. Install the [handles](#).
11. Install the [Dell Pro Micro holder](#).
12. Follow the procedure in [After working inside your monitor](#).

# Touch board

## Removing the touch board

### Prerequisites

1. Follow the procedure in [Before working inside your monitor](#).
2. Remove the [Dell Pro Micro holder](#).
3. Remove the [handles](#).
4. Remove the [back cover](#).
5. Remove the [power key board](#).
6. Remove the [speakers](#).
7. Remove the [driver board](#).
8. Remove the [T-CON board](#).
9. Remove the [AC socket module](#).
10. Remove the [power board](#).
11. Remove the [USB board](#).
12. Remove the [main board](#).
13. Remove the [front bezel](#).

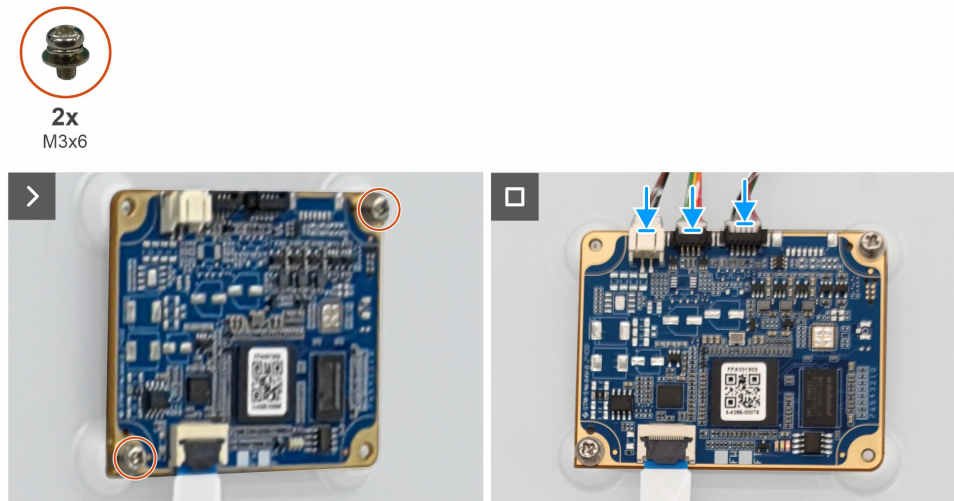


**Figure 46.** Removing the touch board

### Steps

1. Remove the two screws (M3x6) that secure the touch board to the display-assembly base.
2. Disconnect the cables from the connectors on the touch board.
3. Remove the touch board from the display-assembly base.

## Installing the touch board



**Figure 47.** Installing the touch board

### Steps

1. Align the screw holes on the touch board with the screw holes on the display-assembly base.
2. Replace the two screws (M3x6) that secure the touch board to the display-assembly base.
3. Connect the cables to the connectors on the touch board.

### Next steps

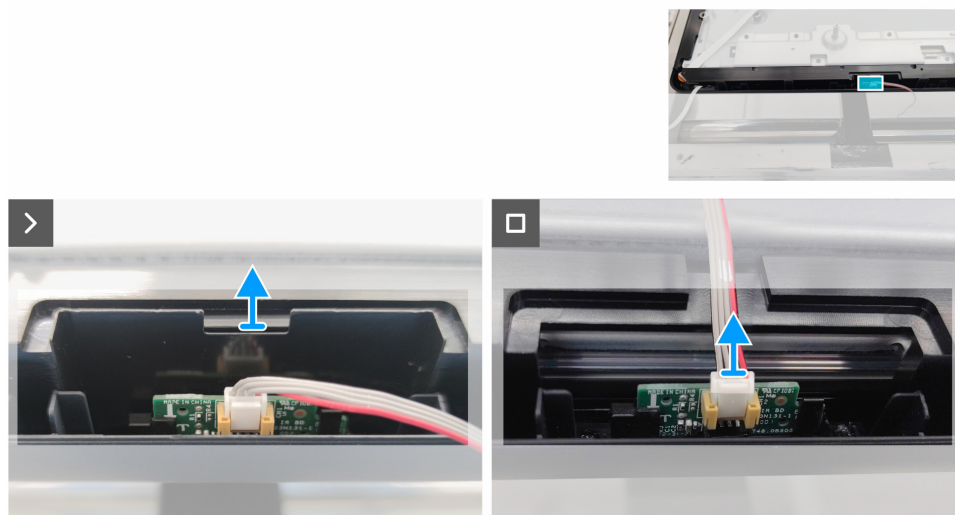
1. Install the [front bezel](#).
2. Install the [main board](#).
3. Install the [USB board](#).
4. Install the [power board](#).
5. Install the [AC socket module](#).
6. Install the [T-CON board](#).
7. Install the [driver board](#).
8. Install the [speakers](#).
9. Install the [power key board](#).
10. Install the [back cover](#).
11. Install the [handles](#).
12. Install the [Dell Pro Micro holder](#).
13. Follow the procedure in [After working inside your monitor](#).

## IR board

### Removing the IR board

#### Prerequisites

1. Follow the procedure in [Before working inside your monitor](#).
2. Remove the [Dell Pro Micro holder](#).
3. Remove the [handles](#).
4. Remove the [back cover](#).
5. Remove the [power key board](#).
6. Remove the [speakers](#).
7. Remove the [driver board](#).
8. Remove the [T-CON board](#).
9. Remove the [AC socket module](#).
10. Remove the [power board](#).
11. Remove the [USB board](#).
12. Remove the [main board](#).
13. Remove the [front bezel](#).
14. Remove the [touch board](#).

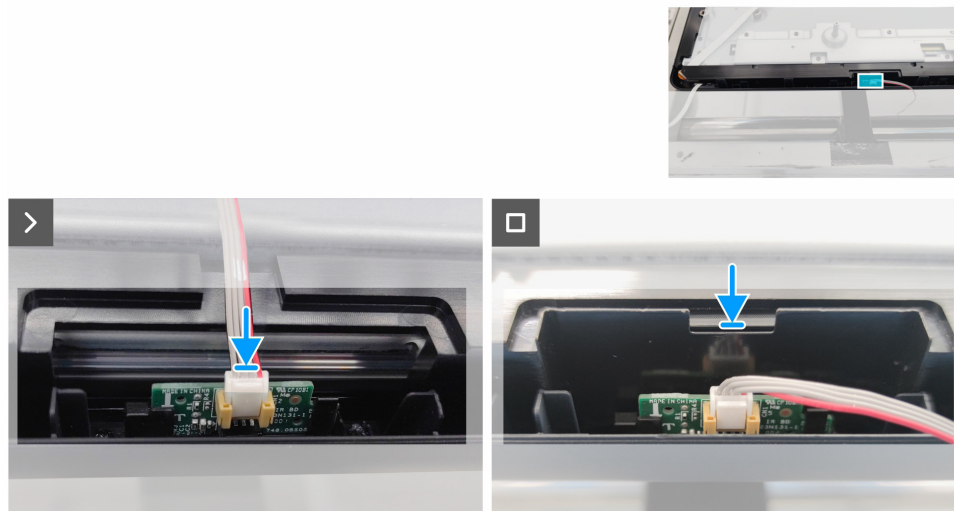


**Figure 48.** Removing the IR board

#### Steps

1. Remove the IR bracket from the front bezel.
2. Slide the IR board from the slot on the front bezel.
3. Disconnect the IR cable from the IR board.

## Installing the IR board



**Figure 49.** Installing the IR board

### Steps

1. Slide and place the IR board to the front bezel.
2. Connect the IR cable to the IR board.
3. Replace the IR bracket to the front bezel.

### Next steps

1. Install the [touch board](#).
2. Install the [front bezel](#).
3. Install the [main board](#).
4. Install the [USB board](#).
5. Install the [power board](#).
6. Install the [AC socket module](#).
7. Install the [T-CON board](#).
8. Install the [driver board](#).
9. Install the [speakers](#).
10. Install the [power key board](#).
11. Install the [back cover](#).
12. Install the [handles](#).
13. Install the [Dell Pro Micro holder](#).
14. Follow the procedure in [After working inside your monitor](#).

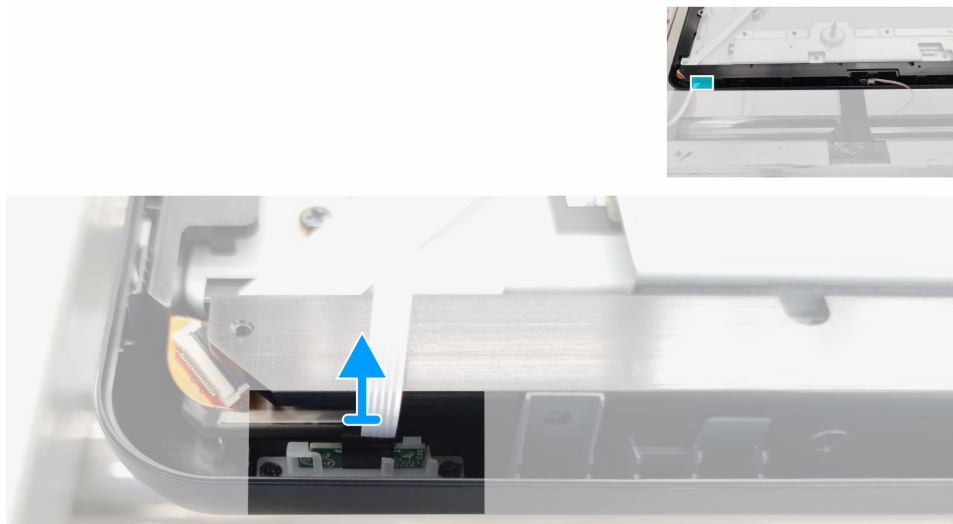


## LED board

### Removing the LED board

#### Prerequisites

1. Follow the procedure in [Before working inside your monitor.](#)
2. Remove the [Dell Pro Micro holder.](#)
3. Remove the [handles.](#)
4. Remove the [back cover.](#)
5. Remove the [power key board.](#)
6. Remove the [speakers.](#)
7. Remove the [driver board.](#)
8. Remove the [T-CON board.](#)
9. Remove the [AC socket module.](#)
10. Remove the [power board.](#)
11. Remove the [USB board.](#)
12. Remove the [main board.](#)
13. Remove the [front bezel.](#)
14. Remove the [touch board.](#)
15. Remove the [IR board.](#)



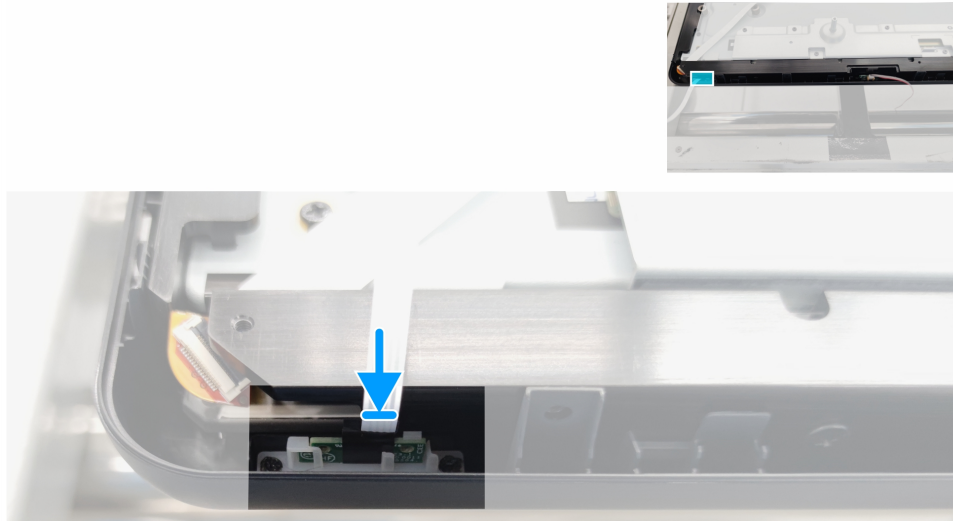
**Figure 50.** Removing the LED board

#### Steps

1. Remove the LED board from the slot on the front bezel.



## Installing the LED board



**Figure 51.** Installing the LED board

### Steps

1. Replace the LED board to the slot on the front bezel.

### Next steps

1. Install the [IR board](#).
2. Install the [touch board](#).
3. Install the [front bezel](#).
4. Install the [main board](#).
5. Install the [USB board](#).
6. Install the [power board](#).
7. Install the [AC socket module](#).
8. Install the [T-CON board](#).
9. Install the [driver board](#).
10. Install the [speakers](#).
11. Install the [power key board](#).
12. Install the [back cover](#).
13. Install the [handles](#).
14. Install the [Dell Pro Micro holder](#).
15. Follow the procedure in [After working inside your monitor](#).

# Troubleshooting

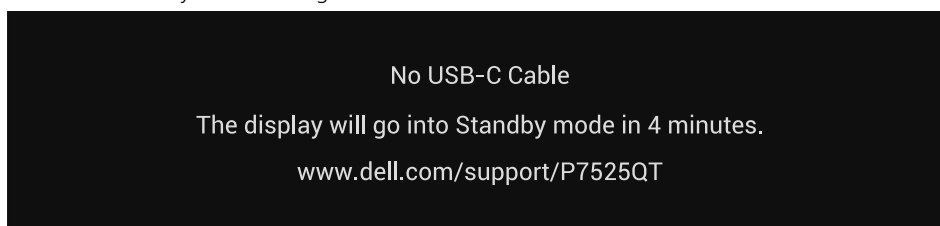
**⚠ WARNING:** Before you begin any of the procedures in this section, follow the [Safety instructions](#).

## Self-test

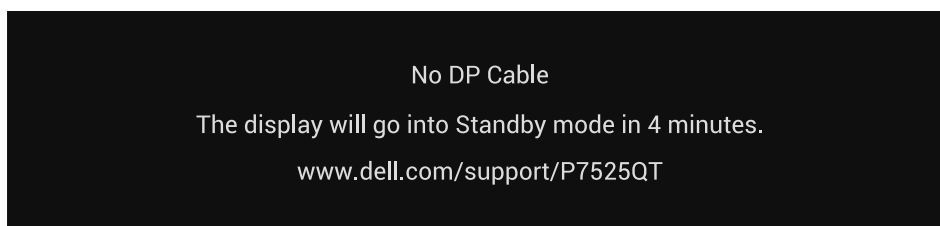
Your monitor provides a self-test feature that allows you to check whether your monitor is functioning properly. If your monitor and computer are properly connected but the monitor screen remains dark, run the monitor self-test by performing the following steps:

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

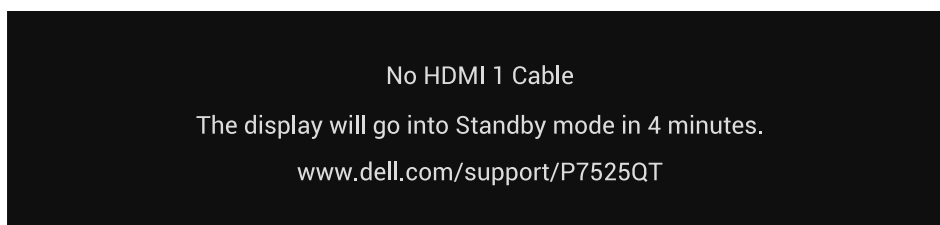
The floating dialog box should appear on-screen (against a black background), if the display cannot sense a video signal and is working correctly. While in self-test mode, the power LED remains white. Also, depending upon the selected input, one of the dialogs that are shown below will continuously scroll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



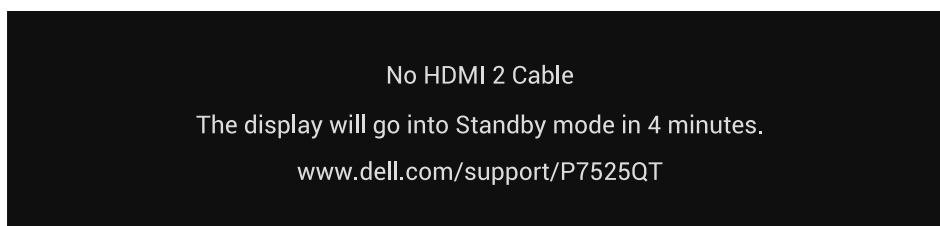
**Figure 52.** USB-C cable disconnected warning message



**Figure 53.** DP cable disconnected warning message



**Figure 54.** HDMI 1 cable disconnected warning message



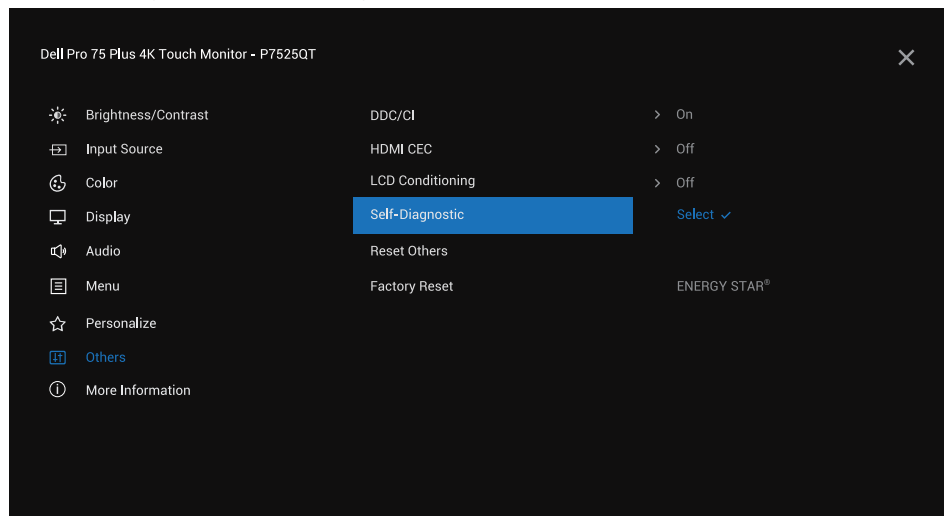
**Figure 55.** HDMI 2 cable disconnected warning message

4. This box also appears during normal computer 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 display.

If your monitor screen remains blank after performing the above steps, it indicates that the monitor is functioning properly. Check the video controller and computer.

## 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 56.** 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-Diagnostic** in **Others** feature.
3. Touch the front panel to start the diagnostics. A gray screen is displayed.
4. Observe if the screen has any defects or abnormalities.
5. Toggle the front panel 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.
8. The test is completed when a text screen is displayed. To exit, toggle the front panel 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 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 8. Common problems**

Common symptoms	What you experience	Possible solutions
No video/power LED off	No picture	<ul style="list-style-type: none"> <li>Ensure that the video cable connecting the display and the computer is properly connected and secure.</li> <li>Verify that the power outlet is functioning properly using any other electrical equipment.</li> <li>Ensure that the power button is on.</li> <li>Ensure that the correct input source is selected in the Input Source menu.</li> </ul>
No video/power LED on	No picture or no brightness	<ul style="list-style-type: none"> <li>Increase brightness and contrast controls through OSD.</li> <li>Perform monitor self-test feature check.</li> <li>Check for bent or broken pins in the video cable connector.</li> <li>Run the built-in diagnostics.</li> <li>Ensure that the correct input source is selected in the Input Source menu.</li> </ul>
Poor focus	Picture is fuzzy, blurry, or ghosting	<ul style="list-style-type: none"> <li>Eliminate video extension cables.</li> <li>Reset the display to factory settings.</li> <li>Change the video resolution to the correct aspect ratio.</li> </ul>
Shaky/jittery video	Wavy picture or fine movement	<ul style="list-style-type: none"> <li>Reset the display to factory settings.</li> <li>Check environmental factors.</li> <li>Relocate the display and test in another room.</li> </ul>
Missing Pixels	LCD screen has spots	<ul style="list-style-type: none"> <li>Cycle power on-off.</li> <li>A pixel that is permanently off is a natural defect that can occur in LCD technology.</li> <li>For more information about Dell Display Quality and Pixel Policy, see <a href="#">Dell Display Pixel Guidelines</a>.</li> </ul>
Stuck-on pixels	LCD screen has bright spots	<ul style="list-style-type: none"> <li>Cycle power on-off.</li> <li>A pixel that is permanently off is a natural defect that can occur in LCD technology.</li> <li>For more information about Dell Monitor Quality and Pixel Policy, see <a href="#">Dell Display Pixel Guidelines</a>.</li> </ul>
Brightness problems	Picture too dim or too bright	<ul style="list-style-type: none"> <li>Reset the monitor to factory settings.</li> <li>Adjust brightness and contrast controls through OSD.</li> </ul>
Audio problem	No Audio	<ul style="list-style-type: none"> <li>Check the personal computer setting if the playback is correctly selected.</li> <li>Checking other video cables.</li> <li>Ensure that the speaker is enabled using OSD.</li> </ul>
Geometric distortion	Screen not centered correctly	<ul style="list-style-type: none"> <li>Reset the display to factory settings.</li> </ul>
Synchronization Problems	Screen is scrambled or appears torn	<ul style="list-style-type: none"> <li>Reset the display to factory settings.</li> <li>Perform a display self-test feature check to determine if the scrambled screen appears in self-test mode.</li> <li>Check for bent or broken pins in the video cable connector.</li> <li>Restart the computer in safe mode.</li> </ul>
Safety-related issues	Visible signs of smoke or sparks	<ul style="list-style-type: none"> <li>Do not perform any troubleshooting steps.</li> <li>Contact Dell immediately.</li> </ul>
Intermittent problems	Display malfunctions on and off	<ul style="list-style-type: none"> <li>Ensure that the video cable connecting the display to the computer is connected properly and is secure.</li> <li>Reset the display to factory settings.</li> <li>Perform a display self-test feature check to determine if the intermittent problem occurs in self-test mode.</li> </ul>

Common symptoms	What you experience	Possible solutions
Missing color	Picture missing color	<ul style="list-style-type: none"> <li>Perform a display self-test.</li> <li>Ensure that the video cable connecting the display to the computer is connected properly and is secure.</li> <li>Check for bent or broken pins in the video cable connector.</li> </ul>
Wrong color	Picture color is not good	<ul style="list-style-type: none"> <li>Change the settings of the Preset Modes in the Color menu OSD depending on the application.</li> <li>Adjust R/G/B value under Custom. Color in Color menu OSD.</li> <li>Change the Input Color Format to personal computer RGB or YCbCr in the Color menu OSD.</li> <li>Run the built-in diagnostics.</li> </ul>
Image retention from a static image left on the display for a long period	Faint shadow from the static image that is displayed appears on the screen	<ul style="list-style-type: none"> <li>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.</li> <li>Alternatively, use a dynamically changing screensaver.</li> </ul>

## Product-specific problems

**Table 9. Product-specific problems**

Specific symptoms	What you experience	Possible solutions
The screen image is too small	Image is centered on the screen, but does not fill the entire viewing area	<ul style="list-style-type: none"> <li>Check the Aspect Ratio setting in the Display menu OSD.</li> <li>Reset the display to factory settings.</li> </ul>
Cannot adjust the monitor with the touch OSD	OSD does not appear on the screen	<ul style="list-style-type: none"> <li>Turn off the monitor, unplug the monitor power cable, plug it back, and then turn on the monitor.</li> <li>Check if the OSD menu is locked. If yes, Touch LFM the launch icon  for four seconds to unlock.</li> </ul>
No Input Signal when user controls are pressed	No picture, the LED light is white	<ul style="list-style-type: none"> <li>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.</li> <li>Check whether the signal cable is plugged in properly. Replug the signal cable if necessary.</li> <li>Reset the computer or video player.</li> </ul>
The picture does not fill the entire screen	The picture cannot fill the height or width of the screen	<ul style="list-style-type: none"> <li>Due to different video formats (aspect ratio) of DVDs, the display may display in full screen.</li> <li>Run the built-in diagnostics.</li> </ul>
No image when using USB Type-C connection to computer, laptop, and so on	Black screen	<ul style="list-style-type: none"> <li>Verify if the USB Type-C interface of the device can support DP alternate mode.</li> <li>USB Type-C interface of the device cannot support DP alternate mode.</li> <li>Set Windows to Projection mode.</li> <li>Ensure that the USB Type-C cable is not damaged.</li> </ul>
No charging when using USB Type-C connection to computer, laptop, and so on	No charging	<ul style="list-style-type: none"> <li>Verify if the device can support one of the 5 V/9 V/15 V/20 V charging profiles.</li> <li>Verify if the Notebook requires a &gt;90W power adapter.</li> <li>If the Notebook requires a &gt;90W power adapter, it may not charge with the USB Type-C connection.</li> <li>Ensure that you use only the Dell approved adapter or the adapter that comes with the product.</li> <li>Ensure that the USB Type-C cable is not damaged.</li> </ul>
Intermittent charging when using USB Type-C connection to a computer, laptop, and so on	Intermittent charging	<ul style="list-style-type: none"> <li>Check if the maximum power consumption of the device is over 90 W.</li> <li>Ensure that you use only the Dell approved adapter or the adapter that comes with the product.</li> <li>Ensure that the USB Type-C cable is not damaged.</li> </ul>



## Universal Serial Bus (USB) specific problems

**Table 10. Universal Serial Bus (USB) specific problems**

Specific symptoms	What you experience	Possible solutions
USB interface is not working	USB peripherals are not working	<ul style="list-style-type: none"> <li>Check that your display is turned ON.</li> <li>Reconnect the upstream cable to your computer.</li> <li>Reconnect the USB peripherals (downstream connector).</li> <li>Switch off and then turn on the display again.</li> <li>Reboot the computer.</li> <li>Some USB devices like external portable hard drive require a higher electric current; connect the device directly to the computer.</li> </ul>
SuperSpeed USB 3.2 interface is slow	SuperSpeed USB 3.2 peripherals working slowly or not working at all	<ul style="list-style-type: none"> <li>Check that your computer is USB 3.2-capable.</li> <li>Some computers have USB 3.1, USB 3.0, USB 2.0, and USB 1.1 ports. Ensure that the correct USB port is used.</li> <li>Reconnect the upstream cable to your computer.</li> <li>Reconnect the USB peripherals (downstream connector).</li> <li>Reboot the computer.</li> </ul>
Wireless USB peripherals stop working when a USB 3.2 device is plugged in	Wireless USB peripherals responding slowly or only working as the distance between itself and its receiver decreases	<ul style="list-style-type: none"> <li>Increase the distance between the USB 3.2 peripherals and the wireless USB receiver.</li> <li>Position your wireless USB receiver as close as possible to the wireless USB peripherals.</li> <li>Use a USB-extender cable to position the wireless USB receiver as far away as possible from the USB 3.2 port.</li> </ul>
USB is not working	No USB functionalities	<ul style="list-style-type: none"> <li>See the input source and USB pairing table.</li> </ul>

## Ethernet problems

**Table 11. Ethernet problems**

Specific symptoms	What you experience	Possible solutions
Ethernet not working	Dell Web Management for Displays Webpage control is not working	<ul style="list-style-type: none"> <li>Ensure that the Network cable connecting the display is properly secured.</li> <li>Touch the middle icon for 3 seconds to turn on. A network icon  appears and is shown on the center for 3 seconds.</li> <li>Touch the middle icon for 3 seconds to turn off. A network icon  appears and is shown on the center for 3 seconds.</li> </ul>

# 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.