XPS 14 9440

External Display Connection Guide



Notes, cautions, and warnings

(i) 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.

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

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Before you begin

You can connect up to two 4K external displays or one 5K and above display using the Thunderbolt 4 (USB Type-C) ports available on your computer. You can connect the display without the use of USB-C or Thunderbolt 4 adapters or docking stations.

Before you begin, ensure that you:

- Check the graphics options on your computer.
- Check the ports available on your external displays and decide on the mode of connection.

Check the graphics options on your computer

The number of external displays that are supported depends on the type of Graphics Processing Unit (GPU) available on your computer.

NOTE: On computers with Intel Arc Graphics, you can connect up to two external displays or one 8K display to the Thunderbolt 4 ports of your computer.

For more information about the graphics card or graphics processing unit available on your computer, run Dell SupportAssist on your computer, or scan your hardware at www.dell.com/support.

XPS 14 9440 features Intel Arc Graphics (integrated graphics).

Modes of connection

Depending on the connectors available on your external display, you can connect the display to the Thunderbolt 4 (USB Type-C) ports on your computer using:

- Daisy-chaining technique.
- Thunderbolt cables, adapters, or docking stations.
- USB Type-C cables, adapters, or docking stations.
- NOTE: To experience the full resolution supported by your external displays, use appropriate cables. For example, use DisplayPort or HDMI cables for 4K and above resolution.
- NOTE: Thunderbolt or USB Type-C docking stations can be used to connect external displays to the computer using a single Thunderbolt or USB Type-C cable, while charging the computer. For more information about the types of docking stations available from Dell, see the knowledge base article 000124295 at www.dell.com/support.
- NOTE: Thunderbolt or USB Type-C adapters can also be used to connect external displays to the computer, though these adapters may not allow power charging at the same time. For more information about the types of Thunderbolt or USB Type-C adapters available from Dell, see the knowledge base article 000125728 at www.dell.com/support.

The Thunderbolt 4 (USB Type-C) ports available on your computer are shown in the following image.

- NOTE: When connecting a display indirectly using an adapter or docking station, it is recommended that you connect the display to the docking station first, and then connect the docking station to the Thunderbolt 4 (USB Type-C) port on your computer.
- NOTE: The devices connected to the port on the left side of the computer have priority over the port on the right. While connecting external displays, it is recommended that you connect the displays to the left port.

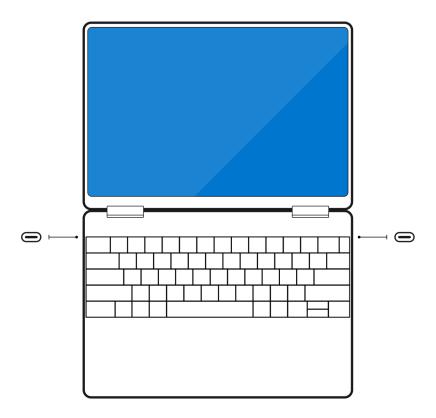


Figure 1. Thunderbolt 4 (USB Type-C) ports

Turn off the internal display

There can be instances where you want to turn off the computer internal display to connect more external displays.

You can turn off the display of your computer by using the Intel Graphics Command Center.

To turn off the display:

- 1. In the Windows search bar, type Intel Graphics Command Center and press Enter.
- 2. Accept the Intel Graphics Command Center software license agreement.
- 3. In the Intel Graphics Command Center window, click Display. The list of active displays is listed under the Connected Displays section.
- 4. Click the ellipsis (...) at the upper right corner of your primary display, then click Mirror > Display 2.
- 5. Click the ellipsis (...) at the upper right corner of display 2, then click Make Display Primary.
- 6. Click the ellipsis (...) at the upper right corner of your computer display, then click **Disable**.

Connect external displays

You can connect up to four external displays to the computer in the following ways:

- Daisy chain the external displays.
- Connect up to three external displays to a docking station (Thunderbolt or USB Type-C) that connects to the left Thunderbolt 4 port. The remaining external displays connect to the right Thunderbolt 4 port.

The number of displays supported depends on the following:

- If the internal display is enabled or disabled.
- Your docking station or adapter may also limit the number of supported external displays. Check the documentation that came with your docking station or adapter for details.

The following tables summarize the number of supported external displays.

Table 1. Display support (up to 4K at 60 Hz)

Graphics card	Direct Graphics Controller Direct Output Mode	displays with computer	Supported external displays with computer internal display off
Intel Arc Graphics	Not applicable	3	4

Table 2. Display support (up to 8K at 60 Hz)

Graphics card	Direct Graphics Controller Direct Output Mode	Supported external displays with computer internal display on	Supported external displays with computer internal display off
Intel Arc Graphics	Not applicable	Not applicable	1

The following table shows the supported accessories for connecting external displays to your computer.

Table 3. Supported accessories for connecting external displays

Accessories	
Dell Thunderbolt Dock - WD22TB4	
Dell Adapter - USB-C to HDMI/DisplayPort with Power Pass-Through	

Integrated graphics

Connecting external displays to XPS 14 9440 with integrated graphics

- NOTE: When connecting a display indirectly using an adapter or a docking station (Thunderbolt or USB Type-C), it is recommended that you first connect the display to the adapter or docking station. Then, connect the adapter or docking station to the Thunderbolt 4 (USB Type-C) port on your computer.
- NOTE: The devices connected to the ports on the left side of the computer have priority over the ports on the right. While connecting external displays, it is recommended that you connect the displays to the left ports.

With the internal display turned on

You can connect external displays directly to the Thunderbolt 4 (USB Type-C) ports, or up to three external displays using a docking station (Thunderbolt or USB Type-C).

(i) NOTE: The number of external displays that are supported depends on the specifications of the docking station.

• Connect an external display using a direct USB Type-C or Thunderbolt cable.

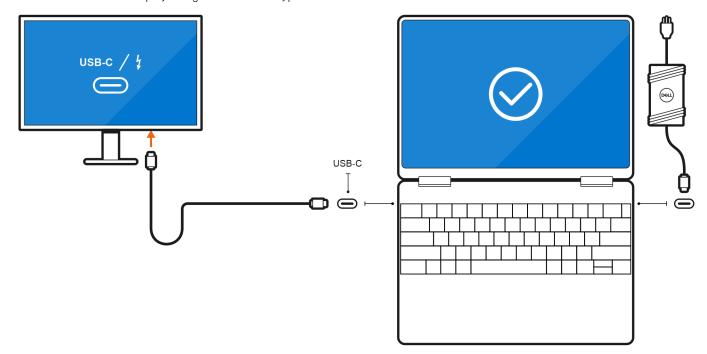


Figure 2. Connecting external display using a direct USB Type-C or Thunderbolt cable

• Connect an external display using a USB Type-C to Thunderbolt/HDMI/DisplayPort adapter.

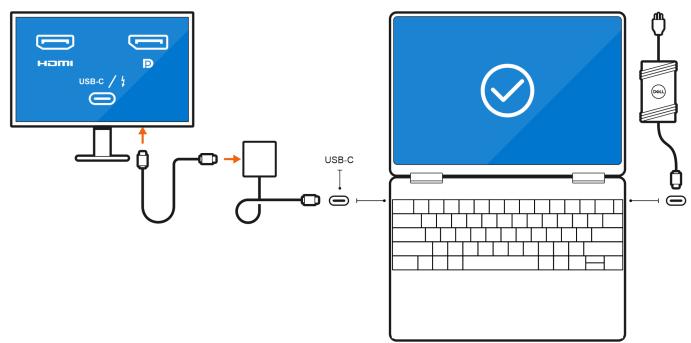


Figure 3. Connecting external display using a USB Type-C to Thunderbolt/HDMI/DisplayPort adapter

• Connect up to two external displays using a docking station.

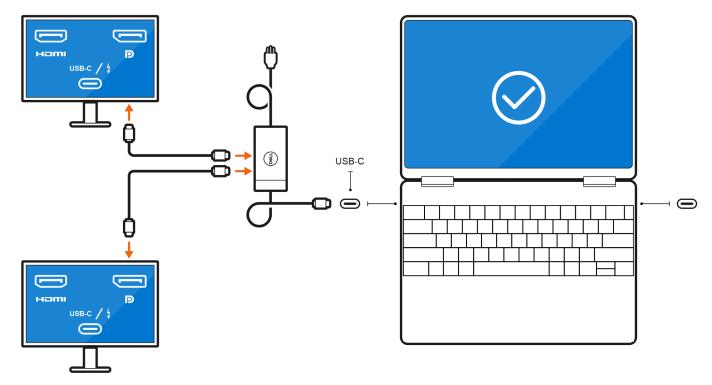


Figure 4. Connecting external display using a USB Type-C docking station

• Connect up to three external displays using a docking station.

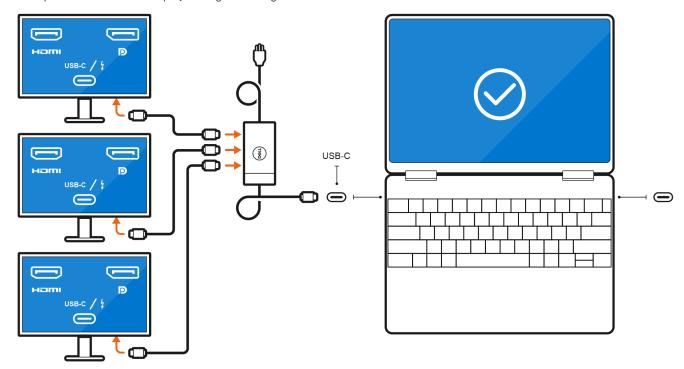


Figure 5. Connecting external displays using a USB Type-C docking station

With the internal display turned off

NOTE: Ensure that you turn off the computer's internal display before connecting the external displays. For more information, see Turn off the internal display.

You can connect external displays directly to the Thunderbolt 4 (USB Type-C) ports. You can also use a docking station (Thunderbolt or USB Type-C) to connect up to three external displays. The fourth external display is connected to the Thunderbolt 4 (USB Type-C) port of the computer, with a USB Type-C or Thunderbolt cable.

• Connect two external displays using direct USB Type-C or Thunderbolt cables.

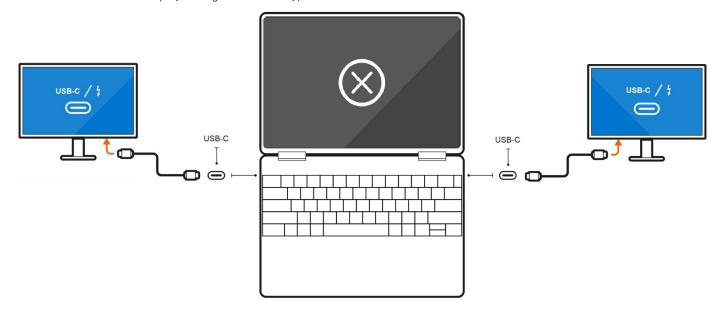


Figure 6. Connect two external displays using direct USB Type-C or Thunderbolt cables

• Connect up to four external displays.

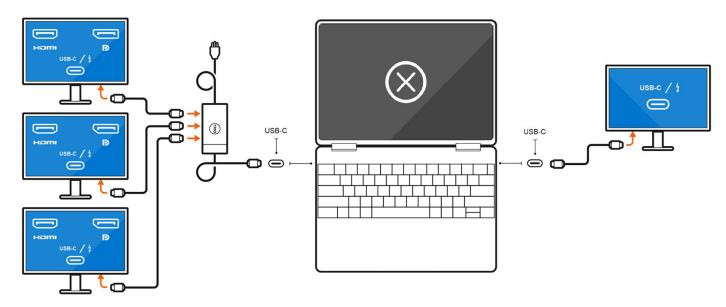


Figure 7. Connect two external displays using direct USB Type-C or Thunderbolt cables

(i) NOTE:

- Up to three displays can be connected to the docking station. The additional display can be connected to the right Thunderbolt 4 port with a USB Type-C or Thunderbolt cable.
- o The total number of external displays that is supported depends on the specifications of the docking station.
- The maximum supported resolution of the four external displays is 4K UHD (3840 x 2160) at 60 Hz refresh rate.

Troubleshooting

8K displays flickering

Question

When I connect two 8K displays to both Thunderbolt ports on the left or right side of the computer, they flicker when run at a display rate of 60 Hz.

Cause

The flickering may be because of interlacing or switching as the Thunderbolt controller sent only part of the data.

Workaround

Connect each 8K display to a Thunderbolt port on either side of the computer. For example, one 8K display to a port on the left, and the other to a port on the right. After doing so, turn off the displays and turn them on again.

8K displays not displaying correctly

Question

When I connect an 8K display to the computer using a Thunderbolt docking station, the display output is not correct from the computer.

Cause

The display output may not be correct due to hardware limitations with the Thunderbolt docking station.

Workaround

Connect the 8K display directly to a Thunderbolt port on the computer (not using a docking station). After doing so, turn off the display and turn it on again.

Getting help and contacting Dell

Self-help resources

You can get information and help on Dell products and services using these self-help resources:

Table 4. Self-help resources

Self-help resources	Resource location	
Information about Dell products and services	www.dell.com	
My Dell app	Deal	
Tips	*	
Contact Support	In Windows search, type Contact Support, and press Enter.	
Online help for operating system	www.dell.com/support/windows	
Access top solutions, diagnostics, drivers and downloads, and learn more about your computer through videos, manuals, and documents.	Your Dell computer is uniquely identified by a Service Tag or Express Service Code. To view relevant support resources for your Dell computer, enter the Service Tag or Express Service Code at www.dell.com/support. For more information about how to find the Service Tag for your computer, see Locate the Service Tag on your computer.	
Dell knowledge base articles	 Go to www.dell.com/support. On the menu bar at the top of the Support page, select Support > Knowledge Base. In the Search field on the Knowledge Base page, type the keyword, topic, or model number, and then click or tap the search icon to view the related articles. 	

Contacting Dell

To contact Dell for sales, technical support, or customer service issues, see www.dell.com/contactdell.

- (i) NOTE: Availability varies by country/region and product, and some services may not be available in your country/region.
- 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.