Dell Docking Station WD19DCS Dual Cable User Guide

Regulatory Model: K20A Regulatory Type: K20A001 November 2023 Rev. A03



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.

© 2021-2023 Dell Inc. or its subsidiaries. All rights reserved. Dell Technologies, Dell, and other trademarks are trademarks of Dell Inc. or its subsidiaries. Other trademarks may be trademarks of their respective owners.

Contents

Chapter 1: Introduction	4
Chapter 2: What's in the box	5
Chapter 3: Hardware requirements	6
Chapter 4: Identifying Parts and Features	7
Chapter 5: Important Information	11
Chapter 6: Quick Setup of Hardware	12
Chapter 7: Setup of External Monitors	
Updating the graphics drivers for your computer	
Configuring your Monitors	
Display bandwidth	
Display Resolution Table	
Chapter 8: Removing the USB Type-C cable module	
Chapter 9: Technical specifications	26
LED Status Indicators	
Power Adapter LED	
Docking Status Indicator	
Docking specifications	
Input/Output (I/O) Connectors	
Dell ExpressCharge and ExpressCharge Boost overview	
Chapter 10: Dell docking station firmware update	29
Chapter 11: Frequently asked questions	
Chapter 12: Troubleshooting the Dell Performance Docking Station	WD19DCS 34
Symptoms and solutions	
Chapter 13: Getting help	
Contacting Dell	

Introduction

The Dell Performance Docking Station WD19DCS is a device that links all your electronic devices to your system using a dual USB Type-C cable interface. Connecting the system to the docking station allows you to access all peripherals (mouse, keyboard, stereo speakers, external hard drive, and large-screen displays) without having to plug each one into the system.

CAUTION: Update your system's BIOS, graphic drivers and the Dell Performance Docking Station WD19DCS drivers to the latest versions available at www.dell.com/support BEFORE using the docking station. Older BIOS versions and drivers could result your system not recognizing the docking station or not functioning optimally. Always check if any recommended firmware is available for your docking station at www.dell.com/support.

4

2

What's in the box

Your docking station ships with the components shown below:

- 1. Docking station
- 2. Power adapter and power cord
- 3. Documentation (Quick Start Guide and Safety, Environmental, and Regulatory Information)



(i) NOTE: Contact Dell support if any of the listed items are missing from your box.

Hardware requirements

Before using the docking station, ensure that your system has a DisplayPort over dual USB Type-C designed to support the docking station.

() NOTE: Dell Docking stations are supported with select Dell systems. See the Dell Commercial Docking Compatibility Guide for the list of supported systems and recommended docking.

Identifying Parts and Features

4



Figure 1. Top view

C/G

1.

Sleep/Wake up/Power button

(i) NOTE: The dock button is designed to replicate your system's power button. If you connect the Dell Performance Docking Station WD19DCS to supported Dell systems, the dock button works like your system's power button and you can use it to power on/sleep/force shutdown the system.

(i) NOTE: The dock button is not functional when connected to unsupported Dell systems or non-Dell systems.



Figure 2. Front view





Figure 3. Left view





Figure 4. Back view





Figure 5. Bottom view

1. Service tag label

Important Information

Dell Docking Station drivers (Realtek USB GBE Ethernet Controller Driver) are required to be installed before using the docking station for full functionality. Dell recommends updating the system BIOS and graphics driver to the latest version before using the docking station. Older BIOS versions and drivers could result in the docking station not being recognized by your system or not functioning optimally.

Dell highly recommends the following applications to automate the installation of BIOS, firmware, driver, and critical updates specific to your system and docking station:

- Dell | Update for Dell XPS systems only.
- Dell Command | Update for Dell Latitude, Dell Precision, or XPS systems.

These applications are available for download on the Drivers & Downloads page for your product at www.dell.com/support

Updating the Dell Docking Station WD19DCS driver set

To fully support the new generation Dell Docking Station WD19DCS, it is highly recommended to install the following BIOS/ Drivers on a 64–bit Windows operating system:

- 1. Go to www.dell.com/support and click **Detect Product** to Autodefect your product, or enter your system's Service Tag in the **Enter a Service Tag or Express Service Code** field, or click **View Products** to browse to your system model.
- 2. Flash the latest BIOS available for the system. This is available for download at dell.com/support under the "**BIOS**" section. Restart the system before the next step.
- **3.** Install the latest Intel HD/NVIDIA/AMD Graphics drivers available for the system. This is available for download at www.dell.com/support/drivers. Restart the system before the next step.
- 4. Install the **Realtek USB GBE Ethernet Controller Driver for Dell Dock WD19DCS** available for your system. This is available for download at dell.com/support under the "**Docks/Stand**" section.

Quick Setup of Hardware

6

Steps

1. Update your system's BIOS, graphics and drivers from www.dell.com/support/drivers.





2. Connect the AC adapter to a power outlet. Then, connect the AC adapter to the 7.4 mm DC-in power input on the Dell Performance Docking Station WD19DCS .



Figure 6. Connecting the AC Adapter

Connect the USB Type-C connector to the system.
 Update the Dell Performance Docking Station WD19DCS firmware from www.dell.com/support/drivers.



Figure 7. Connecting the dual USB Type-C connector

- **NOTE:** On supported systems use a single USB Type-C cable to connect the docking station. The other USB Type-C cable of the docking station can only be used as a power deliverable cable for smartphone or tablet up to 15 W.
- **NOTE:** When both dock cables are connected to a non-Precision system that does not support dual-C dock, only one of the dock cables functions. The LED on that working dock cable lights up, indicating that power, video, and data connections have been established for that specific cable.
- 4. Connect multiple displays to the docking station, as needed.



Figure 8. Connecting the multiple displays

Setup of External Monitors

Topics:

- Updating the graphics drivers for your computer
- Configuring your Monitors
- Display bandwidth
- Display Resolution Table

Updating the graphics drivers for your computer

The Microsoft Windows operating systems include the VGA graphics drivers only. Therefore, for optimum graphics performance, it is recommended that Dell graphics drivers applicable for your computer be installed from dell.com/support under the "**Video**" section

() NOTE:

- 1. For nVidia Discrete Graphics solutions on the supported Dell systems:
 - a. First, install the Intel Media Adapter Graphics Driver applicable to your computer.
 - **b.** Second, install the nVidia Discrete Graphics Driver applicable to your computer.
- 2. For AMD Discrete Graphics solutions on the supported Dell systems:
 - a. First, install the Intel Media Adapter Graphics driver applicable to your computer.
 - **b.** Second, install the AMD Discrete Graphics driver applicable to your computer.

Configuring your Monitors

If connecting two displays, follow these steps:

Steps

- 1. Click the Start button, and then select Settings.
- 2. Click System and select Display.

3. Under the Multiplay displays section, modify the display configuration as needed.



NOTE: The display topology can be configured, by moving around the displays in the "**Select and rearrange displays**" section, to change where the operating system assumes these monitors are located.

- a x

Display bandwidth

External monitors require a certain amount of bandwidth to work properly. Monitors with higher resolution require more bandwidth.

- DisplayPort High Bit Rate 2 (HBR2) is 5.4 Gbps maximum link rate per lane. With DP overhead, the effective data rate is 4.3 Gbps per lane.
- DisplayPort High Bit Rate 3 (HBR3) is 8.1 Gbps maximum link rate per lane. With DP overhead, the effective data rate is 6.5 Gbps per lane.

Table 1. Display bandwidth

Resolution	Minimum bandwidth required
1 x FHD (1920 x 1080) display @60 Hz	3.2 Gbps
1 x QHD (2560 x 1440) display @60 Hz	5.6 Gbps
1 x 4K (3840 x 2160) display @30 Hz	6.2 Gbps
1 x 4K (3840 x 2160) display @60 Hz	12.5 Gbps

Display Resolution Table

Only for Recommended Systems from Dell Commercial Docking Compatibility Guide. The following table only addresses the dual-cable connection and does not support systems that use single Type-C cable.

Table 2. WD19DCS

Display Port Available Bandwidth	Single Display (maximum resolution)	Dual Display (maximum resolution)	Triple Display (maximum resolution)	Quad Display (maximum resolution)
HBR2 (HBR2 x 4 lanes - 17.2 Gbps)	DP 1.4/HDMI 2.0/MFDP Type-C: 4K (3840 x 2160) @60 Hz	 DP 1.4 + DP 1.4: QHD (2560 x 1440) @60 Hz DP 1.4 + HDMI 2.0: QHD (2560 x 1440) @60 Hz DP 1.4 + MFDP Type- C: QHD (2560 x 1440) @60 Hz 	 DP 1.4 + DP 1.4 + HDMI 2.0: 2 × QHD (2560 × 1440) @60 Hz 1 × FHD (1920 × 1080) DP 1.4 + DP 1.4 + MFDP Type-C: 2 × QHD (2560 × 1440) @60 Hz 1 × FHD (1920 × 1080) 	N/A
HBR3 (HBR3 x4 lanes - 25.9 Gbps) With discrete graphics card See recommended models in hardware requirements	DP 1.4/HDMI 2.0/MFDP Type-C: 4k (3840 x 2160) @60 Hz	 DP 1.4 + DP 1.4: 4K (3840 x 2160) @60 Hz DP 1.4 + HDMI 2.0: 4K (3840 x 2160) @60 Hz DP 1.4 + MFDP Type- C: 4K (3840 x 2160) @60 Hz 	 DP 1.4 + DP 1.4 + HDMI 2.0: QHD (2560 x 1440) @60 Hz DP1.4 + DP1.4 + MFDP Type-C: QHD (2560 x 1440) @60 Hz 	 Using daisy-chain: DP1.4 (daisy-chain 2 x QHD 2560 x 1440 @30 Hz) + DP1.4 + HDM12.0: QHD (2560 x 1440) @60 Hz DP1.4 (daisy-chain 2 x QHD 2560 x 1440) @30Hz) + DP1.4 + MFDP type-C: QHD (2560 x 1440) @60 Hz
HBR3 with Display Stream Compression (DSC) With discrete graphics card	DP 1.4/HDMI 2.0/MFDP Type-C: 4K (3840 x 2160) @60Hz	 DP 1.4 + DP 1.4: 4K (3840 x 2160) @60 Hz DP1.4 + HDMI 2.0: 4K (3840 x 2160) @60 Hz DP1.4 + MFDP Type- C: 4K (3840 x 2160) @60 Hz 	 DP 1.4 + DP 1.4 + HDMI 2.0: 3 x @ 60 Hz 4K (3840 x 2160) DP 1.4 + DP 1.4 + MFDP Type-C: 3 x @ 60 Hz 4K (3840 x 2160) 	 DP 1.4 + DP 1.4 x 2 (daisy-chain) + HDMI 2.0: DP 1.4: 1 x 4K(3840 x 2160) @60 Hz DP 1.4: 2 x QHD (2560 x 1440) @60Hz daisychain HDMI 2.0: 1 x 4K (3840 x 2160)@60Hz DP 1.4 + DP 1.4 x 2 (daisy-chain) + MFDP Type-C: DP 1.4: 1 x 4K (3840 x 2160) @60Hz DP 1.4: 2 x QHD (2560 x 1440) @60Hz DP 1.4: 2 x QHD (2560 x 1440) @60Hz daisy-chain MFDP Type-C: 1 x 4K (3840 x 2160) @60Hz DP 1.4 + DP 1.4 + HDMI 2.0:

Table 2. WD19DCS (continued)

Display Port Available Bandwidth	Single Display (maximum resolution)	Dual Display (maximum resolution)	Triple Display (maximum resolution)	Quad Display (maximum resolution)
				 4 x 4K (3840 x 2160) @60 Hz NOTE: The fourth display must be a 4K DSC monitor daisy-chained through one of the monitors connected to the DP 1.4 port. DP 1.4 + DP 1.4 + MFDP Type-C: 4 x 4K (3840 x 2160) @60 Hz NOTE: The fourth display must be a 4K DSC monitor daisy-chained through one of the monitors connected to the DP 1.4 port. DP 1.4 x 2 (daisy-chain) + DP 1.4 x 2 (daisy-chain): 4 x 4K (3840 x 2160) @60 Hz - all four monitors should support DSC. NOTE: This setup applies to Precision 7000 series systems that support NVIDIA GPU with two cables.

- **NOTE:** HDMI2.0 and MFDP (Multi-Function DisplayPort) Type-C ports on the back of all docks in the WD19S family are toggled. HDMI2.0 and MFDP Type-C cannot support dual monitors simultaneously. Only one of these ports can be used as a display device at a time.
- **NOTE:** If higher resolution monitors are used, the Graphics driver makes a judgment based on monitor specifications and display configurations. Some resolutions may not be supported and so will be removed from the Windows Display Control Panel.
- **NOTE:** Configuration that is supported with AMD and Nvidia in special-graphics mode. This mode is listed in the BIOS for the Dell Precision mobile workstations 7530/7730 will require enabling special-graphics mode when Switchable is enabled.

Precision 7530 and Precision 7730 with AMD Graphics can only support dual 4K@60 Hz non-HDR monitors when, both monitors are plugged to the two DP ports (not HDMI).

Precision 7540 and Precision 7740 with AMD Graphics can support up to six displays dependent on GPU capability. With Nvidia Graphics, it can support up to four displays.

(i) **NOTE:** Linux operating system is unable to physically turn-off built-in display, the external display numbers will be one less than the display numbers listed in above tables.

If the Display Port Data Rate is HBR2, then, the maximum resolution that Linux supports is 8192 x 8192 (counted with built-in display plus external display).

Removing the USB Type-C cable module

Prerequisites

The Dell Performance Docking Station WD19DCS is shipped with the USB Type-C cable attached. To remove/change the cable module, follow these steps:

Steps

1. Turn over the docking station.



2. Remove the two M2.5 x 5 screws [1], and turn over the docking station [2].



 ${\bf 3.}~$ Gently pull the cable module away from the docking station.



4. Lift and remove the USB Type-C cable module from its connector inside the docking station.



Technical specifications

Topics:

- LED Status Indicators
- Docking specifications
- Input/Output (I/O) Connectors
- Dell ExpressCharge and ExpressCharge Boost overview

LED Status Indicators

Power Adapter LED

Table 3. Power Adapter LED indicator

State	LED Behavior
Power Adapter is plugged into wall socket	Flash three times

Docking Status Indicator

Table 4. Docking Station LED Indicators

State	LED Behavior
Docking station is receiving power from power adapter	Flash three times

Table 5. Cable LED Indicators

State	LED Behavior
USB Type-C host supports video + data + power	On
USB Type-C host does not support video + data + power	Off (will not illuminate)

Table 6. RJ-45 LED Indicators

Link Speed Indicators	Ethernet Activity Indicator
10 Mb = Green	Amber Flashing
100 Mb = Amber	
1 Gb = Green + Orange	

Docking specifications

Table 7. Docking Specifications

Features	Specifications	
Standard	Dual USB 3.2 Gen2 Type-C	
Video Ports	• USB 3.2 Gen2 Type-C with DisplayPort 1.4 or HDMI2.0 x1	

Table 7. Docking Specifications (continued)

Features	Specifications	
	• DisplayPort++ 1.4 x2	
Network Port	 Gigabit Ethernet (RJ-45) x1 Support Wake On LAN from S3, S4, or S5 sleep state with select Dell systems. See platform setup guide for more details. Support MAC Address Pass-Through with select Dell systems. See platform setup guide for more details. 	
USB Ports	 Front USB 3.2 Gen1 x1: Dell PowerShare BC1.2; 2 A @ 5 V (max 10 W) Front USB 3.2 Gen2 Type-C: 1.5 A @ 5 V (max 7.5 W) Rear USB 3.2 Gen1 x2: 0.9 A @ 5 V (max 4.5 W) Rear USB 3.2 Gen2 Type-C with DisplayPort 1.4 x1: 3 A @ 5 V (max 15 W) 	
DC-in Port	7.4 mm DC-in port x1	
USB Type-C cable length	0.8 m	
Power delivery	 Dell systems 210 W to Dell Precision mobile workstations 7000 series with 240 W AC-adapter 130 W to Dell systems (single cable plugged in) with 240 W AC-adapter Non-Dell systems 90 W support for USB Power Delivery 3.0 (single cable plugged in). 	
Button	Sleep/Wakeup/Power button	

Table 8. Environment specifications

Feature	Specifications
Temperature range	Operating: 0°C-35°C (32°F-95°F) Non-operating: • Storage: -20°C to 60°C (-4°F to 140°F) • Shipping: -20°C to 60°C (-4°F to 140°F)
Relative humidity	Operating: 10% to 80% (non-condensing) Non-operating: • Storage: 5% to 90% (non-condensing) • Shipping: 5% to 90% (non-condensing)
Dimension	205 mm x 90 mm x 29 mm
Weight	685 g (1.51 lb)
VESA Mounting options	Yes—using Dell Docking station mounting kit

Table 9. Power adapter specifications

Dell AC Adapter Specifications	240 W
Input voltage	100 to 240 VAC
Input current (max)	3.5 A
Input frequency	50 to 60 Hz
Output current	12.31 A (continuous)
Rated output voltage	19.5 VDC
Weight (lb)	1.70

Table 9. Power adapter specifications (continued)

Dell AC Adapter Specifications	240 W
Weight (kg)	0.769
Dimensions (in.)	1.0 x 3.94 x 7.87
Dimensions (mm)	25.4 x 100.07 x 199.89
Temperature range operating	0°C to 40°C
	32°F to 104°F
Storage	-40°C to 70°C
	-40°F to 158°F

Input/Output (I/O) Connectors

The Dell Performance Docking Station WD19DCS has the following I/O connectors:

Table 10. I/O connectors

Ports	Connectors
Video Ports	 DisplayPort++ 1.4 x2 USB 3.2 Gen2 with DisplayPort 1.4 or HDMI 2.0 x1
Input/Output Ports	 USB 3.2 Gen1 x 2 USB 3.2 Gen1 with PowerShare x 1 USB 3.2 Gen2 Type-C 7.4 mm DC-in x 1 Gigabit Ethernet (RJ-45) x 1

Dell ExpressCharge and ExpressCharge Boost overview

- Dell ExpressCharge enables an empty battery to charge to 80% in about one hour when the system is turned off and to 100% in approximately two hours.
- Dell ExpressCharge Boost enables an empty battery to charge to 35% in 15 minutes.
- Metrics are created for **system off** given charge time with the system on has varied results.
- Customers must enable ExpressCharge mode in the BIOS or through Dell Power Manager to take advantage of these features.
- Check your Dell Latitude, XPS or Precision system for the battery size using the table to determine compatibility.

Table 11. Dell ExpressCharge compatibility

Power Delivery to System	Max Battery Size for ExpressCharge	Max Battery Size for ExpressCharge Boost
90 W with 130 W adapter	92 Whr	53 Whr
130 W with 180 W adapter	100 Whr	76 Whr

Dell docking station firmware update

Standalone Dock Firmware Update utility

() NOTE: Information that is provided is for Windows users running the executable tool. For other operating systems or further detailed instructions see the WD19 admin guide available on www.dell.com/support.

Download the DCS driver and firmware update from www.dell.com/support. Connect the dock to the system and start the tool in administrative mode.

1. Wait for all the information to be entered in the various Graphical User Interface (GUI) panes.

🧔 Dell Firmware Update Utility WD	01.00.17.01 ? 🎄 _ 🗖 🗙
<image/> <section-header><section-header><section-header><text><text><text></text></text></text></section-header></section-header></section-header>	Dell Firmware Update Utility This utility allows you to update the WD19 Firmware. To apply the updates in the list below, click "Update" button below. Marning The update process may take up to 6 minutes and must not be interrupted. Interruption of the WD19 Firmware update process will likely render your Dock unusable. Before you continue. - DO NOT disconnect the dock or the power source.
	Detecting MST Connection Type 45%

2. Update and Exit buttons are displayed in the bottom-right corner. Click the Update button.

Lell Firmware Update Utility WD19				01.00.17.01	? 🌣 🗆 🗆 🗙
WD19S	Dell Firmware L This utility allows you Warning: The update process m process will kely ren Before you continue, - DO NOT di	Ipdate Utility to update the WD19 Firmware. ay take up to 6 minutes and m ler your Dock unusable. connect the dock or the powe	To apply the update ust not be interrupte r source.	s in the list below, click "Upd d. Interruption of the WD19	ate [°] button below. Firmware update
Package 01.00.16.01 Version:	Status 🔺 Payload N	ame Current Version	New Version	Progress Details	
Service Tag: N/A Power Source: 🖕 + 🍟 (98%)	MST	05.04.06	05.04.06		
	Gen1 Hu	01.21	01.21		
About	Gen2 Hu	01.47	01.47		
	WD19 Do	ck Ec 01.00.01.00	01.00.01.01		
				Update	Exit

3. Wait for all the component firmware update to complete. A progress bar is displayed in the bottom.

🌆 Dell Firmware Update Utility WD19					01.00.17.01 ? 🌩 💶 🗙
WD19S	Dell Firm This utility a Warning: The update process will Before you o - D	Nware Update Uf Ilows you to update the process may take up to likely render your Doc continue. O NOT disconnect the	ility e WD19 Firmware. T o 6 minutes and mu k unusable. dock or the power	To apply the update st not be interrupt source.	as in the list below, click "Update" button below. ed. Interruption of the WD19 Firmware update
Package 01.00.10.01	Status 🔺	Payload Name	Current Version	New Version	Progress Details
Version: 0100.16.01	×	MST	05.04.06	05.04.06	Up To Date
Power Source: 2 (98%)	×	Gen1 Hub	01.21	01.21	Up To Date
	×	Gen2 Hub	01.47	01.47	Up To Date
About	•	WD19 Dock Ec	01.00.01.00	01.00.01.01	Updating Firmware.
	Updating W 15%	D19 EC Firmware			Update Exit

4. The update status is displayed above the payload information.

🔯 Dell Firmware Update Utility WD1	9				01.00.17.01	? * = 🗆 ×
WD19S Package	Dell Firm This utility al Warning: The update g process will Before you c - Dr Dr Dr Dr Dr Dr Dr Dr Dr Dr Dr Dr Dr D	ware Update Ut lows you to update the process may take up to likely render your Dool ontinue. D NOT disconnect the e: Firmware update we	ility a WD19 Firmware. ¹ o 6 minutes and mu k unusable. dock or the power as successful.	To apply the updat ist not be interrupt r source.	es in the list below, click "L ed. Interruption of the WD	Jpdate" button below. X19 Firmware update
Version: 0100.1601 Service Tag: N/A Power Source: ₩ + 2 (98%)	Status 🔨	Payload Name	Current Version	New Version	Progress Details	
About	~	Gen1 Hub	01.21	01.21	Up To Date	
	~	Gen2 Hub	01.47	01.47	Up To Date	
	×	WD19 Dock Ec	01.00.01.00	01.00.01.01	Updated.	
						Exit

() NOTE: While the model number appearing in the Dell Firmware Update Utility images above shows WD19S, the same steps are applicable for WD19DCS as well.

Table 12. Command-Line Options

Command lines	Function
/? or /h	Usage.
/s	Silent.
/l= <filename></filename>	Log file.
/verflashexe	Display utility version.
/componentsvers	Display current version of all dock firmware components.

For IT professionals and engineers, to get more information about the following technical topics, see the Dell Docking Station DCS Administrator's Guide:

- Step-by-step stand-alone DFU (Dock Firmware Update) and driver update utilities.
- Using DCU (Dell Command | Update) for driver download.
- Dock asset management locally and remotely through DCM (Dell Command | Monitor) and SCCM (System Center Configuration Manager).

Frequently asked questions

1. The fan is not working after connecting with the system.

- The fan is triggered by temperature. The dock fan will not rotate until the dock is hot enough to trigger a thermal threshold.
- Vice versa, if your dock is not cool enough, the fan will not stop even when you disconnect the dock from the system.

2. The dock does not work after high-speed fan noise.

When you hear a loud fan noise, it is warning you that the dock is in some kind of a hot condition. For example, the vent in the dock may be blocked or the dock is working in a high working-temperature environment (> 35C), etc,.
 Please eliminate these abnormal conditions from the dock. If you do not eliminate the abnormal condition, in a worst-case situation, the dock will shut down through the over-temperature protection mechanism. Once this happens, please un-plug the Type-C cable from the system and remove the dock's power. Then wait 15 seconds and plug in the dock power to recover the dock back online.

3. I hear a fan noise when I plug in the dock's AC adapter.

• This is a normal condition. First time plugging in of the dock's AC adapter will trigger the fan to rotate, but it will subsequently turn off very soon.

4. I hear a loud fan noise. What's wrong?

• The dock fan is designed with five different rotate speeds. Normally, the dock will work on low fan speed. If you put the dock in a heavy loading, or in a high working-temperature environment, the dock fan may have a chance to work at a high speed. But, this is normal and the fan will work at a low/high speed depending on the work loading.

State	State name	Fan speed (rpm)
0	Fan off	Off
1	Fan minimum	1900
2	Fan Iow	2200
3	Fan medium	2900
4	Fan medium-high	3200
5	Fan high	3600

Table 13. Fan states

5. What is the charging station feature?

• The Dell Performance Docking Station WD19DCS can charge your mobile or power bank even without being connected to the system. Just make sure your dock is connected to external power. The dock fan will rotate automatically if the dock gets too warm. This is normal working condition.

6. Why does it take a long time for the system to recognize all the peripheral devices which are attached to the docking station?

• Security is always Dell's highest priority. We ship our systems with "Security level - User Authorization" setting by default. This allows our customers to review the Thunderbolt security conditions of their systems so they can make selections accordingly. However, this also means the Thunderbolt dock and the devices attached to it will need to pass Thunderbolt driver security permission checking to get it connected and initialized. This normally means some extra time is needed before these devices can be accessed by users.

7. Why does the hardware installation window show up when I plug in a USB device to the docking stations ports?

• When a new device is plugged in, the USB hub driver notifies the Plug and Play (PnP) manager that a new device was detected. The PnP manager queries the hub driver for all of the device's hardware IDs and then notifies the Windows OS that a new device needs to be installed. In this scenario, the user will see a hardware installation window.

https://msdn.microsoft.com/en-us/windows/hardware/drivers/install/step-1--the-new-device-is-identified

https://msdn.microsoft.com/en-us/windows/hardware/drivers/install/identifiers-for-usb-devices

8. Why do the peripheral devices, which are connected to the dock station, become unresponsive after recovering from a power loss?

• Our Dell dock is designed to operate on AC power only and it does not support system power source back (powered by system Type-C port). A power loss event will make all devices on the dock fail to work. Even when you restore the AC

power, the dock may still not function properly because the dock still needs to negotiate proper power contract with the system's Type-C port and establish a system EC-to-dock-EC connection.

Troubleshooting the Dell Performance Docking Station WD19DCS

Topics:

• Symptoms and solutions

Symptoms and solutions

Table 14. Symptoms and solutions

Symptoms	Suggested solutions
No video on the monitors that are attached to the High Definition Multimedia Interface (HDMI), or DisplayPort (DP) port on the docking station.	 Ensure that the latest BIOS and drivers for your system and the docking station are installed on your system. Ensure that your system is connected to the docking station securely. Try to disconnect and reconnect the docking station to the notebook system. Disconnect both ends of the video cable and check for damaged/bent pins. Securely re-connect the cable to the monitor and docking station. Ensure the video cable (HDMI, or DisplayPort) is connected properly to the monitor and the docking station. Ensure to select the correct video source on your monitor (see your monitor's documentation for more information about changing the video source). Check the resolution settings on your system. Your monitor may support higher resolutions than what the docking station can support. See the Display Resolution Table for more information about maximum resolution capacity. If your monitor is connected to the docking station, the video output on your system. If only one monitor is shown, while the other is not, go to Windows Display Properties, and under Multiple Displays, select the output for the second monitor. Using Intel graphics and using the system LCD, only two additional displays can be supported. For NVIDIA or AMD discrete graphics, the dock supports three external displays plus the system LCD. Try with a different monitor and cable that is known to be good, if possible.
The video on the attached monitor is distorted or flickering.	 Reset the monitor to Factory Defaults. See the User Guide of your monitor for more information about how to reset the monitor to factory defaults. Ensure that the video cable (HDMI, or DisplayPort) is connected securely to the monitor and the docking station. Disconnect and reconnect the monitor/s from the docking station.

Table 14. Symptoms and solutions (continued)

Symptoms	Suggested solutions
	 First power off the docking station by disconnecting the Type-C cable and then removing the power adapter from the dock. Then, power on the docking station by connecting power adapter to the dock before connecting the Type-C cable to your system. Undock and reboot the system if, the above steps do not work.
The video on the attached monitor is not displaying as an Extended Monitor.	 Ensure that the Intel HD Graphics driver is installed in the Windows Device Manager. Ensure that the nVidia or AMD Graphics driver is installed in the Windows Device Manager. Open the Windows Display Properties and go to Multiple Displays control to set the display to the extended mode.
The USB ports are not functioning on the docking station.	 Ensure that the latest BIOS and drivers for your system and the docking station are installed on your system. If your BIOS Setup has a USB Enabled/Disabled option, ensure it is set to Enabled. Verify if the device is detected in Windows Device Manager and that the correct device drivers are installed. Ensure that the docking station is connected securely to the notebook system. Try to disconnect and reconnect the docking station to the system. Check the USB ports. Try plugging the USB device into another port. First power off the docking station by disconnecting the Type-C cable and then removing the power adapter from the dock. Then, power on the docking station by connecting the power adapter to the dock before connecting the Type-C cable to your system.
The High-Bandwidth Digital Content Protection (HDCP) content is not displayed on the attached monitor.	 Dell Dock supports HDCP up to HDCP 2.2. NOTE: User's monitor/display must support HDCP 2.2
The LAN port is not functioning.	 Ensure that the latest BIOS and drivers for your system and the docking station are installed on your system. Ensure that the RealTek Gigabit Ethernet Controller is installed in the Windows Device Manager. If your BIOS Setup has a LAN/GBE Enabled/Disabled option, ensure it is set to Enabled Ensure that the Ethernet cable is connected securely on the docking station and the hub/router/firewall. Check the status LED of the Ethernet cable to confirm connectivity. Re-connect both ends of the Ethernet cable if the LED is not lit. First power off the docking station by disconnecting the Type-C cable and then removing the power adapter from the dock. Then, power on the docking station by connecting the Type-C cable to your system.
Cable LED is not ON after it is connected to your host.	 Ensure the WD19DCS is connected to AC power. Ensure that the system is connected with the docking station. Try to disconnect and re-connect again with the docking station.
USB port has no function in a pre-OS environment.	 If your BIOS has an USB Configuration page, ensure that the following options are checked: 1. Enable USB Boot Support

Table 14. Symptoms and solutions (continued)

Symptoms	Suggested solutions
	• 2. Enable External USB Port
PXE boot on dock does not function.	 If your BIOS has an integrated NIC page, select Enabled w/PXE. If your BIOS Setup on your system has an USB Configuration page, ensure that the following options are checked: 4. Each build D Back 0, and build buil
USB Boot does not function.	 I. Enable USB Boot Support If your BIOS has an USB Configuration page, ensure that the following options are checked: 1. Enable USB Boot Support 2. Enable External USB Port
AC Adapter is displayed as "Not Installed" in the Battery Information page of the Dell BIOS Setup when the Type-C cable is connected.	 1. Ensure the Dell Performance Docking Station WD19DCS is connected properly to its own adapterUSB (240 W). 2. Ensure the cable LED of your docking station is ON. 3. Disconnect and re-connect the (Type-C) cable to your system.
Peripherals connected to the docking station do not work in a pre-OS environment.	 If the BIOS Setup on your system has an USB Configuration page, check the following option to enable docking station function in a pre-OS environment: Enable External USB Port
Alert message "You have attached an undersized power adapter to your system" is displayed when the docking station is connected to your system.	 Ensure that the docking station is connected properly to its own power adapter. Computer requiring more than 130 W power input must also be connected to their own power adapter for charging and operating at full performance. First power off the docking station by disconnecting the Type-C cable and then removing power adapter from the dock. Then, power on the docking station by connecting the power adapter to the dock before connecting the Type-C cable to your system.
Undersized power adapter warning message that is displayed and cable LED are off.	• The docking connector has disconnected from the system's USB ports. Reconnect the docking cable from the system, wait for 15 seconds or more, and then dock again.
No external display. USB or data and cable LED is off.	 The docking connector has disconnected from the system's USB ports. Reconnect the docking connector. Undock and reboot the system if the above steps do not work.
When system or dock is moved the cable LED turns off.	• Avoid moving the system/dock when the docking cable is connected to the system.
With Ubuntu 18.04, WIFI will be turned off when the docking station is connected to the system and the WIFI turns On again after rebooting the system.	 Please uncheck the option Control WLAN radio in BIOS. Option is available in - Settings -> Power Management -> Wireless Radio Control.
I connected both dock cables to my system but only one cable LED lights up.	When both dock cables are connected to a non-Precision system that does not support dual-C dock, only one of the dock cables functions. The LED on that working dock cable lights up, indicating that power, video, and data connections have been established for that specific cable.

Getting help

Topics:

• Contacting Dell

Contacting Dell

Prerequisites

() NOTE: If you do not have an active Internet connection, you can find contact information on your purchase invoice, packing slip, bill, or Dell product catalog.

About this task

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area. To contact Dell for sales, technical support, or customer service issues:

Steps

- 1. Go to Dell.com/support.
- 2. Select your support category.
- 3. Verify your country or region in the Choose a Country/Region drop-down list at the bottom of the page.
- 4. Select the appropriate service or support link based on your need.