Dell USB-C Monitor P2219HC/P2419HC/P2719HC

User's Guide



Model: P2219HC/P2419HC/P2719HC Regulatory model: P2219HCb/P2419HCb/P2719HCt

NOTE: A NOTE indicates important information that helps you make better use of your computer.
better use of your computer.

CAUTION: A CAUTION indicates potential damage to hardware or loss of data if instructions are not followed.

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

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2018 - 07

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About Your Monitor

Package Contents

Your monitor ships with the components shown below. Make sure that you have received all the components and contact Dell if something is missing.



NOTE: Some items may be optional and may not ship with your monitor. Some features or media may not be available in certain countries.





	USB Type-C cable (C to C)
	DP cable
	Cable Tie
	Quick Setup Guide
Comment of the commen	Safety,Environmental,and Regulatory Information

Product Features

The **Dell P2219HC/P2419HC/P2719HC** monitor has an active matrix, thinfilm transistor (TFT), liquid crystal display (LCD), and LED backlight. The monitor features include:

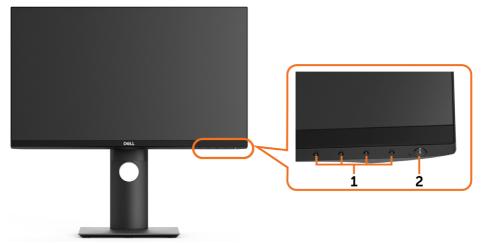
- **P2219HC:** 54.6 cm (21.5-inch) viewable area display (measured diagonally). 1920 x 1080 resolution with full-screen support for lower resolutions.
- P2419HC: 60.5 cm (23.8-inch) viewable area display (measured diagonally).
 1920 x 1080 resolution with full-screen support for lower resolutions.
- **P2719HC:** 68.6 cm (27.0-inch) viewable area display (measured diagonally). 1920 x 1080 resolution with full-screen support for lower resolutions.
- Color gamut of 72% NTSC.
- Tilt, swivel, height and rotate adjustment capabilities.
- Removable stand and Video Electronics Standards Association (VESA™) 100 mm mounting holes for flexible mounting solutions.
- Digital connectivity with DisplayPort and HDMI.
- Equipped with 4 USB downstream ports.
- Single USB Type-C to supply power to compatible notebook while receiving video signal.
- Plug and play capable if supported by your system.
- Minimize eve discomfort with a flicker-free screen.
- The possible long-term effects of blue light emission from the monitor may cause damage to the eyes, including eye fatigue or digital eye strain. ComfortView feature is designed to reduce the amount of blue light emitted from the monitor to optimize eye comfort.
- On-screen display (OSD) adjustments for easy setup and screen optimization.
- Security lock slot.



- · Stand lock.
- Energy Gauge shows the energy level being consumed by the monitor in real time.
- · Arsenic-free glass and mercury-free for the panel only.
- 0.3 W standby power when in the sleep mode.

Identifying Parts and Controls

Front view



Label	Description	
1	Function buttons (For more information, see Operating the Monitor)	
2	Power on/off button (with LED indicator)	



Back View





Label	Description	Use
1	VESA mounting holes (100 mm × 100 mm - behind attached VESA Cover)	Wall mount monitor using VESA-compatible wall mount kit (100 mm x 100 mm).
2	Regulatory label	Lists the regulatory approvals.
3	Stand release button	Releases stand from the monitor.
4	Security lock slot	Secures monitor with security lock (sold separately).
5	Barcode, serial number, and Service Tag label	Refer to this label if you need to contact Dell for technical support.
6	Cable-management slot	Use to organize cables by inserting them through the slot.



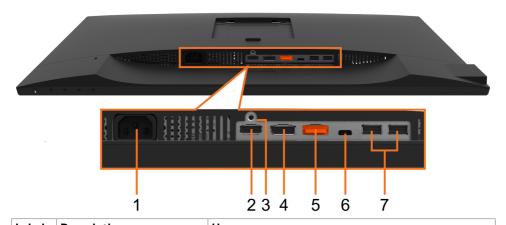
Side View



Label	Description	Use
1	USB downstream ports (2)	Connect your USB device. NOTE: You can only use this connector after you have connected the USB Type-C cable to the computer and USB Type-C connector on the monitor.



Bottom View



Label	Description	Use
1	Power connector	Connect the power cable.
2	HDMI connector	Connect your computer with HDMI cable (sold separately).
3	Stand lock feature	To lock the stand to the monitor using a M3 \times 6 mm screw (screw not included).
4	DP connector (in)	Connect your computer with DisplayPort cable.
5	DP connector (out)	DP output for MST (multi-stream transport) capable monitor. DP 1.1 monitor can only be connected as the last monitor in the MST chain. To enable MST, refer to instruction on section "Connecting the Monitor for DP MST Function". NOTE: Remove the rubber plug when use DP out connector.
6	USB Type-C connector	You can attach the monitor to PC using a USB type C cable, to get the monitor experience as below: support data transmission speed up to USB 3.1. Display resolution up to 1920x1080@60Hz on Display Port™ 1.2 alternate mode. Power delivery of 20V/3.25A, 15V/3A, 9V/3A, 5V/3A. NOTE: USB Type-C is not supported on versions of Windows prior to Windows 10.
7	USB downstream ports (2)	Connect your USB device. NOTE: You can only use this connector after you have connected the USB Type-C cable to the computer and USB Type-C connector on the monitor.



Monitor Specifications

Model	P2219HC	P2419HC
Screen type	Active matrix - TFT LCD	
Panel Type	In-Plane Switching Technology	
Aspect ratio	16:9	
Viewable image dimensions		
Diagonal	546.10 mm (21.5 inches)	604.52 mm (23.8 inches)
Active Area		
Horizontal	476.06 mm (18.74 inches)	527.04 mm (20.75 inches)
Vertical	267.79 mm (10.54 inches)	296.46 mm (11.67 inches)
Area	127484.10 mm² (197.60 inches²)	156246.27 mm² (242.18 inches²)
Pixel pitch	0.248 mm x 0.248 mm	0.275 mm x 0.275 mm
Pixel per inch (PPI)	102	92
Viewing angle	'	
Horizontal	178° (typical)	
Vertical	178° (typical)	
Brightness	250 cd/m² (typical)	
Contrast ratio	1000 to 1 (typical)	
Faceplate coating	Anti-Glare with 3H hardness	
Backlight	LED edgelight system	
Response Time (Gray to Gray)	8 ms (NORMAL mode) 5 ms (FAST mode)	
Color depth	16.7 million colors	
Color gamut	72% (CIE1931) NOTE: Color gamut (typical) is based on CIE1976 (82%) and CIE1931 (72%) test standards.	
Connectivity	• 1 HDMI port	
	• 1 DP(in) port	
	• 1 DP(out) port	
	• 1 USB Type-C port	
	• 2 USB 2.0 downstream p	orts (rear)
	• 2 USB 3.0 downstream p	orts (side)
Border width (edge of monitor to active area)	5.62 mm (Top/Left/ Right) 19.99 mm (Bottom)	5.38 mm (Top/Left/ Right) 20.31 mm (Bottom)
Adjustability	isioo iiiii (Bottoiii)	25.01 mm (Doctom)



Height adjustable stand Tilt Swivel Pivot	130 mm -5° to 21° -45° to 45° -90° to 90°
Dell Display Manager (DDM) Compatibility	Easy Arrange and other key features
Security	Security lock slot (cable lock sold separately)

Model	P2719HC
Screen type	Active matrix - TFT LCD
Panel Type	In-Plane Switching Technology
Aspect ratio	16:9
Viewable image dimensions	
Diagonal	686 mm (27 inches)
Active Area	
Horizontal	597.88 mm (23.54 inches)
Vertical	336.31 mm (13.24 inches)
Area	201073.02 mm² (311.66 inches²)
Pixel pitch	0.3114 mm × 0.3114 mm
Pixel per inch (PPI)	81.59
Viewing angle	
Horizontal	178° (typical)
Vertical	178° (typical)
Brightness	300 cd/m² (typical)
Contrast ratio	1000 to 1 (typical)
Faceplate coating	Anti-Glare with 3H hardness
Backlight	LED edgelight system
Response Time (Gray to Gray)	14 ms (typical) 8 ms (NORMAL mode) 5 ms (FAST mode)
Color depth	16.7 million colors
Color gamut	72% (CIE1931) NOTE: Color gamut (typical) is based on CIE1976 (82%) and CIE1931 (72%) test standards.



• 1 HDMI port		
• 1 DP(in) port		
• 1 DP(out) port		
• 1 USB Type-C port		
• 2 USB 2.0 downstream ports (rear)		
• 2 USB 3.0 downstream ports (side)		
6.0 mm (Top/Left/Right)		
20.7 mm (Bottom)		
Adjustability		
130 mm		
-5° to 21°		
-45° to 45°		
-90° to 90°		
Easy Arrange		
and other key features		
Security lock slot (cable lock sold separately)		

Resolution Specifications

Horizontal scan range	30 kHz to 83 kHz (automatic)
Vertical scan range	56 Hz to 76 Hz (automatic)
Maximum preset resolution	1920 x 1080 at 60 Hz
Video input capabilities (HDMI & DP playback)	480i, 480p, 576i, 576p, 720p, 1080i, 1080p



Preset Display Modes

Display Mode	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (Horizontal/ Vertical)
VESA, 640 x 480	31.5	60.0	25.2	-/-
VESA, 640 x 480	37.5	75.0	31.5	-/-
IBM, 720 × 400	31.5	70.0	28.3	-/+
VESA, 800 x 600	37.9	60.0	40.0	+/+
VESA, 800 x 600	46.9	75.0	49.5	+/+
VESA, 1024 x 768	48.4	60.0	65.0	-/-
VESA, 1024 x 768	60.0	75.0	78.8	+/+
VESA, 1152 x 864	67.5	75.0	108.0	+/+
VESA, 1280 x 1024	64.0	60.0	108.0	+/+
VESA, 1280 x 1024	80.0	75.0	135.0	+/+
VESA, 1600 x 900	60.0	60.0	108.0	+/+
VESA, 1920 x 1080	67.5	60.0	148.5	+/+

MST Multi-Stream Transport (MST) Modes

MST Source Monitor	Maximum number of external monitor that can be supported
	1920 x 1080/60 Hz
1920 x 1080/60 Hz	1 (Use USB Type-C)
	3 (Use DP)

NOTE: Maximum external monitor resolution supported is 1920x1080 60Hz only.

Electrical Specifications

Model	P2219HC/P2419HC
Video input signals	HDMI 1.4, 600 mV for each differential line, 100 ohm input impedance per differential pair
	DisplayPort 1.2, 600 mV for each differential line, 100 ohm input impedance per differential pair
	 USB Type-C, 600mV for each differential line, 90 ohm input impedance per differential pair
AC Input voltage/ frequency/ current	100-240 VAC / 50 or 60 Hz ± 3 Hz / 1.5A (typical)
Inrush current	• 120 V: 40 A (Max.) at 0 °C (cold start)
	• 240 V: 80 A (Max.) at 0 °C (cold start)



Model	P2719HC
Video input signals	HDMI 1.4, 600 mV for each differential line, 100 ohm input impedance per differential pair
	DisplayPort 1.2, 600 mV for each differential line, 100 ohm input impedance per differential pair
	USB Type-C, 600mV for each differential line, 90 ohm input impedance per differential pair
AC Input voltage/ frequency/ current	100-240 VAC / 50 or 60 Hz ± 3 Hz / 1.6A (typical)
Inrush current	• 120 V: 30 A (Max.) at 0 °C (cold start)
	+ 220 V: 60 A (Max.) at 0 °C (cold start)

Physical Characteristics

Model	P2219HC	P2419HC
Signal cable type	Digital: DisplayPort, 20 pins	
	Digital: HDMI, 19 pins	
	Digital: USB Type-C, 24 pins	
Dimensions (with stand)		
Height (extended)	472.04 mm (18.58 inches)	486.11 mm (19.14 inches)
Height (compressed)	353.42 mm (13.91 inches)	356.11 mm (14.02 inches)
Width	487.3 mm (19.19 inches)	537.8 mm (21.17 inches)
Depth	166.0 mm (6.54 inches)	166.0 mm (6.54 inches)
Dimensions (without stand)		
Height	293.4 mm (11.55 inches)	322.15 mm (12.68 inches)
Width	487.3 mm (19.19 inches)	537.8 mm (21.17 inches)
Depth	41.3 mm (1.63 inches)	42.8 mm (1.69 inches)
Stand dimensions	'	
Height (extended)	400.80 mm (15.78 inches)	400.80 mm (15.78 inches)
Height (compressed)	353.42 mm (13.91 inches)	353.42 mm (13.91 inches)
Width	206.0 mm (8.11 inches)	206.0 mm (8.11 inches)
Depth	166.0 mm (6.54 inches)	166.0 mm (6.54 inches)
Base	206.0 mm x 166.0 mm (8.11 inches x 6.54 inches)	206.0 mm × 166.0 mm (8.11 inches × 6.54 inches)
Weight		
Weight with packaging	6.43 kg (14.18 lb)	7.26 kg (16.01 lb)
Weight with stand assembly and cables	4.99 kg (11,00 lb)	5.45 kg (12.02 lb)



Weight without stand assembly (For wall mount or VESA mount considerations - no cables)	3.05 kg (6.72 lb)	3.52 kg (7.76 lb)
Weight of stand assembly	1.64 kg (3.62 lb)	1.65 kg (3.63 lb)
Front frame gloss	2-4 (only front chin)	2-4 (only front chin)

Model	P2719HC
Signal cable type	Digital: DisplayPort, 20 pins
	Digital: HDMI, 19 pins
	Digital: USB Type-C, 24 pins
Dimensions (with stand)	
Height (extended)	524.3 mm (20.64 inches)
Height (compressed)	394.3 mm (15.52 inches)
Width	609.9 mm (24.01 inches)
Depth	185.0 mm (7.28 inches)
Dimensions (without stand)	
Height	363.0 mm (14.29 inches)
Width	609.9 mm (24.01 inches)
Depth	42.8 mm (1.69 inches)
Stand dimensions	
Height (extended)	418.4 mm (16.47 inches)
Height (compressed)	371.0 mm (14.61 inches)
Width	245.0 mm (9.65 inches)
Depth	185.0 mm (7.28 inches)
Base	245.0 mm x 185.0 mm (9.65 inches x 7.28 inches)
Weight	
Weight with packaging	9.36 kg (20.64 lb)
Weight with stand assembly and cables	6.94 kg (15.30 lb)
Weight without stand assembly (For wall mount or VESA mount considerations - no cables)	4.67 kg (10.30 lb)
Weight of stand assembly	1.93 kg (4.25 lb)
Front frame gloss	2-4 (only front chin)



Environmental Characteristics

Model	P2219HC	P2419HC	
Temperature			
Operating	0°C to 40°C (32°F to 104°F)		
Non-operating	• Storage: -20 °C to 60 °C	• Storage: -20 °C to 60 °C (-4 °F to 140 °F)	
	• Shipping: -20 °C to 60 °	C (-4 °F to 140 °F)	
Humidity			
Operating	20% to 80% (non-conder	20% to 80% (non-condensing)	
Non-operating • Storage: 10% to 90% (non-cond		on-condensing)	
	• Shipping: 10% to 90% (r	non-condensing)	
Altitude			
Operating	5,000 m (16,404 ft) (maximum)		
Non-operating	12,192 m (40,000 ft) (max	12,192 m (40,000 ft) (maximum)	
Thermal dissipation	· 403 BTU/hour (maximum)	• 407 BTU/hour (maximum)	
	• 58 BTU/hour (typical)	• 62 BTU/hour (typical)	

Model	P2719HC	
Temperature		
Operating	0°C to 40°C (32°F to 104°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)	
Humidity		
Operating	20% to 80% (non-condensing)	
Non-operating	Storage: 10% to 90% (non-condensing)	
	Shipping: 10% to 90% (non-condensing)	
Altitude		
Operating	5,000 m (16,404 ft) (maximum)	
Non-operating	12,192 m (40,000 ft) (maximum)	
Thermal dissipation	• 427 BTU/hour (maximum)	
	• 89 BTU/hour (typical)	

Compliant standards

ENERGY STAR Certified Monitor	yes
EPEAT	EPEAT Gold registered in the U.S. EPEAT registration varies by country. See www.epeat.net for registration status by country.
TCO Certified Displays	yes
RoHS Compliant	yes



BFR/PVC free Monitor (excluding external cables)	yes
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Power Management Modes

If you have VESA's DPM-compliant video card or software installed in your PC, the monitor can automatically reduce its power consumption when not in use. This is referred to as power save mode*. If the computer detects input from the keyboard, mouse, or other input devices, the monitor automatically resumes functioning. The following table shows the power consumption and signaling of this automatic power saving feature.

P2219HC

VESA Modes	Horizontal Sync	Vertical Sync	Video	Power Indicator	Power Consumption
Normal operation	Active	Active	Active	White	118 W (maximum)** 17 W (typical)
Active-off mode	Inactive	Inactive	Off	White (Glowing)	Less than 0.3 W***
Switch off	_	-	_	Off	Less than 0.3 W

Energy Star	Power Consumption
Pon	15.57 W
E _{TEC}	50.59 kWh

P2419HC

VESA Modes	Horizontal Sync	Vertical Sync	Video	Power Indicator	Power Consumption
Normal operation	Active	Active	Active	White	119 W (maximum)** 18 W (typical)
Active-off mode	Inactive	Inactive	Off	White (Glowing)	Less than 0.3 W***
Switch off	-	-	-	Off	Less than 0.3 W

Energy Star	Power Consumption
P _{on}	16.73 W
E _{TEC}	54.14 kWh



P2719HC

VESA Modes	Horizontal Sync	Vertical Sync	Video	Power Indicator	Power Consumption
Normal operation	Active	Active	Active	White	125 W (maximum)** 26 W (typical)
Active-off mode	Inactive	Inactive	Off	White (Glowing)	Less than 0.3 W***
Switch off	-	-	-	Off	Less than 0.3 W

Energy Star	Power Consumption
Pon	16.82 W
E _{TEC}	52.99 kWh

The OSD operates only in the normal operation mode. If you press any button in the activeoff mode, one of the following message is displayed:



- *Zero power consumption in OFF mode can only be achieved by disconnecting the AC mains cable from the monitor.
- **Maximum power consumption with maximum luminance.
- ***Test data is measured based on no USB-C cable attached condition.

This document is informational only and reflects laboratory performance. Your product may perform differently, depending on the software, components and peripherals you ordered and shall have no obligation to update such information. Accordingly, the customer should not rely upon this information in making decisions about electrical tolerances or otherwise. No warranty as to accuracy or completeness is expressed or implied.

Activate the computer and the monitor to gain access to the OSD.



NOTE: These monitors are ENERGY STAR certified.





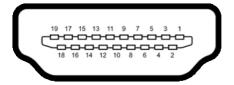
Pon: Power consumption of on mode as defined in Energy Star 7.0 version.

E_{TEC}: Total energy consumption in kWh as defined in Energy Star 7.0 version.



Pin Assignments

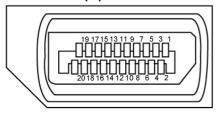
HDMI connector



Pin number	19-pin side of the connected signal cable
1	TMDS DATA 2+
2	TMDS DATA 2 SHIELD
3	TMDS DATA 2-
4	TMDS DATA 1+
5	TMDS DATA 1 SHIELD
6	TMDS DATA 1-
7	TMDS DATA 0+
8	TMDS DATA 0 SHIELD
9	TMDS DATA 0-
10	TMDS CLOCK+
11	TMDS CLOCK SHIELD
12	TMDS CLOCK-
13	CEC
14	Reserved (N.C. on device)
15	DDC CLOCK (SCL)
16	DDC DATA (SDA)
17	DDC/CEC Ground
18	+5 V POWER
19	HOT PLUG DETECT



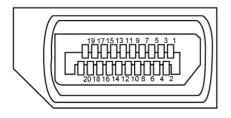
DP connector (in)



Pin number	20-pin side of the connected signal cable
1	ML3 (n)
2	GND
3	ML3 (p)
4	ML2 (n)
5	GND
6	ML2 (p)
7	ML1 (n)
8	GND
9	ML1 (p)
10	ML0 (n)
11	GND
12	ML0 (p)
13	GND
14	GND
15	AUX (p)
16	GND
17	AUX (n)
18	Hot Plug Detect
19	Re-PWR
20	+3.3 V DP_PWR



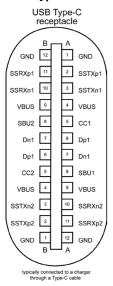
DP connector (out)



Pin number	20-pin side of the connected signal cable
1	MLO(p)
2	GND
3	MLO(n)
4	ML1(p)
5	GND
6	ML1(n)
7	ML2(p)
8	GND
9	ML2(n)
10	ML3(p)
11	GND
12	ML3(n)
13	CONFIG1
14	CONFIG2
15	AUX CH(p)
16	GND
17	AUX CH(n)
18	Hot Plug Detect
19	Return
20	DP_PWR



USB Type-C connector



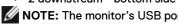
Pin	Signal	Pin	Signal
A1	GND	B12	GND
A2	SSTXp1	B11	SSRXp1
A3	SSTXn1	B10	SSRXn1
A4	VBUS	В9	VBUS
A5	CC1	В8	SBU2
A6	Dp1	В7	Dn1
A7	Dn1	В6	Dp1
A8	SBU1	B5	CC2
A9	VBUS	В4	VBUS
A10	SSRXn2	В3	SSTXn2
A11	SSRXp2	B2	SSTXp2
A12	GND	B1	GND



Universal Serial Bus (USB)

This section gives you information about the USB ports that are available on the monitor. Your computer has the following USB ports:

- · 2 downstream left side USB 3.0
- · 2 downstream bottom side USB 2.0



NOTE: The monitor's USB ports work only when the monitor is on or in the power save mode. If you turn off the monitor and then turn it on, the attached peripherals may take a few seconds to resume normal functionality.



NOTE: This monitor is Super-Speed USB 3.0 and High-Speed USB 2.0 compatible.

USB 3.0

Transfer speed	Data rate	Power consumption	
SuperSpeed	5 Gbps	4.5 W (Max., each port)	
Hi-Speed	480 Mbps	4.5 W (Max., each port)	
Full speed	12 Mbps	4.5 W (Max., each port)	

USB 2.0

Transfer speed	Data rate	Power consumption
Hi-Speed	480 Mbps	2.5 W (Max., each port)
Full speed	12 Mbps	2.5 W (Max., each port)
Low speed	1.5 Mbps	2.5 W (Max., each port)



USB 2.0 port



Pin number	Signal name
1	VCC
2	DMD
3	DPD
4	GND

USB 3.0 port



Pin number	Signal name	
1	VBUS	
2	D-	
3	D+	
4	GND	
5	StdA_SSRX-	
6	StdA_SSRX+	
7	GND_DRAIN	
8	StdA_SSTX-	
9	StdA_SSTX+	
Shell	Shield	



Plug-and-Play

You can install the monitor in any Plug-and-Play-compatible system. The monitor automatically provides the computer system with its extended display identification data (EDID) using display data channel (DDC) protocols so the computer can configure itself and optimize the monitor settings. Most monitor installations are automatic; you can select different settings if desired. For more information about changing the monitor settings, see Operating the Monitor.

LCD Monitor Quality and Pixel Policy

During the LCD monitor manufacturing process, it is not uncommon for one or more pixels to become fixed in an unchanging state which are hard to see and do not affect the display quality or usability. For more information on LCD Monitor Pixel Policy, see Dell support site at: http://www.dell.com/support/monitors.



Setting Up the Monitor

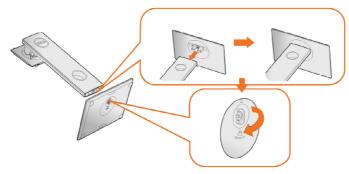
Attaching the stand

NOTE: The stand is not installed at the factory when shipped.

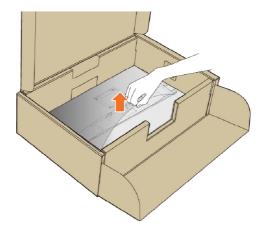
NOTE: The following instructions are applicable only for attaching the stand that was shipped with your monitor. If you are attaching a stand that you purchased from any other source, follow the set up instructions that were included with the stand.

To attach the monitor stand:

- 1 Follow the instructions on the flaps of carton to remove the stand from the top cushion that secures it.
- 2 Insert the stand base blocks fully into the stand slot.
- 3 Lift the screw handle and turn the screw clockwise.
- 4 After fully tightening the screw, fold the screw handle flat within the recess.

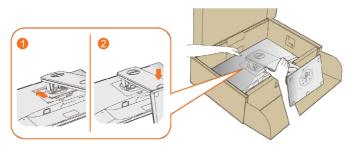


5 Lift the cover, as shown, to expose the VESA area for stand assembly.

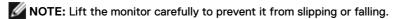




- 6 Attach the stand assembly to the monitor.
 - **a**. Fit the two tabs on the upper part of the stand to the groove on the back of the monitor.
 - b. Press the stand down till it snaps into place.



7 Place the monitor upright.



Using the Tilt, Swivel, and Vertical Extension

NOTE: This is applicable for a monitor with a stand. If you purchased any other stand, refer to the respective stand setup guide for set up instructions.

Tilt, Swivel

With the built-in pedestal, you can tilt the monitor for the most comfortable viewing angle.



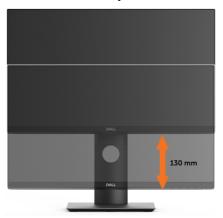
NOTE: The stand is detached when the monitor is shipped from the factory.



Vertical Extension

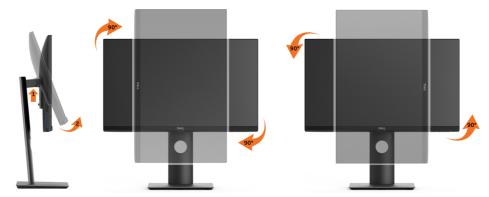


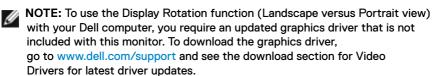
NOTE: The stand extends vertically up to 130 mm. The figure below illustrates how to extend the stand vertically.

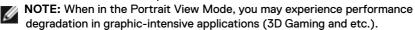


Rotating the Monitor

Before you rotate the monitor, your monitor should be fully vertically extended (Vertical Extension) and fully tilted (Tilt) up to avoid hitting the bottom edge of the monitor.









Adjusting the Rotation Display Settings of Your System

After you have rotated your monitor, you need to complete the procedure below to adjust the Rotation Display Settings of your System.



NOTE: If you are using the monitor with a non-Dell computer, you need to go the graphics driver website or your computer manufacturer website for information on rotating the 'contents' on your display.

To adjust the Rotation Display Settings:

- 1 Right-click on the desktop and click Properties.
- 2 Select the **Settings** tab and click **Advanced**.
- 3 If you have an ATI graphics card, select the Rotation tab and set the preferred rotation.

If you have an nVidia graphics card, click the **nVidia** tab, in the left-hand column select **NVRotate**, and then select the preferred rotation.

If you have an Intel® graphics card, select the Intel graphics tab, click Graphic Properties, select the Rotation tab, and then set the preferred rotation.



NOTE: If you do not see the rotation option or it is not working correctly, go to www.dell.com/support and download the latest driver for your graphics card.

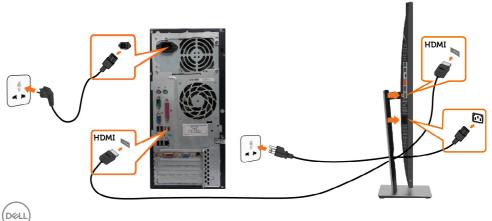
Connecting Your Monitor

MARNING: Before you begin any of the procedures in this section, follow the Safety Instructions.

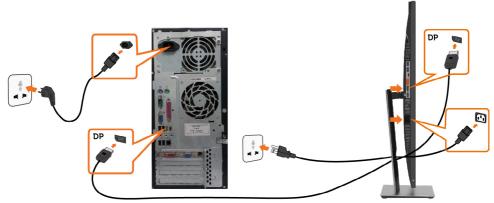
To connect your monitor to the computer:

- 1 Turn off your computer.
- 2 Connect the HDMI, DP or USB Type C cable from your monitor to the computer.
- 3 Switch on your monitor.
- 4 Select the correct input source at Monitor OSD Menu and turn on your computer.

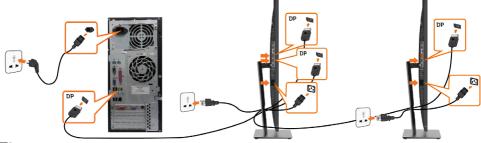
Connecting the HDMI cable (optional)



Connecting the DisplayPort cable



Connecting the monitor for DP Multi-Stream Transport (MST) function (optional)



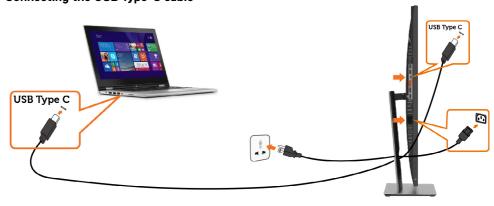
NOTE: Supports the DP MST feature. To make use of this feature, your PC

Graphics Card must be certified to DP1.2 with MST option.

NOTE: Remove the rubber plug when use DP out connector.

NOTE: When DP in and DP out is connected to a PC and second monitor respectively for the first time, MST will be automatically enabled.

Connecting the USB Type-C cable



M NOTE:

- 1 Support USB Type C Alternate mode with DP 1.2, DP 1.1 is not supported.
- 2 Support USB PD (Power Delivery) profiles up to 65W(20V/3.25A).
- **3** If your Notebook required >65W(20V/3.25A) to operate and the battery is drained, it may not power up or charge with P2219HC/P2419HC/P2719HC USB PD.

Organizing Your Cables



After attaching all necessary cables to your monitor and computer, (see Connecting Your Monitor for cable attachment) organize all cables as shown above.



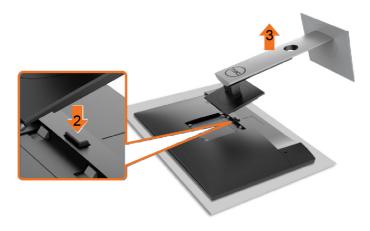
Removing the Monitor Stand

CAUTION: To prevent scratches on the LCD screen while removing the stand, make sure that the monitor is placed on a soft, clean surface.

NOTE: The procedure below is applicable for the default stand. If you purchased any other stand, see the documentation shipped with the stand to set it up.

To remove the stand:

- 1 Place the monitor on a soft cloth or cushion.
- 2 Press and hold the stand-release button.
- 3 Lift the stand up and away from the monitor.





Wall Mounting (Optional)



NOTE: Use M4 x 10 mm screws to connect the monitor to the wall-mounting kit.

Refer to the instructions that come with the VESA-compatible wall mounting kit.

- 1 Place the monitor on a soft cloth or cushion on a stable, flat table.
- 2 Remove the stand.
- 3 Use a Phillips crosshead screwdriver to remove the four screws securing the plastic cover.
- 4 Attach the mounting bracket from the wall mounting kit to the monitor.
- 5 Mount the monitor on the wall by following the instructions that comes with the wall mounting kit.
- **NOTE:** For use only with UL or CSA or GS-listed wall mount bracket with minimum weight/load bearing capacity of 3.05 kg (P2219HC)/3.52 kg (P2419HC)/4.67 kg (P2719HC).



Operating the Monitor

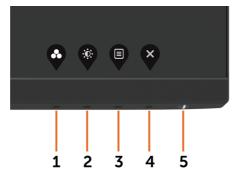
Turning on the Monitor

Press the button to turn on the monitor.



Using the Front Panel Controls

Use the control buttons on the front of the monitor to adjust the characteristics of the image being displayed. As you use these buttons to adjust the controls, an OSD shows the numeric values of the characteristics as they change.





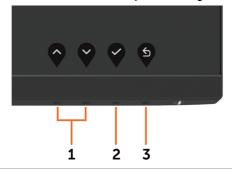
The following table describes the front panel buttons:

Fro	nt-Panel Button	Description
1	©	Use this button to choose from a list of preset color modes.
	Shortcut key: Preset Modes	
2		Use this button to directly access the "Brightness/Contrast" bar.
	Shortcut key: Brightness/Contrast	
3		Use this menu button to launch the on-screen display (OSD) and select the OSD menu.
		See Accessing the Menu System.
	Menu	
4	Exit	Use this button to go back to the main menu or exit the OSD main menu.
5	Power (with power light indicator)	Use the Power button to turn the monitor On and Off. The white LED indicates the monitor is On and fully functional. A glowing white LED indicates DPMS Power Save Mode.



Front-Panel Button

Use the buttons on the front of the monitor to adjust the image settings.



Fro	nt Panel Butto	Description	Description	
1	Up	Use the Up (increase) and Down (decrease) keys to items in the OSD menu.	o adjust	
2	ok	Use the OK button to confirm your selection.		
3	Back	Use the Back button to go back to the previous me	nu.	



Using the On-Screen Display (OSD) Menu

Accessing the Menu System



NOTE: Any changes you make using the OSD menu are automatically saved if you move to another OSD menu, exit the OSD menu, or wait for the OSD menu to disappear.

1 Press the button to launch the OSD menu and display the main menu.





- 2 Press the and buttons to move between options. As you move from one icon to another, the option name is highlighted.
- 3 Press the or or button once to activate the highlighted option.
- 4 Press the and buttons to select the desired parameter.
- 5 Press to enter the slide bar and then use the or button, according to the indicators on the menu, to make your changes.
- 6 Select the to return to previous menu or to accept and return to previous menu.



lcon

Menu and Submenus

Description



Brightness/ Contrast

Use this menu to activate **Brightness/Contrast** adjustment.



Contrast adjusts the difference between darkness and lightness









Brightness Brightness adjusts the luminance of the backlight (minimum 0; maximum 100). Press the button to increase brightness. Press the button to decrease brightness. NOTE: Manual adjustment of Brightness is disabled when Dynamic Contrast are switched on. Contrast Adjust the Brightness first, and then adjust Contrast only if further adjustment is necessary. Press the button to increase contrast and press the button to decrease contrast (between 0 and 100).

on the monitor.

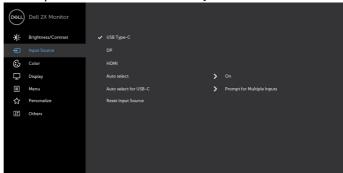


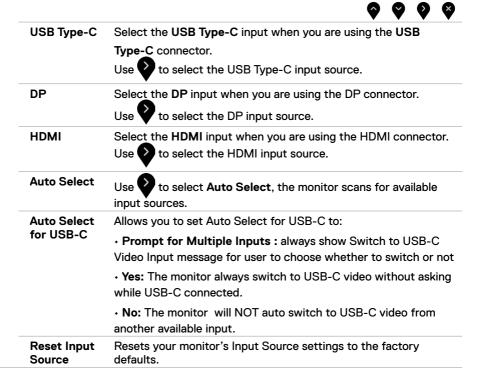
Icon Menu and Description Submenus



Input Source

Use the **Input Source** menu to select between different video inputs that are be connected to your monitor.







Icon Menu and Submenus





Color

Use the Color menu to adjust the color setting mode.











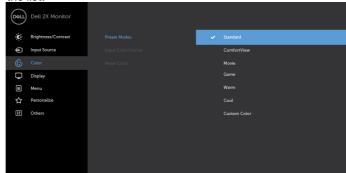
Icon

Menu and Submenus

Description

Preset Modes

When you select **Preset Modes**, you can choose **Standard**, **ComfortView**, **Movie**, **Game**, **Warm**, **Cool** or **Custom Color** from the list.









- Standard: Default color settings. This is the default preset mode.
- ComfortView: Decreases the level of blue light emitted from the screen to make viewing more comfortable for your eyes.

NOTE: To reduce the risk of eye strain and neck/arm/back/ shoulders pain from using the monitor for long periods of time, we suggest you to:

- Set the screen about 20 to 28 inches (50-70 cm) from your eyes.
- Blink frequently to moisten or rewet your eyes when working with the monitor.
- Take regular and frequent breaks for 20 minutes every two hours.
- Look away from your monitor and gaze at a distant object at 20 feet away for at least 20 seconds during the breaks.
- Perform stretches to relieve tension in the neck/arm/back/ shoulders during the breaks.
- · Movie: Loads color settings ideal for movies.
- Game: Loads color settings ideal for most gaming applications.
- Warm: Increases the color temperature. The screen appears warmer with a red/yellow tint.
- Cool: Decreases the color temperature. The screen appears cooler with a blue tint.
- Custom Color: Allows you to manually adjust the color settings.

Press the and buttons to adjust the Red, Green, and Blue values and create your own preset color mode.



on	Menu and Submenus	Description
	Input Color Format	Allows you to set the video input mode to: RGB: Select this option if your monitor is connected to a computer (or DVD player) using the HDMI cable. YPbPr: Select this option if your DVD player supports only YPbPr output. Brightness/Contrast Input Source Input Source Reset Color Prescr Modes Prescr Modes Prescr Modes Prescr Modes Typer Others
	Hue	Use or to adjust the hue from 0 to 100. NOTE: Hue adjustment is available only for Movie and Game mode.
	Saturation	Use or to adjust the saturation from 0 to 100. NOTE: Saturation adjustment is available only for Movie and Game mode.

Resets your monitor's color settings to the factory defaults.

Reset Color

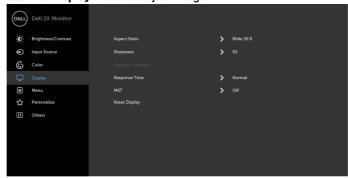


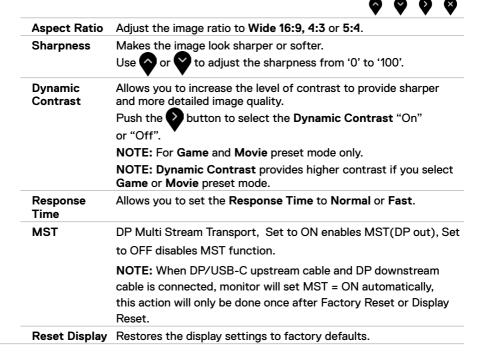
Icon Menu and Description Submenus



Display

Use the **Display** menu to adjust image.







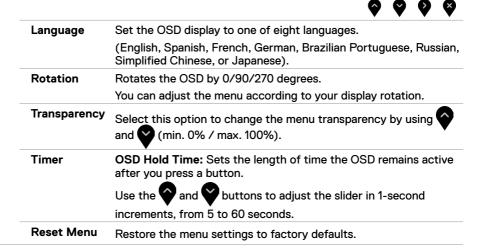
Icon Menu and Description Submenus



Menu

Select this option to adjust the settings of the OSD, such as, the languages of the OSD, the amount of time the menu remains on screen, and so on.







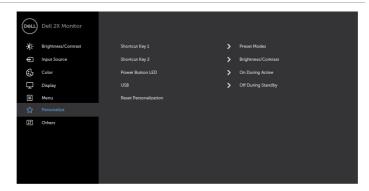
Icon

Menu and Submenus

Description



Personalize











Shortcut key 1	Select from Preset Modes, Brightness/Contrast, Input Source, Aspect Ratio, Rotation set as shortcut key 1. Select from Preset Modes, Brightness/Contrast, Input Source, Aspect Ratio, Rotation set as shortcut key 2.	
Shortcut key 2		
Power Button LED	Allows you to set the state of the power light to save energy.	
USB	Allows you to enable or disable USB charger function during monitor standby mode.	
	NOTE: USB ON/OFF under standby mode is only available when the USB Type-C cable is unplugged. This option will be greyed out when the USB Type-C cable plugs in.	
Reset Persona- lization	Restores Shortcut Keys and Power Button LED to factory defaults.	



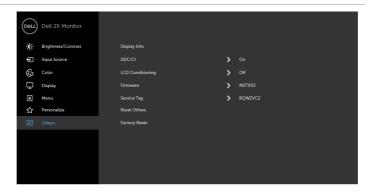
Icon

Menu and Submenus

Description



Other









Select this option to adjust the OSD settings, such as the DDC/CI, LCD conditioning, and so on.

Display info

Displays the monitor's current settings.

DDC/CI

DDC/CI (Display Data Channel/Command Interface) allows you to adjust the monitor settings using software on your computer.

Select **Off** to turn off this feature.

Enable this feature for best user experience and optimum performance of your monitor.









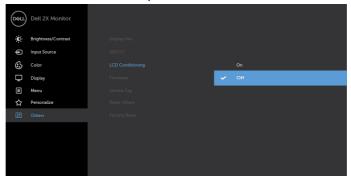


Icon Menu and Submenus

Description

LCD Conditioning

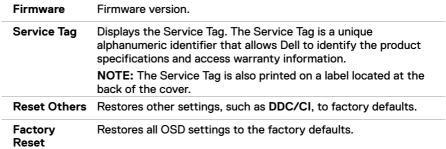
Helps reduce minor cases of image retention. Depending on the degree of image retention, the program may take some time to run. Select **On** to start the process.











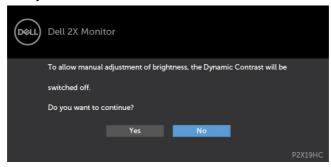


NOTE: This monitor has a built-in feature to automatically calibrate the brightness to compensate for LED aging.

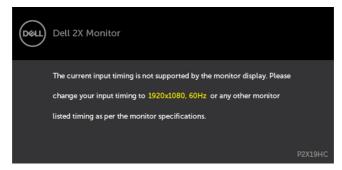


OSD Warning Messages

When the **Dynamic Contrast** feature is enabled (in these preset modes: **Game** or **Movie**), manual brightness adjustment is disabled.

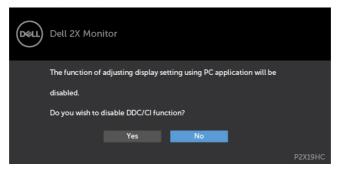


When the monitor does not support a particular resolution mode, you can see the following message:



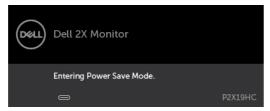
This means that the monitor cannot synchronize with the signal that it is receiving from the computer. See Monitor Specifications for the Horizontal and Vertical frequency ranges addressable by this monitor. Recommended mode is 1920×1080 .

You can see the following message before the DDC/CI function is disabled:



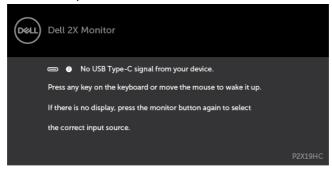


When the monitor enters the **Power Save** mode, the following message appears:



Activate the computer and wake up the monitor to gain access to the OSD.

If you press any button other than the power button, the following messages will appear depending on the selected input:

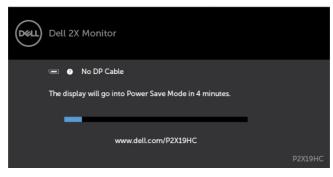


If either HDMI, DP, USB Type-C input is selected and the corresponding cable is not connected, a floating dialog box as shown below appears.

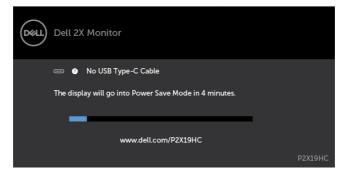


or





or



While OSD item of Auto Select for USB-C selected to Prompt for Multiple Inputs, When monitor is currently displaying video from DP/HDMI, and user connect USB-C cable to notebook/phone that support DP Alternate mode, following message will prompt:



See Troubleshooting for more information.



Troubleshooting

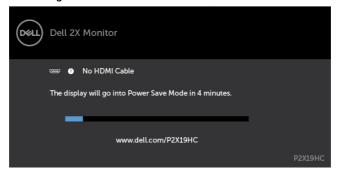
Safety Instructions.

Self-Test

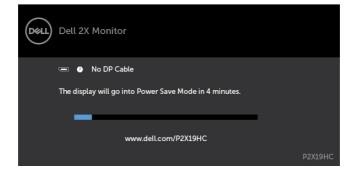
Your monitor provides a self-test feature that allows you to check whether your monitor is functioning properly. If your monitor and computer are properly connected but the monitor screen remains dark, run the monitor self-test by performing the following steps:

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

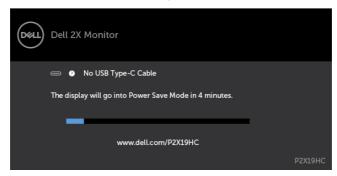
The floating dialog box should appear on-screen (against a black background), if the monitor cannot sense a video signal and is working correctly. While in self-test mode, the power LED remains white. Also, depending upon the selected input, one of the dialogs shown below will continuously scroll through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



or







- **4** This box also appears during normal system 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 monitor.

If your monitor screen remains blank after you use the previous procedure, check your video controller and computer, because your monitor is functioning properly.

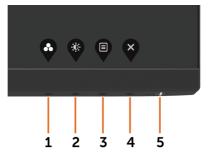


Built-in Diagnostics

Your monitor has a built-in diagnostic tool that helps you determine if the screen abnormality you are experiencing is an inherent problem with your monitor, or with your computer and video card.



NOTE: You can run the built-in diagnostics only when the video cable is unplugged and the monitor is in self-test mode.



To run the built-in diagnostics:

- 1 Make sure that the screen is clean (no dust particles on the surface of the screen).
- 2 Unplug the video cable(s) from the back of the computer or monitor. The monitor then goes into the self-test mode.
- 3 Press and hold **Button 1** for 5 seconds. A gray screen appears.
- 4 Carefully inspect the screen for abnormalities.
- 5 Press Button 1 on the front panel again. The color of the screen changes to red.
- 6 Inspect the display for any abnormalities.
- Repeat steps 5 and 6 to inspect the display in green, blue, black, white, and text screens.

The test is complete when the text screen appears. To exit, press **Button 1** again. If you do not detect any screen abnormalities upon using the built-in diagnostic tool, the monitor is functioning properly. Check the video card and computer.



Common Problems

The following table contains general information about common monitor problems you might encounter and the possible solutions:

Common Symptoms	What You Experience	Possible Solutions
No Video/Power LED off	No picture	 Ensure that the video cable connecting the monitor and the computer is properly connected and secure. Verify that the power outlet is functioning properly using any other electrical equipment. Ensure that the power button is depressed fully. Ensure that the correct input source is selected in the Input Source menu.
No Video/Power LED on	No picture or no brightness	 Increase brightness & contrast controls via OSD. Perform monitor self-test feature check. Check for bent or broken pins in the video cable connector. Run the built-in diagnostics. Ensure that the correct input source is selected in the Input Source menu.
Missing Pixels	LCD screen has spots	 Cycle power on-off. Pixel that is permanently off is a natural defect that canoccur in LCD technology. For more information on Dell Monitor Quality and Pixel Policy, see Dell Support site at: http://www.dell.com/support/monitors.
Stuck-on Pixels	LCD screen has bright spots	 Cycle power On-Off. Pixel that is permanently off is a natural defect that canoccur in LCD technology. For more information on Dell Monitor Quality and PixelPolicy, see Dell Support site at: http://www.dell.com/support/monitors.
Brightness Problems	Picture too dim or too bright	Reset the monitor to factory settings.Adjust brightness & contrast controls via OSD.
Safety Related Issues	Visible signs of smoke or sparks	Do not perform any troubleshooting steps.Contact Dell immediately.
Intermittent Problems	Monitor malfunctions on & off	 Ensure that the video cable connecting the monitor to the computer is connected properly and is secure. Reset the monitor to factory settings. Perform monitor self-test feature check to determine if the intermittent problem occurs in self-test mode.



Common Symptoms	What You Experience	Possible Solutions
Missing Color	Picture missing color	 Perform monitor self-test. Ensure that the video cable connecting the monitor to the computer is connected properly and is secure. Check for bent or broken pins in the video cable connector.
Wrong Color	Picture color not good	 Change the settings of the Preset Modes in the Color menu OSD depending on the application. Adjust R/G/B value under Custom. Color in Color menu OSD. Change the Input Color Format to PC RGB or YPbPr in the Color menu OSD. Run the built-in diagnostics.
Image retention from a static image left on the monitor for a long period of time	Faint shadow from the static image displayed appears on the screen	 Use the Power Management feature to turn off the monitor at all times when not in use (for more information, see Power Management Modes). Alternatively, use a dynamically changing screensaver.



Product Specific Problems

Specific Symptoms	What You Experience	Possible Solutions
Screen image is too small	Image is centered on screen, but does not fill entire viewing area	 Check the Aspect Ratio setting in the Display menu OSD. Reset the monitor to factory settings.
Cannot adjust the monitor with the buttons on the front panel	OSD does not appear on the screen	Turn off the monitor, unplug the monitor power cable, plug it back, and then turn on the monitor.
No Input Signal when user controls are pressed	No picture, the LED light is white	 Check the signal source. Ensure the computer is not in the power saving mode by moving the mouse or pressing any key on the keyboard. Check whether the signal cable is plugged in properly. Re-plug the signal cable if necessary. Reset the computer or video player.
The picture does not fill the entire screen	The picture cannot fill the height or width of the screen	 Due to different video formats (aspect ratio) of DVDs, the monitor may display in full screen. Run the built-in diagnostics.
No image when using USB Type C connection to PC or Notebook.	Black screen	 Verify if the PC or Notebook USB Type C interface can support Alternate mode DP1.2. USB Type C interface of PC or Notebook can not support Alternate mode DP1.2.
No charging when using USB Type C connection to the Notebook	No charging	 Verify if the Notebook required >65W power charging. The Notebook required >65W power charging.



Universal Serial Bus (USB) Specific Problems

Specific Symptoms	What You Experience	Possible Solutions
USB interface is not working	USB peripherals are not working	 Check that your monitor is turned ON. Reconnect the upstream cable to your computer. Reconnect the USB peripherals (downstream connector). Switch off and then turn on the monitor again. Reboot the computer. Some USB devices like external portable HDD require higher electric current; connect the device directly to the computer system.
Supre Speed USB 3.0 interface is slow.	Super Speed USB 3.0 peripherals working slowly or not working at all	 Check that your computer is USB 3.0-capable. Some computers have USB 3.0, USB 2.0, and USB 1.1 ports. Ensure that the correct USB port is used. Reconnect the upstream cable to your computer. Reconnect the USB peripherals (downstream connector). Reboot the computer.
Wireless USB peripherals stop working when a USB 3.0 device is plugged in	Wireless USB peripherals responding slowly or only working as the distance between itself and its receiver decreases	 Increase the distance between the USB 3.0 peripherals and the wireless USB receiver. Position your wireless USB receiver as close as possible to the wireless USB peripherals. Use a USB-extender cable to position the wireless USB receiver as far away as possible from the USB 3.0 port.



Appendix

Safety Instructions

For displays with glossy bezels the user should consider the placement of the display as the bezel may cause disturbing reflections from surrounding light and bright surfaces.

MARNING: 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.

For information on safety instructions, see the Safety, Environmental, and Regulatory Information (SERI).

FCC Notices (U.S. only) and Other Regulatory Information

For FCC notices and other regulatory information, see the regulatory compliance website located at www.dell.com/regulatory_compliance.

Contacting Dell



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.

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 get online Monitor support content:

See www.dell.com/support/monitors.

To contact Dell for sales, technical support, or customer service issues:

- 1 Go to www.dell.com/support.
- 2 Verify your country or region in the Choose A Country/Region drop-down menu at the top-left corner of the page.
- 3 Click Contact Us next to the country dropdown.
- Select the appropriate service or support link based on your need.
- Choose the method of contacting Dell that is convenient for you.



Setting Up Your Monitor

Setting Display Resolution to 1920 x 1080

For best performance, set the display resolution to 1920×1080 pixels by performing the following steps:

In Windows Vista, Windows 7, Windows 8 or Windows 8.1:

- 1 For Windows 8 or Windows 8.1 only, select the Desktop tile to switch to classic desktop.
- 2 Right-click on the desktop and click Screen Resolution.
- 3 Click the Dropdown list of the Screen Resolution and select 1920 x 1080.
- 4 Click OK.

In Windows 10:

- 1 Right-click on the desktop and click Display Settings.
- 2 Click Advanced display settings.
- 3 Click the dropdown list of **Resolution** and select 1920 x 1080.
- 4 Click Apply.

If you do not see the recommended resolution as an option, you may need to update your graphics driver. Please choose the scenario below that best describes the computer system you are using, and follow the given steps.

Dell computer

- 1 Go to www.dell.com/support, enter your service tag, and download the latest driver for your graphics card.
- 2 After installing the drivers for your graphics adapter, attempt to set the resolution to 1920×1080 again.



NOTE: If you are unable to set the resolution to 1920×1080 , please contact Dell to inquire about a graphics adapter that supports these resolutions.



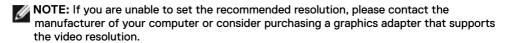
Non-Dell computer

In Windows Vista, Windows 7, Windows 8 or Windows 8.1:

- 1 For Windows 8 or Windows 8.1 only, select the Desktop tile to switch to classic desktop.
- 2 Right-click on the desktop and click Personalization.
- 3 Click Change Display Settings.
- 4 Click Advanced Settings.
- 5 Identify your graphics controller supplier from the description at the top of the window (e.g. NVIDIA, AMD, Intel etc.).
- 6 Refer to the graphic card provider website for updated driver (for example, http://www.AMD.com or http://www.NVIDIA.com).
- 7 After installing the drivers for your graphics adapter, attempt to set the resolution to 1920×1080 again.

In Windows 10:

- 1 Right-click on the desktop and click Display Settings.
- 2 Click Advanced display settings.
- 3 Click Display adapter properties.
- 4 Identify your graphics controller supplier from the description at the top of the window (e.g. NVIDIA, AMD, Intel etc.).
- 5 Refer to the graphic card provider website for updated driver (for example, http://www.AMD.com or http://www.NVIDIA.com).
- 6 After installing the drivers for your graphics adapter, attempt to set the resolution to 1920×1080 again.





Maintenance Guidelines

Cleaning Your Monitor

WARNING: Before cleaning the monitor, unplug the monitor power cable from the electrical outlet.

CAUTION: Read and follow the Safety Instructions before cleaning the monitor.

For best practices, follow these instructions in the list below while unpacking, cleaning, or handling your monitor:

- · To clean your anti-static screen, lightly dampen a soft, clean cloth with water. If possible, use a special screen-cleaning tissue or solution suitable for the anti-static coating. Do not use benzene, thinner, ammonia, abrasive cleaners, or compressed air.
- · Use a lightly-dampened, soft cloth to clean the monitor. Avoid using detergent of any kind as some detergents leave a milky film on the monitor.
- If you notice white powder when you unpack your monitor, wipe it off with a cloth.
- Handle your monitor with care as a darker-colored monitor may get scratched and show white scuff marks more than a lighter- colored monitor.
- · To help maintain the best image quality on your monitor, use a dynamically changing screen saver and turn off your monitor when not in use.

