Dell UltraSharp 32 HDR PremierColor Monitor—UP3221Q

User's Guide



Model: UP3221Q Regulatory model: UP3221Qb

Notes, cautions, and warnings

- NOTE: A NOTE indicates important information that helps you make 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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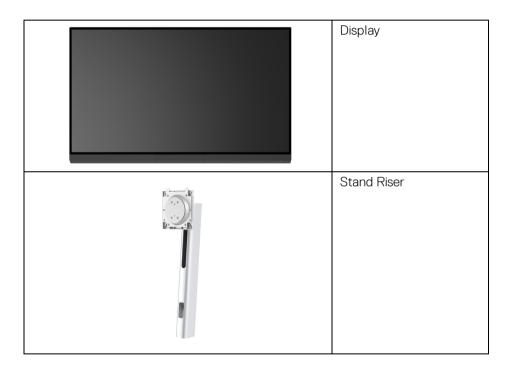


About Your Monitor

Package Contents

Your monitor ships with the components shown below. Ensure 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.
- NOTE: To set up with any other stand, please refer to the respective stand setup guide for setup instructions.





Stand Base
Otalia Dase
I/O Cover
Monitor Hood
Power Cable (Varies by Country)
HDMI Cable
DP Cable (DP to DP)
Thunderbolt™ 3 (USB Type-C) Active Cable



USB Type-C to Type-A Cable
 Factory Calibration Report Calibration and Validation Techsheet Thunderbolt™ 3 Connection Techsheet Quick Setup Guide Safety, Environmental, and Regulatory Information



Product Features

The **Dell UP3221Q** flat panel display has an active matrix, Thin-Film Transistor (TFT), Liquid Crystal Display (LCD) and mini LED backlight. The monitor features include:

- 80.01 cm (31.5 in.) viewable area display (measured diagonally).
 3840 x 2160 (16:9) resolution, plus full-screen support for lower resolutions.
- · Wide viewing angle to allow viewing from a sitting or standing position.
- Color gamut of CIE1976 DCI-P3 99.8% with an average $\Delta E < 2$.
- Manually select Gamma/White Point/Color Gamut/Luminance via User 1, User 2, or User 3 Color Space options.
- Manual HDR mode without HDR signal via User 1, User 2, or User 3 options, allowing force selection of HDR EOTF between ST.2084(PQ) and HLG.
- · Calibrate User 1, User 2, or User 3 settings directly in CAL 1 or CAL 2.
- Supports HDMI, DP, and Thunderbolt™ 3 sources.
- HDMI, DP, and Thunderbolt™ 3 connection supports 10-bit color.
- Frame Buffering allows 24/25 Hz video to be displayed in 48/50 Hz at 10-bit color.
- Single Thunderbolt[™] 3 to supply power (Up to 90 W) to a compatible notebook while receiving video & data signal.
- · Built-in Color Calibration functionality.
- · Multi-Stream Transport (MST) capability via Thunderbolt™ 3 connection.
- · Tilt, swivel, pivot, and vertical extension adjustment capabilities.
- Ultra-thin bezel minimizes the bezel gap in multi-monitor usage, enabling easier setup with an elegant viewing experience.
- Removable stand and Video Electronics Standards Association (VESA™)
 100 mm mounting holes for flexible mounting solutions.
- Plug and play capability if supported by your system.
- On-Screen Display (OSD) adjustments for ease of set-up and screen optimization.
- · Supports Joystick, Power button and Color lock via OSD.
- · Security lock slot.
- \cdot < 0.3 W in Standby Mode.
- · Supports Picture by Picture (PBP) select mode.



Identifying Parts and Controls

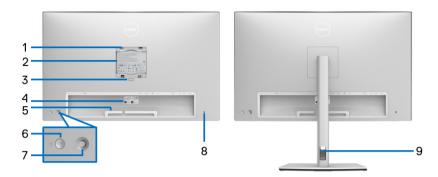
Front View



Label	Description	Use
1	LED indicator to display the monitor's power status.	Solid white light indicates that the monitor is turned on and functioning normally. Blinking white light indicates that the monitor is in Standby Mode.



Back View

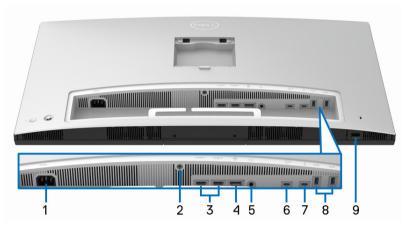


Back view without and with monitor stand

Label	Description	Use
1	VESA mounting holes (100 mm x 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 monitor.
4	Barcode, serial number, and Service Tag label	Refer to this label if you need to contact Dell for technical support.
5	Cable management clips	To organize the cables neatly
6	Power On/Off button	Turns the monitor on or off.
7	Joystick	Use to control the OSD menu. (For more Information, see Operating the Monitor)
8	Security lock slot	Secures monitor with security lock (security lock not included).
9	Cable management hole	Use to organize cables by placing them through the hole.



Bottom View



Bottom view without monitor stand

Label	Description	Use
1	AC power connector	Connect the power cable (shipped with your monitor).
2	Stand lock feature	To lock the stand to the monitor using a M3 x 6 mm screw (screw not included).
3	HDMI port connector (2)	Connect your computer with HDMI cable.
4	DisplayPort in connector	Connect your computer with DP cable.
5	Audio-Line out	Connect your speakers.*



6	Thunderbolt™ 3 Upstream (USB Type-C [®]) port	Connect the Thunderbolt [™] 3 Active cable that came with your monitor to the computer or mobile device. This port supports USB Power Delivery (up to 90 W), Data, and DisplayPort video signal. The Thunderbolt [™] 3 port supports Alternate Mode DP1.4 with a maximum resolution of 3840 x 2160 at 60 Hz, PD 20 V/4.5 A, 15 V/3 A, 9 V/3 A, and 5 V/3 A. Thunderbolt [™] 3 supports MST (Multi-Stream Transport) capable monitor. To enable MST, refer to instruction on section "Connecting the monitor for Thunderbolt [™] Multi-Stream Transport (MST) function".
		NOTE: Thunderbolt [™] 3 is not supported on versions of Windows prior to Windows 10.
7	Thunderbolt™ 3 Downstream (USB Type-C) port	Connect the Thunderbolt [™] 3 Active cable that came with your monitor to the computer, mobile devices, a second monitor, or other Thunderbolt [™] devices. This port supports USB Power Delivery (up to 15 W, PD 5 V/3 A), Data, and DisplayPort video signal. Thunderbolt [™] 3 supports MST (Multi-Stream Transport) capable monitor. To enable MST, refer to instruction on section "Connecting the monitor for Thunderbolt [™] Multi-Stream Transport (MST) function". NOTE: For Notebooks and other devices that require more than 15 W of power, it is recommended to connect to another power source to power or charge your device. NOTE: Thunderbolt [™] 3 is not supported on versions of Windows prior to Windows 10.
8	SuperSpeed USB 5/10 Gbps (USB 3.2 Gen 1/ 2) downstream port (2)	Connect your USB device. You can only use this connector after you have connected the USB cable to the computer.**



9	External	Connect your external colorimeter.
	Colorimeter port	NOTE: Remove the plastic plug when using this port.
	ASS.	NOTE: This port is used exclusively for connecting
		external colorimeters. Do not plug in other USB
		devices.

^{*} Headphone usage is not supported for the audio line out connector.

Monitor Specifications

Flat Panel Specifications

Model	UP3221Q
Screen type	Active matrix - TFT LCD
Panel technology	In-Plane Switching Type
Aspect ratio	16:9
Viewable image	
Diagonal	800.05 mm (31.5 in.)
Horizontal, Active Area	697.31 mm (27.45 in.)
Vertical, Active Area	392.23 mm (15.44 in.)
Area	273505.9 mm ² (423.93 in. ²)
Pixel pitch	0.1816 mm x 0.1816 mm
Pixel per inch	140
Viewing angle	178° (vertical) typical
	178° (horizontal) typical
Luminance output	SDR: 350 cd/m ²
	HDR: 1000 cd/m ²
Contrast ratio	· 1300 to 1
	· 1,000,000 to 1 (HDR On)



^{**} To avoid signal interference, when a wireless USB device has been connected to a USB downstream port, it is NOT recommended to connect any other USB devices to the adjacent port(s).

Faceplate coating	Advanced Antiglare treatment of the front polarizer (Haze 25%, 3H)
Backlight	mini LED
Response time	· 6 ms gray to gray in Fast Mode
	· 8 ms gray to gray in Normal Mode
	· 14 ms gray to gray in Off Mode
Color depth	1.07 billion colors (True 10 Bit)
Color gamut (panel	· CIE1931 Adobe 93%
native)	· CIE1976 DCI-P3 99.8%
	· CIE1976 BT.2020 83%
Built-in devices	Colorimeter
Calibration accuracy	SDR:
(default Color Space	Average ΔE < 1
preset)	NOTE: Only for DCIP3 D65, BT.709 D65 and sRGB D65.
	Average ΔE < 2
	NOTE: Only for Adobe RGB D65 and Adobe RGB D50.
	HDR:
	ST.2084(PQ): ΔE ITP < 3.5
	HLG: ΔE < 3.5
NOTE: Select Factory R	eset to return Calibration accuracy to default presets.
Connectivity	· 1 x DP 1.4 (HDCP 2.2)
	· 2 x HDMI 2.0 (HDCP 2.2)
	· 1 x Thunderbolt™ 3 Upstream port (DP1.4)
	· 1 x Thunderbolt™ 3 Downstream port (DP1.4)
	 2 x SuperSpeed USB 5/10 Gbps (USB 3.2 Gen 1/2) Downstream port
	 1 x External Colorimeter port. This port does not support standard USB devices.
Border width (edge of	7.6 mm (Top/Left/Right)
monitor to active area)	35.81 mm (Bottom)



Adjustability		
Height adjustable stand	160 mm	
Tilt	-5° to 21°	
Swivel	-30° to 30°	
Pivot	-90° to 90°	
NOTE: Do not mount inverse (180°) landscape orientation as it may damage the monitor.		
Dell Display Manager (DDM) Compatibility	Yes	
Security	Security lock slot (cable lock sold separately)	

Resolution Specifications

Model	UP3221Q
Horizontal scan range (HDMI & DP & Thunderbolt™ 3 alternate mode)	15 kHz to 135 kHz (automatic)
Vertical scan range (HDMI & DP & Thunderbolt™ 3 alternate mode)	23 Hz to 86 Hz (automatic)
Maximum preset resolution	3840 x 2160 at 60 Hz

Supported Video Modes

Model	UP3221Q
Video display capabilities (HDMI & DP playback)	480p, 576p, 720p, 1080i, 1080p, QHD, UHD (Interlacing mode is not supported under PBP mode)



Preset Display Modes

Display Mode	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (Horizontal /Vertical)
VESA, 640 x 480	31.5	59.9	25.2	-/-
VESA, 640 x 480	37.5	75.0	31.5	-/-
VESA, 720 x 400	31.5	70.1	28.3	-/+
VESA, 800 x 600	37.9	60.3	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 1200	75.0	60.0	162.0	+/+
VESA, 1920 x 1080	67.5	60.0	148.5	+/+
VESA, 2048 x 1280 - R	78.9	59.9	174.3	+/-
VESA, 3840 x 2160 (DP/Thunderbolt™)	133.3	60.0	533.3	+/-
VESA, 3840 x 2160 (HDMI)	135.0	60.0	594.0	+/+
2560 x 1440	88.787	59.951	241.55	+/-
2048 x 1080	27.0	24.0	74.25	+/-
2048 x 1080	54.0	48.0	148.5	+/-



Multi-Stream Transport (MST) Modes

MST Source	Maximum number of external monitor can be supported	
Monitor	3840 x 2160 at 60 Hz	
3840 x 2160 at 60 Hz	1	



NOTE: Use the cables that came with your monitor for Thunderbolt™ Multi-Stream Transport (MST) connection. See Connecting the monitor for Thunderbolt™ Multi-Stream Transport (MST) function for connection details.

Electrical Specifications

Model	UP3221Q	
Video input signals	HDMI 2.0*/DP 1.4, 600 mV for each differential line, 100 ohm input impedance per differential pair.	
AC input voltage/ frequency/current	100 VAC to 240 VAC / 50 Hz or 60 Hz <u>+</u> 3 Hz / 4.5 A (typical)	
Inrush current	· 120 V: 50 A (Max.) at 0°C (cold start)	
	· 240 V: 100 A (Max.) at 0°C (cold start)	
Power consumption	· 0.2 W (Off mode) ¹	
	· 0.2 W (Standby mode) ¹	
	· 68.3 W (On mode) ¹	
	· 380 W (Max.) ²	
	· 39 W (Pon) ³	
	· 138.37 kWh (TEC) ³	

^{*} Not Support HDMI 2.0 optional specification, include HDMI Ethernet Channel (HEC), Audio Return Channel (ARC), standard for 3D format and resolutions, and standard for 4K digital cinema resolution.

² Max luminance setting with maximum power loading on all USB ports.



¹ As defined in EU 2019/2021 and EU 2019/2013.

³ Pon: Power consumption of On Mode measured with reference to Energy Star test method.

TEC: Total energy consumption in kWh measured with reference to Energy Star test method.

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.

Physical Characteristics

Model	UP3221Q
Connector Type	· 1 x DP 1.4 (HDCP 2.2)
	· 2 x HDMI 2.0 (HDCP 2.2)
	· 1 x Thunderbolt™ 3 Upstream port (DP1.4)
	· 1 x Thunderbolt™ 3 Downstream port (DP1.4)
	 2 x SuperSpeed USB 5/10 Gbps (USB 3.2 Gen 1/2) Downstream port
	1 x External Colorimeter port. This port does not support standard USB devices.
Signal cable type	· Digital: HDMI, 19 pins
	· Digital: DisplayPort, 20 pins
	 Digital: Thunderbolt™ 3, 24 pins
	 Universal Serial Bus: USB Type-C to Type-A

NOTE: Dell monitors are designed to work optimally with the video cables that are shipped with your monitor. As Dell does not have control over the different cable suppliers in the market, the type of material, connector and process used to manufacture these cables, Dell does not guarantee video performance on cables that are not shipped with your Dell monitor.



Dimensions (with stand)	
Height (extended)	623.7 mm (24.55 in.)
Height (compressed)	463.7 mm (18.25 in.)
Width	712.5 mm (28.05 in.)
Depth	250.0 mm (9.84 in.)
Dimensions (without stand)	
Height	435.9 mm (17.16 in.)
Width	712.5 mm (28.05 in.)
Depth	76.1 mm (3.00 in.)
Stand dimensions	
Height (extended)	488.3 mm (19.22 in.)
Height (compressed)	441.5 mm (17.38 in.)
Width	345.0 mm (13.58 in.)
Depth	250.0 mm (9.84 in.)
Weight	
Weight with packaging	24.33 kg (53.62 lb)
Weight with stand assembly, hood and cables	18.07 kg (39.83 lb)
Weight without stand assembly (with cable cover attached) (For wall mount or VESA mount considerations - no cables)	11.31 kg (24.93 lb)
Weight of stand assembly	5.59 kg (12.32 lb)
Weight of hood	0.80 kg (1.76 lb)
Front frame gloss	5 +/- 1.5 GU



Environmental Characteristics

Model	UP3221Q		
Compliant Standards			
· RoHS-compliant			
BFR/PVC-free (Halogen	-free) excluding external cables		
 Arsenic-free glass and M 	ercury-free for the panel only		
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	10% to 90% (non-condensing)		
Non-operating	· Storage: 10% to 90% (non-condensing)		
	· Shipping: 10% to 90% (non-condensing)		
Altitude			
Operating	3,048 m (10,000 ft) (maximum)		
Non-operating	12,192 m (40,000 ft) (maximum)		
Thermal dissipation	· 1,297 BTU/hour (maximum)		
	· 239 BTU/hour (typical)		



Pin Assignments

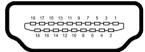
DisplayPort Connector



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



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	



Plug and Play Capability

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 system 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**.

Universal Serial Bus (USB) Interface

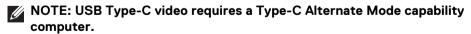
This section gives you information about the USB ports that are available on the monitor.



NOTE: This monitor is SuperSpeed USB 5/10 Gbps (USB 3.2 Gen 1/2) compatible.

Transfer Speed	Data Rate	Power Consumption
Super-speed	10 Gbps	4.5 W (Max, each port)
High speed	480 Mbps	4.5 W (Max, each port)
Full speed	12 Mbps	4.5 W (Max, each port)

Thunderbolt™ 3/ USB Type-C	Description
Video	DP1.2 (Passive cable)
	DP1.4 (Active cable)
Data	USB 2.0
	USB 3.2 (Active, Thunderbolt™ 3 only)
Power Delivery (PD)	Thunderbolt™ 3 Upstream port: Up to 90 W (typical)
	Thunderbolt™ 3 Downstream port: Up to 15 W (typical)





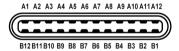


USB Downstream Connector



Pin Number	9-pin Side of the Connector	
1	VCC	
2	D-	
3	D+	
4	GND	
5	SSRX-	
6	SSRX+	
7	GND	
8	SSTX-	
9	SSTX+	

Thunderbolt™ 3 Connector



Pin Number	Signal Name	Pin Number	Signal Name
A1	GND	B1	Cable Detection
A2	TX1+	B2	TX2+
A3	TX1-	B3	TX2-
A4	VBUS	B4	VBUS
A5	CC1	B5	CC2
A6	D+	B6	D+
A7	D-	B7	D-
A8	SBU1	B8	SBU2
A9	VBUS	B9	VBUS



A10	RX2-	B10	RX1-
A11	RX2+	B11	RX1+
A12	GND	B12	GND

USB Ports

- 1 x Thunderbolt™ 3 downstream (USB Type-C compatible) bottom
- · 1 x Thunderbolt™ 3 upstream (USB Type-C compatible) bottom
- · 2 x SuperSpeed USB 5/10 Gbps (USB 3.2 Gen 1/2) downstream bottom
- NOTE: SuperSpeed USB 5/10 Gbps (USB 3.2 Gen 1/2) functionality requires a SuperSpeed USB 5/10 Gbps (USB 3.2 Gen 1/2)-capable computer.
- NOTE: The USB ports on the monitor work only when the monitor is turned On or in Standby mode. If you turn Off the monitor and then turn it On, the attached peripherals may take a few seconds to resume normal functionality.



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 Dell Monitor Quality and Pixel Policy, see Dell Support site at: http://www.dell.com/pixelguidelines.

Maintenance Guidelines

Cleaning Your Monitor

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

For best practices, follow the 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, warm 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.



Setting Up the Monitor

Attaching the Stand

- NOTE: The stand is detached when the monitor is shipped from the factory.
- NOTE: This is applicable for a monitor with a stand. When any other stand is bought, please refer to the respective stand setup guide for the set up instructions.
- \triangle CAUTION: Do not remove the monitor from the packaging box before attaching 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. Remove the stand riser, stand base, I/O cover, and hood from the packaging cushion.



- 3. Insert the stand base blocks fully into the stand slot.
- **4.** Lift the screw handle and turn the screw clockwise.
- **5.** After tightening the screw, fold the screw handle flat within the recess.





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



- 7. 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.





8. Place the monitor upright with the protective cushion attached.

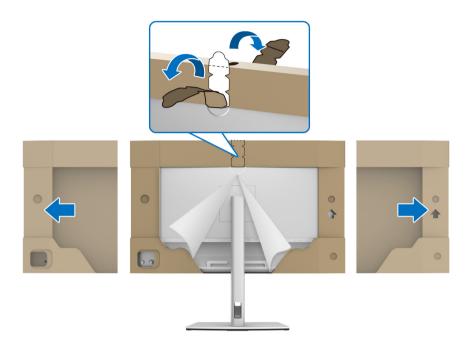


NOTE: Lift the monitor carefully to prevent it from slipping or falling.

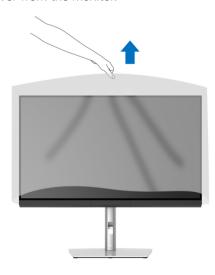
 \triangle CAUTION: Do not hold or lift the monitor by the colorimeter tray when moving the monitor.



9. Tear apart the zipper die-cut in the middle of the protective cushion, then remove the protective cushion from the left and right side of the monitor.



10. Remove the cover from the monitor.





Attaching the Monitor Hood

To install your monitor hood:

1. Take out the hood that came with the monitor.



2. Unfold the hood with the "U" channel strips on both flaps facing inwards.





3. Align the monitor side within the "U" channel strips.



4. Slide the hood all the way down.



Connecting Your Monitor

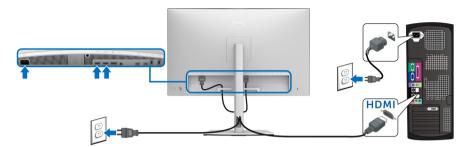
- MARNING: Before you begin any of the procedures in this section, follow the Safety Instructions.
- NOTE: Do not connect all cables to the computer at the same time.

To connect your monitor to the computer:

- **1.** Turn Off your computer and disconnect the power cable.
- **2.** Connect the HDMI/DP/Thunderbolt $^{\text{TM}}$ 3 Active cable from the monitor to your computer or device.



Connecting the HDMI cable



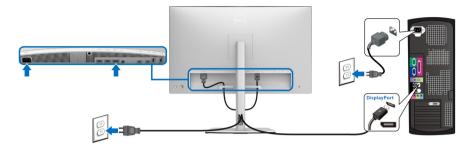
- NOTE: The default out of factory setting in the UP3221Q is HDMI 2.0. If the monitor fails to show any content after the HDMI cable is connected, follow the procedures below to change the settings from HDMI 2.0 to HDMI 1.4:
 - · Press the **Joystick** to activate the OSD menu.
 - Toggle the **Joystick** to highlight **Input Source**, then press the joystick to enter the submenu.
 - · Toggle the **Joystick** to highlight **HDMI**.
 - Press and hold the **Joystick** for approximately 10 seconds, and the HDMI configuration message appears.
 - · Toggle the **Joystick** to select **Yes** and change the settings.



Repeat the above steps to change the HDMI format settings if necessary.

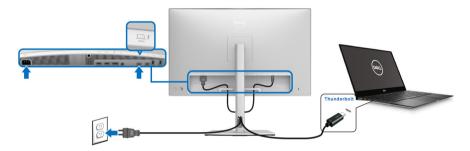


Connecting the DisplayPort (DP to DP) cable



NOTE: The default out of factory setting in the UP3221Q is DP 1.4.

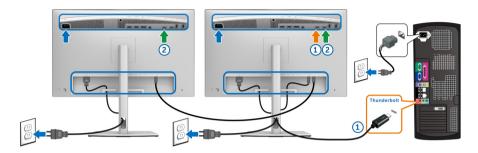
Connecting the Thunderbolt™ 3 Active cable



- MOTE: Use the Thunderbolt™ 3 Active cable shipped with monitor only.
 - This port supports DisplayPort Alternate Mode DP1.4.
 - The Thunderbolt[™] 3 power delivery compliant port (PD Version 3.0) delivers up to 90 W of power.
 - If your notebook requires more than 90 W to operate and the battery is drained, it may not be powered up or charged with the USB PD port of UP3221Q.
 - Thunderbolt™ 3 is not supported on versions of Windows prior to Windows 10.
- NOTE: The UP3221Q monitor ships with a USB-C Thunderbolt™ 3
 Active cable. The USB-C DP cable is not included. If you are using a computer with USB-C DP connection, please purchase the USB-C DP cable separately. For more information, go to: www.dell.com/UP3221Q



Connecting the monitor for Thunderbolt™ Multi-Stream Transport (MST) function



NOTE: UP3221Q supports the Thunderbolt™ MST feature. To make use of this feature, your PC must support Thunderbolt™ feature.

The default out of factory setting in the UP3221Q is Alternate Mode DP1.4.

To set up MST connection, please use only Thunderbolt™ 3 Active cable that came with your monitor and perform the below steps:

- 1. Turn Off your computer and disconnect the power cable.
- 2. Connect the Thunderbolt™ 3 Active cable from the Thunderbolt™ upstream port of Monitor One to your computer or device.
- 3. Connect the other Thunderbolt[™] 3 Active/Passive cable or USB Type-C cable from the Thunderbolt™ downstream port of Monitor One to the Thunderbolt™ upstream port of Monitor Two. Refer to the following table for available types of cable.

You can use the following cable type for MST connection:

Host	UP3221Q Monitor One	UP3221Q Monitor Two
Thunderbolt™ 3		Active cable*
	Active cable*	Passive cable**
		USB Type-C cable
Thunderbolt™ 2	Active or Passive cable	N/A
USB Type-C	Passive cable**	N/A

^{*} Thunderbolt™ 3 (USB Type-C) Active Cable

MOTE: Use the Thunderbolt™ 3 Active cable that came with your monitor.



^{**} Thunderbolt™ 3 (USB Type-C) Passive Cable

- NOTE: If you are using a computer with USB-C DP connection, please purchase the USB-C DP cable separately. For more information, go to: http://www.dell.com.
- NOTE: For information on purchasing a Thunderbolt™ 3 Passive cable, go to: Purchasing a Thunderbolt™ 3 Passive Cable.

Connecting the USB Type-C to Type-A cable

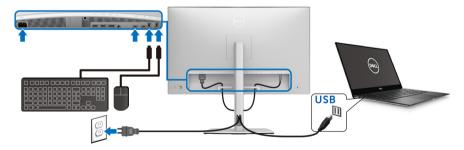
NOTE: To prevent data damage or loss, before unplugging the USB upstream port, make sure that NO USB storage devices are in use by the computer connected to the monitor's Thunderbolt™ 3 upstream port.

After you have completed connecting the DisplayPort/HDMI cable, follow the procedures below to connect the USB Type-C to Type-A cable to the computer and complete your monitor setup:

- 1. Connect the computer: connect the Thunderbolt™ 3 upstream port with the USB Type-C end of the cable (cable supplied).
- Connect the USB Type-A end of the cable to an appropriate USB port on your computer.
- **3.** Connect the USB peripherals to the SuperSpeed USB 5/10 Gbps (USB 3.2 Gen 1/2) downstream ports on the monitor.

NOTE: The transfer speed for this connection is 5 Gbps.

4. Plug the power cables for your computer and monitor into a nearby outlet.



5. Turn On the monitor and the computer.
If your monitor displays an image, installation is complete. If it does not display an image, see Common Problems.



- **6.** Use the cable slot on the monitor stand to organize the cables.
- NOTE: The USB connection only offers USB data transfer in this scenario.
- △ CAUTION: The graphics are used for the purpose of illustration only. Appearance of the computer may vary.

Organizing Your Cables

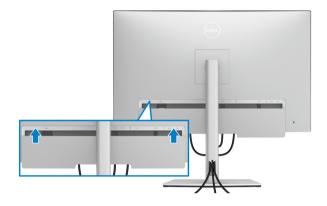


After attaching all necessary cables to your monitor and computer, (See **Connecting Your Monitor** for cable attachment,) organize all cables as shown above.



Attaching the I/O Cover

Align and place the I/O Cover within the recess compartment.



NOTE: Ensure that all cables pass through cable-management clip on the monitor.

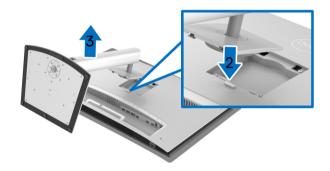


Removing the Monitor Stand

- NOTE: To prevent the curved LCD screen from being scratched and damaged while removing the stand, ensure that the monitor is placed on a soft, clean foam. Direct contact with hard objects might cause damage to the curved monitor.
- NOTE: This is applicable for a monitor with a stand. When any other stand is bought, please refer to the respective stand setup guide for the set-up instructions.

To remove the stand:

- **1.** Place the monitor on a soft cloth or cushion.
- 2. Press and hold the stand release button.
- **3.** Press and lift the cover latch to release and remove the cover.





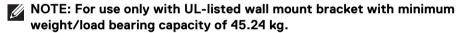
Wall Mounting (Optional)



(Screw dimension: M4 x 10 mm).

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

- 1. Place the monitor panel 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.

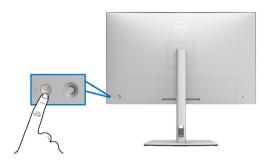




Operating the Monitor

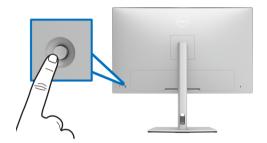
Power On the Monitor

Press the **Power Button** to turn on the monitor.



Using the Joystick Control

Use the **Joystick** control on the rear of the monitor to make OSD adjustments.



- 1. Press the Joystick button to launch the OSD main menu.
- 2. Move the **Joystick** up/down/left/right to toggle between options.
- 3. Press the **Joystick** button again to confirm the settings and exit.

Joystick	Description
	 When the OSD menu is on, press the button to confirm the selection or save the settings. When the OSD menu is off, press the button to launch the OSD main menu. See Accessing the Menu System.







- · For 2-way (right and left) directional navigation.
- · Move right to enter the submenu.
- · Move left to exit from the submenu.
- · For 2-way (up and down) directional navigation.
- · Toggles between the menu items.
- Increases (up) or decreases (down) the parameters of selected menu item.

Using the On-Screen Display (OSD) Menu

Accessing the Menu Launcher

Press or toggle the **Joystick** to launch the Menu Launcher.



The following table describes the Menu Launcher functions:

M	lenu Launcher Icon	Description	
1	\bigcirc	Select this icon to set the Input Source .	
	Shortcut key/ Input Source		
2		Select this icon to display the monitor's current status.	
	Shortcut key/ Display Info		
3		Select this icon to start the color calibration process.	
	Shortcut key/ Calibrate Now	p. 66666.	



4	(ba)	Select this icon to start the color validation process.
	Shortcut key/	
	Validate Now	
5	\bigcirc	Select this icon to set Color Space setting.
	Shortcut key/	
	Color Space	
6		Select this icon to launch the On-Screen Display
		(OSD). See Accessing the Menu System.
	Menu	
7	×	Select this icon to exit the OSD main menu.
	Exit	

Accessing the Menu System

NOTE: If you change the settings and then either proceed to another menu or exit the OSD menu, the monitor automatically saves those changes. The changes are also saved if you change the settings and then wait for the OSD menu to disappear.

lcon	Menu and Submenus		Descri	ption
	Color	Use Color to	adjust the colo	r setting mode.
		ONL UltraSharp 32 Monitor		
		€ Color	Color Space	> Native
		• Luminance	Reset Color	
		◆ Input Source		
		☐ Display		
		□ PBP		
		 Calibration 		
		▶ Validation		
		Scheduler Menu		
		⊞ Menu		
		III Others		
		EL Galeis		



Color Space

When you select Color Space, you can choose one of the following: S1: DCI P3 D65 G2.4 L100, S2: BT.709 D65 BT.1886 L100, S3: BT.2020 D65 BT.1886 L100, S4: sRGB D65 sRGB L120, S5: Adobe RGB D65 G2.2 L160, S6: Adobe RGB D50 G2.2 L160, Native, H1: HDR10 D65 ST.2084(PQ) L1000, H2: HDR D65 HLG L1000, User 1, User 2, User 3, CAL 1, or CAL 2.

NOTE: The factory preset mode **S1: DCI P3 D65 G2.4 L100** differs from DCI-P3 spec (P3 White point, 48 cd/m2).

NOTE: User may use either User 1, User 2, or User 3 to set preferred color space parameter. E.g.: Color Space > User 1 > Color Gamut (DCI-P3) > White Point (D50) > Gamma (2.6) > Luminance (48 cd/m2).

Manual HDR mode without color volume metadata presented in video content may be achieved via **User 1**, **User 2**, or **User 3**, allowing force selection of HDR EOTF between ST.2084(PQ) and HLG.

NOTE: Calibrate **User 1**, **User 2**, or **User 3** settings directly to **CAL 1** or **CAL 2**.

NOTE: Factory Reset will not remove calibrated data. User may go to Color > Color Space > Reset Color Space S# (1~6) to manually remove selected calibration data. Calibration data of CAL 1 and CAL 2 cannot be removed from the OSD.

NOTE: HDR color space options are available only when HDR input source is detected.



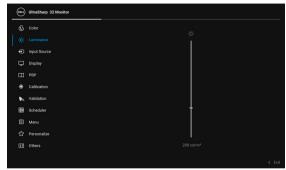
Reset Color

Reset your monitor color settings to the factory settings.



Luminance

Luminance adjusts the luminance of the backlight.





Toggle the **Joystick** up to increase the luminance and toggle the **Joystick** down to decrease the luminance (min. 45 / max. 350).

NOTE: Changes made in **Luminance** menu will not be saved in the preset color space.

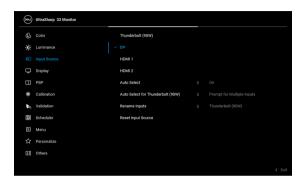
NOTE: Luminance is grayed out when **Color Space** is set to **CAL 1** or **CAL 2**.





Input Source

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





Thunderbolt (90 W)	Select the Thunderbolt (90 W) input when you are using the Thunderbolt [™] 3 connector. Press the Joystick to select the Thunderbolt (90 W) input source.
DP	Select the DP input when you are using the DisplayPort (DP) connector. Press the Joystick to select the DP input source.
HDMI 1	Select the HDMI 1 input when you are using the HDMI 1 connector. Press the Joystick to select the HDMI 1 input source.
HDMI 2	Select the HDMI 2 input when you are using the HDMI 2 connector. Press the Joystick to select the HDMI 2 input source.
Auto Select	Turning on the function allows you to scan for available input sources.



Thunderbolt (90 W)

Auto Select for Allows you to set Auto Select for Thunderbolt (90 W) to:

- Prompt for Multiple Inputs: Always displays the "Switch to Thunderbolt Video Input" message for you to choose whether to switch or not.
- Yes: Always switch to Thunderbolt (90 W) video input (without asking) when the Thunderbolt™ 3 Active cable is connected.
- No: Never automatically switch to Thunderbolt (90 W) video input when the Thunderbolt™ 3 Active cable is connected.

NOTE: Auto Select for Thunderbolt (90 W) is only available when Auto Select is turned On.

Rename Inputs Allows you to rename the input source.

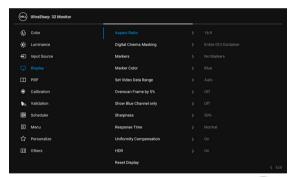
Reset Input Source

Reset your monitor input settings to the factory settings.



Display

Use **Display** to adjust images.





Aspect Ratio

Adjusts the image ratio to **Auto Resize**, **17:9**, **16:9**, or Pixel-for-Pixel



Digital Cinema Masking	Adjusts the Digital Cinema Masking to Entire DCI Container, DCI 1.85:1, DCI 2.39:1, DCI 2.35:1 or Masking Opacity .
	NOTE: When Masking Opacity is selected, toggle the Joystick up or down to adjust the level.
Markers	Adjusts the Markers to No Markers, 1.85:1, 2.39:1, 2.35:1, 2:1, 1:1, 16:9 Extraction, 16:9 Action Safe, 16:9 Title Safe, 4:3 Extraction, 4:3 Action Safe, 4:3 Title Safe, Center Crosshair, or Thirds.
Marker Color	Adjusts the Marker Color to Gray , Red , Green , or Blue .
Set Video Data Range	Adjusts the Set Video Data Range to Auto , Full , or Limited .
Overscan Frame by 5%	Allows you to set the Overscan Frame by 5% On or Off.
	NOTE: This function will only apply to the main window in PBP Mode .
Show Blue Channel only	Allows you to set the Show Blue Channel only to On or Off .
	NOTE: This function will only apply to the main window in PBP Mode .
Sharpness	This feature can make the image look sharper or softer. Toggle the Joystick up or down to adjust the sharpness from '0' to '100'.



Response Time Allows you to set the Response Time to Normal,

Fast, or Off.

NOTE: The **Response Time** will automatically reset to panel default during calibration and validation to ensure color accuracy.

NOTE: Response time selection:

4K:

- · 24 Hz, 30 Hz (Response time selectable)
- 48 Hz, 50 Hz (Response time not selectable)

Non-4K:

 24 Hz, 30 Hz, 48 Hz, 50 Hz, 60Hz (Response time) selectable)

Uniformity Compensation

Select screen uniformity compensation settings. **On** is factory calibrated setting by default. Uniformity

Compensation adjusts different areas of the screen with respect to the center to achieve uniform brightness and color over the entire screen.

NOTE: User is advised to use factory default luminance setting when **Uniformity Compensation** is turned on. For other luminance level setting, the uniformity performance may deviate from the data shown on the Factory Calibration Report.

HDR

The HDR (High Dynamic Range) feature enhances the display output by optimally adjusting contrast and the ranges of color and luminosity to resemble true-to-life visuals. The default setting is **On**.

NOTE: HDR must be turned **On** to enable input devices to output HDR signal.

NOTE: When the monitor is processing HDR content. Color Space and Luminance will be disabled.

Reset Display

Select this option to restore default display settings.





PBP

This function brings up a window displaying image from another input source.







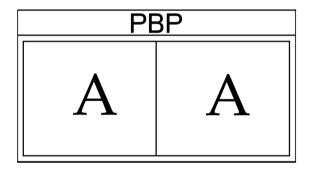
PBP Mode

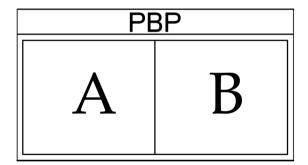
Adjusts the **PBP** (Picture by Picture) mode to ${\bf AA}$, ${\bf AB}$, or ${\bf Off}$.

Press the **Joystick** to enable PBP mode.











PBP (Sub)

Select between the different video signals that may be connected to your monitor for the PBP sub-window. Press the **Joystick** to select the PBP sub-window source signal.





PBP Input Source Toggle

Select to toggle between the input sources in PBP mode. Press the **Joystick** to switch between input sources in PBP mode.

NOTE: Not available when **PBP** mode is set to **AA**.

Video Swap

Select to swap videos between main window and subwindow in PBP mode. Press the **Joystick** to swap main window and sub-window.

Gamma (Sub)

Adjusts the **Gamma (Sub)** to **1.6**, **1.8**, **2.0**, **2.2**, **2.4**, **2.6**, **BT.1886**, **sRGB**, or **Native**.

NOTE: Not available when **Color Gamut (Sub)** is set to **Native**.

White Point (Sub)

Adjusts the White Point (Sub) to D50, D55, D60,

D63, **D65**, **D93**, or **Native**.

NOTE: Not available when **Color Gamut (Sub)** is set to **Native**.

Color Gamut (Sub)

Adjusts the Color Gamut (Sub) to DCI P3, BT.709, BT.2020, sRGB, Adobe RGB, or Native.

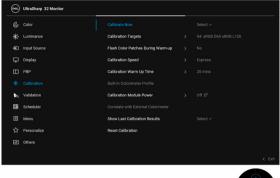


Sharpness	Adjust the sharpness level of the picture in PBP Mode.
(Sub)	Toggle the Joystick up or down to adjust the sharpness.
Audio	Allows you to set the audio source from the main window or the sub-window.
Video Data Range	Adjusts the Video Data Range to Auto, Full, or Limited.
Reset PBP	Select this option to restore default PBP settings.
Calibration	Derform color colibration with the built in colorimator



Calibration

Perform color calibration with the built-in colorimeter.





Calibrate Now Allows you to start color calibration.

NOTE: Select desired calibration targets before starting

calibration process.

NOTE: When using a supported external colorimeter, ensure that it is plugged into the dedicated USB port before starting calibration process.



Calibration Targets	Allows you to set the calibration target to S1: DCI P3 D65 G2.4 L100, S2: BT.709 D65 BT.1886 L100, S3: BT.2020 D65 BT.1886 L100, S4: sRGB D65 sRGB L120, S5: Adobe RGB D65 G2.2 L160, S6: Adobe RGB D50 G2.2 L160, H1: HDR10 D65 ST.2084(PQ) L1000, H2: HDR D65 HLG L1000, User 1, User 2, User 3, CAL 1, or CAL 2. NOTE: The following Color Space options are not available as calibration targets: Native, User 1, User 2,
	and User 3 .
Flash Color Patches During Warm-up	Allows you to set the Flash Color Patches During Warm-up to Yes or No.
Calibration Speed	Allows you to set the calibration speed to Express or Comprehensive .
	NOTE: When Express is selected, the calibration time is approximately 4 minutes. When Comprehensive is selected, the calibration time is approximately 10 minutes.
Calibration Warm Up Time	Set the warm up time to 20 mins or 30 mins .
Built-in Colorimeter Profile	Allows you to set the Built-in Colorimeter Profile to Default or Correlated (correlated with external colorimeter).
	Switching the profile may cause inconsistent result to previous calibration. It is recommended to re-calibrate the monitor after switching profile.
	NOTE: User can apply different calibrator profiles. To select Correlated profile, user must correlate the monitor with an external colorimeter via Calman Ready/Calman Powered first. When correlation is under processing, Calman Ready/Calman Powered will drive the monitor's internal calibrator to the position and start the process with the external colorimeter. After



completing the complement of the correlation, Calman Ready/Calman Powered will set the correlation parameters to the monitor to enable this item.

Calibration Module Power	Allows you to set the Calibration Module Power to \mathbf{On} or $\mathbf{Off} \varnothing$.
	NOTE: Calibration Module Power must be On to enable Calibration function.
Correlate with External Colorimeter	This function allows you to correlate the internal colorimeter with the readings of a Dell approved external colorimeter, generating a colorimeter profile for the internal colorimeter. Go to https://downloads.dell.com/manuals/all-products/esuprt_electronics_accessories/esuprt_electronics_accessories_monitors/dell-up3221q-monitor_reference-guide4_en-us.pdf for list of Dell approved external colorimeters. To use this function:
	 Connect the external colorimeter to the monitor via designated port. See External Colorimeter port.
	From the OSD, go to Correlate with External Colorimeter, select Select and press OK.
	Follow on screen instructions to position the external colorimeter and select Yes to proceed with the process.
Show Last Calibration Results	Allows you to examine the most recent calibration results.
Reset Calibration	Select this option to restore default Calibration settings.

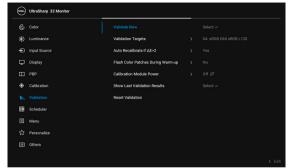


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Validation

Perform validation on color calibration with the built-in colorimeter.





Validate Now

Allows you to start color validation.

NOTE: Select desired validation targets before starting calibration process.

NOTE: When using a supported external colorimeter. ensure that it is plugged into the dedicated USB port before starting validation process.

NOTE: It is recommended to always use the same colorimeter for calibration and validation.

Validation **Targets**

Allows you to set the validation target to S1: DCI P3 D65 G2.4 L100, S2: BT.709 D65 BT.1886 L100. S3: BT.2020 D65 BT.1886 L100, S4: sRGB D65 sRGB L120, S5: Adobe RGB D65 G2.2 L160. S6: Adobe RGB D50 G2.2 L160. H1: HDR10 D65 ST.2084(PQ) L1000. H2: HDR D65 HLG L1000. CAL 1*. or CAL 2*.

*For targets supported by built-in calibration.

Auto Recalibrate if $\Delta F2000 > 2$

Allows you to set the **Auto Recalibrate** if Δ **E2000 > 2** to Yes or No

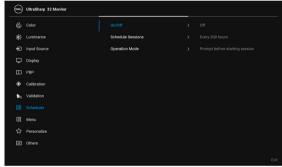
NOTE: Function name on your display may vary.

Flash Color Warm-up

Allows you to set the Flash Color Patches During Patches During Warm-up to Yes or No.



Calibration Module Power	Allows you to set the Calibration Module Power to On or Off <i>∅</i> .
	NOTE: Calibration Module Power must be On to enable Validation function.
Show Last Validation Results	Allows you to examine the most recent validation results.
Reset Validation	Select this option to restore default Validation settings.
Scheduler	Set schedule for auto calibration or validation. Allows you to set Scheduler to Off , Calibration , Validation , or Calibration + Validation .





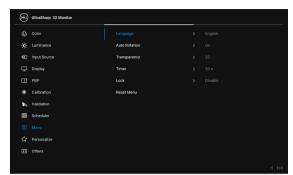
Schedule Sessions	Allows you to set the Schedule Sessions to Every 200 Hours or at user preferred interval (Quarterly , Monthly , Weekly , or Daily).
Operation Mode	Allows you to set the Operation Mode to Prompt before starting session or Carry out in Standby Mode.





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.





Language

Language options set the OSD display to one of the eight languages (English, Spanish, French, German, Brazilian Portuguese, Russian, Simplified Chinese or Japanese).

Auto Rotation

Allows you to set the monitor **Auto Rotation** to **On** or **Off**.

Transparency

Select this option to change the menu transparency by toggling the **Joystick** up or down (Minimum: $0 \sim$ Maximum: 100).

Timer

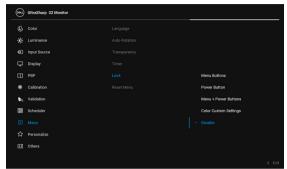
OSD Hold Time: sets the length of time the OSD will remain active after the last time you pressed a button.

Toggle the **Joystick** up or down to adjust the slider in 1 second increments, from 5 to 60 seconds.



Lock

With the control buttons on the monitor locked, you can prevent people from accessing the controls. It also prevents accidental activation in multiple monitors side-by-side setup.





- Menu Buttons: All Joystick functions (except the Power Button) are locked and not accessible by the user.
- Power Button: Only the Power Button is locked and not accessible by the user.
- Menu + Power Buttons: Both the Joystick & Power Button are locked and not accessible by the user.
- Color Custom Settings: Color menu settings are locked and not accessible by the user.

The default setting is Disable.

Alternative Lock Method [for **Joystick**]: You can also toggle and hold the **Joystick** to the left for 4 seconds to set the lock options.

NOTE: To unlock, toggle and hold the **Joystick** to the left for 4 seconds.

Reset Menu

Reset all OSD settings to the factory preset values.





Personalize





Shortcut Key 1	Allows you to choose a feature from Color Space ,	
Shortcut Key 2	Luminance, Input Source, Aspect Ratio, Digital Cinema Masking, Markers, PBP Mode, PBP Input Source Toggle, Video Swap, Calibrate Now, Show	
Shortcut Key 3		
Shortcut Key 4	Last Calibration Results, Validation, Show Last	
Shortcut Key 5	Validation Results, or Display Info and set it as a shortcut key.	
Power Button LED	Allows you to set the power LED indicator on or off to save energy.	
USB-C Charging (90 W)	Allows you to enable or disable the Always On USB Type-C Charging function during monitor Power Off mode.	
Other USB Charging	Allows you to enable or disable USB Type-A and USB Type-C Downstream Ports charging function during monitor standby mode.	
	NOTE: This option is only available when the USB Type-C (Upstream Port) cable is unplugged. If the USB Type-C cable is connected, Other USB Charging follows the USB host power status and the option is not accessible.	
Fast Wakeup	Allows you to set the Fast Wakeup function to \mathbf{On} or $\mathbf{Off}_{\mathcal{D}}$.	



before Use

Warm Up Time Allows you to turn the monitor warm up On or Off, or set it to automatically activate at the scheduled Day

and Time. The default is Off.

Reset

Reset all settings under the **Personalize** menu to the Personalization factory preset values



Others





Display Info

Displays the monitor's current settings.

Set Date and Time

Set the date and time for the monitor.

NOTE: Please sync the date and time when:

- · Setting up the monitor for the first time.
- · Monitor has been disconnected from power for more than 10 days.



DDC/CI

DDC/CI (Display Data Channel/Command Interface) allows your monitor parameters (brightness, color balance, and etc.) to be adjustable via the software on your computer.

You can disable this feature by selecting **Off**. Enable this feature for best user experience and optimum performance of your monitor.





LCD Conditioning

Helps reduce minor cases of image retention. Depending on the degree of image retention, the program may take some time to run. You can enable this feature by selecting **On**.







Displays the firmware version of your monitor. Displays the service tag serial number of your monitor. Allows you to set the Acknowledge SDK access function to On or Off .
Allows you to set the Acknowledge SDK access
•
Reset all settings under the Others menu to the factory preset values.
: Reset all settings to the factory preset values.
NOTE: The following settings will not reset after Factory Reset : Calibration and validation data,

OSD Warning Messages

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



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

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 3840 x 2160.



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



When you change the default setting of power saving features for the first time, such as **Calibration Module Power**, **USB-C Charging (90 W)**, **Other USB Charging**, or **Fast Wakeup**, the following message appears:



NOTE: If you select Yes for any one of the features mentioned above, the message will not appear next time when you intend to change the settings of these features. When you perform a factory reset, the message will appear again.



You will see the following message before the **Lock** function is activated:



NOTE: The message may be slightly different according to the selected settings.

When the monitor enters the **Standby Mode**, the following message appears:



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

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

If you press any button other than the **Power Button**, the following message will appear depending on the selected input:



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



If either **Thunderbolt (90 W)**, **HDMI**, or **DP** input is selected and the corresponding cable is not connected, a floating dialog box as shown below appears.



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

When the monitor is under DP/HDMI input and a Thunderbolt[™] 3 Active cable is connected to a notebook that supports DP Alternate Mode, if **Auto Select for Thunderbolt (90 W)** is enabled, the following message appears:



When Factory Reset is selected, the following message appears:





When Yes is selected, the following message appears:



See **Troubleshooting** for more information.



Setting the Maximum Resolution

To set the maximum resolution for the monitor:

In Windows[®] 7, Windows[®] 8 and Windows[®] 8.1:

- **1.** For Windows[®] 8 and 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 3840 x 2160.
- 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 **3840** \times **2160**.
- 4. Click Apply.

If you do not see 3840×2160 as an option, you may need to check whether your graphic card supports 4K@60 Hz. If it does support 4K@60 Hz, update your graphic driver. If it does not support 4K@60 Hz, depending on your computer, complete one of the following procedures:

If you have a Dell desktop or portable computer:

 Go to http://www.dell.com/support, enter your service tag, and download the latest driver for your graphics card.

If you are using a non-Dell computer (portable or desktop):

- Go to the support site for your computer and download the latest graphic drivers.
- · Go to your graphics card website and download the latest graphic drivers.

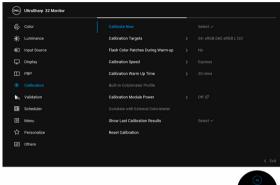


Performing Color Calibration

Perform **Calibration** with the built-in colorimeter to calibrate the color of your monitor.

Using the OSD menu

1. Using the OSD menu, set the calibration criteria based on your preference. Then select **Calibrate Now**.



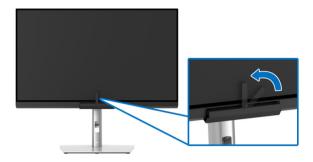


2. The following message appears, select Yes to continue the process.





3. Calibration will start automatically.



Using the Shortcut Key with video signal

- 1. Press the **Joystick** to display the shortcut keys.
- 2. Select the o icon.

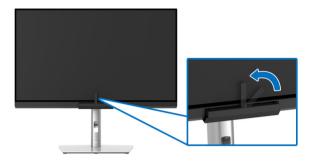


 ${\bf 3.}$ The following message appears, select ${\bf Yes}$ to continue the process.





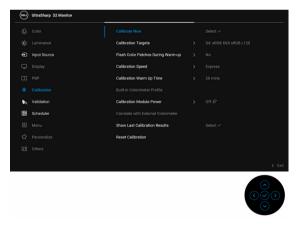
4. Calibration will start automatically.



Using the Shortcut Key without video signal

You can perform calibration for the monitor without acquiring an input signal from the computer.

- 1. Press the Joystick to display the OSD menu.
- 2. Toggle to the **Calibration** menu and set the calibration criteria based on your preference. Then select **Calibrate Now**.

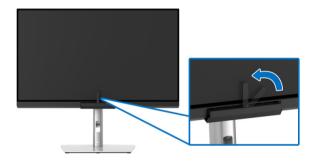




3. The following message appears, select **Yes** to continue the process.



4. Calibration will start automatically.



NOTE: Calibration at Portrait Mode is not supported.

NOTE: For detailed functionality, see Calibration.



Stopping the Calibration Process

You can stop the calibration process at any time.

1. During calibration process, press the **Joystick**, the following message appears.



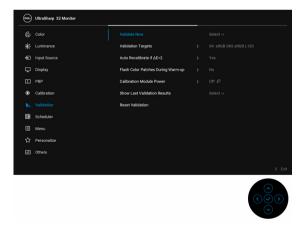
2. Select Yes to stop the process.

Performing Color Validation

Perform **Validation** on color calibration with the built-in colorimeter.

Using the OSD menu

1. Using the OSD menu, set the validation criteria based on your preference. Then select **Validate Now** to start the validation process.

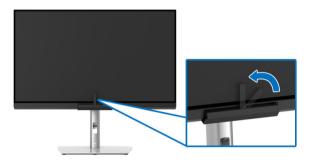




2. The following message appears, select Yes to continue the process.



3. Validation will start automatically.



Using the shortcut key with video signal

- 1. Press the **Joystick** to display the shortcut keys.
- 2. Select the loon.

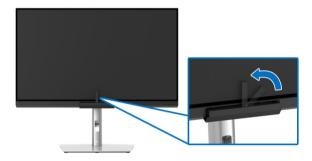




3. The following message appears, select **Yes** to continue the process.



4. Validation will start automatically.



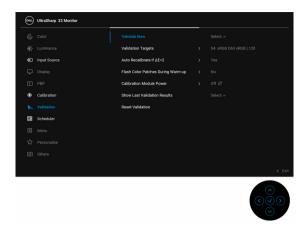
Using the shortcut key without video signal

You can perform validation for the monitor without acquiring an input signal from the computer.

1. Press the **Joystick** to display the OSD menu.



2. Toggle to the **Validation** menu and set the validation criteria based on your preference. Then select **Validate Now**.



3. The following message appears, select **Yes** to continue the process.



4. Validation will start automatically.





- NOTE: Validation at Portrait Mode is not supported.
- NOTE: For detailed functionality, see Validation.

Stopping the Validation Process

You can stop the validation process at any time.

1. During validation process, press the **Joystick**, the following message appears.



2. Select Yes to stop the process.



Requirements to view or playback HDR content

(1) via Ultra BluRay DVD or Game consoles

Ensure the DVD player and Game consoles are HDR capable, e.g. Panasonic DMP-UB900, x-Box One S, PS4 Pro. Download and install the appropriate graphics card drivers (for PC applications), see below.

(2) via PC

Ensure the graphics card used is HDR capable, i.e., HDMI2.0a (with HDR option) compliant and HDR graphics driver is installed. HDR capable player application must be used, e.g. Cyberlink PowerDVD 17, Windows 10 Movies and TV app.

For example Dell XPS 8910, Alienware Aurora R5, bundled with the below graphics cards.

Dell Graphics driver with HDR support: Refer to Dell support page to download the latest graphics driver that supports HDR playback for your PC/Notebook.

Nvidia

HDR capable Nvidia graphics cards: GTX1070, GTX1080, P5000, P6000, etc. For a full range of HDR capable Nvidia graphics cards, refer to Nvidia website www.nvidia.com

Driver that supports Full Screen Playback mode (e.g. PC games, UltraBluRay players), HDR on Win 10 Redstone 2 OS: 381.65 or later.

AMD

HDR capable AMD graphics cards: RX480, RX470, RX460, WX7100, WX5100, WX4100, etc. For a full range of HDR capable AMD graphics cards, refer to www.amd.com. Check HDR driver support information and download the latest driver from www.amd.com

Intel (Integrated Graphics)

HDR capable system: CannonLake or later

Suitable HDR player: Windows 10 Movies and TV app

OS with HDR support: Windows 10 Redstone 3

Driver with HDR support: visit downloadcenter.intel.com for the latest HDR

driver

3.HDR playback via OS (e.g. playback of HDR in a window within desktop) requires Win 10 Redstone 2 or later with appropriate player applications, e.g. PowerDVD17. Playing back protected content will require appropriate DRM software and/or hardware, e.g. Microsoft Playready™. Refer to Microsoft website for HDR support information.

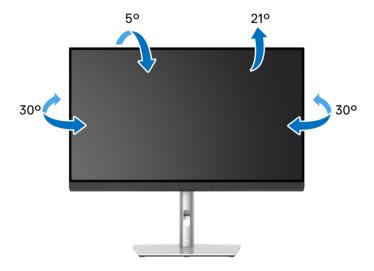


Using the Tilt, Swivel, and Vertical Extension

NOTE: This is applicable for a monitor with a stand. When any other stand is bought, please refer to the respective stand setup guide for set up instructions.

Tilt, Swivel

With the stand attached to the monitor, you can tilt and swivel the monitor for the most comfortable viewing angle.



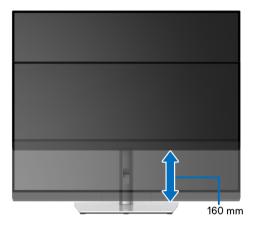
NOTE: The stand is detached when the monitor is shipped from the factory.



Vertical Extension



NOTE: The stand extends vertically up to 160 mm. The figure below illustrates how to extend the stand vertically.



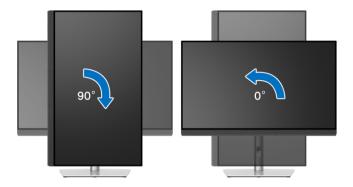
Rotating the Monitor

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





Rotate clockwise



Rotate counterclockwise





Troubleshooting

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

Self-Test

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

- 1. Turn off both your computer and the monitor.
- 2. Unplug the video cable from the back of the computer.
- **3.** 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, the dialog shown below will continuously scroll through the screen.



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

- **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.

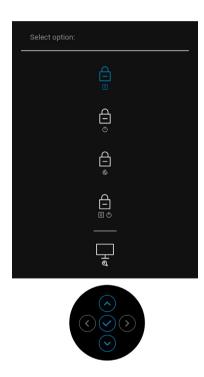


Built-in Diagnostics

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.

To run the built-in diagnostics:

- **1.** Ensure that the screen is clean (no dust particles on the surface of the screen).
- **2.** Toggle and hold the **Joystick** to the left for 4 seconds, the following message appears:





3. Toggle the **Joystick** to highlight the Diagnostics icon, then press the **Joystick**, and a gray screen appears.



- 4. Carefully inspect the screen for abnormalities.
- **5.** Press the **Joystick** again. The color of the screen changes to red.
- 6. Inspect the display for any abnormalities.
- 7. 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 the **Joystick** again.



Always On USB Type-C (Thunderbolt™) Charging

The monitor allows you to charge your notebook or mobile devices through the Thunderbolt[™] 3 Active cable even when the monitor is powered off. See **USB-C Charging (90 W)** for more information. You may need to update to the latest firmware for this feature to function properly.

Firmware update

You may verify your current firmware revision in **Firmware**. If this is not available, go to the Dell download support site for the latest application installer (**Monitor Firmware Update Utility.exe**) and refer to the Firmware Update Instruction User's Guide: www.dell.com/UP3221Q

If the firmware update process is not completed properly, when you try to turn on the monitor, a warning message appears:



Refer to instructions in the Firmware Update Instruction User's Guide and update the monitor's firmware again. Do not turn off the Firmware Update Utility tool until the update is complete.



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 pressed 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. 		
Poor Focus	Picture is fuzzy, blurry, or ghosting	· Eliminate video extension cables.		
		· Reset the monitor to factory settings.		
		 Change the video resolution to the correct aspect ratio. 		
Shaky/Jittery	Wavy picture	· Reset the monitor to factory settings.		
Video	or fine movement	· Check environmental factors.		
		 Relocate the monitor and test in another room. 		
		 Dell monitors are designed to work optimally with Dell supplied inbox cables. Dell does not guarantee the video quality and performance when using non-Dell cables. 		



Missing Pixels	LCD screen has spots	 Cycle power On-Off. Pixel that is permanently Off is a natural defect that can occur in LCD technology. For more information on Dell Monitor Quality and Pixel Policy, see Dell Support site at: http://www.dell.com/pixelguidelines.
Stuck-on Pixels	LCD screen has bright spots	 Cycle power On-Off. Pixel that is permanently off is a natural defect that can occur in LCD technology. For more information on Dell Monitor Quality and Pixel Policy, see Dell Support site at: http://www.dell.com/pixelguidelines.
Brightness Problems	Picture too dim or too bright	Reset the monitor to factory settings.Adjust brightness & contrast controls via OSD.
Geometric Distortion	Screen not centered correctly	Reset the monitor to factory settings.Adjust horizontal & vertical controls via OSD.
Horizontal/ Vertical Lines	Screen has one or more lines	 Reset the monitor to factory settings. Perform monitor self-test feature check and determine if these lines are also in self-test mode. Check for bent or broken pins in the video cable connector.
Synchronization Problems	Screen is scrambled or appears torn	 Run the built-in diagnostics. Reset the monitor to factory settings. Perform monitor self-test feature check to determine if the scrambled screen appears in self-test mode. Check for bent or broken pins in the video cable connector. Restart the computer in the safe mode.



Safety Related Issues	Visible signs of smoke or sparks	•	Do not perform any troubleshooting steps. Contact Dell immediately.
Intermittent Problems	Monitor malfunctions on & 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.
Missing Color	Picture		Perform monitor self-test feature check.
	missing color	•	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	٠	Change the settings of the Color Space in the Color menu OSD depending on the application.
		٠	Set the parameters of User 1 , User 2 , or User 3 of the Color Space to user preferred settings.
		٠	Calibrate the monitor with the built-in colorimeter.
Image retention from a static image left on the monitor for a long period of	Faint shadow from the static image displayed	•	Set the screen to turn off after a few minutes of screen idle time. These can be adjusted in Windows Power Options or Mac Energy Saver setting.
time	appears on the screen	•	Alternatively, use a dynamically changing screensaver.
Image Ghosting	Fast moving images leave a trail of shadow images	•	Change the Response Time in the Display menu.



Product Specific Problems

Specific Symptoms	What You Experience	Possible Solutions
Screen image is too small	lmage is centered on	Check the Aspect Ratio setting in the Display menu OSD.
	screen, but does not fill entire viewing area	Reset the monitor to factory settings.
Cannot adjust the monitor	OSD does not appear on the	 Turn Off the monitor, unplug the power cord, plug it back, and then turn On the monitor.
with the buttons on the front panel	screen	 Check whether the OSD menu is locked. If yes, toggle and hold the Joystick for 4 seconds to unlock (for more information, see Lock).
No Input Signal when user controls are	No picture, the LED light is white	 Check the signal source. Ensure the computer is not in the Standby Mode by moving the mouse or pressing any key on the keyboard.
pressed		 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	The picture cannot fill the height or	 Due to different video formats (aspect ratio) of DVDs, the monitor may display in full screen.
screen	width of the screen	Run the built-in diagnostics.



No video in PBP mode at HDMI port when playing movie content	When connected to some docking device at HDMI port, there is no video at PBP mode after the monitor is turned Off and then turned On again.	Unplug/plug HDMI cable from docking device output.
No video at HDMI port	When connected to some docking device at HDMI port, there is no video when unplug/plug Thunderbolt ™ cable from the Notebook.	Unplug the HDMI cable from docking device, then plug the docking Thunderbolt™ cable to Notebook. Plug the HDMI cable 7 seconds later.



Universal Serial Bus (USB) Specific Problems

Specific Symptoms	What You Experience	Possible Solutions
USB interface is not working	USB peripherals are not working	 Unplug/plug Thunderbolt™ 3 Active cable. Check that your monitor is turned On. Reconnect the Thunderbolt™ 3 Active 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.
Thunderbolt™ 3 port does not supply power	USB peripherals can not be charged	 Check that the connected device is compliant with the Thunderbolt™ 3 specification. The Thunderbolt™ 3 port supports USB 3.2 with speeds up to 10 Gbps and an output of 90 W. Check that you use the Thunderbolt™ 3 Active cable shipped with your monitor.
No video when using Thunderbolt™ 3 connection after DC On/ Off, wake up from Standby mode	No picture is showing	 Unplug/plug Thunderbolt™ 3 Active cable. Check that the connected device is compliant with Thunderbolt™ 3 specification. Check that the Thunderbolt™ 3 Active cable connected from the computer to the USB-C upstream port on the monitor. Use the Thunderbolt™ 3 Active cable that was shipped with the monitor. In Windows, click on the Thunderbolt™ logo in Windows system tray (located at bottom right corner of the screen). Under Approve Thunderbolt Devices, select "Always Connect" for this monitor.



No video when using USB-C DP Alt-Mode connection after DC On/Off, wake up from Standby mode	No picture is showing	•	Unplug/plug USB-C cable. The monitor ships with a Thunderbolt™ 3 Active cable. This cable does not work with a USB-C DP Alt-Mode source. If you are using a computer with USB-C DP Alt-Mode connection, please purchase a USB-C DP cable separately.
SuperSpeed USB 5/10 Gbps (USB 3.2 Gen 1/2) interface is slow	SuperSpeed USB 5/10 Gbps (USB 3.2 Gen 1/2) peripherals working slowly or not working at all		Check that your computer is SuperSpeed USB 5/10 Gbps (USB 3.2 Gen 1/2)-capable. Some computers have 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 mouse is not working or lagging	Do not respond or responds slowly	•	Increase the distance between the USB peripherals and the wireless USB receiver. Position your wireless USB receiver as close as possible to the wireless mouse. Use a USB-extender cable to position the wireless USB receiver as far away as possible from the SuperSpeed USB 5/10 Gbps (USB 3.2 Gen 1/2) port.



Appendix

WARNING: Safety Instructions

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**.

Contact Dell

For customers in the United States, call 800-WWW-DELL (800-999-3355).

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.

- Online technical assistance www.dell.com/support/monitors
- · Contacting Dell www.dell.com/contactdell

EU product database for energy label and product information sheet

UP3221Q: https://eprel.ec.europa.eu/qr/344551



Video and USB Support over USB-C

Video resolution and USB support when connecting to monitor via USB-C.

		Vio	deo	USB		
Connection on host computer	Upstream Cable used (Host computer to Monitor port 6)	4K (Direct connect)	4K (Daisy- chained)	TBT3 device connected to TBT3 down- stream (Monitor port 7)	USB-C device connected to TBT3 down- stream (Monitor port 7)	USB device connected to USB-A down- stream (Monitor port 8)
USB-A	USB A-to-C*	No	No	No	USB2.0	USB2.0/ 3.2
	USB-C MFDP	No	No	No	USB2.0	USB2.0/ 3.2
USB-C (Data only)	TBT3 Passive	No	No	No	USB2.0	USB2.0/ 3.2
	TBT3 Active*	No	No	USB2.0	USB2.0	USB2.0
	USB-C MFDP	Yes	No	No	USB2.0	USB2.0
USB-C (MFDP)	TBT3 Passive	Yes	No	No	USB2.0	USB2.0
	TBT3 Active*	No	No	USB2.0	USB2.0	USB2.0
ТВТ3	USB-C MFDP	Yes	No	No	USB2.0	USB2.0/ 3.2
	TBT3 Passive	Yes	No	Yes	USB2.0	USB2.0/ 3.2
	TBT3 Active*	Yes	Yes	Yes	USB2.0	USB2.0/ 3.2

^{*} Cable shipped with monitor.

MOTE: TBT3 is the abbreviation of Thunderbolt™ 3.

NOTE: Refer to Bottom View for monitor port assignment.

NOTE: Refer to Connecting the monitor for Thunderbolt™ Multi-Stream Transport (MST) function for Daisy chain connection.



Purchasing a Thunderbolt™ 3 Passive Cable

Region	Link
-	https://www.dell.com/en-us/shop/accessories/apd/a9905599
Dell Website	https://www.dell.com/en-us/shop/accessories/apd/a9905597
	https://www.dell.com/en-us/shop/accessories/apd/a9269731
US	https://www.belkin.com/us/p/P-F2CD081/
EMEA	https://www.delock.com/produkte/G_84846/merkmale.html/
	https://www.hama.cz/hama-kabel-thunderbolt-3-usb-c-typ-c-vidlicevidlice-20-gb-s-100-w-1-m/
	https://www.lindy-international.com/Thunderbolt-3-Cable-2m.htm?websale8=ld0101.ld020102π=41557
Asia	https://www.lindy.com.tw/ecommerce/cable-adapter/thunderbolt3/41557.html



NOTE: The links are for your reference only, and are subject to change without notice.

