



Dell C7520QT

User's Guide

Model: C7520QT
Regulatory model: C7520QTt



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

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

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

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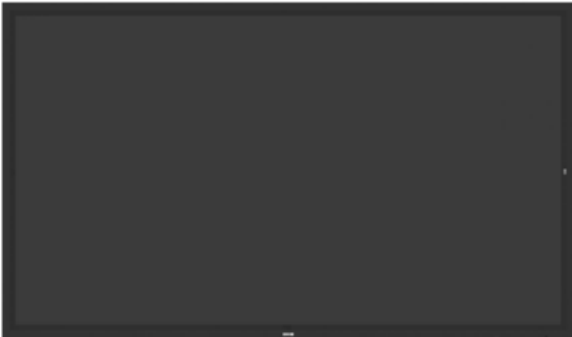




About Your Display









Package Contents

Your display 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 display. Some features may not be available in certain countries.

	Display
	Remote Control & Batteries (AAA x 2)
	Stylus x 2



	(Remote control & Stylus holder) x 3
	Wire Saddle x 3
	Power cable (varies by country)
	Power cable for connecting Optiplex system to display (see Optiplex (Optional))
	USB 3.0 upstream cable (enables the USB ports on the display)
	DP cable (DP to DP)
	VGA cable
	HDMI cable
	<ul style="list-style-type: none"> Flatfrog Whiteboard Software download instruction Safety, Environmental and Regulatory Information Quick Setup Guide



Product Features

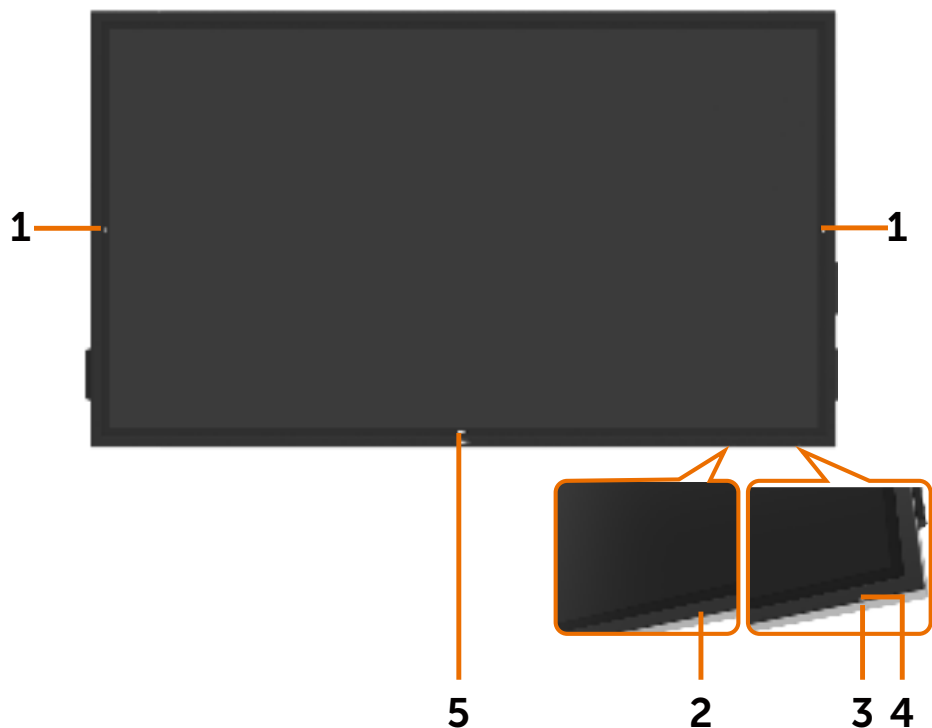
The **Dell C7520QT** display has an active matrix, thin film transistor (TFT), liquid crystal display (LCD), and LED backlight. The display features include:

- 189.273 cm (74.52-inch) active area display (Measured diagonally) 3840 x 2160 (16:9 aspect ratio) resolution, plus full-screen support for lower resolutions.
- Video Electronics Standards Association (VESA™) 400 x 400 mm mounting holes.
- Plug and play capability if supported by your system.
- On-Screen Display (OSD) adjustments for ease of set-up and screen optimization.
- Security lock slot.
- Supports Asset Management Capability.
- Arsenic-Free glass and Mercury-Free for Panel only.
- 0.3 W standby power when in the sleep mode.
- Easily setup with Dell Optiplex Mirco PC (Mirco Form Factor).
- Up to 20 points and 4 pens InGlass™ Touch technology.
- Optimize eye comfort with a flicker-free screen.
- The possible long-term effects of blue light emission from the display 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 display to optimize eye comfort.



Identifying Parts and Controls

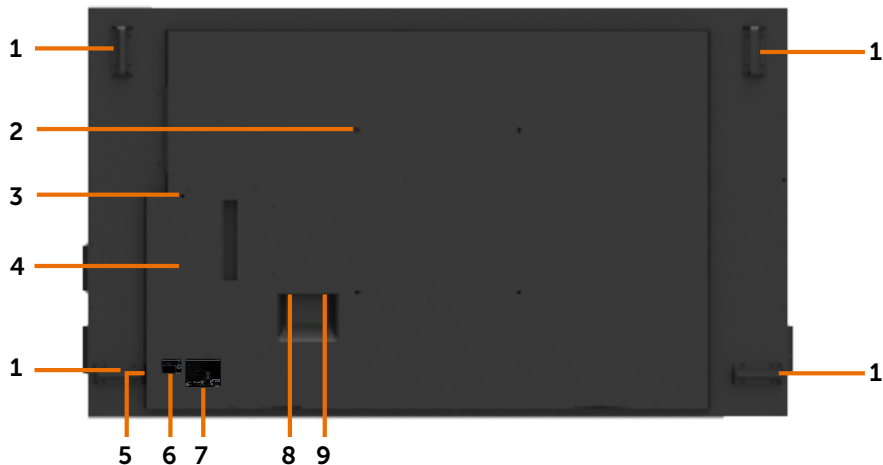
Front view



Label	Description
1	Screen drop down touch key
2	IR Lens
3	Power on/off button
4	Power LED indicator
5	OSD Launcher touch key (For more information, see Operating the Display)



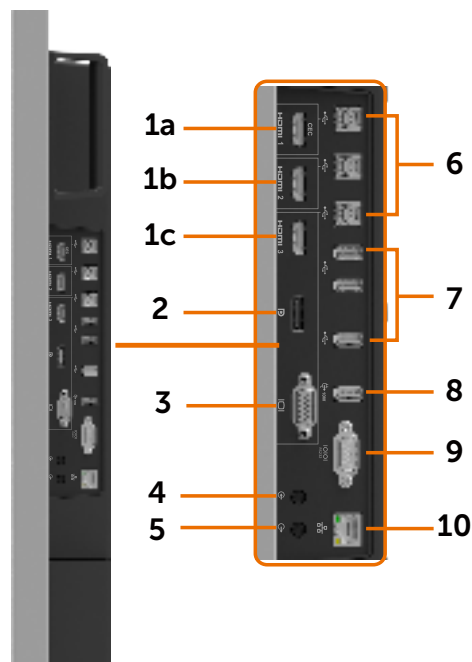
Back View



Label	Description	Use
1	Handle x 4	Use to move the display.
2	VESA mounting holes (400 x 400 mm)	To mount the display.
3	Security lock slot	Secures Optiplex with security cable lock (sold separately).
4	Optiplex holder	Use to hold a Micro Form Factor Optiplex PC.
5	Serial number, Service Tag label, and Website	Refer to this label if you need to contact Dell for technical support.
6	Barcode, serial number, and Service Tag label	
7	Regulatory label	List of approved regulatory labels.
8	AC to optiplex (optional)	AC power to optiplex power adapter.
9	AC power connector	To connect the display power cable.



Side View

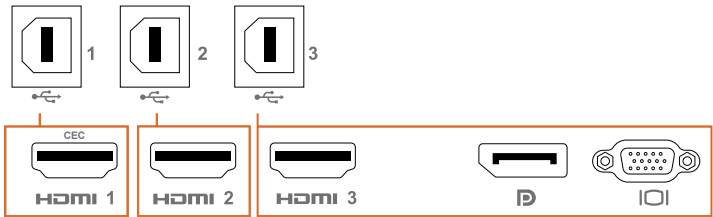


Label	Description	Use
1a	HDMI 1 connector	Connect your computer with HDMI cable.
1b	HDMI 2 connector	
1c	HDMI 3 connector	
2	DP connector	Connect your computer with DP cable.
3	VGA connector	Connect your computer with VGA cable.
4	Audio line-in port	Analog audio (two channel) input.
5	Audio line-out port	Connect to external audio peripherals. Only supports 2-channel audio. NOTE: The audio line-out port does not support headphones.
6	USB 3.0 upstream ports (3)	Connect the USB cable that comes with your display to the computer. Once this cable is connected, you can use the USB downstream connectors on the display and the touch screen function on the display.



7	USB 3.0 downstream ports (3)	Connect your USB device. You can only use this connector after you have connected the USB cable to the computer and USB upstream connector on the display.
8	USB charging port	USB 3.0 with 10 W with BC1.2 charging capability at 2A (max).
9	RS232 connector	Remote management and control of display via RS232.
10	RJ-45 connector	Remote Network Management and control of display via RJ-45.

Input sources and USB pairing



Input sources	USB upstream
HDMI 1 CEC	USB 1
HDMI 2	USB 2
HDMI 3	USB 3
DP	
VGA	

Bottom View



Label	Description
1, 2	Speakers
3	Power on/off button



Display Specifications

Screen type	Active matrix - TFT LCD
Panel Type	In-plane switching Technology
Aspect ratio	16:9
Viewable image dimensions	
Diagonal	189.273 cm (74.52 inches)
Active Area	
Horizontal	1649.664 mm (64.95 inches)
Vertical	927.936 mm (36.53 inches)
Area	1530323.4 mm ² (2372 inches ²)
Pixel pitch	0.429 mm x 0.429 mm
Pixel per inch (PPI)	59
Viewing angle	
Horizontal	178° (typical)
Vertical	178° (typical)
Panel brightness	350 cd/m ² (typical)
Contrast ratio	1200 to 1 (typical)
Display screen coating	9H, Anti-Smudge, Anti-Glare
Response Time	8 ms typical (G to G), 12 ms max. (G to G)
Color depth	1.07 Billion colors
Color gamut	NTSC (72%)
Connectivity	<ul style="list-style-type: none">• 1 x DP 1.2• 1 x VGA• 3 x HDMI 2.0• 4 x USB 3.0 downstream port (1 x USB BC1.2 charging capability at 2A (max))• 3 x USB 3.0 upstream port• 1 x Analog 2.0 audio line out (3.5 mm jack)• 1 x Analog 2.0 audio line in (3.5 mm jack)• 1 x RJ-45• 1 x RS232
Border width (edge of display to active area)	42.75 mm (Top) 42.69 mm (Left/Right) 46.75 mm (Bottom)



Touch

Type	InGlass Touch Technology™
Input Method	Bare finger and stylus
Interface	USB HID Compliant
Touch point	Up to 20 points touch Up to 4 pens

NOTE: Touch Pen and Eraser differentiation ready (functionality subject to application).

Support OS

OS	Version	Touch	Pen	Eraser
Windows	7 Pro and Ultimate	20	4	1
	8, 8.1	20	4	1
	10	20	4	1
Chorme OS	Linux kernel version 3.15 (3.10) or later ¹	20	4 (0)	1 (0)
Android	4.4 (KitKat) with Linux kernel 3.15 (3.10) or later ¹	20	4 (0)	1 (0)
Other Linux based OS	Linux kernel 3.15 or later	20	4	1
macOS	10.10, 10.11	1 (mouse ²)		No

¹ Functionality of Linux kernel has been verified on Ubuntu 14.04 and Debian 8. Functionality of Chrome OS and Android with Linux kernel 3.15 needs confirmation.

² Mouse emulation in landscape mode. Full multi-touch requires additional drivers on the host system.

Touch sensor input accuracy

		Typ ¹	Max ²	Unit
Touch sensor input accuracy	Center area ³	1.0	1.5	mm
	Edge area ⁴	1.2	2.0	mm

¹ Average accuracy at the specified input area.

² 95-percentile accuracy of specified input area.

³ >20 mm from active touch area edge

⁴ >20 mm from active touch area edge

Note that touch sensor input accuracy is defined relative to the active touch area as defined in the reference drawing (listed in 8.1). The overall system accuracy, of touch co-ordinates relative to display co-ordinates, is directly affected by integration assembly tolerances.



Resolution Specifications

Horizontal scan range	30 kHz to 140 kHz (DP/HDMI)
Vertical scan range	24 Hz to 75 Hz (DP/HDMI)
Maximum preset resolution	3840 x 2160 at 60 Hz
Video display capabilities (DP & HDMI playback)	480p, 576p, 720p, 1080i, 1080p, 2160p

NOTE:VGA input resolution supported is 1920 x 1080 only.

Preset Display Modes

Display Mode	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (Horizontal/ Vertical)
720 x 400	31.5	70.0	28.3	-/+
640 x 480	31.5	60.0	25.2	-/-
640 x 480	37.5	75.0	31.5	-/-
800 x 600	37.9	60.0	40.0	+/+
800 x 600	46.9	75.0	49.5	+/+
1024 x 768	48.4	60.0	65.0	-/-
1024 x 768	60.0	75.0	78.8	+/+
1152 x 864	67.5	75.0	108.0	+/+
1280 x 800	49.3	60.0	71.0	+/+
1280 x 1024	64.0	60.0	108.0	+/+
1280 x 1024	80.0	75.0	135.0	+/+
1600 x 1200	75.0	60.0	162.0	-/+
1920 x 1080	67.5	60.0	193.5	+/+
2048 x 1152	71.6	60.0	197.0	+/-
2560 x 1440	88.8	60.0	241.5	+/-
3840 x 2160	65.68	30.0	262.75	+/+
3840 x 2160	133.313	60.0	533.25	+/+



Electrical Specifications

Video input signals	<ul style="list-style-type: none">• Digital video signal for each differential line Per differential line at 100 ohm impedance• DP/HDMI/VGA signal input support
Input voltage/ frequency/current	100-240 VAC / 50 or 60 Hz \pm 3 Hz / 5.5 A (maximum)
Output voltage/ frequency/current	100-240 VAC / 50 or 60 Hz \pm 3 Hz / 2 A (maximum)
Inrush current	120 V: 42 A (Max.) at 0 °C (cold start) 240 V: 80 A (Max.) at 0 °C (cold start)

Physical Characteristics

Connector type	<ul style="list-style-type: none">• DP connector• VGA connector• HDMI connector• Audio line-out• Audio line-in• USB 3.0 connector• USB charging port- supplying power of up to 5 V (max 2A) for connected devices• RJ-45 connector• RS232 connector
Signal cable type (in-box)	DP, 3 m cable HDMI, 3 m cable VGA, 3 m cable USB 3.0, 3 m cable Optiplex power cable, 1 m
Dimensions	
Height	1017.44 mm (40.06 inches)
Width	1735.02 mm (68.31 inches)
Depth	79.1 mm (3.11 inches)
Weight	
Weight with packaging	76 kg (167.55 lb)
Weight without packaging	64 kg (141.10 lb)



Environmental Characteristics

Compliant Standards	
RoHS Compliant	yes
Temperature	
Operating	0 °C to 40 °C (32 °F to 104 °F)
Non-operating	−20 °C to 60 °C (−4 °F to 140 °F)
Humidity	
Operating	10% to 80% (non-condensing)
Non-operating	5% to 90% (non-condensing)
Altitude	
Operating	5,000 m (16,404 ft) (maximum)
Non-operating	12,192 m (40,000 ft) (maximum)
Thermal dissipation	921.89 BTU/hour (maximum)
	546.30 BTU/hour (typical)

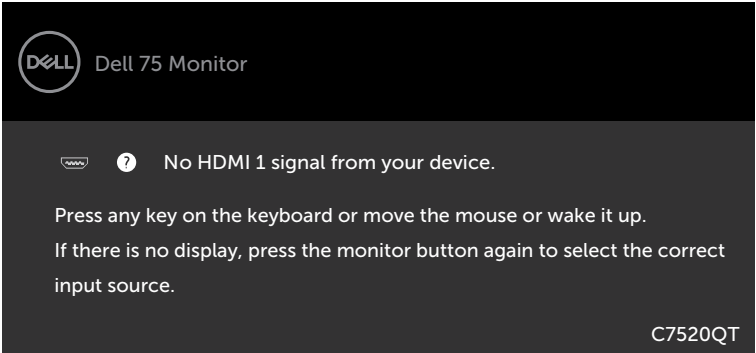


Power Management Modes

If you have VESA's DPM-compliant video card or software installed in your PC, the display 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 display automatically resumes functioning. The following table shows the power consumption and signaling of this automatic power saving feature.

VESA Modes	Horizontal Sync	Vertical Sync	Video	Power Indicator	Power Consumption
Normal operation	Active	Active	Active	White	270 W (maximum)** 160 W (typical)
Active-off mode	Inactive	Inactive	Off	White (Glowing)	Less than 0.3 W
Switch off	-	-	-	Off	Less than 0.3 W

The OSD operates only in the normal operation mode. If you press any button in the active-off mode, the following message is displayed:



*Zero power consumption in OFF mode can only be achieved by disconnecting the AC main cable from the display.

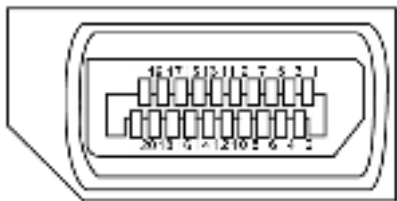
**Maximum power consumption with maximum luminance.

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



Pin Assignments

DP 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(u)
8	GND
9	ML1(p)
10	ML0(n)
11	GND
12	ML0(p)
13	CONFIG1/(GND)
14	CONFIG2/(GND)
15	AUX CH (p)
16	DP_Cable Detect
17	AUX CH (n)
18	Hot Plug Detect
19	GND
20	+3.3V DP_PWR



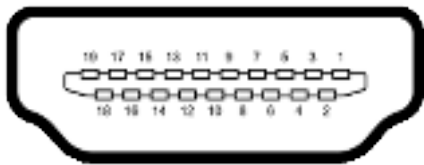
VGA connector



Pin number	15-pin side of the connected signal cable
1	Video-Red
2	Video-Green
3	Video-Blue
4	NC
5	Self-test
6	GND-R
7	GND-G
8	GND-B
9	Computer 5 V / 3.3 V
10	GND-sync
11	GND
12	DDC data
13	H-sync
14	V-sync
15	DDC clock



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



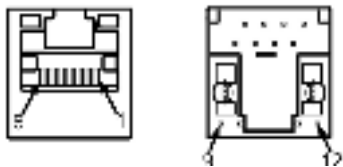
RS232 connector



Pin number	9-pin side of the connected signal cable
1	-
2	RX
3	TX
4	-
5	GND
6	-
7	Not Used
8	Not Used
9	-



RJ-45 connector



Pin number	12-pin side of the connected signal cable
1	D+
2	RCT
3	D-
4	D+
5	RCT
6	D-
7	GND
8	GND
9	LED2_Y+
10	LED2_Y-
11	LED2_G+
12	LED2_G-




Universal Serial Bus (USB)


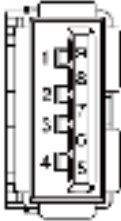
This section gives you information about the USB ports available on your display.

Your computer has the following USB ports:

- 3 USB 3.0 upstream
- 4 USB 3.0 downstream (1 USB charging port)

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

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 3.0 upstream port		USB 3.0 downstream port	
			
Pin number	Signal name	Pin number	Signal name
1	VBUS	1	VBUS
2	D-	2	D-
3	D+	3	D+
4	GND	4	GND
5	StdB_SSTX-	5	StdA_SSRX-
6	StdB_SSTX+	6	StdA_SSRX+
7	GND_DRAIN	7	GND_DRAIN
8	StdB_SSRX-	8	StdA_SSTX-
9	StdB_SSRX+	9	StdA_SSTX+
Shell	Shield	Shell	Shield



Plug-and-Play

You can install the display in any Plug-and-Play-compatible system. The display 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 display settings. Most display installations are automatic; you can select different settings if desired. For more information about changing the display settings, see [Operating the Display](#).

LCD Display Quality and Pixel Policy

During the LCD display 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 Display Pixel Policy, see Dell support site at: <http://www.dell.com/support/monitors>.



Setting Up the Display

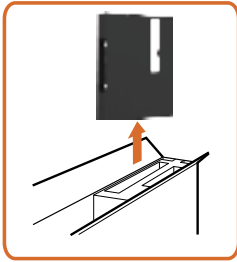
Connecting Your Display

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

To connect your display to the computer:

1. Turn off your computer.
2. Connect the HDMI/DP/VGA/USB cable from your display to the computer.
3. Switch on your display.
4. Select the correct input source at Display OSD Menu and turn on your computer.

Optiplex (Optional) Attaching the Optiplex

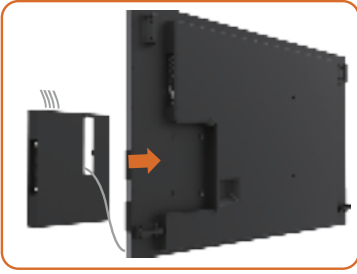


- Open the carton, take out the Optiplex holder.



1. Remove cable cover.
2. Insert the Optiplex PC and power adapter into the respective compartments.
3. Plug in the cables and route the cables using the cable management hooks that is within the PC box holder.

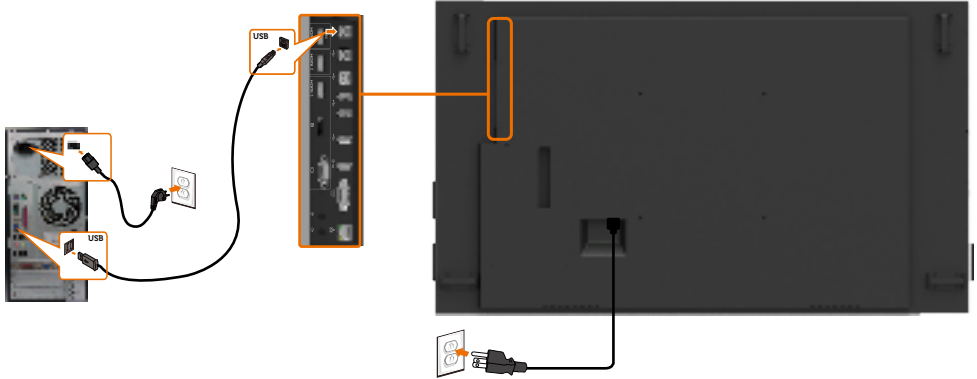




- Slide Optiplex holder back into display.

External PC connection

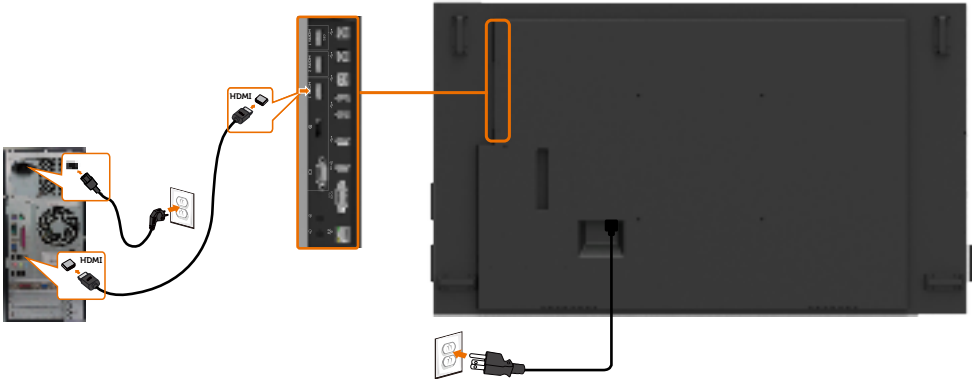
Connecting the USB cable



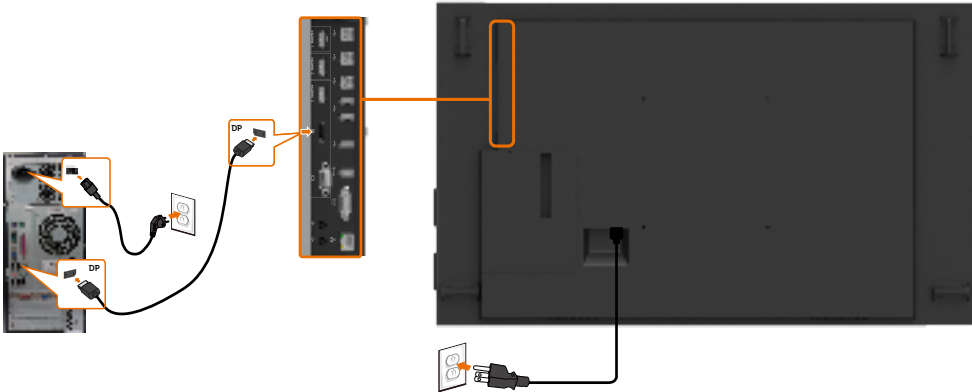
NOTE: Refer to section on [input source and USB pairing](#).



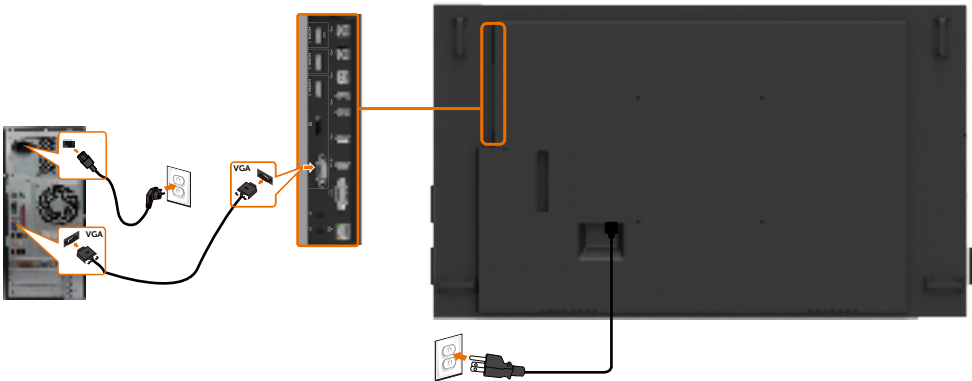
Connecting the HDMI cable



Connecting the DP cable

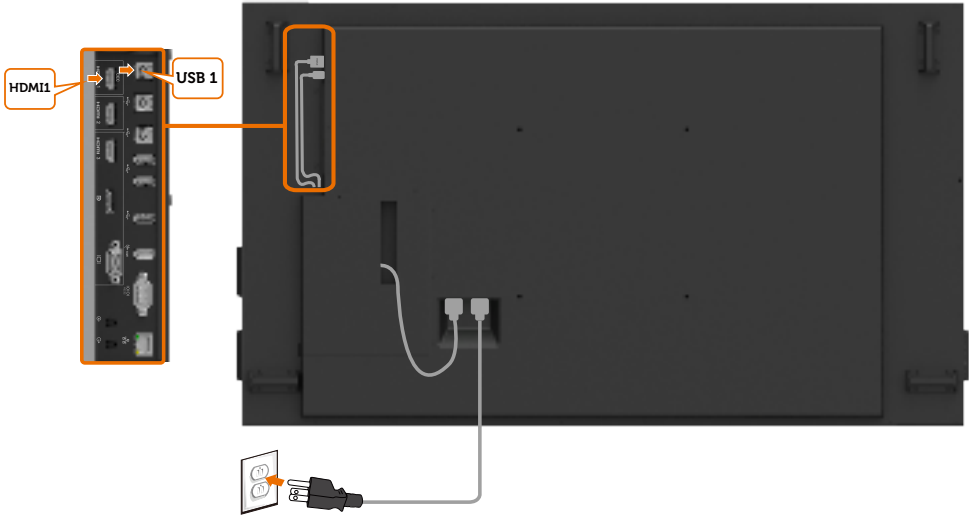


Connecting the VGA cable

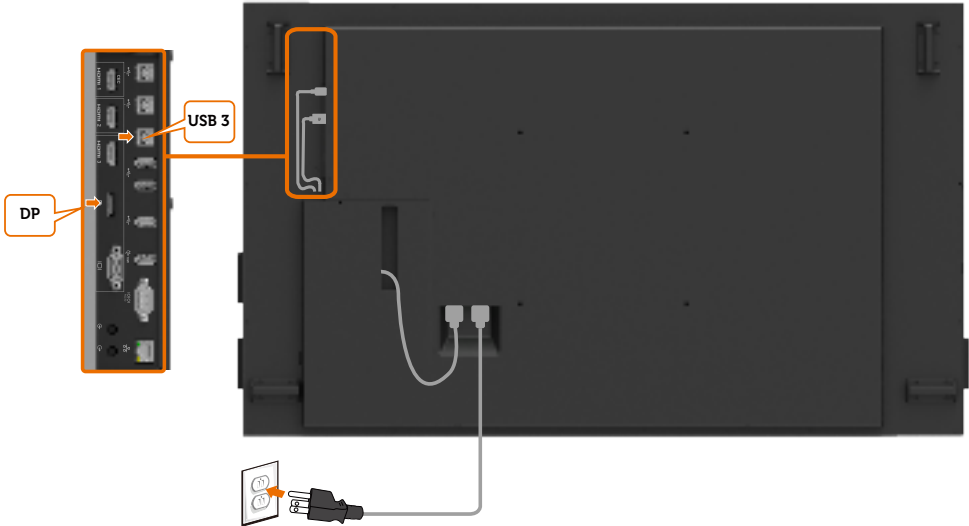


Connecting the Optiplex

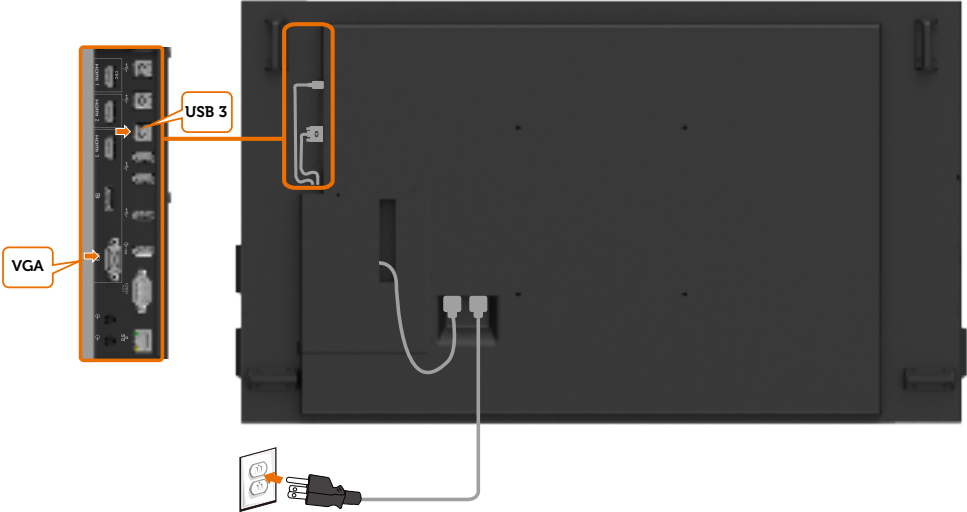
Connecting the HDMI cable



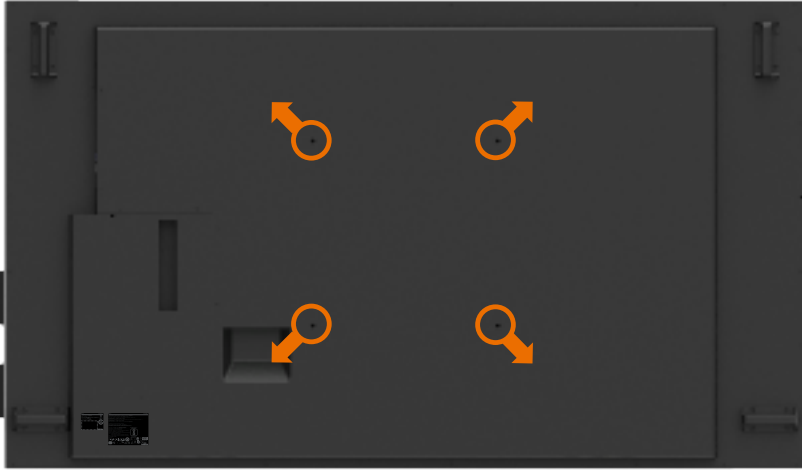
Connecting the DP cable



Connecting the VGA cable



Wall Mounting




(Screw dimension: M8 x 35 mm).

Refer to installation instruction that comes with the 3rd party wall mount that customer purchases. Vesa-compatible base mounting kit (400 x 400) mm.

1. Install Wall Plate to Wall.
2. Place the display panel on a soft cloth or cushion on a stable flat table.
3. Attach the mounting brackets from the wall mounting kit to the display.
4. Install Display to Wall Plate.
5. Ensure display is mounted vertically with no tilt forward or backward and a leveler is used to assist to mount the display.

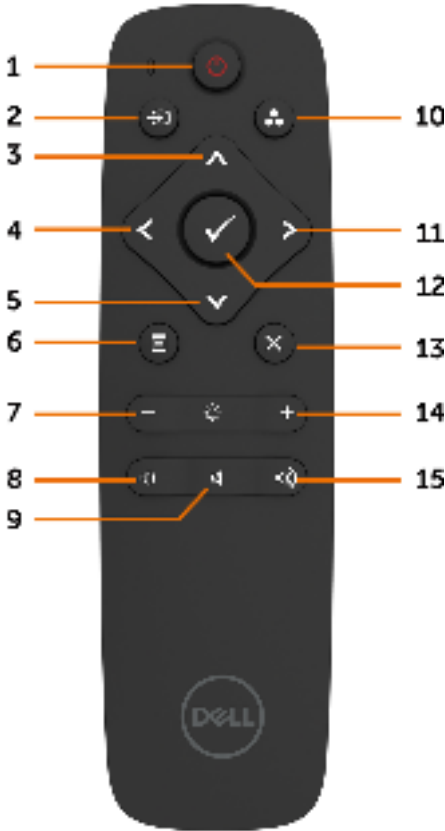
NOTE:

- Do not attempt to wall mount the Touch Display by yourself. It should be installed by qualified installers.
- Recommended Wall Mount for this Display can be found in the Dell support website at dell.com/support.

 NOTE: For use only with UL or CSA or GS-listed wall mount bracket with minimum weight/load bearing capacity of the product.





Remote Control




1. Power On/Off

Switch this display on or off.

2. Input Source

Select input source. Press  or  button to select from VGA or DP or HDMI 1 or HDMI 2 or HDMI 3.

Press  button to confirm and exit.

3. Up

Press to move the selection up in OSD menu.

4. Left

Press to move the selection left in OSD menu.

5. Down

Press to move the selection down in OSD menu.

6. Menu

Press to turn on the OSD menu.

7. Brightness -

Press to decrease the Brightness.

8. Volume -

Press to decrease the Volume.

9. MUTE

Press to turn the mute function on/off.

10. Preset Modes

Display information about Preset Modes.

11. Right

Press to move the selection right in OSD menu.

12. OK

Confirm an entry or selection.

13. Exit

Press to exit the Menu.

14. Brightness +

Press to increase the Brightness.

15. Volume +

Press to increase the Volume.



Inserting the batteries in the remote control

The remote control is powered by two 1.5V AAA batteries.

To install or replace batteries:

1. Press and then slide the cover to open it.
2. Align the batteries according to the (+) and (–) indications inside the battery compartment.
3. Replace the cover.



⚠ CAUTION: The incorrect use of batteries can result in leaks or bursting. Be sure to follow these instructions:

- Place “AAA” batteries matching the (+) and (–) signs on each battery to the (+) and (–) signs of the battery compartment.
- Do not mix battery types.
- Do not combine new batteries with used ones. It causes shorter life or leakage of batteries.
- Remove the dead batteries immediately to prevent them from liquid leaking in the battery compartment. Don’t touch exposed battery acid, as it can damage your skin.

✍ NOTE: If you do not intend to use the remote control for a long period, remove the batteries.

Handling the remote control


- Do not subject to strong shock.
- Do not allow water or other liquids to splash on the remote control. If the remote control gets wet, wipe it dry immediately.
- Avoid exposure to heat and steam.
- Other than to install the batteries, do not open the remote control.

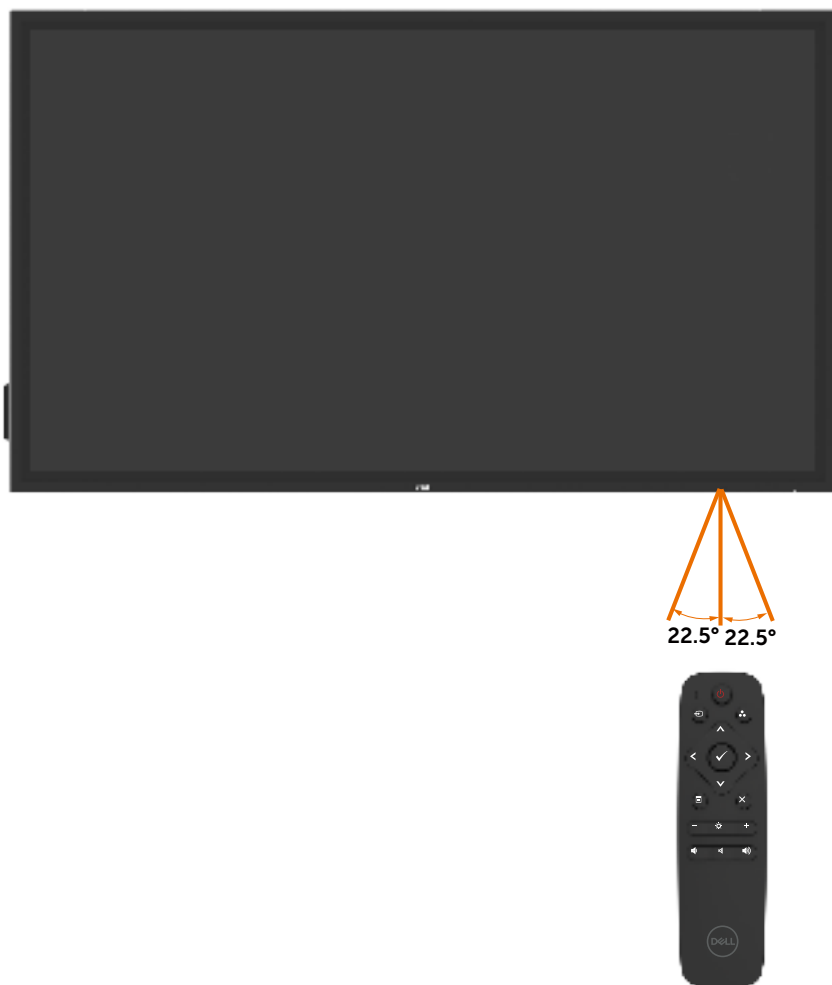


Operating range of the remote control

Point the top of the remote control toward the LCD display's remote sensor during button operation.

Use the remote control within a distance of about 7 m from remote control sensor or at a horizontal and vertical angle of within 22.5° within a distance of about 7 m.

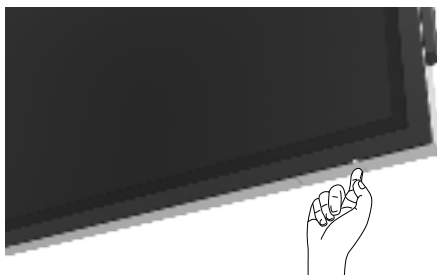
 **NOTE:** The remote control may not function properly when the remote control sensor on the display is under direct sunlight or strong illumination, or when there is an obstacle in the path of signal transmission.



Operating the Display

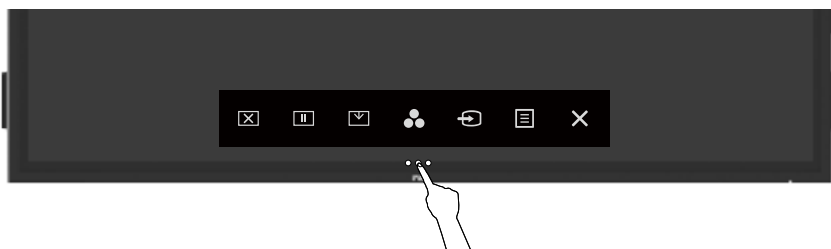
Turning on the Display

Press the **Power** button  to turn the display On and Off. The white LED indicates the display is On and fully functional. A glowing white LED indicates DPMS Power Save Mode.



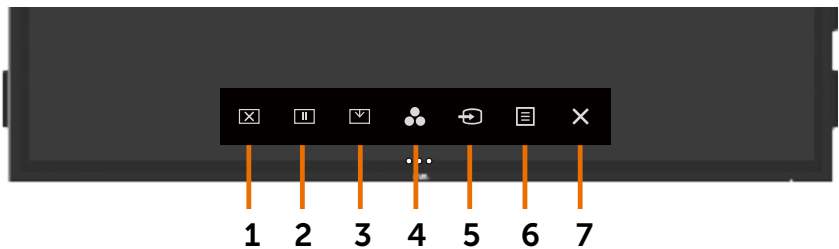
Touch OSD Launcher

This display comes with a touch OSD functionalities. Press the OSD launcher touch key to access the functionalities.













Using the Touch Control Launcher

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



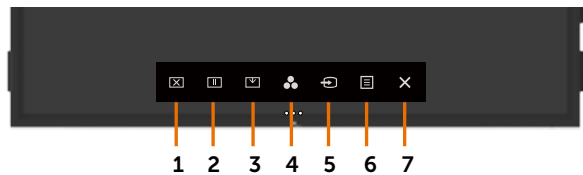
The following table describes the touch control icons:


Touch Control icons	Description
1  Screen Off	Use this icon to switch screen to black or white. Go to Menu to select screen off color. Use touch key  to screen restore.
2  Suspend	To a freeze screen when press/activate. Use touch key  to screen restore.
3  Screen Drop Down	Screen Drop Down so that you can easily reach the top of the image. Use touch key  to screen restore.
4  Preset Modes	Use this icon to choose from a list of preset color modes.
5  Input Source	Use this icon to choose from a list of Input Source.
6  Menu	Use this menu icon to launch the on-screen display (OSD) and select the OSD menu. See Accessing the Menu System .
7  Exit	Use this icon to go back to the main menu or exit the OSD main menu.

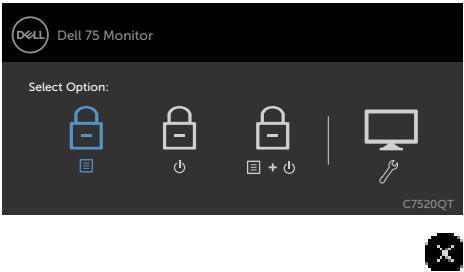


Using the OSD lock function





1. Press the OSD launcher touch key.





2. Touch and hold  for 5 seconds. you can see following select option:

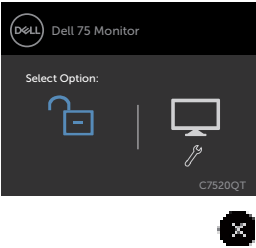


The following table describes the touch control icons:

Options	Description
1  OSD menu lock	Use this icon to lock OSD menu function.
2  Power-off button lock	Use this icon to lock power button from powering off.
3  OSD menu and power button lock	Use this icon to lock OSD menu and power button from powering off.
4  Built-in Diagnostics	Use this icon to run the built-in diagnostics, see Built-in Diagnostics .





3. Touch and hold  for 5 seconds, touch  to unlock.

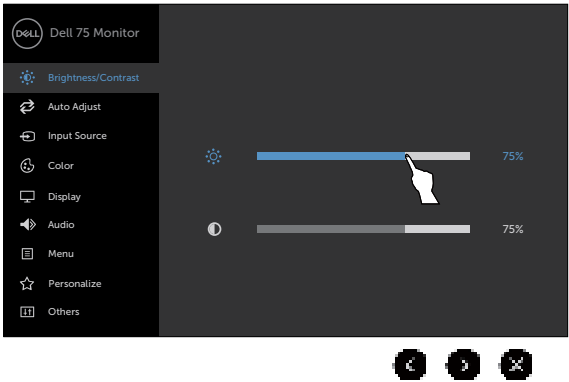


Using the On-Screen Display (OSD) Menu





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  icon on the remote control or OSD Launcher touch key to launch the OSD menu.




Use the icons to adjust the image settings.

Touch control icon		Description
1	  Up Down	Use the Up (increase) and Down (decrease) icons to adjust items in the OSD menu.
2	  Left Right	Use the Left (decrease) and Right (increase) icons to adjust items in the OSD menu.




- 3



OK


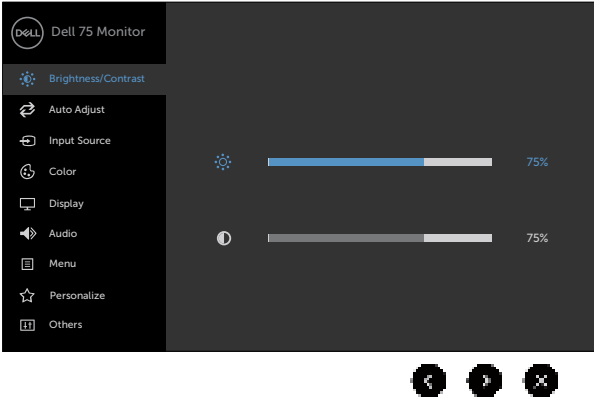




Use the **OK** icon to confirm your selection.
-
- 4




Back

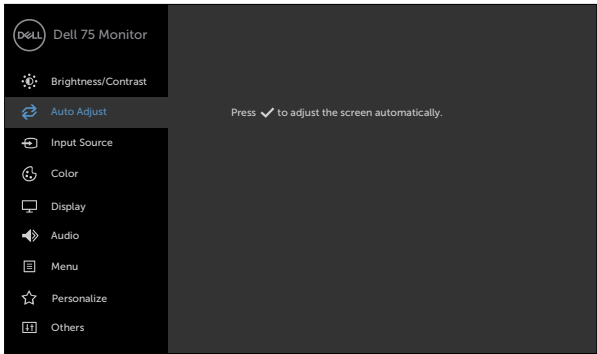
Use the **Back** icon to go back to the previous menu.
-

Touch OSD Control

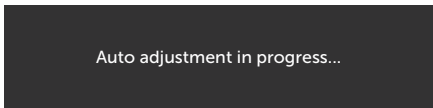
Icon	Menu and Submenus	Description
	Brightness/Contrast	Use this menu to activate Brightness/Contrast adjustment.
		
Brightness	Brightness adjusts the luminance of the backlight (minimum 0; maximum 100). Touch the  icon to increase brightness. Touch the  icon to decrease brightness.	
Contrast	Adjust the Brightness first, and then adjust Contrast only if further adjustment is necessary. Touch the  icon to increase contrast and Touch the  icon to decrease contrast (between 0 and 100). Contrast adjusts the difference between darkness and lightness on the display.	



Icon	Menu and Submenus	Description
	Auto Adjust	<p>Even though your computer recognizes your display on startup, the Auto Adjustment function optimizes the display settings for use with your particular setup.</p> <p>Auto Adjustment allows the display to self-adjust to the incoming video signal. After using Auto Adjustment, you can further tune your display by using the Pixel Clock (Coarse) and Phase (Fine) controls under Display menu.</p>




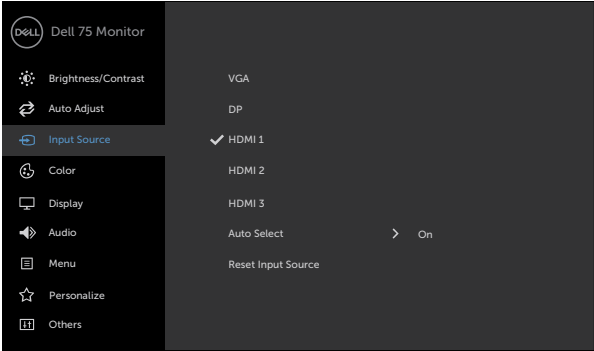


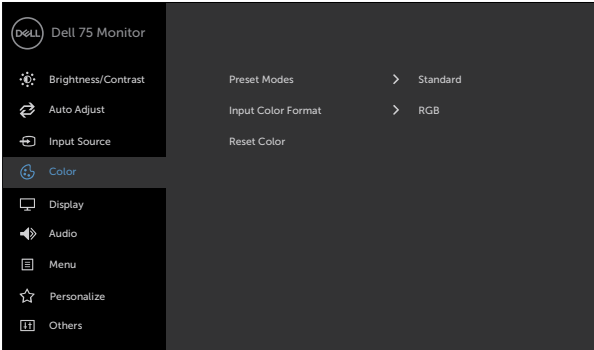

The following dialog appears on a black screen as the display automatically adjusts to the current input:



NOTE: In most cases, Auto Adjust produces the best image for your configuration.

NOTE: Auto Adjust feature option is only available when your display is connected using the VGA cable.

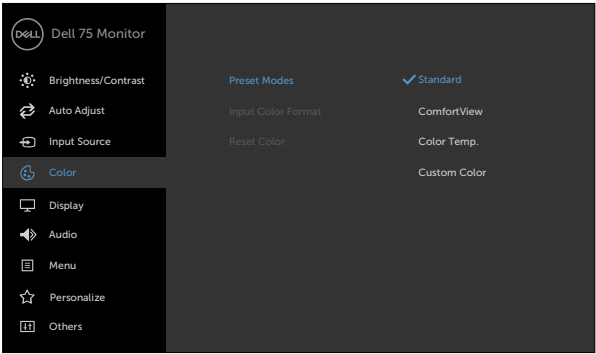


Icon	Menu and Submenus	Description
	Input Source	Use the Input Source menu to select between different video inputs that are be connected to your display.
		 
	VGA	Select VGA input when you are using the VGA connector.
	DP	Select DP input when you are using the DP (DisplayPort) connector.
	HDMI 1	Select the HDMI 1 input when you are using the HDMI 1 connector.
	HDMI 2	Select the HDMI 2 input when you are using the HDMI 2 connector.
	HDMI 3	Select the HDMI 3 input when you are using the HDMI 3 connector.
	Auto Select	Select Auto Select . the display scans for available input sources.
	Reset Input Source	Resets your display's Input Source settings to the factory defaults.
	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**, **Color Temp.** or **Custom Color** from the list.



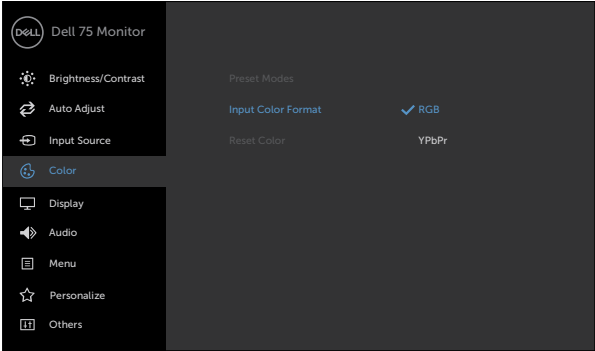

- **Standard:** Default color settings. This is the default preset mode.
- **ComfortView:** Decreases the level of blue light emitted from the screen to make viewing more comfortable for your eyes.

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


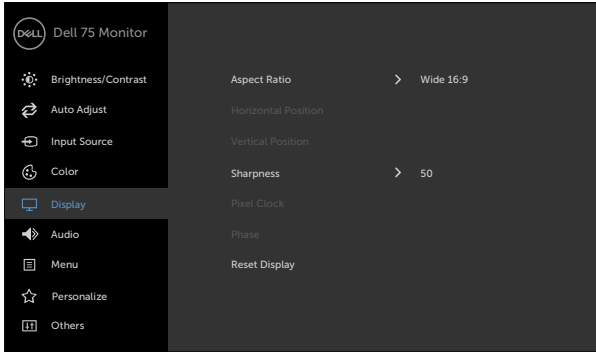









- Set the screen about 20 to 28 inches (50-70 cm) from your eyes.
- Blink frequently to moisten or rewet your eyes when working with the display.
- Take regular and frequent breaks for 20 minutes every two hours.
- Look away from your display and gaze at a distant object at 20 feet away for at least 20 seconds during the breaks.
- Perform stretches to relieve tension in the neck/arm/back/shoulders during the breaks.
- **Color Temp.:** The screen appears warmer with a red/yellow tint with slider set at 5,000K or cooler with blue tint with slider set at 10,000K.
- **Custom Color:** Allows you to manually adjust the color settings.

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



Icon	Menu and Submenus	Description
	Input Color Format	<p>Allows you to set the video input mode to:</p> <ul style="list-style-type: none">• RGB: Select this option if your display is connected to a computer (or DVD player) using the HDMI, DP or VGA cable.• YPbPr: Select this option if your DVD player supports only YPbPr output. 
	Reset Color	<p>Resets your display's color settings to the factory defaults.</p> 



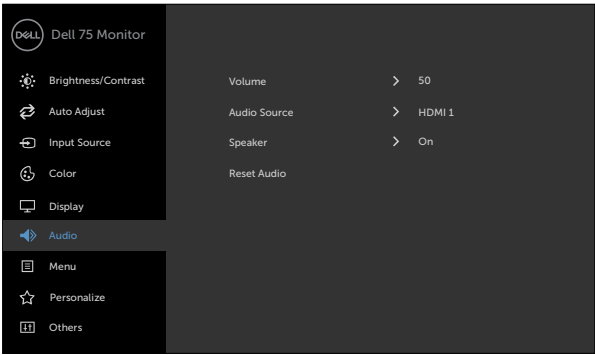
Icon	Menu and Submenus	Description
	Display	Use the Display menu to adjust image.
		
		
	Aspect Ratio	Adjust the image ratio to Wide 16:9 , 4:3 or 5:4 .
	Horizontal Position	Use  or  to adjust the image left or right. Minimum is '0' (-). Maximum is '100' (+).
	Vertical Position	Use  or  to adjust the image up or down. Minimum is '0' (-). Maximum is '100' (+). NOTE: Horizontal Position and Vertical Position adjustments are only available for "VGA" input.
	Sharpness	Makes the image look sharper or softer. Use  or  to adjust the sharpness from '0' to '100'.
	Pixel Clock	The Phase and Pixel Clock adjustments allow you to adjust your display to your preference. Use the  or  icons to adjust for best image quality. NOTE: Pixel Clock adjustments are only available for "VGA" input.
	Phase	If satisfactory results are not obtained using the Phase adjustment, use the Pixel Clock (coarse) adjustment and then use Phase (fine) again. NOTE: Phase adjustments are only available for "VGA" input.



Icon	Menu and Submenus	Description
	Reset Display	Restores the display settings to factory defaults.



Audio

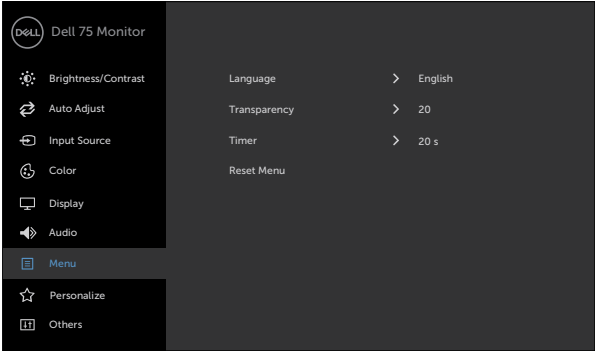






Volume	Allows you to set the volume level of audio source. Use or to adjust the volume level from '0' to '100'.
Audio Source	Allows you to set the audio source to PC Audio or HDMI/DP .
Speaker	Allows you to On or Off Speaker function.
Reset Audio	Select this option to restore default audio settings.



Menu

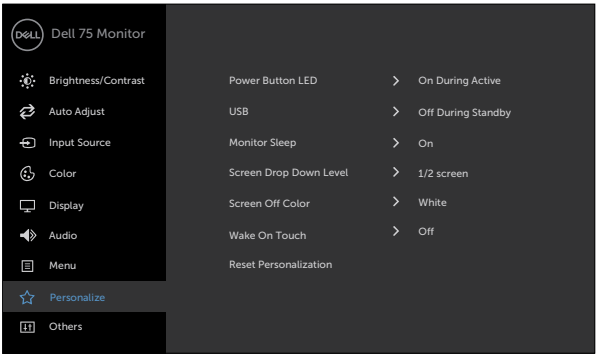
Select this option to adjust the settings of the OSD, such as the languages of the OSD, the amount of time the menu remains on screen, and so on.



Icon	Menu and Submenus	Description
	Language	Set the OSD display to one of eight languages. (English, Spanish, French, German, Brazilian Portuguese, Russian, Simplified Chinese, or Japanese).
	Transparency	Select this option to change the menu transparency by using  and  icons (min. 0 / max. 100).
	Timer	OSD Hold Time: Sets the time the OSD remains active after you press a button. Use the  and  icons to adjust the slider in 1-second increments, from 5 to 60 seconds.
	Reset Menu	Restore the menu settings to factory defaults.



Personalize



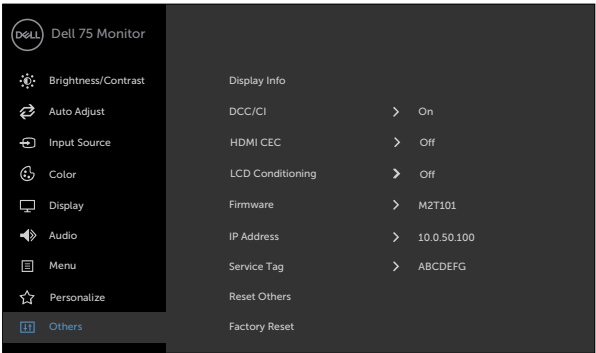
Power Button LED	Allows you to set the state of the power light to save energy.
USB	Allows you to enable or disable USB function during display standby mode. NOTE: USB ON/OFF under standby mode is only available when the USB upstream cable is unplugged. This option will be greyed out when the USB upstream cable plugs in.
Monitor Sleep	Select Off to turn off this feature.
Screen Drop Down Level	Allows you to set the Screen Drop Down level so that you can reach the top of the image. Drop Down Level Options: - 1/2 Screen - 1/3 Screen - 2/3 Screen



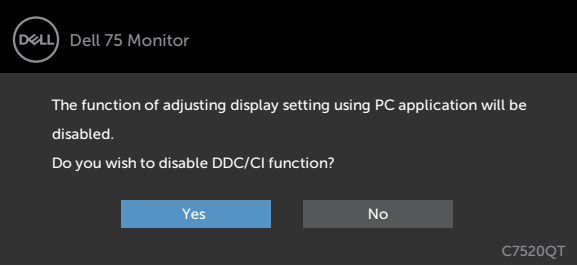
Icon	Menu and Submenus	Description
	Screen Off Color	Allows you to set the Screen Off Color to White or black .
	Wake On Touch	Select On to turn on this feature.
	Reset Personalization	Restores shortcut keys to factory defaults.



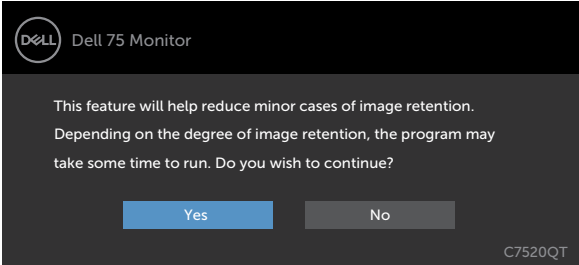
Other



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

Display Info	Displays the display's current settings.
DDC/CI	<p>DDC/CI (Display Data Channel/Command Interface) allows you to adjust the display settings using software on your computer. Select Off to turn off this feature.</p> <p>Enable this feature for best user experience and optimum performance of your display.</p> 
HDMI CEC	Allows you to On or Off HDMI CEC function.



Icon	Menu and Submenus	Description
	LCD Conditioning	<p>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.</p> 
	Firmware	Current Firmware version.
	IP Address	Show IP Address.
	Service Tag	Show Service Tag.
	Reset Others	Restores other settings, such as DDC/CI , to factory defaults.
	Factory Reset	Restores all OSD settings to the factory defaults.

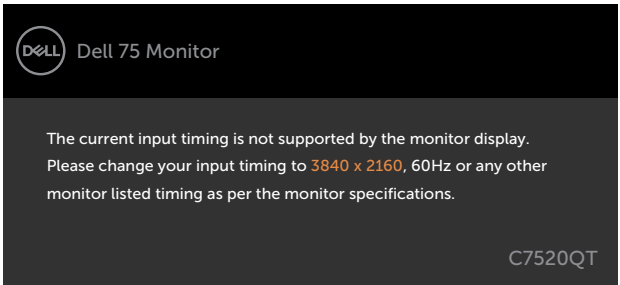


NOTE: This display has a built-in feature to automatically calibrate the brightness to compensate for LED aging.



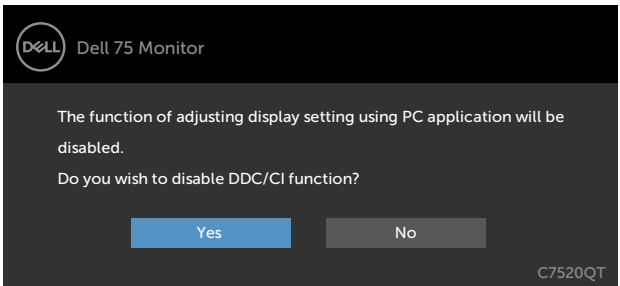
OSD Warning Messages

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

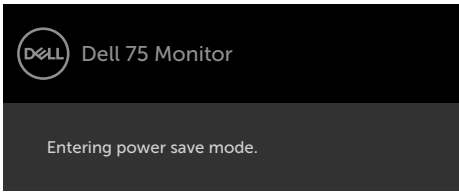


This means that the display cannot synchronize with the signal that it is receiving from the computer. See [Display Specifications](#) for the Horizontal and Vertical frequency ranges addressable by this display. Recommended mode is 3840 x 2160.

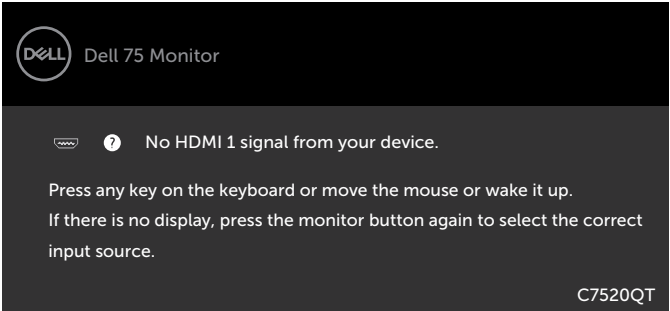
You can see the following message before the DDC/CI function is disabled:



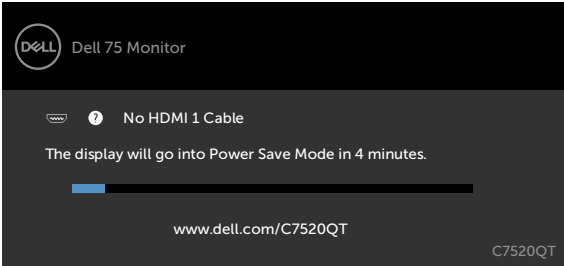
When the display enters the **Power Save** mode, the following message appears:



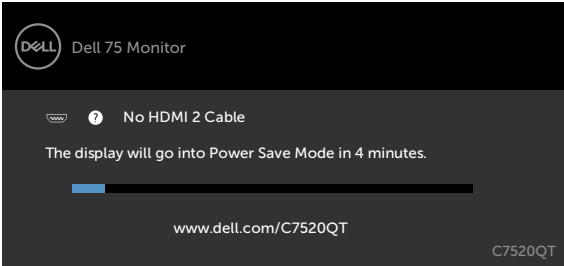
If you press any button other than the power button, the following messages will appear depending on the selected input:



If either HDMI 1, HDMI 2, HDMI 3, DP or VGA input is selected and the corresponding cable is not connected, a floating dialog box as shown below appears.

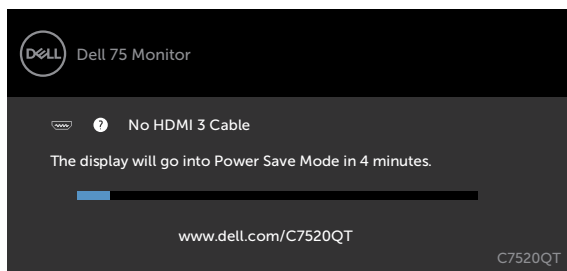


or

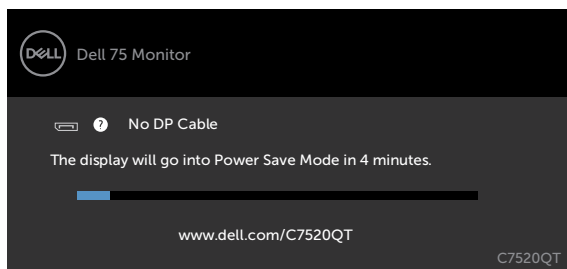


or

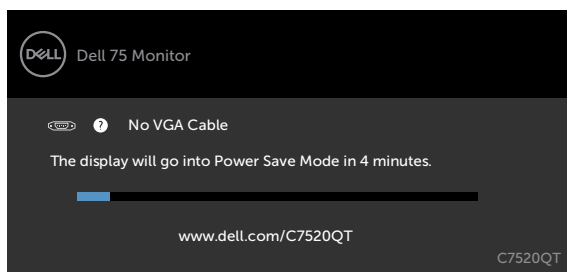




or



or

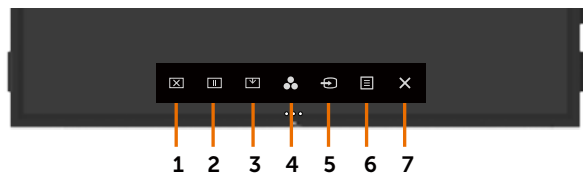


See [Troubleshooting](#) for more information.




Dell Web Management for Displays


Before accessing the Dell Display Web Management feature, ensure the Ethernet is working normally.



- **Ethernet Enable**

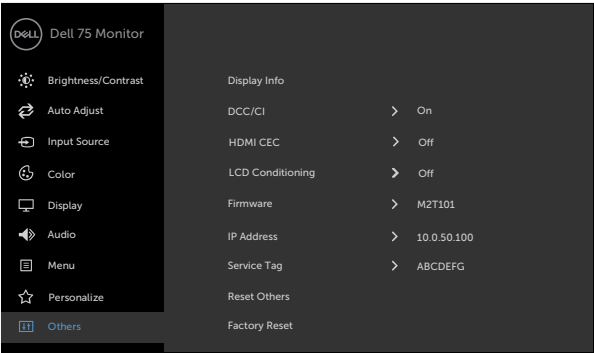
Touch and hold the **touch key 5** on the front panel for 4 seconds to turn on , A network icon  appears and is shown on the center for 4 seconds.

- **Ethernet Disable**

Touch and hold the **touch key 5** on the front panel for 4 seconds to turn off , A network icon  appears and is shown on the center for 4 seconds.

To access the Dell Display Web Management tool you need to set the IP Addresses for your computer and the display.

- 1. Press the Menu key on the remote control to display the IP Address of the display, or by navigating to OSD Menu > Others. By default, the IP Address is 10.0.50.100



2. In the computer's IP Properties tab, specify an IP Address by selecting Use the following IP Address and enter the following values: For IP Address: 10.0.50.101 and for Subnet Mask: 255.0.0.0 (leave all other entries as blanks).



3. The IP Address configuration would now look like this:



Configure notebook IP Address to 10.0.50.101



Monitor IP Address 10.0.50.100

To access and use the web management tool, follow these steps:

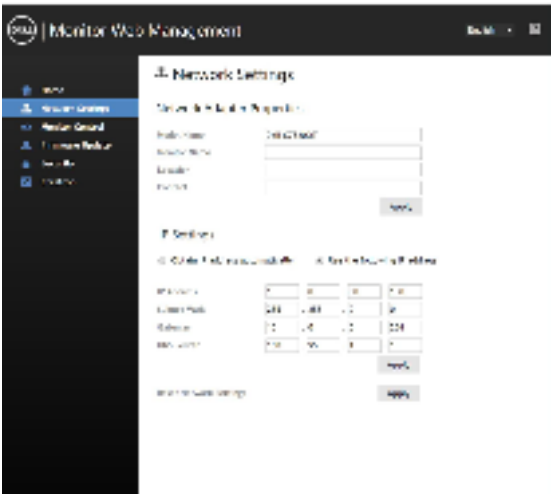
1. Open a web browser and type the display's IP Address (10.0.50.100) in the address bar.
2. The log-in page opens. Enter the Administrator Password to continue.



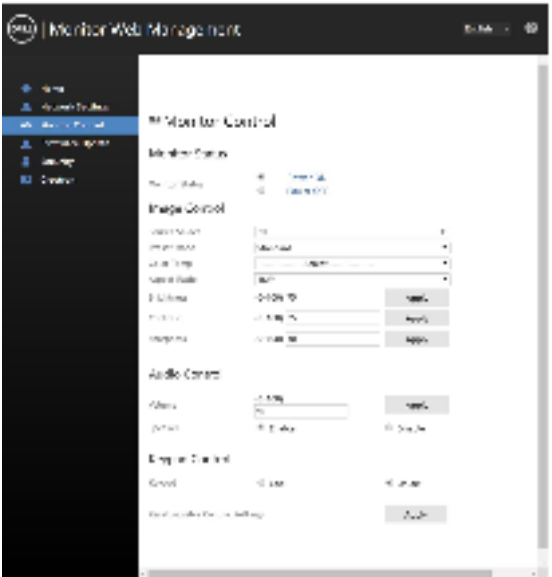
3. The Home page opens:



4. Click **Network Settings** tab to see the network settings.



5. Click **Display Control** to see the display's status.



6. Update **Firmware**. You can download the latest drivers from the Dell Support website at www.dell.com/support.



7. Upgrade firmware page and wait for 30 seconds.



8. Finished. Click on button to proceed after 8 seconds.




9. Click **Security** to set a password.



10. Click **Crestron** to control interface.



Troubleshooting

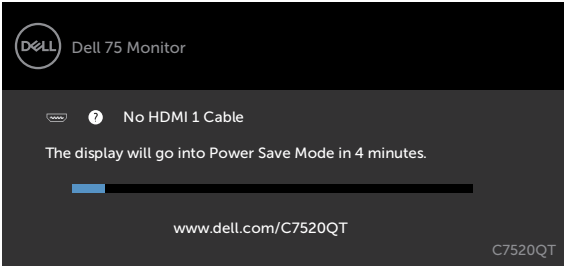
 **WARNING:** Before you begin any of the procedures in this section, follow the [Safety Instructions](#).

Self-Test

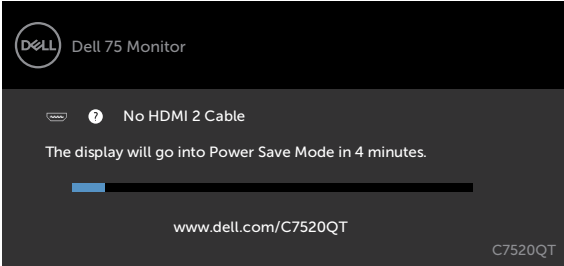
Your display provides a self-test feature that allows you to check whether your display is functioning properly. If your display and computer are properly connected but the display screen remains dark, run the display self-test by performing the following steps:

1. Turn off both your computer and the display.
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.
3. Turn on the display.

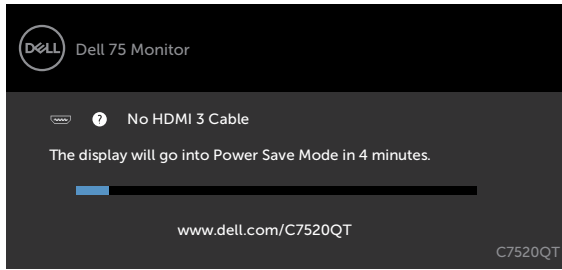
The floating dialog box should appear on-screen (against a black background), if the display cannot sense a video signal and is working correctly. While in self-test mode, the power LED remains white. Also, depending upon the selected input, one of the dialogs shown below will continuously scroll through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



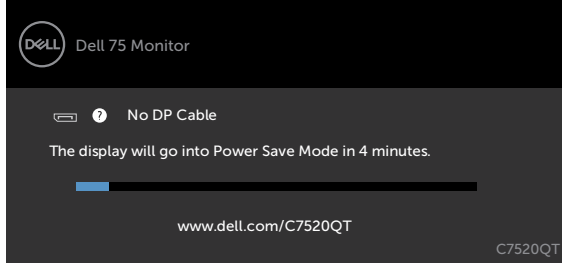
OR



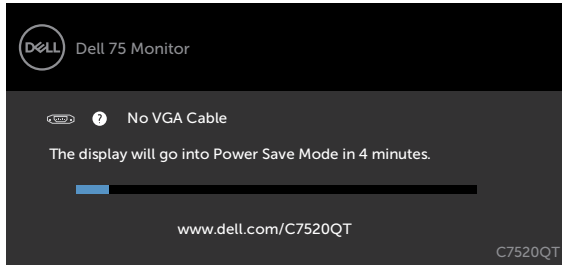
or



or



or



4. This box also appears during normal system operation, if the video cable becomes disconnected or damaged.

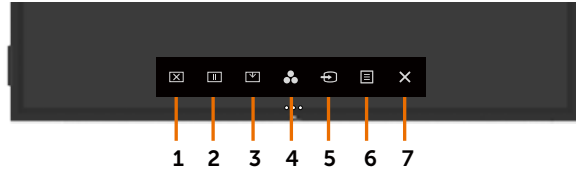
5. Turn off your display and reconnect the video cable; then turn on both your computer and the display.

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





Built-in Diagnostics

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



To run the built-in diagnostics:

1. Make sure that the screen is clean (no dust particles on the surface of the screen).
2. Touch and hold  for 5 seconds in lock Select Option. Touch the self-inspection icon . A gray screen appears.
3. Carefully inspect the screen for abnormalities.
4. Touch the front panel. The color of the screen changes to red.
5. Inspect the display for any abnormalities.
6. Repeat steps 4 and 5 to inspect the display in green, blue, black, white, and text screens.

The test is complete when the text screen appears. To exit, touch panel again.

If you do not detect any screen abnormalities upon using the built-in diagnostic tool, the display is functioning properly. Check the video card and computer.



Common Problems

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

 **NOTE: Auto Adjust function is applicable to VGA input only.**

Common Symptoms	What You Experience	Possible Solutions
No Video/Power LED off	No picture	<ul style="list-style-type: none">• Ensure that the video cable connecting the display 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	<ul style="list-style-type: none">• Increase brightness & contrast controls via OSD.• Perform display 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	<ul style="list-style-type: none">• Perform Auto Adjust via OSD.• Adjust the Phase and Pixel Clock controls via OSD.• Eliminate video extension cables.• Reset the display to factory settings.• Change the video resolution to the correct aspect ratio.
Shaky/Jittery Video	Wavy picture or fine movement	<ul style="list-style-type: none">• Perform Auto Adjust via OSD.• Adjust the Phase and Pixel Clock controls via OSD.• Reset the display to factory settings.• Check environmental factors.• Relocate the display and test in another room.
Missing Pixels	LCD screen has spots	<ul style="list-style-type: none">• Cycle power on-off.• Pixel that is permanently off is a natural defect that can occur in LCD technology.• For more information on Dell Display Quality and Pixel Policy, see Dell Support site at: http://www.dell.com/support/monitors.
Stuck-on Pixels	LCD screen has bright spots	<ul style="list-style-type: none">• Cycle power On-Off.• Pixel that is permanently off is a natural defect that can occur in LCD technology.• For more information on Dell Display Quality and PixelPolicy, see Dell Support site at: http://www.dell.com/support/monitors.




Common Symptoms	What You Experience	Possible Solutions
Brightness Problems	Picture too dim or too bright	<ul style="list-style-type: none"> Reset the display to factory settings. Auto Adjust via OSD. Adjust brightness & contrast controls via OSD.
Audio problem	No Audio	<ul style="list-style-type: none"> Check PC setting if the playback is correctly selected. Checking other video cables. Ensure that the Speaker is enabled via OSD
Geometric Distortion	Screen not centered correctly	<ul style="list-style-type: none"> Reset the display to factory settings. Auto Adjust via OSD. Adjust horizontal & vertical controls via OSD.
Horizontal/Vertical Lines	Screen has one or more lines	<ul style="list-style-type: none"> Reset the display to factory settings. Perform Auto Adjust via OSD. Adjust Phase and Pixel Clock controls via OSD. Perform display 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. Run the built-in diagnostics.
Synchronization Problems	Screen is scrambled or appears torn	<ul style="list-style-type: none"> Reset the display to factory settings. Perform Auto Adjust via OSD. Adjust Phase and Pixel Clock controls via OSD. Perform display 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 safe mode.
Safety Related Issues	Visible signs of smoke or sparks	<ul style="list-style-type: none"> Do not perform any troubleshooting steps. Contact Dell immediately.
Intermittent Problems	Display malfunctions on & off	<ul style="list-style-type: none"> Ensure that the video cable connecting the display to the computer is connected properly and is secure. Reset the display to factory settings. Perform display self-test feature check to determine if the intermittent problem occurs in self-test mode.
Missing Color	Picture missing color	<ul style="list-style-type: none"> Perform display self-test. Ensure that the video cable connecting the display 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	<ul style="list-style-type: none"> 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.



Common Symptoms	What You Experience	Possible Solutions
Image retention from a static image left on the display for a long period of time	Faint shadow from the static image displayed appears on the screen	<ul style="list-style-type: none"> Use the Power Management feature to turn off the display at all times when not in use (for more information, see Power Management Modes). Alternatively, use a dynamically changing screensaver.
Touchscreen non-responsive	Display cannot wake on touch	<ul style="list-style-type: none"> Ensure Wake On Touch is enabled via OSD. Wake On Touch is default off.

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	<ul style="list-style-type: none"> Check the Aspect Ratio setting in the Display menu OSD. Reset the display to factory settings.
Cannot adjust the display with touch OSD	OSD does not appear on the screen	<ul style="list-style-type: none"> Turn off the display, unplug the display power cable, plug it back, and then turn on the display. Check whether the OSD menu is locked. If yes, touch  icon for 4 seconds to unlock .
No Input Signal when user controls are pressed	No picture, the LED light is white	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Due to different video formats (aspect ratio) of DVDs, the display may display in full screen. Run the built-in diagnostics.



Touchscreen Problems

Specific Symptoms	What You Experience	Possible Solutions
Touch report error	Touch function miss alignment or no touch function	<ul style="list-style-type: none">• Use the Dell provided USB cable to connect your computer.• Make sure the power cable has a ground pin.• Unplug and replug the power cable to allow initialization of the touch module.• Make sure computer supports USB 2.0 or later.• If the display cannot be detected by the computer, power off/on the monitor or unplug and replug the USB cable.
Touchscreen non-responsive in power-save mode	Cannot wake up display and computer by using touch in power-save mode	<ul style="list-style-type: none">• Access Device Manager, expand HID Interface Device under Human Device.• Right click HID- compliant device, click Properties and select the check-box to allow the device to wake the computer.• Check Display OSD 'Wake on touch' setting is enabled.



Universal Serial Bus (USB) Specific Problems

Specific Symptoms	What You Experience	Possible Solutions
USB interface is not working	USB peripherals are not working	<ul style="list-style-type: none">• Check that your display is turned ON.• Reconnect the upstream cable to your computer.• Reconnect the USB peripherals (downstream connector).• Switch off and then turn on the display again.• Reboot the computer.• Some USB devices like external portable HDD require higher electric current; connect the device directly to the computer system.
SuperSpeed USB 3.0 interface is slow.	SuperSpeed USB 3.0 peripherals working slowly or not working at all	<ul style="list-style-type: none">• 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.



Specific Symptoms	What You Experience	Possible Solutions
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	<ul style="list-style-type: none"> · 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.
USB is not working	No USB functionalities	Refer to input source and USB pairing table.

Ethernet Problems

Specific Symptoms	What You Experience	Possible Solutions
Ethernet not working	Dell Web Management for Displays Webpage control is not working	<ul style="list-style-type: none"> · Ensure that the Network cable connecting the Display is properly secured. · Touch the icon 5 on the screen for 4 seconds to turn on , A network icon  appears and is shown on the center for 4 seconds . · Touch the icon 5 on the front panel for 4 seconds to turn off, A network icon  appears and is shown on the center for 4 seconds.



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.


 **WARNING: Use of controls, adjustments, or procedures other than those specified in this documentation may result in exposure to shock, electrical hazards, and/or mechanical hazards.**

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 Display 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.
4. Select the appropriate service or support link based on your need.
5. Choose the method of contacting Dell that is convenient for you.



Setting Up Your Display

Setting Display Resolution to 3840 x 2160 (maximum)

For best performance, set the display resolution to 3840 x 2160 pixels by performing the following steps:

In 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 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 x 2160.
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 3840 x 2160 again.

 **NOTE:** If you are unable to set the resolution to 3840 x 2160, please contact Dell to inquire about a graphics adapter that supports these resolutions.




Non-Dell computer

In 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, ATI, Intel etc.).
6. Refer to the graphic card provider website for updated driver (for example, <http://www.ATI.com> or <http://www.NVIDIA.com>).
7. After installing the drivers for your graphics adapter, attempt to set the resolution to 3840 x 2160 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, ATI, Intel etc.).
5. Refer to the graphic card provider website for updated driver (for example, <http://www.ATI.com> or <http://www.NVIDIA.com>).
6. After installing the drivers for your graphics adapter, attempt to set the resolution to 3840 x 2160 again.

 **NOTE:** If you are unable to set the recommended resolution, please contact the manufacturer of your computer or consider purchasing a graphics adapter that supports the video resolution.



Maintenance Guidelines

Cleaning Your Display



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



CAUTION: Read and follow the [Safety Instructions](#) before cleaning the display.

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

- 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 display. Avoid using detergent of any kind as some detergents leave a milky film on the display.
- If you notice white powder when you unpack your display, wipe it off with a cloth.
- Handle your display with care as a darker-colored display may get scratched and show white scuff marks more than a lighter-colored display.
- To help maintain the best image quality on your display, use a dynamically changing screen saver and turn off your display when not in use.

