

# Dell C5519Q

## User's Guide

Monitor Model: C5519Q  
Regulatory Model: C5519Qc





**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.



**WARNING:** 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 all the components shown below. Ensure that you have received all the components and [Contacting Dell](#) if anything 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.**

	Monitor
	Remote control & Batteries (AAA x 2)
	Power cable (varies by countries)
	VGA cable
	HDMI cable



	DP cable (DP to DP)
	USB 3.0 upstream cable (enables the USB ports on the monitor)
	Cable clips: 3 pcs
	<ul style="list-style-type: none"> <li>• Quick Setup Guide</li> <li>• Safety, Environment, and Regulatory Information (SERI)</li> </ul>

## Product Features

The **Dell C5519Q** flat panel monitor has an active matrix, Thin-Film Transistor (TFT), Liquid Crystal Display (LCD), and LED backlight. The monitor's features include:

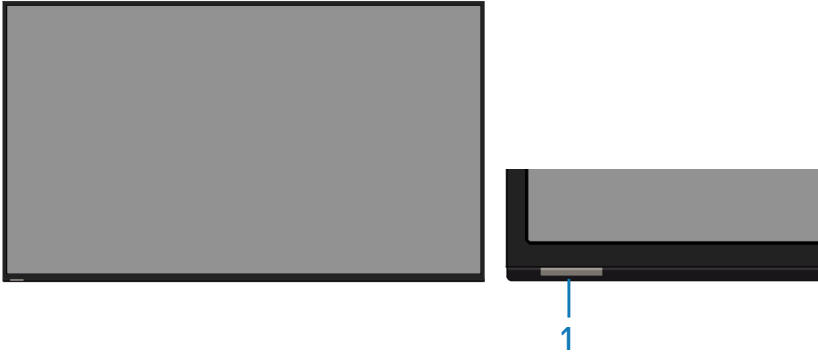
- **C5519Q:** 1386.84 mm (54.6 in.) viewable area display (measured diagonally), 3840 x 2160 resolution, plus full-screen support for lower resolutions.
- Video Electronics Standards Association (VESA) 400 mm x 400 mm mounting holes for flexible mounting solutions.
- Plug and play capability if supported by your system.
- Digital connectivity with DisplayPort and HDMI.
- On-Screen Display (OSD) adjustments for ease of set-up and screen optimization.
- Security lock slot
- Asset Management Capability.
- Optimize eye comfort with a flicker-free screen.

**⚠ WARNING: The possible long-term effects of blue light emission from the monitor may cause damage to the eyes, including eye fatigue, digital eye strain, and so on. ComfortView feature is designed to reduce the amount of blue light emitted from the monitor to optimize eye comfort.**



# Identifying parts and controls

## Front view

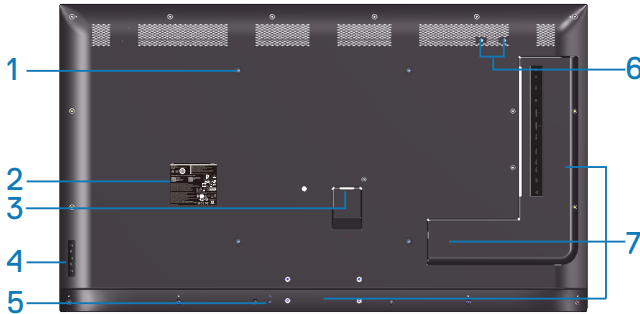


<b>1</b>	IR lens (with LED indicator)
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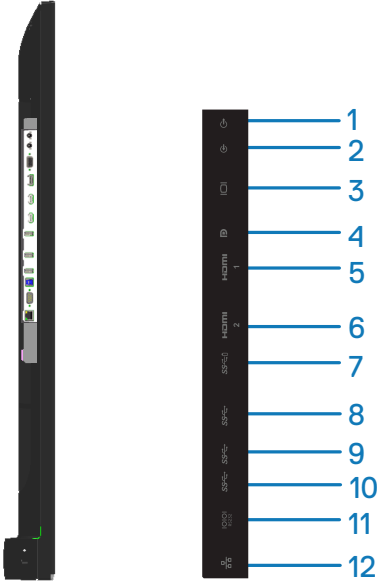
## Back view




Label	Description	Use
1	VESA mounting holes (400 mm x 400 mm)	To mount the monitor.
2	Regulatory label	List of approved regulatory labels.
3	AC power connector	To connect the monitor power cable.
4	Function buttons (For more information, see <a href="#">Operating the monitor</a> )	Use the keys on the back of the monitor to adjust the image settings.
5	Security lock slot	Secures monitor with security lock.
6	Screw Hole	For accessory mounting.
7	Cable clips position	Sticking cable clips on these positions to organize the cables.



## Side view

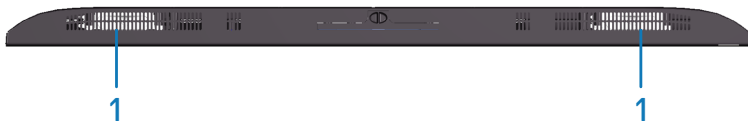


Label	Description	Use
1	Audio line-out port	Connect to external audio peripherals. Only supports 2-channel audio.  <b>NOTE: The audio line-out port does not support headphones.</b>
2	Audio line-in port	Analog audio (two channel) input.
3	VGA connector	Connect your computer with VGA cable.
4	DP connector	Connect your computer with DP cable.
5	HDMI 1 connector	Connect your computer with HDMI cable.
6	HDMI 2 connector	
7	USB dedicated charging port	USB 3.0 with 10 W - Power supply (5 V/2.0 A)
8	USB 3.0 downstream port	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 monitor.



<b>9</b>	USB 3.0 downstream port	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 monitor.
<b>10</b>	USB 3.0 upstream port	Connect the USB cable that comes with your monitor to the computer. Once this cable is connected, you can use the USB downstream connectors on the monitor.
<b>11</b>	RS232 connector	Remote management and control of monitor via RS232
<b>12</b>	RJ-45 port	Remote Network Management and control of monitor via RJ-45.


**Bottom view**



<b>1</b>	Speakers
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## Monitor specifications

Model	C5519Q
Screen type	Active matrix - TFT LCD
Panel type	Vertical alignment
Aspect ratio	16:9
Viewable image	
Diagonal	1386.8 mm (54.6 in.)
Horizontal, Active area	1209.6 mm (47.6 in.)
Vertical, Active area	680.4 mm (26.8 in.)
Area	823011.8 mm <sup>2</sup> (1275.7 in. <sup>2</sup> )
Pixel pitch	0.315 mm (W) * 0.315 mm (H)
Pixel per inch (PPI)	80
Viewing angle	
Horizontal	178° (typical)
Vertical	178° (typical)
Luminance output	350 cd/m <sup>2</sup> (typical)
Contrast ratio	4000:1 (typical)
Faceplate coating	Antiglare with hard-coating 3H, 2% Haze
Backlight	LED light bar system
Response time	8 ms typical (G to G)
Color depth	1.07 billion colors (typical)
Color gamut	National Television Standards Committee (NTSC) 72% (Commission Internationale de L'Eclairage (CIE) 1931)  <b>NOTE: Color gamut (typical) is based on CIE1976 (82%) and CIE1931 (72%) test standards.</b>
Built-in devices	<ul style="list-style-type: none"> <li>• USB 3.0 super-speed hub (with 1 x USB 3.0 upstream port)</li> <li>• 3 x USB 3.0 downstream ports (including 1 x USB 3.0 BC1.2 charging port, support 2.0 A)</li> </ul>



Ports and connectors	<ul style="list-style-type: none"> <li>• 1 x Audio line out port</li> <li>• 1 x Audio line in port</li> <li>• 1 x VGA port</li> <li>• 1 x DisplayPort version 1.2</li> <li>• 2 x HDMI port version 2.0</li> <li>• 1 x USB Dedicated charging port</li> <li>• 2 x USB 3.0 downstream ports</li> <li>• 1 x USB 3.0 upstream port</li> <li>• 1 x RS232</li> <li>• 1 x RJ-45</li> </ul>
Border width (edge of monitor to active area)	
Top/Left/Right	15.7 mm (0.61 in.)
Bottom	25.55 mm (1.01 in.)
Dell Display Manager compatibility	Yes
Security	Security lock slot (cable lock sold separately)
Cable management	Yes



## Resolution specifications

<b>Model</b>	<b>C5519Q</b>
Horizontal scan range	30 kHz to 160 kHz (automatic)
Vertical scan range	23 Hz to 80 Hz (automatic)
Maximum preset resolution	3840 x 2160 at 60 Hz

## Support video mode

<b>Model</b>	<b>C5519Q</b>
Video display capability (HDMI&DP playback)	480p, 576p, 720p, 1080p, 1080i, 2160p

## Preset display modes

Display mode	Horizontal frequency (kHz)	Vertical frequency (Hz)	Pixel clock (MHz)	Sync polarity (Horizontal/Vertical)
VESA, 720 x 400	31.5	70.0	28.3	-/+
VESA, 640 x 480	31.5	60.0	25.2	-/-
VESA, 640 x 480	37.5	75.0	31.5	-/-
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 900	55.5	60.0	97.8	+/-
VESA, 1920 x 1080	67.5	60.0	148.5	+/+
VESA, 3840 x 2160	67.5	30.0	297.0	+/+
VESA, 3840 x 2160	135.0	60.0	594.0	+/+



## Electrical specifications

Model	C5519Q
Video input signals	<ul style="list-style-type: none"><li>• Analog RGB, 0.7 Volts +/- 5%, positive polarity at 75 ohm input impedance</li><li>• HDMI 2.0, 600 mV for each differential line, 100 ohm input impedance per differential pair</li><li>• DisplayPort 1.2, 600 mV for each differential line, 100 ohm input impedance per differential pair</li></ul>
AC input voltage / frequency / current	100 VAC to 240 VAC / 50 Hz or 60 Hz $\pm$ 3 Hz / 2.5 A (typical)
Inrush current	120 V: 30 A (Max.) at 0 °C (cold start) 240 V: 60 A (Max.) at 0 °C (cold start)

## Physical characteristics

Model	C5519Q
Signal cable type	<ul style="list-style-type: none"><li>• Digital: DisplayPort, 20 pins</li><li>• Digital: HDMI, 19 pins</li><li>• Analog: D-Sub, 15 pins</li><li>• Universal Serial Bus: USB, 9 pins</li></ul>
<b>Dimensions</b>	
Height	721.5 mm (28.41 in.)
Width	1241.0 mm (48.86 in.)
Depth	64.8 mm (2.55 in.)
<b>Weight</b>	
Weight with packaging	27.57 kg (60.78 lb)
Weight with cables	21.38 kg (47.13 lb)
Weight without cables (For wall mount or VESA mount considerations - no cables)	20.50 kg (45.19 lb)



## Environmental characteristics

<b>Model</b>	<b>C5519Q</b>
<b>Compliant standards</b>	
<ul style="list-style-type: none"><li>• ENERGY STAR certified monitor</li><li>• RoHS-compliant</li><li>• TCO certified displays</li><li>• BFR/PVC free monitor (excluding external cables)</li><li>• Arsenic-free glass and Mercury-free for the panel only</li></ul>	
<b>Temperature</b>	
Operating	0 °C to 40 °C (32 °F to 104 °F)
Non-operating	<ul style="list-style-type: none"><li>• Storage: -20 °C to 60 °C (-4 °F to 140 °F)</li><li>• Shipping: -20 °C to 60 °C (-4 °F to 140 °F)</li></ul>
<b>Humidity</b>	
Operating	10 % to 80 % (non-condensing)
Non-operating	<ul style="list-style-type: none"><li>• Storage: 10 % to 90 % (non-condensing)</li><li>• Shipping: 10 % to 90 % (non-condensing)</li></ul>
<b>Altitude</b>	
Operating (maximum)	5,000 m (16,400 ft) max
Non-operating (maximum)	12,192 m (40,000 ft) max
<b>Thermal dissipation</b>	<ul style="list-style-type: none"><li>• 684.00 BTU/hour (maximum)</li><li>• 307.80 BTU/hour (typical)</li></ul>





## Power management modes

If you have VESA's DPM™ compliance display card or software installed in your PC, the monitor can automatically reduce its power consumption when not in use. This feature is called Power Save Mode\*. If the computer detects input from the keyboard, mouse or other input devices, the monitor automatically resumes functioning. The following table shows the power consumption and signaling of this automatic power saving feature.

VESA modes	Horizontal sync	Vertical sync	Video	Power indicator	Power consumption
Normal operation	Active	Active	Active	White	200 W (Maximum)** 90 W (Typical)
Active-off mode (Ehernet not turn on)	Inactive	Inactive	Blank	White (Glowing)	Less than 0.5 W
Active-off mode (Ehernet turn on)	Inactive	Inactive	Blank	White (Glowing)	Less than 2 W
Switch off	-	-	-	Off	Less than 0.5 W*

Power Consumption $P_{ON}$	85 W
Total Energy Consumption (TEC)	Not Applicable

\* Zero power consumption in off mode can only be achieved by disconnecting the AC main cable from the monitor.

\*\* Maximum power consumption with max luminance, and USB active.

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.

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





 **NOTE: This monitor is ENERGY STAR certified.**

This product qualifies for ENERGY STAR in the factory default settings which can be restored by “Factory Reset” function in the OSD menu. Changing the factory default settings or enabling other features may increase power consumption that could exceed the ENERGY STAR specified limit.

 **NOTE:**

**P<sub>ON</sub>: Power consumption of on mode as defined in Energy Star 8.0 version.**

**TEC: Total energy consumption in kWh as defined in Energy Star 8.0 version.**



## 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](#).

## LCD monitor quality & 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 [www.dell.com/support/monitors](http://www.dell.com/support/monitors).



# Setting up the monitor

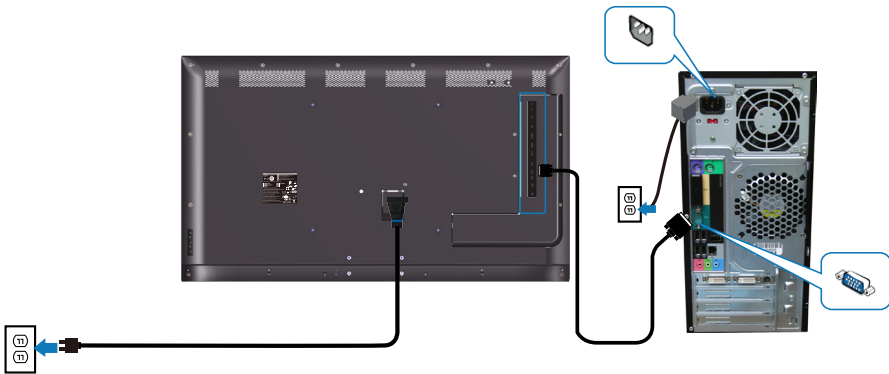
## Connecting your monitor

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

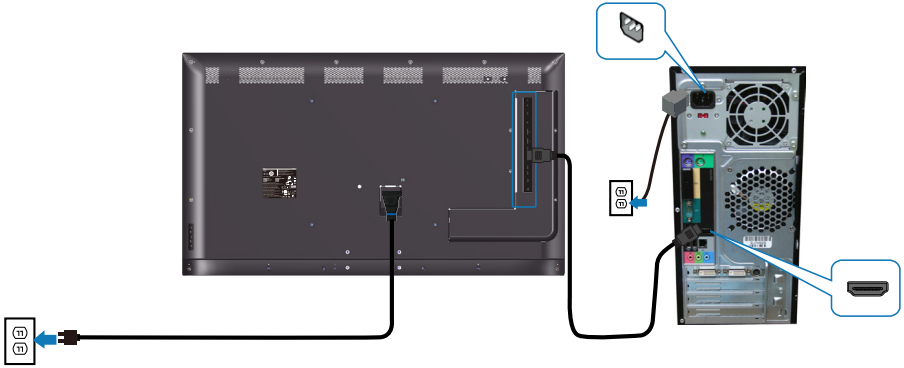
To connect your monitor to the computer:

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

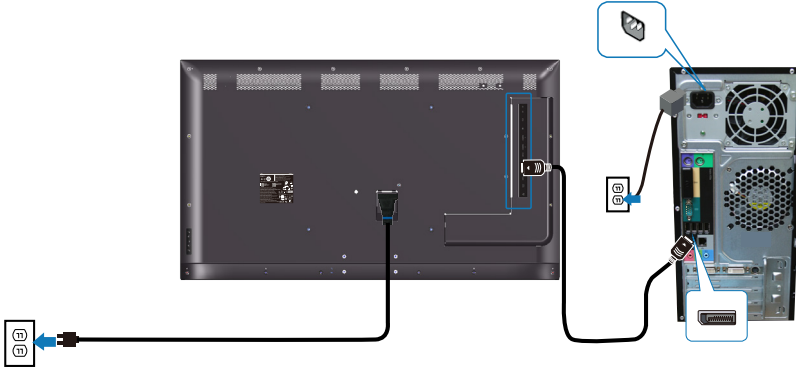
## Connecting the VGA cable



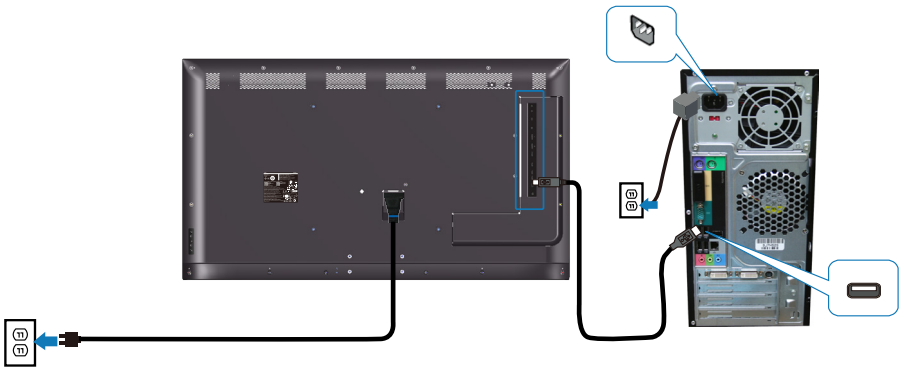
## Connecting the HDMI cable



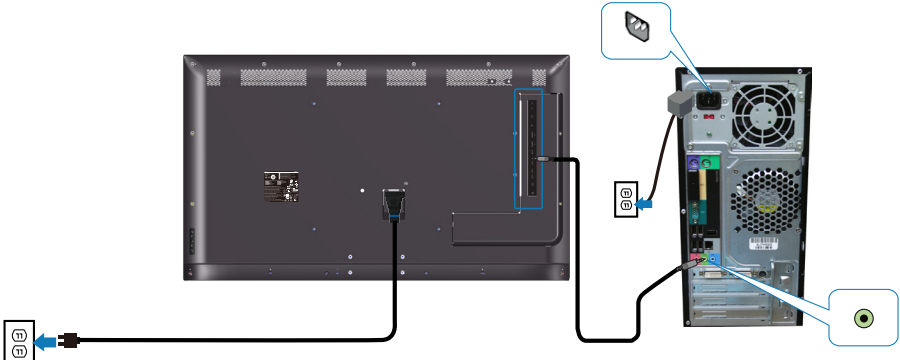
## Connecting the DP cable



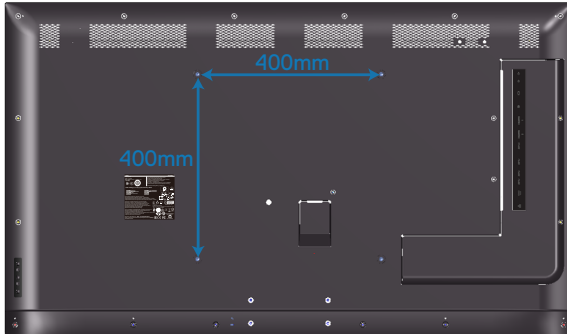
## Connecting the USB cable



## Connecting the audio cable (optional purchase)




## Wall mounting




VESA screw hole dimension M6 x 30 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 monitor panel on a soft cloth or cushion on a stable flat table.
3. Attach the mounting brackets from the wall mounting kit to the monitor.
4. Install monitor to wall plate.
5. Ensure monitor is mounted vertically with no tilt forward or backward and a leveler is used to assist to mount the monitor.

 **NOTE: Do not attempt to wall mount the monitor by yourself. It should be installed by qualified installers.**

**Recommended Wall Mount for this monitor is can be found in the Dell support website at [www.dell.com/support](http://www.dell.com/support).**

 **NOTE: For use only with UL or CSA or GS-listed wall mount bracket with minimum weight/load bearing capacity of 82 kg (180.78 lb).**






## Remote control



### 1. Power on/off

Switch this monitor on or off.

### 2. Input source

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

Monitor 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.



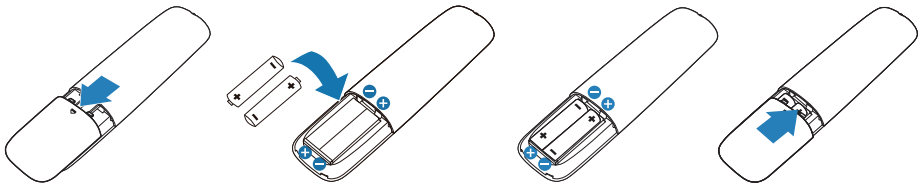


## Inserting the batteries in the remote control

The remote control is powered by two 1.5 V 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. Do not 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

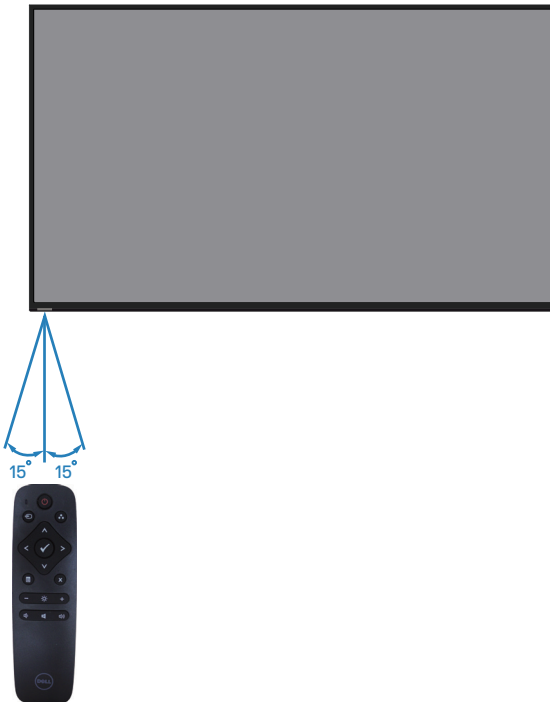
- Do not subject to strong shock.
- Do not allow water or other liquid to splash the remote control. If the remote control gets wet, wipe it dry immediately.
- Avoid exposure to heat and steam.
- Other than to install the batteries, do not open the remote control.

## Operating range of the remote control

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

Use the remote control within a distance of about 8 m from remote control sensor or at a horizontal and vertical angle of within  $15^\circ$  within a distance of about 5.6 m.

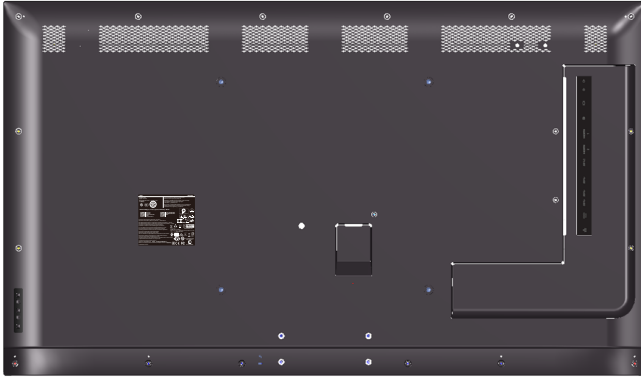
 **NOTE: The remote control may not function properly when the remote control sensor on the monitor is under direct sunlight or strong illumination, or when there is an obstacle in the path of signal transmission.**



# Operating the monitor

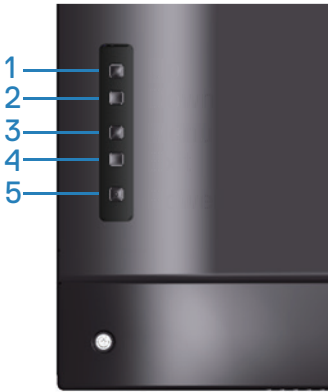
## Power on the monitor

Press the  button to turn on the monitor.








## Using the control buttons

Use the keys on the back of the monitor to adjust the image settings.







The following table describes the control buttons:

Control buttons	Description
1  Up	Use the <b>Up</b> key to adjust (increase ranges) items in the OSD menu.
2  Down	Use the <b>Down</b> key to adjust (decrease ranges) items in the OSD menu.
3  Menu	Use the Menu button to launch the On-Screen Display (OSD) and select the OSD Menu. See <a href="#">Accessing the OSD menu</a> .
4  Exit	Use the <b>Exit</b> key to exit on-screen display (OSD) from menu and sub-menus. Hold about 10 seconds will enable or disable OSD lock.
5  Power	Press the Power button to turn on/off the monitor.



## OSD controls




	Control buttons	Description
1	 Up	Use the <b>Up</b> key to adjust (increase ranges) items in the OSD menu.
2	 Down	Use the <b>Down</b> key to adjust (decrease ranges) items in the OSD menu.
3	 OK	Use the <b>OK</b> key to confirm your selection.
4	 Exit	Use the <b>Exit</b> key to exit on-screen display (OSD) from menu and sub-menus. Hold about 10 seconds will enable or disable OSD lock.



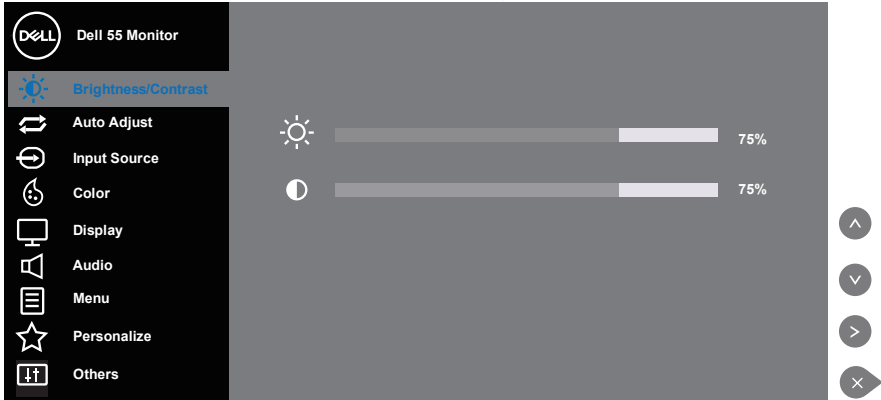
# Using the On-Screen Display (OSD) menu










## Accessing the OSD menu

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


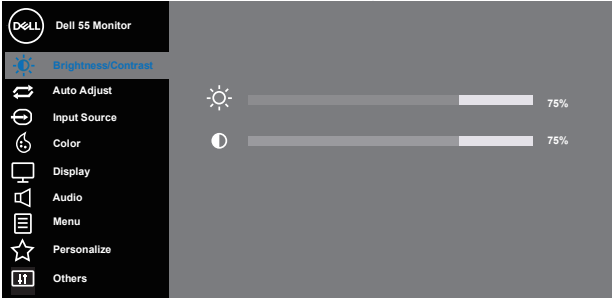





1. Press the  button to display the OSD main menu.

## Main menu



2. Press the  and  buttons to move between the setting options. As you move from one icon to another, the option name is highlighted. See the following table for a complete list of all the options available for the monitor.
3. Press the  button once to activate the highlighted option.
4. Press the  and  button to select the desired parameter.
5. Press  and then use the  or  buttons, according to the indicators on the menu, to make your changes.
6. Select the  button to return to the main menu.



Icon	Menu and submenus	Description
	<b>Brightness/Contrast</b>	<p>Use this menu to activate brightness/contrast adjustment.</p> 
	<b>Brightness</b>	<p>Brightness adjusts the luminance of the backlight.</p> <p>Press the  key to increase brightness and press the  key to decrease brightness (min 0 ~ max 100).</p> <p> <b>NOTE: Manual adjustment of brightness is disabled when dynamic contrast is switched on.</b></p>
	<b>Contrast</b>	<p>Adjust the brightness first, and then adjust the contrast only if further adjustment is necessary.</p> <p>Press the  key to increase contrast and press the  key to decrease contrast (min 0 ~ max 100).</p> <p>The contrast function adjusts the degree of difference between darkness and lightness on the monitor screen.</p>





## Auto Adjust


Use this key to activate automatic setup and adjust menu.



The following dialog appears on a black screen as the monitor self-adjusts to the current input:

Auto Adjustment in Progress...

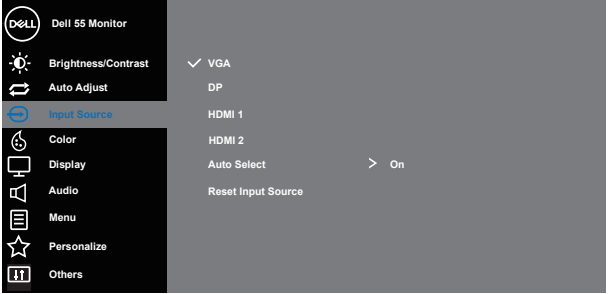





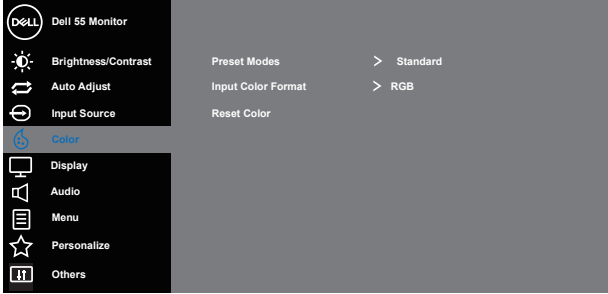
Auto Adjustment allows the monitor to self-adjust to the incoming video signal. After using Auto Adjustment, you can further tune your monitor by using the Pixel Clock (Coarse) and Phase (Fine) controls under **Display Settings**.

 **NOTE: Auto Adjust does not occur if you press the button while there are no active video input signals or attached cables.**

This option is only available when you are using the analog (VGA) connector.





	<p><b>Input Source</b></p>	<p>Use the Input Source menu to select between different video signals that may be connected to your monitor.</p> 
	<p><b>VGA</b></p>	<p>Select VGA input when you are using the analog (VGA) connector. Push  to select the VGA input source.</p>
	<p><b>DP</b></p>	<p>Select DisplayPort input when you are using the DisplayPort (DP) connector. Push  to select the DisplayPort input source.</p>
	<p><b>HDMI 1</b></p>	<p>Select HDMI 1 input when you are using the HDMI 1 connectors. Press  to select the HDMI 1 input source.</p>
	<p><b>HDMI 2</b></p>	<p>Select HDMI 2 input when you are using the HDMI 2 connectors. Press  to select the HDMI 2 input source.</p>
	<p><b>Auto Select</b></p>	<p>Select Auto Select to scan for available input signals.</p>
	<p><b>Reset Input Source</b></p>	<p>Resets your monitor's input source to the factory defaults.</p>
	<p><b>Color</b></p>	<p>Use the Color menu to adjust the monitor's color settings.</p> 



## Preset Modes

When you select preset modes, you can choose Standard, ComfortView, Color temp or Custom Color from the list.

- Standard: Loads the monitor's 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.
- Color temp.: Adjusts the Color temperature as 5000K, 5700K, 6500K, 7500K, 9300K, 10000K. 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. Press the ▲ and ▼ keys to adjust the Red, Green, and Blue values and create your own preset color mode.

**⚠ WARNING: The possible long-term effects of blue light emission from the monitor may cause personal injury such as digital eye strain, eye fatigue and damage to the eyes. Using monitor for extended periods of time may also cause pain in parts of body such as neck, arm, back and shoulder.**

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

1. Set the distance of the screen between 40 to 197 in. (100 - 500 cm) from your eyes.
2. Blink frequently to moisten your eyes or wet your eyes with water after prolonged usage of the monitor.
3. Take regular and frequent breaks for 20 minutes every two hours.
4. Look away from your monitor and gaze at a distant object at 20 feet away for at least 20 seconds during the breaks.
5. Perform stretches to relieve tension in the neck, arm, back, and shoulders during the breaks.



	<b>Input Color Format</b>	Allows you to set the video input mode to: <ul style="list-style-type: none"><li>• RGB: Select this option if your monitor is connected to a computer or DVD player using the HDMI cable (or DisplayPort cable).</li><li>• YPbPr: Select this option if your DVD player supports only YPbPr output.</li></ul>
	<b>Reset Color</b>	Resets your monitor's color settings to the factory defaults.





## Display

Use the display to adjust image.



### Aspect Ratio

Adjusts the image ratio as Wide 16:9, 4:3, or 5:4.

**NOTE: Wide 16:9 adjustment is not required at maximum preset resolution 3840 x 2160.**

### Horizontal Position

Use or the buttons to adjust image left and right. Minimum is '0' (-). Maximum is '100' (+).

### Vertical Position

Use the or buttons to adjust image up and down. Minimum is '0' (-). Maximum is '100' (+).

### Sharpness

This feature can make the image look sharper or softer. Use or to adjust the sharpness from '0' to '100'.

**NOTE: The value of 100 is sharper.**

### Pixel Clock

The Phase and Pixel Clock adjustments allow you to adjust your monitor to your preference. Use or buttons to adjust for best image quality. Minimum is '0' (-). Maximum is '100' (+).

### Phase

If satisfactory results are not obtained using the Phase adjustment, use the Pixel Clock (coarse) adjustment and then use Phase (fine), again. Minimum is '0' (-). Maximum is '100' (+).


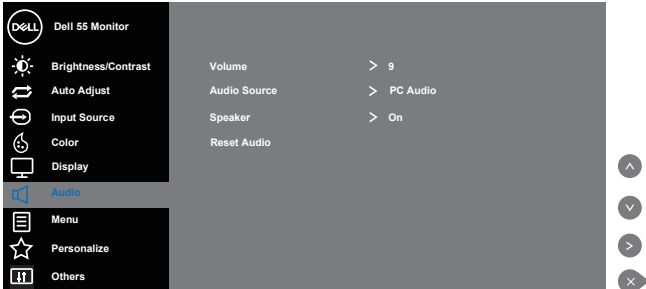
### Reset Display

Select this option to restore default display settings.


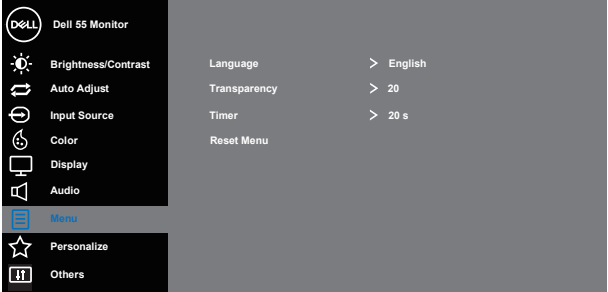






**NOTE: Horizontal Position, Vertical Position, Pixel Clock and Phase adjustment are only available for VGA input.**



	<b>Audio</b>	
	<b>Volume</b>	Use the buttons to adjust the volume. Minimum is '0' (-). Maximum is '100' (+).
	<b>Audio Source</b>	Allows you to set the Audio Source mode to: <ul style="list-style-type: none"> <li>• PC Audio</li> <li>• HDMI 1 (or HDMI X or DP)</li> </ul>
	<b>Speaker</b>	Allows you to enable or disable speaker function.
	<b>Reset Audio</b>	Select this option to restore default display settings.



	<p><b>Menu</b></p>	<p>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.</p> 
	<p><b>Language</b></p>	<p>Allows you to set the OSD display to one of eight languages (English, Spanish, French, German, Portuguese (Brazil), Russian, Simplified Chinese, or Japanese).</p>
	<p><b>Transparency</b></p>	<p>Select this option to change the menu transparency by pressing the  and  buttons from 0 to 100.</p>
	<p><b>Timer</b></p>	<p>Allows you to set the time for which the OSD remains active after you press a key on the monitor.</p> <p>Use the  and  keys to adjust the slider in 1 second increments, from 5 to 60 seconds.</p>
	<p><b>Reset Menu</b></p>	<p>Select this option to restore default menu settings.</p>





## Personalize

Users can choose a feature from Power Button LED, USB, Monitor Sleep or Reset Personalization.



### Power Button LED

Allows you to set the power LED indicator On During Active or Off During Active to save energy.

### USB

Allows you to set the USB On During Standby or Off During Standby to save energy.


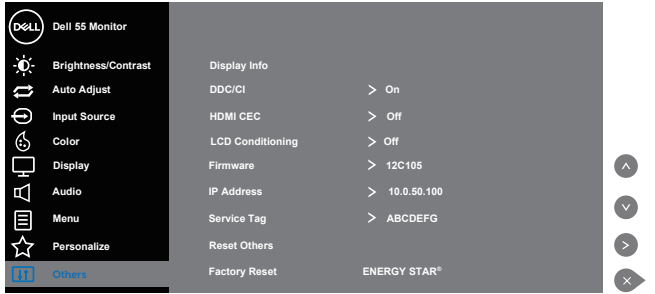

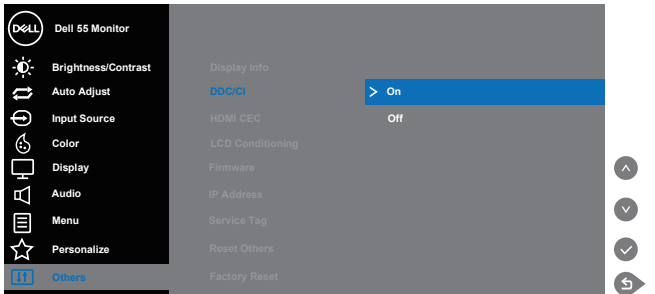
### Monitor Sleep

Select off to turn off this feature.

### Reset Personalization

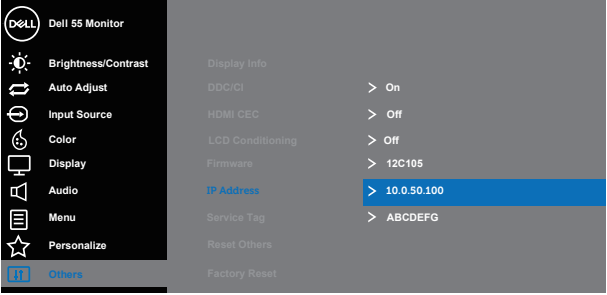
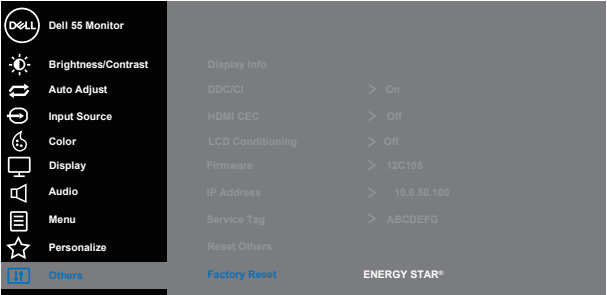
Allows you to restore shortcut key to the default setting.



	<p><b>Others</b></p>	
	<p><b>Display Info</b></p>	<p>Press to display the information about the display.</p> 
	<p><b>DDC/CI</b></p>	<p>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.</p> <p>Enable this feature by selecting on for best user experience and optimum performance of your monitor.</p> 
	<p><b>HDMI CEC</b></p>	<p>Allows you to enable or disable HDMI CEC function.</p>



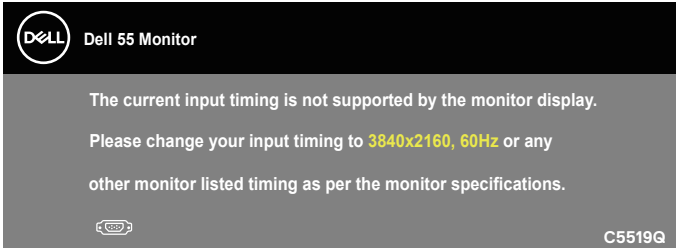


<p><b>LCD Conditioning</b></p>	<p>Helps reduce minor cases of image retention. Depending on the degree of image retention, the program may take some time to run. To start LCD conditioning, select on.</p>
<p><b>Firmware</b></p>	<p>Displays the version of the firmware about the monitor.</p>
<p><b>IP Address</b></p>	<p>Selects this option to access the Dell Monitor Web Management tool. (For more information, see <a href="#">Dell web management for monitors</a>)</p>  <p>The screenshot shows the Dell 55 Monitor OSD menu. The 'IP Address' option is highlighted in blue. The menu items are: Dell 55 Monitor, Brightness/Contrast, Auto Adjust, Input Source, Color, Display, Audio, Menu, Personalize, and Others. The right side of the screen shows settings for Display Info, DDC/CI, HDMI CEC, LCD Conditioning, Firmware, IP Address (10.0.50.100), Service Tag, Reset Others, and Factory Reset.</p>
<p><b>Service Tag</b></p>	<p>Displays the service tag number of the monitor.</p>
<p><b>Reset Others</b></p>	<p>Resets all settings under the others setting menu to the factory preset values.</p>
<p><b>Factory Reset</b></p>	<p>Restore all preset values to the factory default settings. These are also the settings for ENERGY STAR® tests.</p>  <p>The screenshot shows the Dell 55 Monitor OSD menu. The 'Factory Reset' option is highlighted in blue. The menu items are: Dell 55 Monitor, Brightness/Contrast, Auto Adjust, Input Source, Color, Display, Audio, Menu, Personalize, and Others. The right side of the screen shows settings for Display Info, DDC/CI, HDMI CEC, LCD Conditioning, Firmware, IP Address, Service Tag, Reset Others, and Factory Reset (ENERGY STAR®).</p>



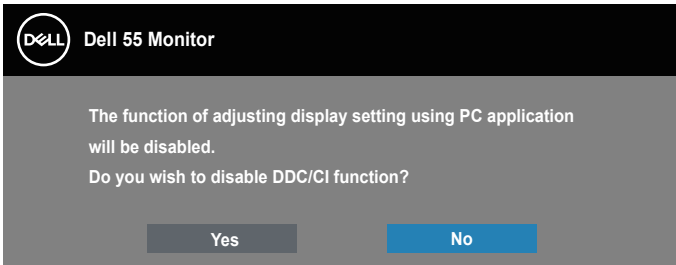
## OSD warning messages

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



This means that the monitor cannot synchronize with the signal that it is receiving from the computer. See [Monitor specifications](#) for the horizontal and vertical frequency ranges addressable by this monitor. Recommended mode is 3840 x 2160.

Before the **DDC/CI** function is disabled, the following message is displayed:



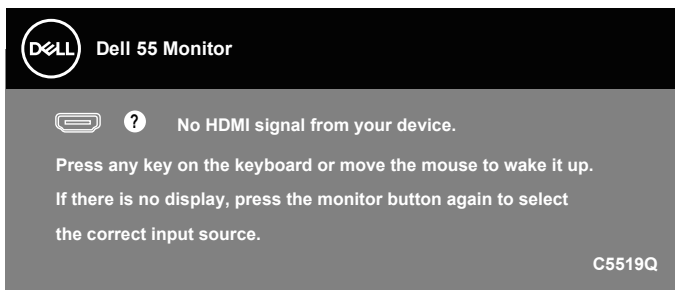
When the monitor enters the **Power Save** mode, the following message appears:



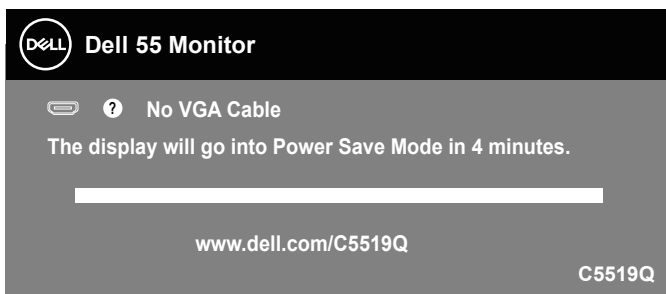
Activate the computer and wake up the monitor to gain access to the [Using the On-Screen Display \(OSD\) menu](#).

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

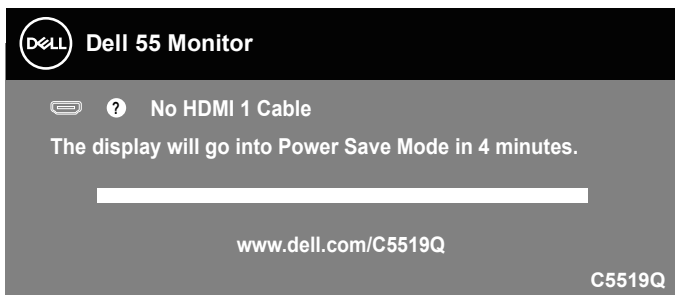


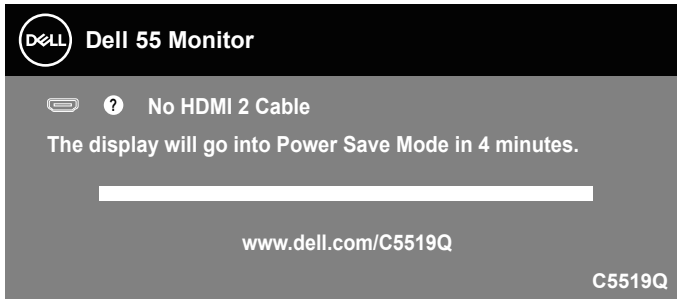


If VGA cable is not connected, a floating dialog box as shown below appears. The monitor will enter power save mode after 4 minutes if left at this state.

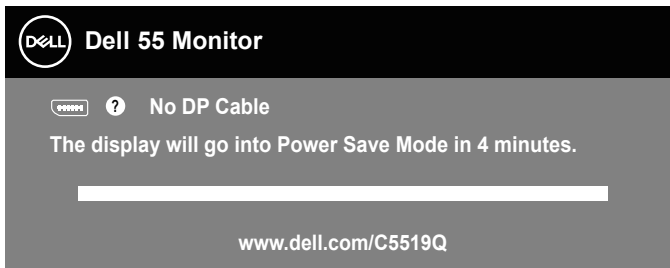


If HDMI cable is not connected, a floating dialog box as shown below appears. The monitor will enter power save mode after 4 minutes if left at this state.





If DP cable is not connected, a floating dialog box as shown below appears. The monitor will enter power save mode after 4 minutes if left at this state.

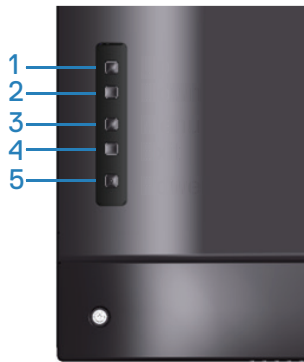



See [Solving Problems](#) for more information.




## Dell ethernet/web management for monitors

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



**Ethernet Enable:** Hold the Up key (button 1) for 4 seconds to enable Ethernet (when Ethernet disabled), A network icon  appears and is shown on center of display screen for 4 seconds.

**Ethernet Disable:** Hold the Up key (button 1) for 4 seconds to disable Ethernet (when Ethernet enabled), A network icon  appears and is shown on center of display screen for 4 seconds.

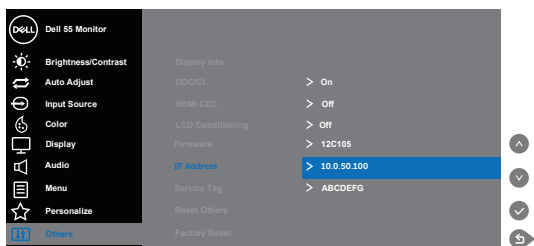
 **NOTE: RS232 remains enabled, whether Ethernet is enabled or disabled.**

This monitor comes with networking capability which lets you remotely access and change settings such as Input Source Selection, Brightness and Volume.

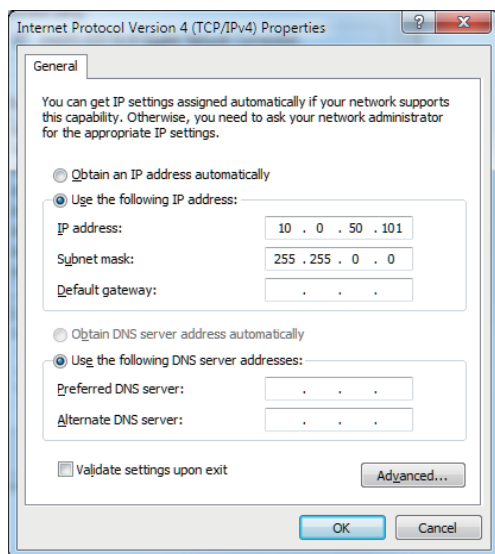
To access the Dell Display Web Management tool you need to set the IP Addresses for your computer and the monitor.

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





- 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: 255.255.0.0 (leave all other entries as blanks).



- The IP Address configuration would now look like this:



Configure notebook IP Address to 10.0.50.101

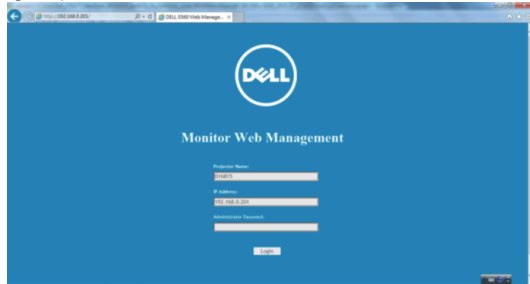


Monitor IP Address 10.0.50.100

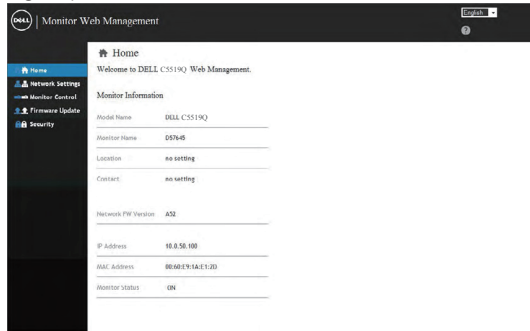
To access and use the web management tool, follow these steps:



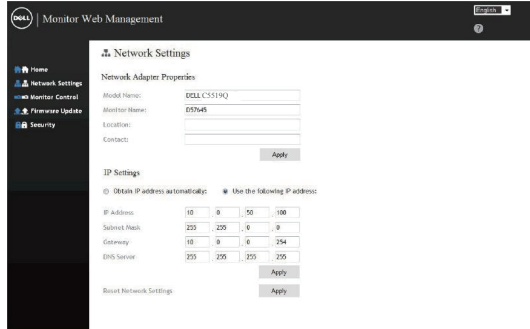
1. Open a web browser and type the monitor's IP Address (10.0.50.100) in the address bar.
2. The log-in page opens. Enter the Administrator Password to continue.



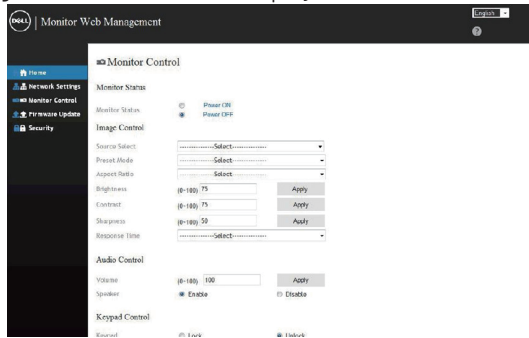
3. The **Home** page opens.



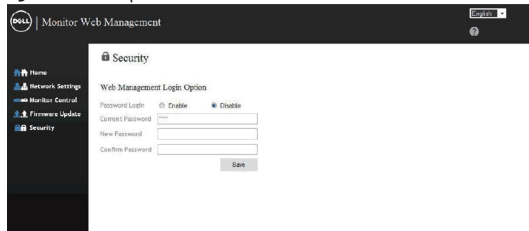
4. Click **Network Settings** tab to see the network settings.



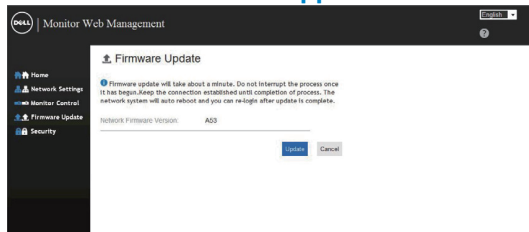
5. Click **Display Control** to see the display's status.



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



7. Update **Firmware**. You can download the latest drivers from the Dell Support website at [www.dell.com/support](http://www.dell.com/support)



8. Upgrade firmware page and wait for 30 seconds.





## Upgrade Firmware

Please select a file (~.bin) to upgrade : C:\Users\Administrator\Desktop\...

Upgrade

Cancel

(Upgrading firmware may take 60 seconds)



Upgrade must NOT be interrupted !

9. Finished. click on button to proceed after 8 seconds.

Please wait.

Click on button to proceed after 8 seconds.

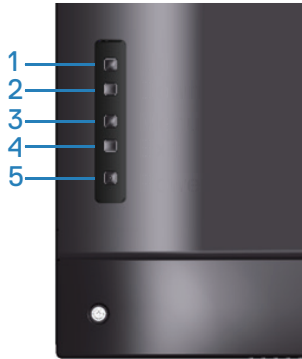
Waiting (6)



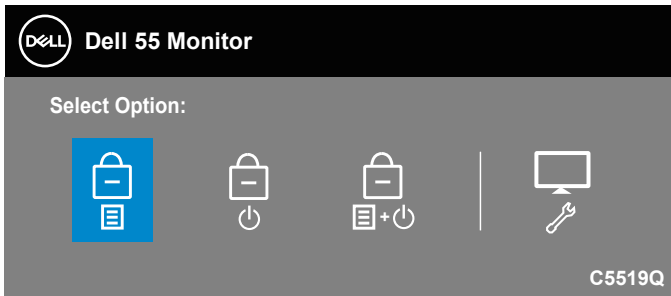
## OSD and Power button lock

Controls user access to adjustments.

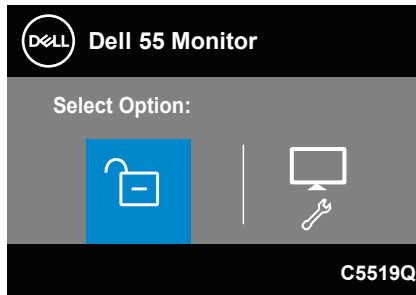
The default setting of OSD lock is set to unlock.







To enter OSD lock menu: Hold the Exit key (button 4) for 4 seconds to display OSD lock menu (when OSD unlocked), A OSD lock menu appears and is shown on center of display screen for 4 seconds.




To enter OSD unlock menu: Hold the Exit key (button 4) for 4 seconds to display OSD lock menu (when OSD locked), A OSD unlock menu appears and is shown on center of display screen for 4 seconds.



There are three levels of lock.

	<b>Menu</b>	<b>Description</b>
1	OSD menu lock 	When “OSD menu lock” is selected, no user adjustments are allowed. All buttons are locked except Power key.
2	Power-off button lock 	When “Power-off button lock” is selected, user is now not able to turn off the display via Power key.
3	OSD menu lock + Power-off button lock 	When “OSD menu lock + Power-off button lock” is selected, no user adjustments are allowed and the power-off button is locked.
4	Built-in Diagnostics 	See <a href="#">Built-in diagnostics</a> for more information.

 **NOTE: To get into OSD Lock or Unlock menu – Press and hold the Exit key (button 4) for 4 seconds.**

The  icon will appear on center of display screen when in the following conditions which mean OSD is in lock state.


1. Press the Up key (button 1), Down key (button 2), Menu key (button 3) or Exit key (button 4) when in “OSD menu lock” state.
2. Press the Power key (button 5) when in “Power-off button lock” state.
3. Press any button of the monitor when in “OSD menu lock + Power-off button lock” state.

When OSD is in lock state, hold the Exit key (button 4) for 4 seconds to enter the OSD unlock menu.

And then choose and apply to the unlock icon  to release the OSD lock.



# Troubleshooting

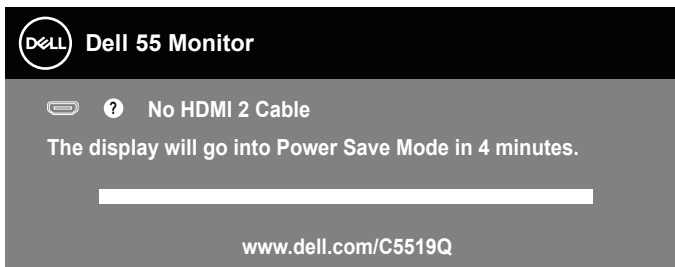
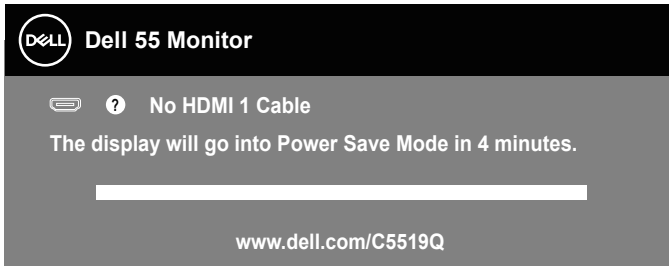
 **WARNING: Before you begin any of the procedures in this section, follow the [Safety instructions](#).**

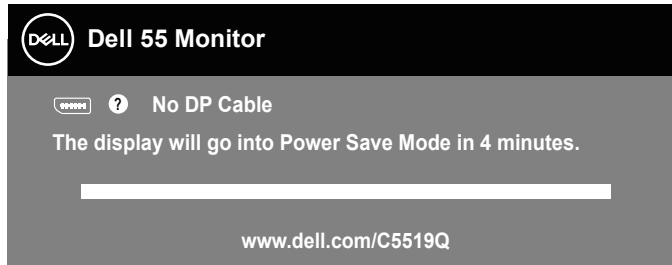
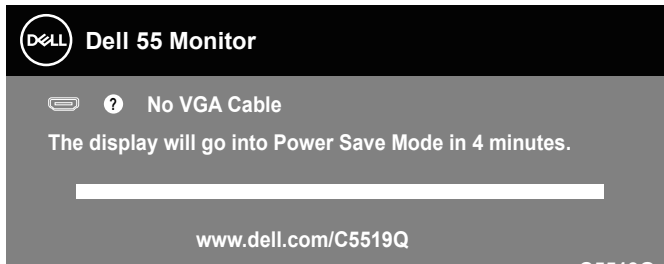
## Self-test

Your monitor provides a self-test feature that allows you to check if 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. Disconnect all video cables from the monitor. This way, the computer doesn't have to be involved.
3. Turn on the monitor.

If the monitor is working correctly, it detects that there is no signal and one of the following message appears. While in self-test mode, the power LED remains white.





 **NOTE: This box also appears during normal system operation, if the video cable is disconnected or damaged.**

4. Turn off your monitor and reconnect the video cable; then turn on your computer and the monitor.

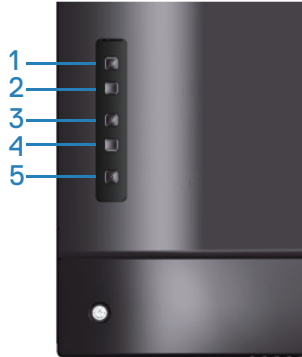
If your monitor remains dark after you reconnect the cables, check your video controller and computer.



## Built-in diagnostics

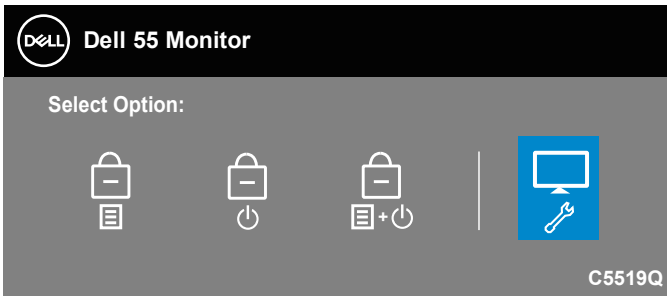
Your monitor has a built-in diagnostic tool that helps you determine if the screen abnormality you are experiencing is an inherent problem with your monitor, or with your computer and video card.

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



To run the built-in diagnostics:

1. Ensure that the screen is clean (no dust particles on the surface of the screen).
2. Unplug the video cable (s) from the back of the computer or monitor. The monitor then goes into the self-test mode.
3. Press and hold the Exit key (button 4) for 4 seconds to enter the OSD lock/unlock menu.



4. Select the  icon to enable the built-in diagnostics.



5. Carefully inspect the screen for abnormalities.
6. Press the Up key (button 1) on the back cover again. The color of the screen changes to grey.
7. Inspect the display for any abnormalities.
8. Repeat step 6 and 7 to inspect the display in red, green, blue, black, white and text pattern screens.

The test is complete when the text pattern screen appears. To exit, press the Up key (button 1) again.

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



## Common problems

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

Common symptoms	Possible solutions
No video/Power LED off	<ul style="list-style-type: none"><li>• Ensure that the video cable connecting the monitor and the computer is properly connected and secure.</li><li>• Verify that the power outlet is functioning properly using any other electrical equipment.</li><li>• Ensure that the power button is pressed.</li><li>• Ensure that the correct input source is selected via the <a href="#">Input Source</a> menu.</li></ul>
No video/Power LED on	<ul style="list-style-type: none"><li>• Increase brightness and contrast controls using the OSD.</li><li>• Perform monitor self-test feature check.</li><li>• Check for bent or broken pins in the video cable connector.</li><li>• Run the built-in diagnostics.</li><li>• Ensure that the correct input source is selected via the <a href="#">Input Source</a> menu.</li></ul>
Poor focus	<ul style="list-style-type: none"><li>• Eliminate video extension cables.</li><li>• Reset the monitor to Factory Settings (Factory Reset).</li><li>• Change the video resolution to the correct aspect ratio.</li></ul>
Shaky/Jittery video	<ul style="list-style-type: none"><li>• Reset the monitor to factory settings (Factory Reset).</li><li>• Check environmental factors.</li><li>• Relocate the monitor and test in another room.</li></ul>
Missing pixels	<ul style="list-style-type: none"><li>• Cycle power on-off.</li><li>• Pixel that is permanently off is a natural defect that can occur in LCD technology.</li><li>• For more information on Dell monitor quality and pixel policy, see Dell support site at: <a href="http://www.dell.com/support/monitors">www.dell.com/support/monitors</a>.</li></ul>
Stuck-on pixels	<ul style="list-style-type: none"><li>• Cycle power on-off.</li><li>• Pixel that is permanently off is a natural defect that can occur in LCD technology.</li><li>• For more information on Dell Monitor Quality and Pixel Policy, see Dell Support site at: <a href="http://www.dell.com/support/monitors">www.dell.com/support/monitors</a>.</li></ul>
Brightness problems	<ul style="list-style-type: none"><li>• Reset the monitor to Factory Settings (Factory Reset).</li><li>• Adjust brightness &amp; contrast controls via OSD.</li></ul>
Geometric distortion	<ul style="list-style-type: none"><li>• Reset the monitor to Factory Settings (Factory Reset).</li><li>• Adjust horizontal &amp; vertical controls via OSD.</li></ul>





Horizontal/Vertical lines	<ul style="list-style-type: none"> <li>● Reset the monitor to Factory Settings (Factory Reset).</li> <li>● Perform monitor self-test feature check and determine if these lines are also in self-test mode.</li> <li>● Check for bent or broken pins in the video cable connector.</li> <li>● Run the built-in diagnostics.</li> </ul>
Synchronization problems	<ul style="list-style-type: none"> <li>● Reset the monitor to Factory Settings (Factory Reset).</li> <li>● Perform monitor self-test feature check to determine if the scrambled screen appears in self-test mode.</li> <li>● Check for bent or broken pins in the video cable connector.</li> <li>● Restart the computer in the safe mode.</li> </ul>
Safety related Issues	<ul style="list-style-type: none"> <li>● Do not perform any troubleshooting steps.</li> <li>● Contact Dell immediately.</li> </ul>
Intermittent problems	<ul style="list-style-type: none"> <li>● Ensure that the video cable connecting the monitor to the computer is connected properly and is secure.</li> <li>● Reset the monitor to Factory Settings (Factory Reset).</li> <li>● Perform monitor self-test feature check to determine if the intermittent problem occurs in self-test mode.</li> </ul>
Missing color	<ul style="list-style-type: none"> <li>● Perform monitor self-test feature check.</li> <li>● Ensure that the video cable connecting the monitor to the computer is connected properly and is secure.</li> <li>● Check for bent or broken pins in the video cable connector.</li> </ul>
Wrong color	<ul style="list-style-type: none"> <li>● Change the Color Setting Mode in the Color Settings OSD to Graphics or Video depending on the application.</li> <li>● Try different Preset Modes in Color settings OSD. Adjust R/G/B value in Custom Color in Color settings OSD.</li> <li>● Change the Input Color Format to RGB or YPbPr in the Color settings OSD.</li> <li>● Run the built-in diagnostics.</li> </ul>
Image retention from a static image left on the monitor for a long period of time	<ul style="list-style-type: none"> <li>● Use the Power Management feature to turn off the monitor at all times when not in use (for more information, see <a href="#">Power management modes</a>).</li> <li>● Alternatively, use a dynamically changing screensaver.</li> </ul>
Video ghosting or overshooting	<ul style="list-style-type: none"> <li>● Change the Response Time in the Display OSD to Fast or Normal depending on your application and usage.</li> </ul>



## Product-specific problems

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### Specific symptoms Possible solutions

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Screen image is too small	<ul style="list-style-type: none"><li>• Check the Aspect Ratio setting in the Display settings OSD.</li><li>• Reset the monitor to Factory Settings (Factory Reset).</li></ul>
Cannot adjust the monitor with the buttons on the back of the panel	<ul style="list-style-type: none"><li>• Turn off the monitor, unplug the power cord, plug it back, and then turn On the monitor.</li><li>• Check if the OSD menu is locked. If yes, press and hold the menu button for 10 seconds to unlock.</li></ul>
No input signal when user controls are pressed	<ul style="list-style-type: none"><li>• Check the signal source. Ensure the computer is not in standby or sleep mode by moving the mouse or pressing any key on the keyboard.</li><li>• Check if the video cable is plugged in properly. Disconnect and reconnect the video cable if necessary.</li><li>• Reset the computer or video player.</li></ul>
The picture does not fill the entire screen	<ul style="list-style-type: none"><li>• Due to different video formats (aspect ratio) of DVDs, the monitor may display in full screen.</li><li>• Run the built-in diagnostics.</li></ul>

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# Appendix

## Safety instructions

 **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 Environment 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](http://www.dell.com/regulatory_compliance).

Please follow these safety instructions for best performance, and long life for your monitor:

1. The socket-outlet shall be installed near the equipment and shall be easily accessible.
2. The equipment can be installed on wall or ceiling mounting in horizontal position.
3. The monitor is equipped with a three-pronged grounded plug, a plug with a third (Grounding) pin.
4. Do not use this product near water.
5. Read these instructions carefully. Keep this document for future reference. Follow all warnings and instructions marked on product.
6. Excessive sound pressure from earphones and headphones can cause hearing loss. Adjustment of the equalizer to maximum increases the earphones and headphones output voltage and therefore the sound pressure level.



## Contacting Dell

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

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area.

### To get online monitor support content:

1. Visit [www.dell.com/support/monitors](http://www.dell.com/support/monitors).

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

1. Go to [www.dell.com/support](http://www.dell.com/support).
2. Verify your country or region in the **Choose A Country/Region** drop-down menu at the bottom of the page.
3. Click **Contact Us** on the left side of the page.
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 monitor

### 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 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 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](http://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 recommended resolution, please contact the manufacturer of your computer or consider purchasing a graphics adapter that supports the video resolution.**

## Non-Dell computer

### In Windows 7, Windows 8 or 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 **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, and so on).
6. Refer to the graphic card provider website for updated driver (for example, [www.ATI.com](http://www.ATI.com) or [www.AMD.com](http://www.AMD.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, [www.ATI.com](http://www.ATI.com) or [www.NVIDIA.com](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.

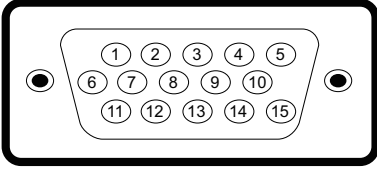
For best practices, follow these instructions in the list below while unpacking, cleaning, or handling your display:

- 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.



# Pin assignments

## VGA connector

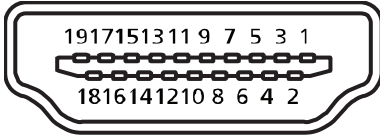


Pin number	Monitor side of the 15-pin side signal cable
1	Video-Red
2	Video-Green
3	Video-Blue
4	GND
5	Self-test
6	GND-R
7	GND-G
8	GND-B
9	DDC +5 V
10	GND-sync
11	GND
12	DDC data
13	H-sync
14	V-sync
15	DDC clock





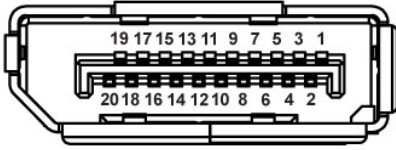
## HDMI connector



Pin number	Monitor side of the 19-pin side signal cable
1	TMDS Data2+
2	TMDS Data2 Shield
3	TMDS Data2-
4	TMDS Data1+
5	TMDS Data1 Shield
6	TMDS Data1-
7	TMDS Data0+
8	TMDS Data0 Shield
9	TMDS Data0-
10	TMDS Clock+
11	TMDS Clock Shield
12	TMDS Clock-
13	CEC
14	Reserved (N.C. on device)
15	SCL
16	SDA
17	DDC/CEC Ground
18	+5 V Power
19	Hot Plug Detect



## DP connector



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




## Universal serial bus (USB)


This section gives you information about the USB ports available on the monitor. The monitor has the following USB ports:

- 1 x USB 3.0 upstream
- 2 x USB 3.0 downstream
- 1 x USB Dedicated charging port
- Power Charging Port - the port with  icon; supports fast current charging capability if the device is BC1.2 compatible.

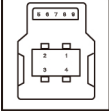
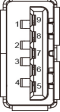
 **NOTE: USB 3.0 functionality requires a USB 3.0-capable computer.**

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

Transfer speed	Data rate	Power consumption*
2 Super-speed	5 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)

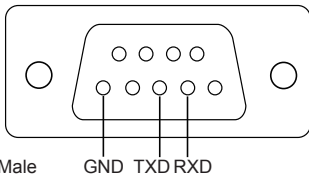
\*Up to 2 A on USB downstream port (port with  icon) with BC1.2 compliance devices or normal USB devices.



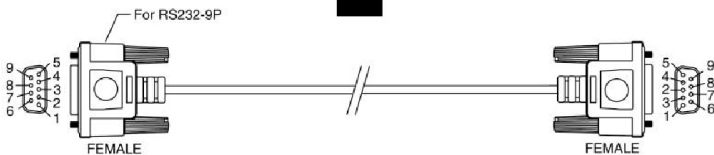
USB 3.0 upstream port		USB 3.0 downstream port	
			
Pin number	Signal name	Pin number	Signal name
1	VBUS	1	VBUS
2	D-	2	D-
3	D+	3	D+
4	GND	4	GND
5	StdB_SSTX-	5	StdB_SSTX-
6	StdB_SSTX+	6	StdB_SSTX+
7	GND_DRAIN	7	GND_DRAIN
8	StdB_SSRX-	8	StdB_SSRX-
9	StdB_SSRX+	9	StdB_SSRX+
Shell	Shield	Shell	Shield

### RS232 connector

#### RS232 monitor pin assignment (Facing monitor)



#### RS232 serial communication cable pin assignment (Facing cable)



## Pin assignments

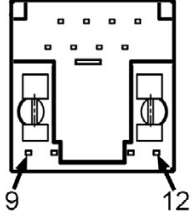
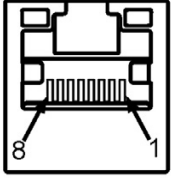
RS232	Pin description	RS232
1		
2	TXD	2
3	RXD	3
4		
5	GROUND	5
6		
7	Not Used	7
8	Not Used	8
9		

## RS232 protocol communication settings

Connection settings	Value
Baud Rate	9600 bps
Data Bits	8 bits
Parity	None
Stop Bits	1 bit
Flow control	None



## RJ-45 connector



## Pin assignments

Pin number	12-pin side of the connector
1	D+
2	D-
3	RCT
4	GND
5	GND
6	RCT
7	D+
8	D-
9	LED2_Y+
10	LED2_Y-
11	LED1_G+
12	LED1_G-

