

Dell S2421HGF Monitor

User's Guide

Model: S2421HGF
Regulatory model: S2421HGFb





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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Safety instructions

 **CAUTION: 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.**

- Place the monitor on a solid surface and handle it carefully. The screen is fragile and can be damaged if dropped or hit sharply.
- Always be sure that your monitor is electrically rated to operate with the AC power available in your location.
- Keep the monitor in room temperature. Excessive cold or hot conditions can have an adverse effect on the liquid crystal of the display.
- Do not subject the monitor to severe vibration or high impact conditions. For example, do not place the monitor inside a car trunk.
- Unplug the monitor when it is going to be left unused for an extended period of time.
- To avoid electric shock, do not attempt to remove any cover or touch the inside of the monitor.



About your monitor

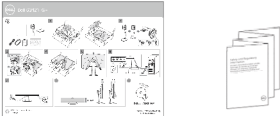
Package contents

Your monitor ships with the components shown in the table below. If any component is missing, contact Dell. For more information, see [Contact Dell](#).

-  **NOTE: Some items may be optional and may not ship with your monitor. Some features may not be available in certain countries.**
-  **NOTE: If you are connecting a stand that you purchased from any other source, follow the set up instructions that were included with the stand.**

Component image	Component description
	Display
	Stand riser
	Stand base



	Power cable (varies by country)
	HDMI cable
	• Quick Setup Guide • Safety, Environmental, and Regulatory Information



Product features

The **Dell S2421HGF** monitor has an active matrix, Thin-Film Transistor (TFT), Liquid Crystal Display (LCD) and LED backlight. The monitor features include:

- 60.47 cm (23.8 in.) viewable area (measured diagonally).
1920 x 1080 (16:9) resolution, plus full-screen support for lower resolutions.
- NVIDIA® G-SYNC® Compatible Certification and AMD FreeSync™ Premium Technology minimizes graphic distortions like screen tearing and stuttering for smoother, fluid gameplay.
- Supports a high refresh rate of 144 Hz and a rapid response time of 1 ms gray to gray in **Extreme** mode*.
- Color gamut of 72% NTSC, CIE 1931 (72%), and CIE 1976 (83%).
- Digital connectivity with DisplayPort and HDMI.
- Tilt and height adjustment capabilities.
- Removable stand and Video Electronics Standards Association (VESA™) 100 mm mounting holes for flexible mounting solutions.
- Plug and play capability if supported by your system.
- On-Screen Display (OSD) adjustments for ease of set-up and screen optimization.
- Power and OSD buttons lock.
- Security lock slot.
- Stand lock.
- ≤ 0.3 W in Standby Mode.
- 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.**

*The 1 ms gray-to-gray mode is achievable in the Extreme mode to reduce visible motion blur and increased image responsiveness. However, this may introduce some slight and noticeable visual artifacts into the image. As every system setup and every gamer's needs are different, we recommend that users experiment with the different modes to find the setting that is right for them.



Identifying parts and controls

Front view

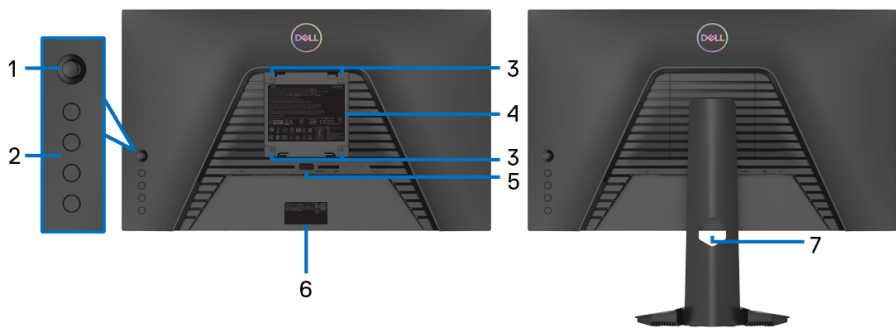


Label	Description	Use
1	Power On/Off button (with LED indicator)	To turn the monitor on or off. Solid white light indicates that the monitor is turned on and functioning normally. Blinking white light indicates that the monitor is in Standby Mode.

Side view



Back view



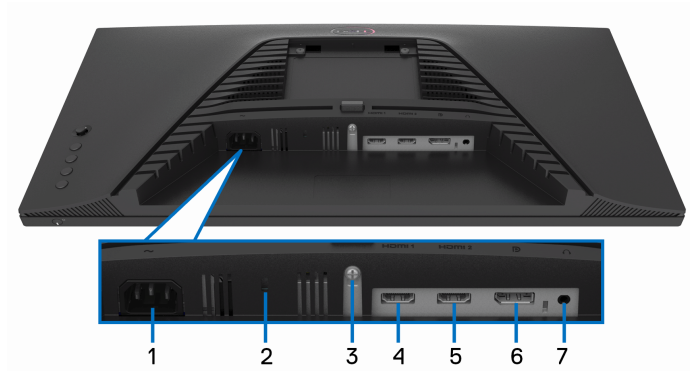
Back view without monitor stand

Back view with monitor stand

Label	Description	Use
1	Joystick	Use it to control the OSD menu.
2	Function buttons	For more information, see Operating the monitor .
3	VESA mounting holes (100 mm x 100 mm - behind attached VESA Cover)	Wall mount monitor using VESA-compatible wall mount kit (100 mm x 100 mm).
4	Regulatory label	Lists the regulatory approvals.
5	Stand release button	Releases stand from the monitor.
6	Barcode, serial number, and Service Tag label	Refer to this label if you need to contact Dell for technical support. The Service Tag is a unique alphanumeric identifier that enables Dell service technicians to identify the hardware components in your monitor and access warranty information.
7	Cable-management slot	Use to organize cables by inserting them through the slot.



Bottom view



Bottom view without monitor stand

Label	Description	Use
1	Power connector	Connect the power cable (shipped with your monitor).
2	Security lock slot	Secures the monitor with security lock (security lock not included).
3	Stand lock feature	To lock the stand to the monitor using a M3 x 6 mm screw (screw not included).
4	HDMI port (HDMI 1)	Connect your computer with the HDMI cable (shipped with your monitor).
5	HDMI port (HDMI 2)	Connect your computer with the HDMI cable (shipped with your monitor).
6	DisplayPort	Connect your computer with the DisplayPort cable.
7	Headphone out port	Connect the headphones. CAUTION: Increasing the audio output beyond 50% on the volume control or equalizer may increase the output voltage on the headphones thereby increasing the sound pressure levels.



Monitor specifications

Model	S2421HGF
Screen type	Active matrix - TFT LCD
Panel technology	TN
Aspect ratio	16:9
Viewable image	
Diagonal	604.7 mm (23.8 in.)
Width (active area)	527.0 mm (20.75 in.)
Height (active area)	296.5 mm (12.10 in.)
Total area	156255.5 mm ² (251.08 in. ²)
Pixel pitch	0.2745 mm x 0.2745 mm
Pixel per inch (PPI)	93
Viewing angle	
Vertical	160° (typical)
Horizontal	170° (typical)
Luminance output	350 cd/m ² (typical)
Contrast ratio	1000 to 1 (typical)
Faceplate coating	Haze 25%, 3H
Backlight	White LED edgelight system
Response time	1 ms gray to gray in Extreme Mode* 2 ms gray to gray in Super Fast Mode 4 ms gray to gray in Fast Mode *The 1 ms gray-to-gray mode is achievable in the Extreme mode to reduce visible motion blur and increased image responsiveness. However this may introduce some slight and noticeable visual artifacts into the image. As every system setup and every gamer's needs are different, we recommend that users experiment with the different modes to find the setting that is right for them.



Color depth	16.7 million colors
Color gamut	72% NTSC, CIE 1931 (72%), and CIE 1976 (83%)
Connectivity	• 1 x DisplayPort version 1.2 • 2 x HDMI ports version 1.4 • 1 x Headphone out port
Border width (edge of monitor to active area)	
Top	5.4 mm
Left/Right	5.4 mm/5.4 mm
Bottom	19.8 mm
Adjustability	
Height adjustable stand	0 to 100 mm
Tilt	-5° to 21°
Dell Display Manager compatibility	Easy Arrange and other key features
Security	Security lock slot (cable lock sold separately)

Resolution specifications

Model	S2421HGF
Horizontal scan range	30 kHz to 170 kHz (automatic)
Vertical scan range	48 Hz to 144 Hz (automatic)
Maximum preset resolution	1920 x 1080 at 144 Hz

Supported video modes

Model	S2421HGF
Video display capabilities (HDMI & DisplayPort)	480i, 480p, 576i, 576p, 720p, 1080i, 1080p



Preset display modes

Display mode	Horizontal frequency (kHz)	Vertical frequency (Hz)	Pixel clock (MHz)	Sync polarity (Horizontal /Vertical)
VESA, 640 x 480	31.5	59.9	25.2	-/-
VESA, 640 x 480	37.5	75.0	31.5	-/-
VESA, 720 x 400	31.5	70.1	28.3	-/+
VESA, 800 x 600	37.9	60.3	40.0	+/+
VESA, 800 x 600	46.9	75.0	49.5	+/+
VESA, 1024 x 768	48.4	60.0	65.0	-/-
VESA, 1024 x 768	60.0	75.0	78.8	+/+
VESA, 1152 x 864	67.5	75.0	108.0	+/+
VESA, 1280 x 1024	64.0	60.0	108.0	+/+
VESA, 1280 x 1024	80.0	75.0	135.0	+/+
VESA, 1920 x 1080	67.5	60.0	148.5	+/+
VESA, 1920 x 1080	137.3	120.0	285.5	+/-
VESA, 1920 x 1080	162.3	143.9	337.5	+/-

 **NOTE: This monitor supports AMD FreeSync™ Premium Technology.**



Electrical specifications

Model	S2421HGF
Video input signals	HDMI 1.4/DisplayPort 1.2, 600 mV for each differential line, 100 Ω input impedance per differential pair
AC input voltage/frequency/current	100 VAC to 240 VAC / 50 Hz or 60 Hz ± 3 Hz / 1 A (typical)
Inrush current	• 120 V: 30 A (Max.) at 0°C (cold start) • 240 V: 60 A (Max.) at 0°C (cold start)
Power consumption	• 0.2 W (Off mode)¹ • 0.2 W (Standby Mode)¹ • 17.1 W (On mode)¹ • 45 W (Max.)² • 16.3 W (Pon)³ • 51.3 kWh (TEC)³

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

² Max brightness and contrast setting.

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

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

This document is informational only and reflects laboratory performance. Your product may perform differently, depending on the software, components and peripherals you ordered and shall have no obligation to update such information.

Accordingly, the customer should not rely upon this information in making decisions about electrical tolerances or otherwise. No warranty as to accuracy or completeness is expressed or implied.



Physical characteristics

Model	S2421HGF
Signal cable type	• Digital: HDMI, 19 pins • Digital: DisplayPort, 20 pins (cable not supplied)
NOTE: Dell monitors are designed to work optimally with the video cables that are shipped with your monitor. As Dell does not have control over the different cable suppliers in the market, the type of material, connector and process used to manufacture these cables, Dell does not guarantee video performance on cables that are not shipped with your Dell monitor.	
Dimensions (with stand)	
Height (extended)	451.6 mm (17.78 in.)
Height (compressed)	351.6 mm (13.84 in.)
Width	537.8 mm (21.17 in.)
Depth	189.4 mm (7.46 in.)
Dimensions (without stand)	
Height	321.6 mm (12.66 in.)
Width	537.8 mm (21.17 in.)
Depth	65.6 mm (2.58 in.)
Stand dimensions	
Height (extended)	366.3 mm (14.42 in.)
Height (compressed)	319.0 mm (12.56 in.)
Width	221.6 mm (8.72 in.)
Depth	189.4 mm (7.46 in.)
Weight	
Weight with packaging	7.4 kg (16.25 lb)
Weight with stand assembly and cables	5.2 kg (11.39 lb)
Weight without stand assembly (For wall mount or VESA mount considerations - no cables)	3.4 kg (7.44 lb)
Weight of stand assembly	1.5 kg (3.37 lb)



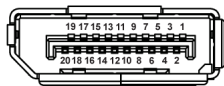
Environmental characteristics

Model	S2421HGF
Compliant standards	
• RoHS-compliant • BFR/PVC free monitor (excluding external cables) • Arsenic-free glass and Mercury-free for the panel only	
Temperature	
Operating	0°C to 40°C (32°F to 104°F)
Non-operating	• Storage: -20°C to 60°C (-4°F to 140°F) • Shipping: -20°C to 60°C (-4°F to 140°F)
Humidity	
Operating	10% to 80% (non-condensing)
Non-operating	• Storage: 5% to 90% (non-condensing) • Shipping: 5% to 90% (non-condensing)
Altitude	
Operating	5000 m (16404 ft) (maximum)
Non-operating	12192 m (40000 ft) (maximum)
Thermal dissipation	• 153.54 BTU/hour (maximum) • 68.24 BTU/hour (typical)



Pin assignments

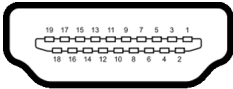
DisplayPort connector



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



HDMI connector



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



Plug and Play capability

You can connect the monitor to 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 that 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 and pixel policy

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

Ergonomics

 **CAUTION: Improper or prolonged usage of keyboard may result in injury.**

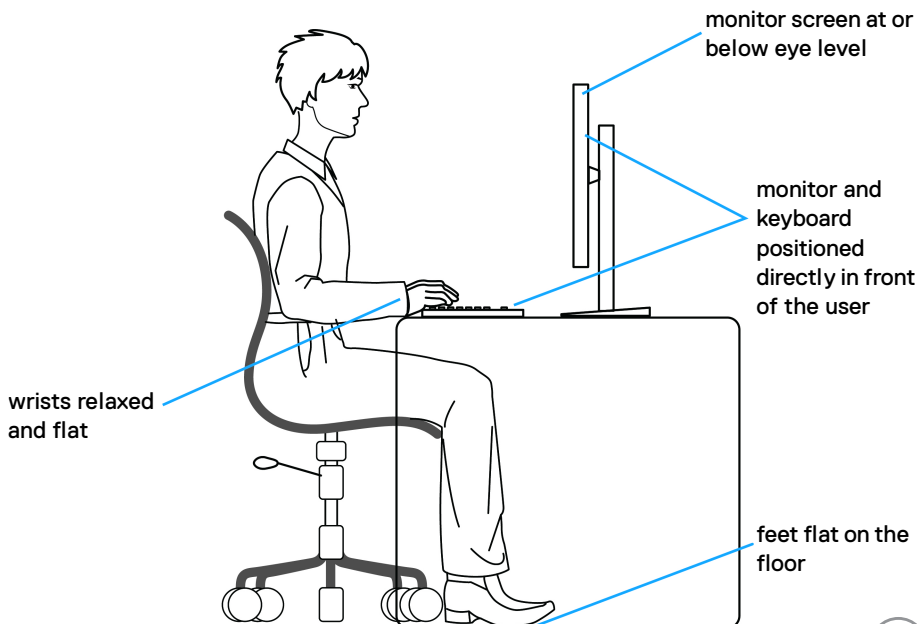
 **CAUTION: Viewing the monitor screen for extended periods of time may result in eye strain.**

For comfort and efficiency, observe the following guidelines when setting up and using your computer workstation:

- Position your computer so that the monitor and keyboard are directly in front of you as you work. Special shelves are commercially available to help you correctly position your keyboard.
- 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 20 to 28 in. (50 - 70 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.
- Make sure that the monitor screen is at eye level or slightly lower when you are sitting in front of the monitor.



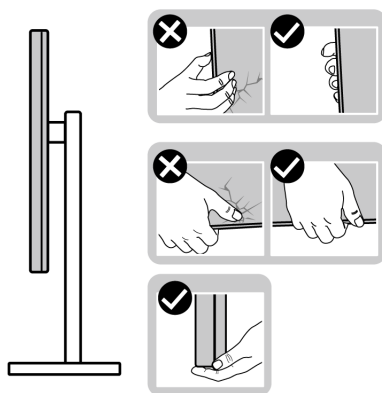
- Adjust the tilt of the monitor, its contrast, and brightness settings.
- Adjust the ambient lighting around you (such as overhead lights, desk lamps, and the curtains or blinds on nearby windows) to minimize reflections and glare on the monitor screen.
- Use a chair that provides good lower-back support.
- Keep your forearms horizontal with your wrists in a neutral, comfortable position while using the keyboard or mouse.
- Always leave space to rest your hands while using the keyboard or mouse.
- Let your upper arms rest naturally on both sides.
- Ensure that your feet are resting flat on the floor.
- When sitting, make sure that the weight of your legs is on your feet and not on the front portion of your seat. Adjust your chair's height or use a footrest if necessary to maintain a proper posture.
- Vary your work activities. Try to organize your work so that you do not have to sit and work for extended periods of time. Try to stand or get up and walk around at regular intervals.
- Keep the area under your desk clear of obstructions and cables or power cords that may interfere with comfortable seating or present a potential trip hazard.



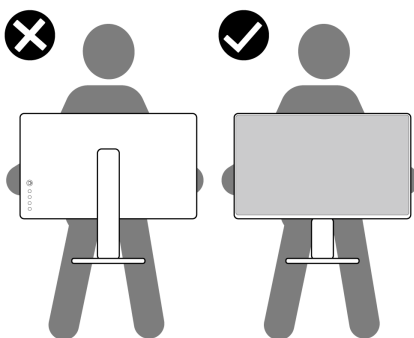
Handling and moving your display

To ensure the monitor is handled safely when lifting or moving it, follow the guidelines mentioned below:

- Before moving or lifting the monitor, turn off your computer and the monitor.
- Disconnect all cables from the monitor.
- Place the monitor in the original box with the original packing materials.
- Hold the bottom edge and the side of the monitor firmly without applying excessive pressure when lifting or moving the monitor.



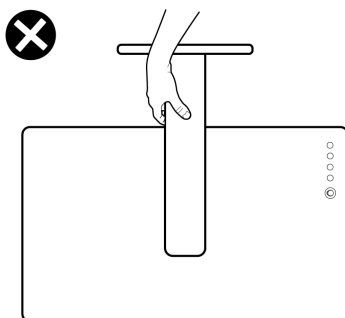
- When lifting or moving the monitor, ensure the screen is facing away from you and do not press on the display area to avoid any scratches or damage.



- When transporting the monitor, avoid any sudden shock or vibration to it.



- When lifting or moving the monitor, do not turn the monitor upside down while holding the stand base or stand riser. This may result in accidental damage to the monitor or cause personal injury.



Maintenance guidelines

Cleaning your monitor

CAUTION: Read and follow the [Safety instructions](#) before cleaning the monitor.

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

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

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



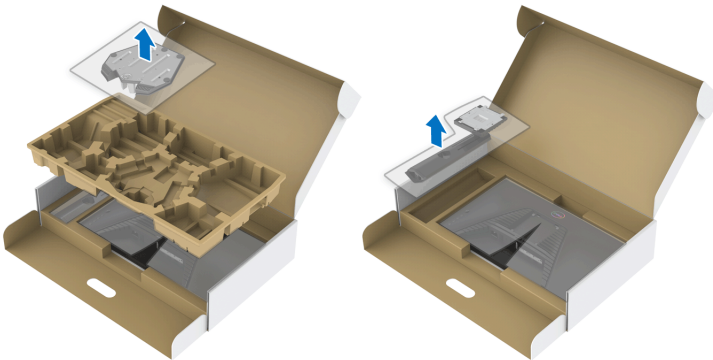
Setting up the monitor

Connecting the stand

-  **NOTE: The stand is not factory-installed.**
-  **NOTE: The following instructions are applicable only for attaching the stand that was shipped with your monitor. If you are attaching a stand that you purchased from any other source, follow the set up instructions that were included with the stand.**

To attach the monitor stand:

1. Follow the instructions on the flaps of carton to remove the stand from the top cushion that secures it.
2. Remove the stand base and stand riser from the packaging cushion.



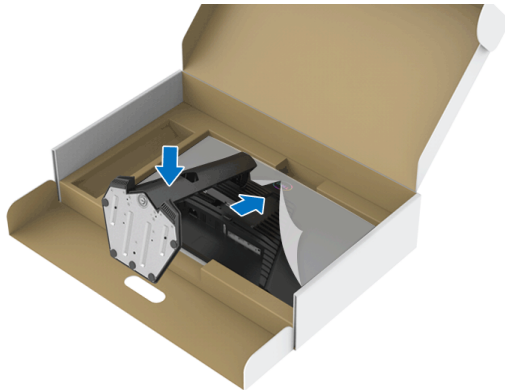
3. Align and place the stand riser on the stand base.
4. Open the screw handle at the bottom of the stand base and turn it clockwise to secure the stand assembly.
5. Close the screw handle.



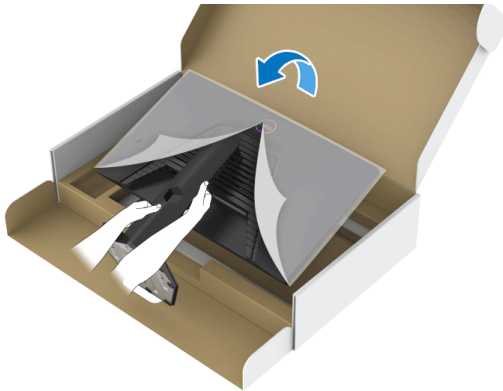
6. Open the protective cover on the monitor to access the VESA slot on the monitor.



7. Slide the tabs on the stand riser into the slots on the display back cover and lower the stand assembly to snap it into place.

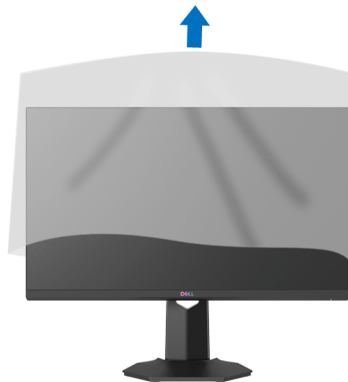


8. Hold the stand riser and lift the monitor carefully, then place it on a flat surface.



 **NOTE: Hold the stand riser firmly when lifting the monitor to avoid any accidental damage.**

9. Lift the protective cover from the monitor.



Connecting your monitor

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

✎ NOTE: Dell monitors are designed to work optimally with Dell supplied inbox cables. Dell does not guarantee the video quality and performance when using non-Dell cables.

✎ NOTE: Route the cables through the cable-management slot before connecting them.

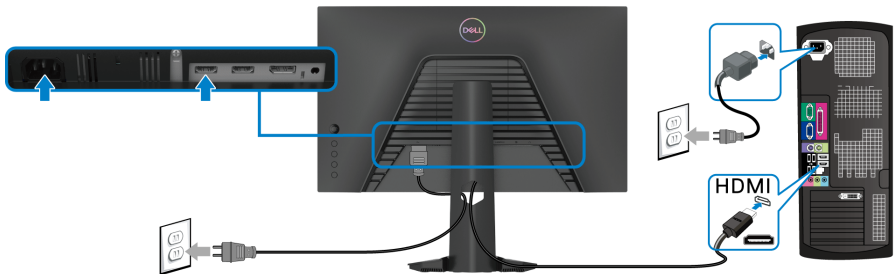
✎ NOTE: Do not connect all cables to the computer at the same time.

✎ NOTE: The images are for the purpose of illustration only. Appearance of the computer may vary.

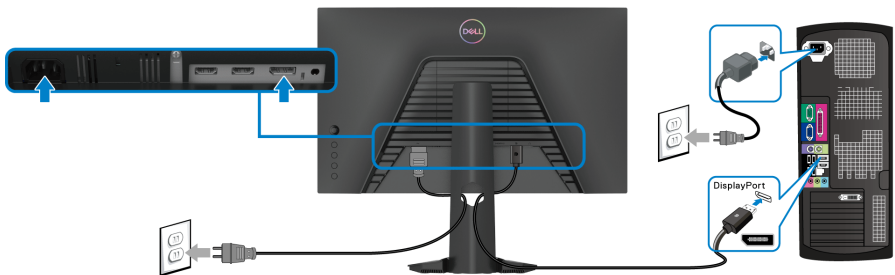
To connect your monitor to the computer:

1. Turn Off your computer and disconnect the power cable.
2. Connect the HDMI or DisplayPort cable from your monitor to the computer.

Connecting the HDMI and power cables



Connecting the DisplayPort (DP to DP) cable (optional) and power cable



Organizing your cables



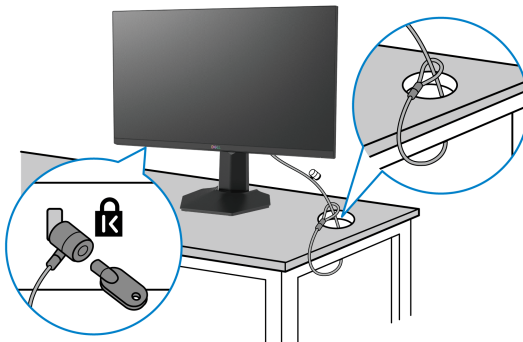
After attaching all necessary cables to your monitor and computer, (See [Connecting your monitor](#) for cable attachment,) organize all cables as shown above.

Securing your monitor using Kensington lock (optional)

The security lock slot is located at the bottom of the monitor. (See [Security lock slot](#))

For more information on using the Kensington lock (purchased separately), see the documentation that is shipped with the lock.

Secure your monitor to a table using the Kensington security lock.

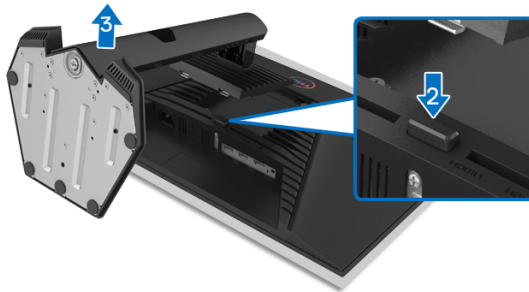


 **NOTE:** The image is for the purpose of illustration only. Appearance of the lock may vary.



Removing the monitor stand

-  **NOTE:** To prevent scratches on the LCD screen when removing the stand, ensure that the monitor is placed on a soft, clean surface.
-  **NOTE:** The following instructions are applicable only for removing the stand that was shipped with your monitor. If you are removing a stand that you purchased from any other source, follow the set up instructions that were included with the stand.



To remove the stand:

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

VESA wall mounting (optional)



(Screw dimension: M4 x 10 mm).

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

1. Place the monitor panel on a soft cloth or cushion on a stable flat table.
2. Remove the monitor stand. (See [Removing the monitor stand](#))



3. Use a Phillips crosshead screwdriver to remove the four screws securing the plastic cover.
4. Attach the mounting bracket from the wall mounting kit to the monitor.
5. Mount the monitor on the wall. For more information, see the documentation that shipped with the wall mounting kit.



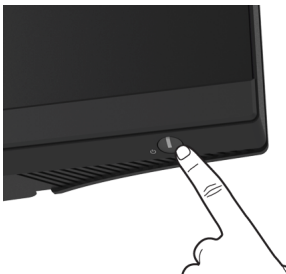
NOTE: For use only with UL or CSA or GS-listed wall mount bracket with minimum weight or load bearing capacity of 13.6 kg.



Operating the monitor

Power on the monitor

Press the Power button to turn on the monitor.

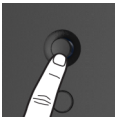


Using the joystick control

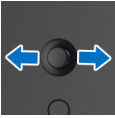
Use the joystick control on the rear of the monitor to make OSD adjustments.



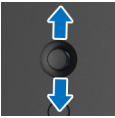
1. Press the joystick button to launch the OSD main menu.
2. Move the joystick up/down/left/right to toggle between options.
3. Press the joystick button again to confirm the settings and exit.

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





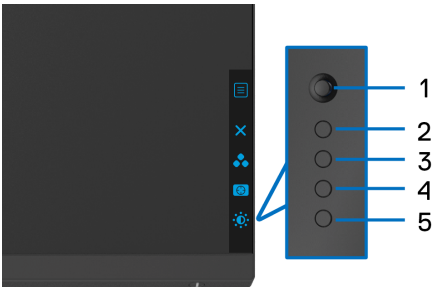
- For 2-way (right and left) directional navigation.
- Move right to enter the submenu.
- Move left to exit from the submenu.
- Increases (right) or decreases (left) the parameters of selected menu item.



- For 2-way (up and down) directional navigation.
- Toggles between the menu items.
- Increases (up) or decreases (down) the parameters of selected menu item.

Using the rear-panel controls

Use the control buttons on the rear of the monitor to access the OSD menu and shortcut keys.



The following table describes the rear-panel buttons:

Rear-panel button		Description
1	 Menu	Use the MENU button to launch the On-Screen Display (OSD). See Accessing the menu system .
2	 Exit	To exit the OSD main menu.
3	 Shortcut key/ Preset Modes	To specify a desired color mode from a preset list.



4



**Shortcut key/
Dark Stabilizer**

To launch the **Dark Stabilizer** menu.

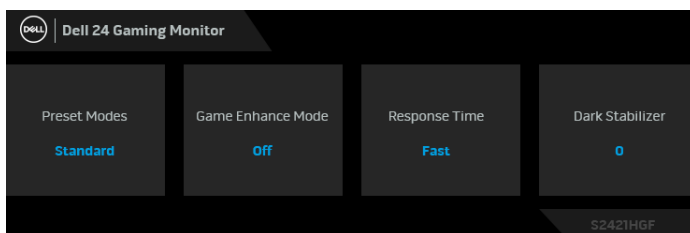
5



**Shortcut key/
Brightness/
Contrast**

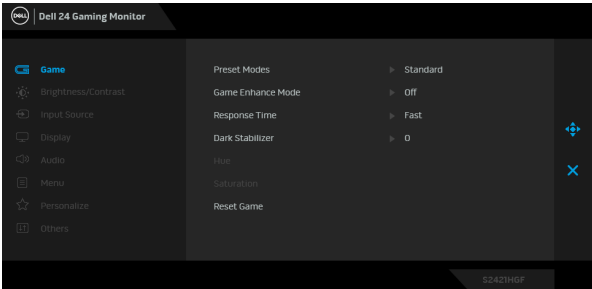
To directly access the **Brightness/Contrast** adjustment sliders.

When you press any of these buttons (excluding the joystick button), the OSD Status Bar appears to let you know the current settings of some OSD functions.

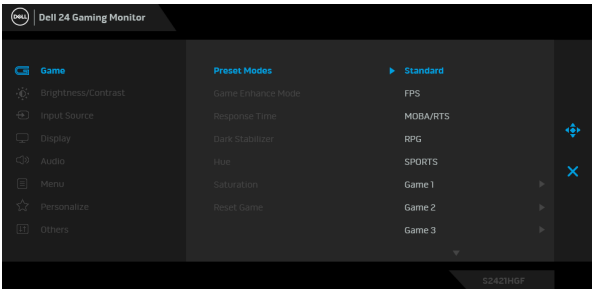


Using the On-Screen Display (OSD) menu

Accessing the menu system

Icon	Menu and Submenus	Description
	Game	Use this menu to personalize your visual gameplay experience.
		

Preset Modes Allows you to choose from a list of preset color modes.



- **Standard:** Loads the monitor's default color settings. This is the default preset mode.
- **FPS:** Loads color settings ideal for First-Person Shooter (FPS) games.
- **MOBA/RTS:** Loads color settings ideal for Multiplayer Online Battle Arena (MOBA) and Real-Time Strategy (RTS) games.



Preset Modes

- **RPG:** Loads color settings ideal for Role-Playing Games (RPG).
- **SPORTS:** Loads color settings ideal for sports games.
- **Game 1/Game 2/Game 3:** Allows you to customize the color settings for your gaming needs.
- **ComfortView:** Decreases the level of blue light emitted from the screen to make viewing more comfortable for your eyes.

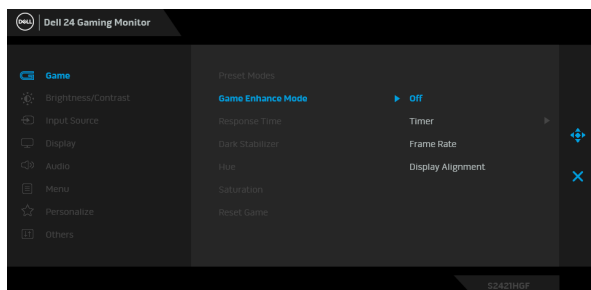
WARNING: The possible long-term effects of blue light emission from the monitor may cause personal injury such as digital eye strain, eye fatigue and damage to the eyes. Using monitor for extended periods of time may also cause pain in parts of body such as neck, arm, back and shoulder. For more information, see [Ergonomics](#).

- **Warm:** Presents colors at lower color temperatures. The screen appears warmer with a red/yellow tint.
 - **Cool:** Presents colors at higher color temperatures. The screen appears cooler with a blue tint.
 - **Custom Color:** Allows you to manually adjust the color settings. Move the joystick to adjust the **Gain**, **Offset**, **Hue**, and **Saturation** values and create your own preset color mode.
-



Game Enhance Mode

The feature offers three available functions to enhance your gameplay experience.



- **Off**

Select to disable the functions under **Game Enhance Mode**.

- **Timer**

Allows you to disable or enable the timer at the upper left corner of the display. The timer shows the time elapsed since the game starts. Select an option from the time-interval list to keep you aware of the remaining time.

- **Frame Rate**

Selecting **On** allows you to display the current frames per second when playing games. The higher the rate, the smoother the motion appears.

- **Display Alignment**

Activating the function may help ensure the perfect alignment of the video contents from multiple displays.

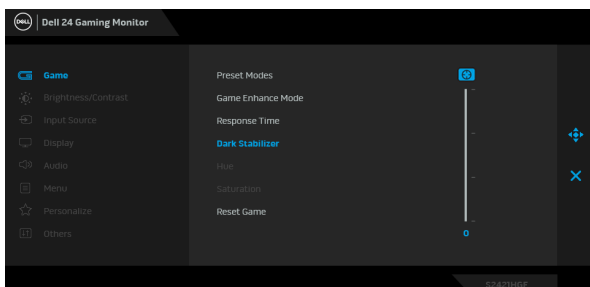
Response Time

Allows you to set the **Response Time** to **Fast**, **Super Fast**, or **Extreme**.



Dark Stabilizer

The feature improves the visibility in the dark gaming scenarios. The higher the value (between 0 to 3), the better visibility in dark area of the display image.



Hue

This feature can shift the color of the video image to green or purple. This is used to adjust the desired flesh-tone color.

Use the joystick to adjust the hue level from 0 to 100. Move the joystick up to increase the green shade of the video image.

Move the joystick down to increase the purple shade of the video image.

NOTE: The **Hue** adjustment is available only when you select **FPS**, **MOBA/RTS**, **SPORTS**, or **RPG** preset mode.

Saturation

This feature can adjust the color saturation of the video image.

Use the joystick to adjust the saturation level from 0 to 100.

Move the joystick up to increase the colorful appearance of the video image.

Move the joystick down to increase the monochrome appearance of the video image.

NOTE: The **Saturation** adjustment is available only when you select **FPS**, **MOBA/RTS**, **SPORTS**, or **RPG** preset mode.

Reset Game

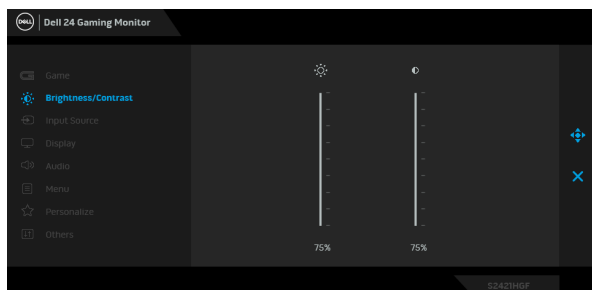
Resets all settings under the **Game** menu to the factory defaults.





Brightness/ Contrast

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



Brightness

Brightness adjusts the luminance of the backlight.

Move the joystick up to increase the brightness level or move the joystick down to decrease the brightness level (min. 0 / max. 100).

Contrast

Adjusts the **Brightness** first, and then adjust the **Contrast** only if further adjustment is necessary.

Move the joystick up to increase the contrast level or move the joystick down to decrease the contrast level (min. 0 / max. 100).

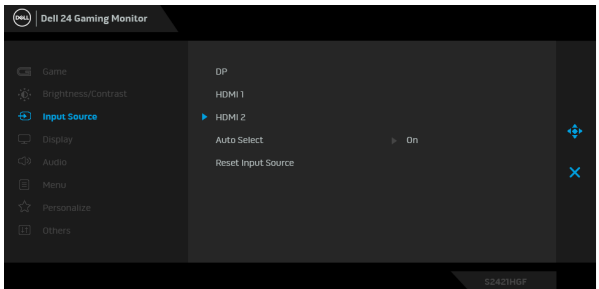
The **Contrast** function adjusts the degree of difference between darkness and lightness on the monitor screen.





Input Source

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



DP

Select the **DP** input when you are using the DisplayPort (DP) connector. Press the joystick button to confirm the selection.

HDMI 1

HDMI 2

Select the **HDMI 1** or **HDMI 2** input when you are using the HDMI connector. Press the joystick button to confirm the selection.

Auto Select

Turn on the function to allow the monitor to automatically scan for available input sources. Press the joystick button to confirm the selection.

Reset Input Source

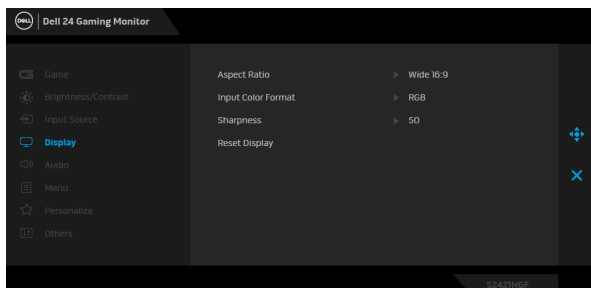
Resets all settings under the **Input Source** menu to the factory defaults.





Display

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



Aspect Ratio

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

Input Color Format

Allows you to set the video input mode to:

- **RGB**: Select this option if your monitor is connected to a computer (or media player) using the DP or HDMI cable.
- **YPbPr**: Select this option if your media player supports only YPbPr output.

Sharpness

This feature can make the image look sharper or softer. Move the joystick to adjust the sharpness level from 0 to 100.

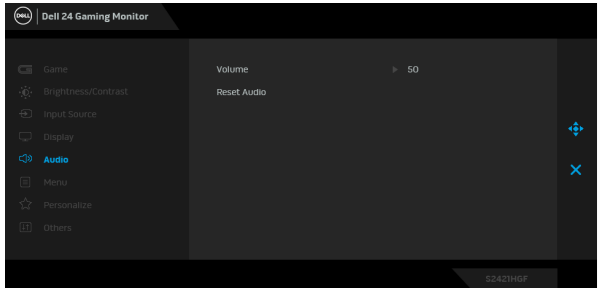
Reset Display

Resets all settings under the **Display** menu to the factory defaults.





Audio



Volume

Allows you to set the volume level of headphone output.

Use the joystick to adjust the volume level from 0 to 100.

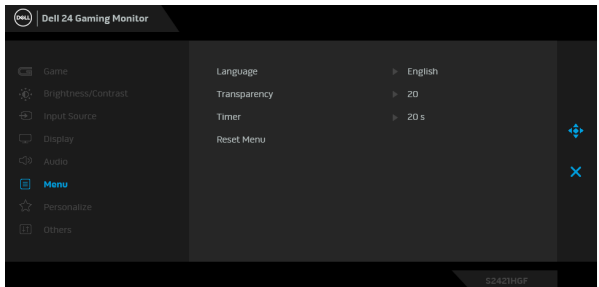
Reset Audio

Resets all settings under the **Audio** menu to the factory defaults.



Menu

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



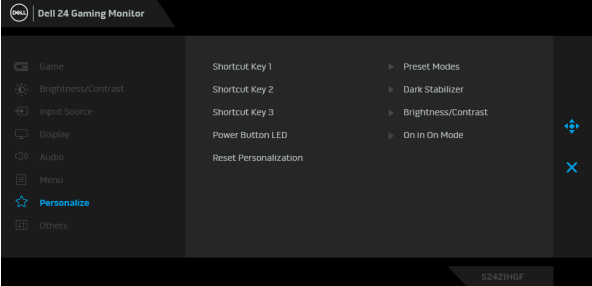
Language

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

Transparency

Select this option to change the menu transparency by moving the joystick up or down (min. 0/max. 100).



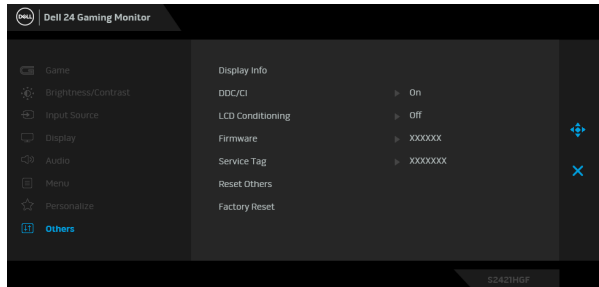
	Timer	Sets the length of time for the OSD to remain active after you move the joystick or press a button. Move the joystick to adjust the slider in 1 second increment, from 5 to 60 seconds.
	Reset Menu	Resets all settings under the Menu menu to the factory defaults.
	Personalize	
	Shortcut Key 1	Allows you to choose a feature from Preset Modes ,
	Shortcut Key 2	Game Enhance Mode , Dark Stabilizer ,
	Shortcut Key 3	Brightness/Contrast , Input Source , Aspect Ratio , or Volume and set it as a shortcut key.
	Power Button LED	Allows you to set the power LED indicator on or off to save energy.
	Reset Personalization	Resets all settings under the Personalize menu to the factory preset values.





Others

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

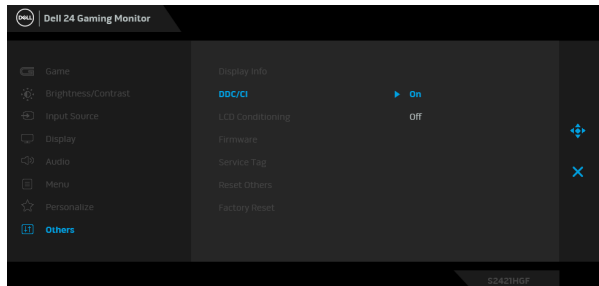


Display Info

Displays the monitor's current settings.

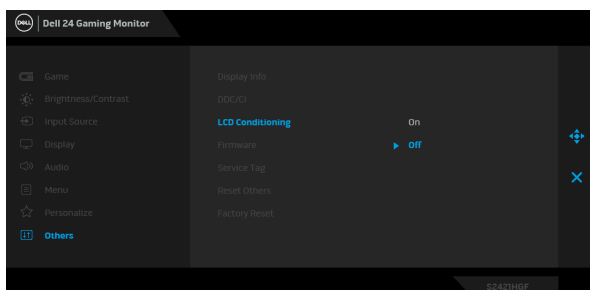
DDC/CI

DDC/CI (Display Data Channel/Command Interface) allows your monitor parameters (brightness, color balance, and etc.) to be adjustable via the software on your computer. You can disable this feature by selecting **Off**. Enable this feature for best user experience and optimum performance of your monitor.



LCD Conditioning

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



Firmware

Displays the firmware version of your monitor.

Service Tag

Displays the service tag of your monitor. This string is required when you look for phone support, check your warranty status, update drivers on Dell's website, etc.

Reset Others

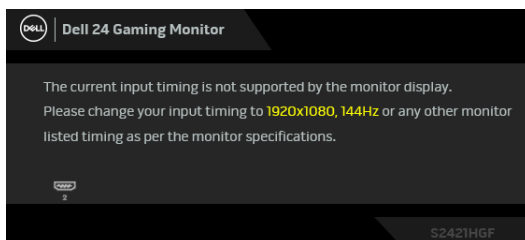
Resets all settings under the **Others** menu to the factory defaults.

Factory Reset

Restore all preset values to the factory default settings.

OSD warning message

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

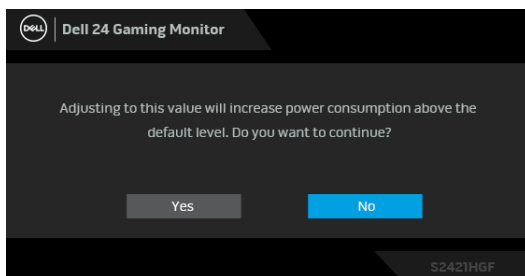


This means that the monitor cannot synchronize with the signal that it is receiving from the computer. See [Monitor specifications](#) for the Horizontal and Vertical frequency ranges addressable by this monitor. Recommended mode is 1920 x 1080.



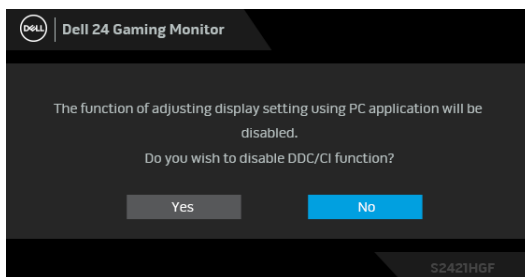
 **NOTE: The message may be slightly different according to the connected input signal.**

When you adjust the **Brightness** level for the first time, the following message appears:

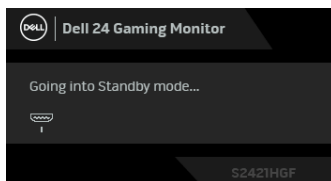


 **NOTE: If you select Yes, the message will not appear next time when you intend to change the Brightness setting.**

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



When the monitor goes into Standby mode, the following message appears:

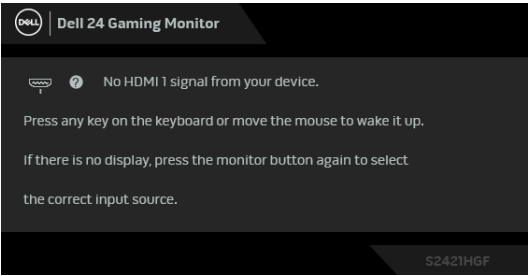


Activate the computer and wake up the monitor to gain access to the [OSD](#).

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

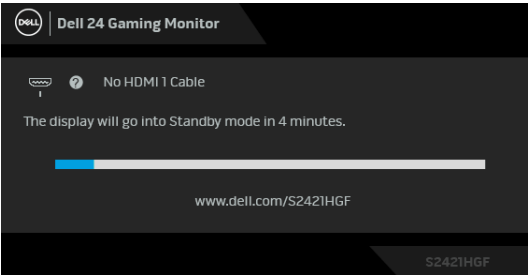


The OSD functions only in the normal operation mode. If you press any button other than the power button during the Standby mode, the following message will appear depending on the selected input:



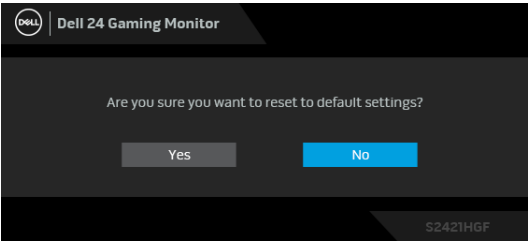
NOTE: The message may be slightly different according to the connected input signal.

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



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

When **Factory Reset** is selected, the following message appears:



See [Troubleshooting](#) for more information.



Locking the rear-panel control buttons

You can lock the rear-panel control buttons to prevent access to the OSD menu and/or power button.



To lock the button(s):

1. Press and hold **Button 5** for four seconds, a menu appears on the screen.
2. Select one of the following options:
 - **Menu Buttons:** Choose this option to lock all OSD menu buttons except the Power button.
 - **Power Button:** Choose this option to lock only the Power button.
 - **Menu + Power Buttons:** Choose this option to lock all the buttons on the rear-panel control.

To unlock the button(s), press and hold **Button 5** for four seconds until a menu appears on the screen. Select the **Unlock icon**  to unlock the button(s).



Setting the maximum resolution

To set the maximum resolution for the monitor:

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

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

In Windows[®] 10:

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

If you do not see 1920 x 1080 as an option, you may need to update your graphics driver. Depending on your computer, complete one of the following procedures:

If you have a Dell desktop or portable computer:

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

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

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

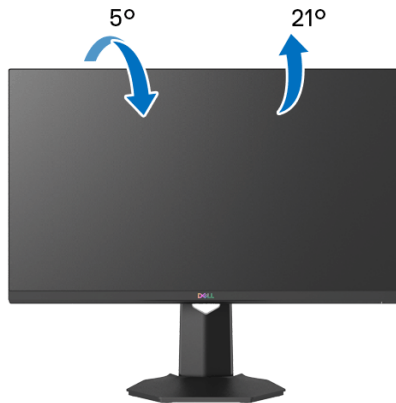


Using the tilt and vertical extension

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

Tilt

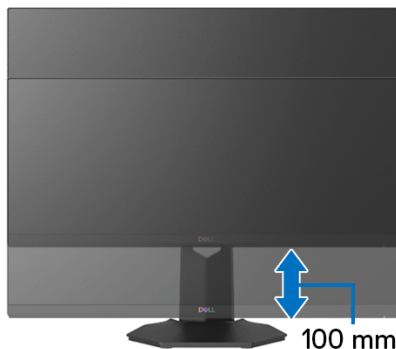
With the stand attached to the monitor, you can tilt the monitor for the most comfortable viewing angle.



 **NOTE:** The stand is not factory-installed.

Vertical extension

 **NOTE:** The stand extends vertically up to 100 mm. The figure below illustrates how to extend the stand vertically.



Troubleshooting

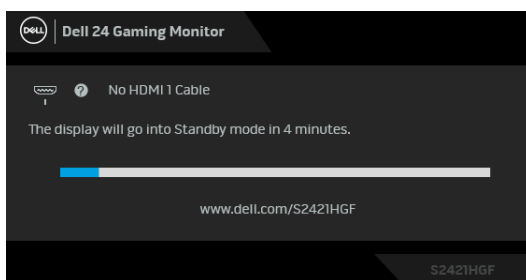
 **WARNING:** Before you begin any of the procedures in this section, follow the [Safety instructions](#).

Self-test

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

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

 **NOTE:** A dialog box should appear on-screen (against a black background), if the monitor cannot sense a video signal and is working correctly. While in self-test mode, the power LED lights white (default color).



 **NOTE:** This box also appears during normal system operation, if the video cable is disconnected or damaged. The message may be slightly different according to the connected input signal.

4. This box also appears during normal system operation, if the video cable becomes disconnected or damaged.
5. Turn Off your monitor and reconnect the video cable; then turn on both your computer and the monitor.

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



Built-in diagnostics

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



To run the built-in diagnostics:

1. Ensure that the screen is clean (no dust particles on the surface of the screen).
2. Press and hold **Button 5** for four seconds until a menu appears on the screen.
3. Using the joystick control, highlight the **Diagnostics**  option and press the joystick button to start the diagnostics. A gray screen is displayed.
4. Observe if the screen has any defects or abnormalities.
5. Toggle the joystick once again until a red screen is displayed.
6. Observe if the screen has any defects or abnormalities.
7. Repeat steps 5 and 6 until the screen displays green, blue, black, and white colors. Note any abnormalities or defects.

The test is complete when a text screen is displayed. To exit, toggle the joystick control again.

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



Common problems

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

Common symptoms	What you experience	Possible solutions
No Video/Power LED off	No picture	• Ensure that the video cable connecting the monitor and the computer is properly connected and secure. • Verify that the power outlet is functioning properly using any other electrical equipment. • Ensure that the power button is pressed fully. • Ensure that the correct input source is selected in the Input Source menu.
No Video/Power LED on	No picture or no brightness	• Increase brightness & contrast controls via OSD. • Perform monitor self-test feature check. • Check for bent or broken pins in the video cable connector. • Run the built-in diagnostics. • Ensure that the correct input source is selected in the Input Source menu.
Poor Focus	Picture is fuzzy, blurry, or ghosting	• Eliminate video extension cables. • Reset the monitor to factory settings. • Change the video resolution to the correct aspect ratio.
Shaky/Jittery Video	Wavy picture or fine movement	• Reset the monitor to factory settings. • Check environmental factors. • Relocate the monitor and test in another room.



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



Synchronization Problems	Screen is scrambled or appears torn	• Reset the monitor to factory settings. • Perform monitor self-test feature check to determine if the scrambled screen appears in self-test mode. • Check for bent or broken pins in the video cable connector. • Restart the computer in the safe mode.
Safety Related Issues	Visible signs of smoke or sparks	• Do not perform any troubleshooting steps. • Contact Dell immediately.
Intermittent Problems	Monitor malfunctions on & off	• Ensure that the video cable connecting the monitor to the computer is connected properly and is secure. • Reset the monitor to factory settings. • Perform monitor self-test feature check to determine if the intermittent problem occurs in self-test mode.
Missing Color	Picture missing color	• Perform monitor self-test feature check. • Ensure that the video cable connecting the monitor to the computer is connected properly and is secure. • Check for bent or broken pins in the video cable connector.



Wrong Color	Picture color not good	• Change the settings of the Preset Modes in the Game menu OSD depending on the application. • Adjust Gain/Offset/Hue/Saturation value under Custom Color in the Game menu OSD. • Change the Input Color Format to PC RGB or YPbPr in the Display menu OSD. • Run the built-in diagnostics.
Image retention from a static image left on the monitor for a long period of time	Faint shadow from the static image displayed appears on the screen	• Set the screen to turn off after a few minutes of screen idle time. These can be adjusted in Windows Power Options or Mac Energy Saver setting. • Alternatively, use a dynamically changing screensaver.



Product specific problems

Common symptoms	What you experience	Possible solutions
Screen image is too small	Image is centered on screen, but does not fill entire viewing area	• Check the Aspect Ratio setting in the Display menu OSD. • Reset the monitor to factory settings.
Cannot adjust the monitor with the buttons on the rear panel	OSD does not appear on the screen	• Turn Off the monitor, unplug the power cord, plug it back, and then turn On the monitor. • The OSD menu may be locked. Press and hold the fourth button (the Brightness/Contrast shortcut key by default) below the joystick button for 4 seconds to unlock.
No Input Signal when user controls are pressed	No picture, the LED light is white	• Check the signal source. Ensure the computer is not in the power saving mode by moving the mouse or pressing any key on the keyboard. • Check whether the signal cable is plugged in properly. Re-plug the signal cable if necessary. • Reset the computer or video player.
The picture does not fill the entire screen	The picture cannot fill the height or width of the screen	• Due to different video formats (aspect ratio) of DVDs, the monitor may display in full screen. • Run the built-in diagnostics.



Appendix

WARNING: 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 Safety, Environmental, and Regulatory Information (SERI).

FCC notices (U.S. only) and other regulatory information

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

Contact Dell

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

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

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

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

EU product database for energy label and product information sheet

S2421HGF: <https://eprel.ec.europa.eu/qr/344900>

