Dell E2223HV

User's Guide



Monitor Model: E2223HV Regulatory Model: E2223HVf

Notes, Cautions and Warnings

- NOTE: A NOTE indicates important information that helps you make better use of your computer.
- △ CAUTION: A CAUTION indicates potential damage to hardware or loss of data if instructions are not followed.
- ⚠ WARNING: A WARNING indicates a potential for property damage, personal injury, or death.

Copyright © 2022 Dell Inc. or its subsidiaries. All rights reserved. Dell, EMC, and other are trademarks of Dell Inc. or its subsidiaries. Other trademarks may be trademarks of their respective owners.

2022 - 02

Contents

Ab	out your monitor	.5
ı	Package contents	5
ı	Product features	6
ı	Identifying features and controls	7
ı	Pin assignments	15
ı	Plug and play capability	16
ı	LCD monitor quality and pixel policy	16
I	Maintenance guidelines	16
Se	tting up the monitor	17
	Connecting the stand	17
	Connecting your monitor	18
	Organizing cables	18
ı	Removing the stand	19
Op	perating your monitor	21
	Turning on the monitor	21
l	Using the front panel controls	21
ı	Using the On-Screen Display (OSD) menu	26
;	Setting up display resolution on your monitor	39
	Using tilt	

Troubleshooting	42
Self-test	42
Built-in diagnostics	43
Common problems	44
Product-specific problems	46
Appendix	47
FCC Notices (U.S. Only) and Other Regulatory	
Information	47
Contact Dell	47
EU product database for energy label and product	
information sheet	47

About your monitor

Package contents

Your monitor ships with the components indicated in the table. Ensure that you have received all the components and see Contact Dell if anything is missing.

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

NOTE: To set up Stand from any other source, refer to the documentation comes with the Stand for instruction.

Component image	Component description
	Display
	Stand riser
-	Stand base
	VESA™ Screw Cover
	Power cable (varies by country)
	VGA cable



Product features

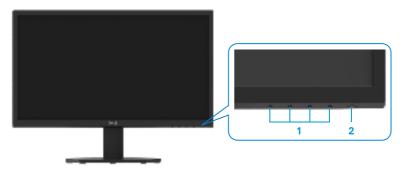
The Dell E2223HV flat panel monitor has an active matrix, Thin-Film Transistor (TFT), Liquid Crystal Display (LCD) Panel with LED backlight.

The monitor features include:

- 54.48 cm (21.45 in.) diagonal viewable area display (measured diagonally).
 1920 x 1080 resolution, with full-screen support for lower resolutions.
- Wide viewing angles of 178 degrees in vertical and horizontal directions.
- · Contrast ratio (3000:1).
- · Plug and play capable if supported by your computer.
- On-Screen Display (OSD) adjustments for easy setup and screen optimization.
- ≤ 0.3 W in Standby Mode.
- · Optimize eye comfort with a flicker-free screen.
- The monitor adopts flicker-free technology, which clears the eye visible flicker, brings comfort viewing experience and preventing users suffer from eye strain and fatigue.
- Possible long-term effects if blue light emission from the monitor may cause damage to the eyes, including eye fatigue or digital eye strain. ComfortView feature to reduce risk of eye strain from high blue light emission.
- · Security-lock slot.
- · Arsenic-free glass and Mercury-free for panel only.
- BFR/PVC-Reduced (Its circuit boards are made from BFR/PVC-free laminates).
- · Meets NFPA 99 leakage current requirement.
- · TCO Certified.
- EPEAT registered where applicable. EPEAT registration varies by country. See https://www.epeat.net for registration status by country.
- · RoHS Compliant.
- · Energy Star® Certified.

Identifying features and controls

Front view



Label	Description	Use
1	Function buttons	To access the OSD menu and change the settings if required. For more information, see Using the front panel controls.
2	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.

Back view





Without monitor stand

With monitor stand

Label	Description	Use
1	Security-lock slot (based on Kensington Security Slot™)	Secures monitor with security cable lock (sold separately)
2	Barcode, serial number, and service tag label	See this label if you need to contact Dell for technical support. The Service Tag is a enables Dell service technicians to identify the hardware components in your computer and access warranty information.
3	Regulatory information	List the regulatory approvals.
4	Cable-management clip	To organize the cables.
5	Stand release button	Release stand from monitor.

Side view



Bottom view, without monitor stand



Label	Description	Use
1	Power port	To connect the monitor power cable.
2	VGA port	For connection to your computer using VGA cable.

Monitor specifications

Model	E2223HV
Screen type	FHD TFT LCD
Panel type	Vertical Alignment (VA)
Viewable area	
Diagonal	544.83 mm (21.45 in.)
Active area	
Horizontal	478.66 mm (18.84 in.)
Vertical	260.28 mm (10.25 in.)
Area	1245.86 cm ² (193.11 in. ²)
Pixel pitch	0.249 mm x 0.241 mm
Pixel per inch (PPI)	103
Viewing angle	
Horizontal	178° (typical)
Vertical	178° (typical)
Brightness	250 cd/m² (typical)
Contrast ratio	3,000 to 1 (typical)
Faceplate coating	Anti-glare with 3H hardness
Backlight	LED edgelight system
Response time	
Normal mode	< 12 ms
Fast mode	< 8 ms
Color depth	16.7 million colors
Color gamut	72% (CIE1931)
	83% (CIE1976)
Dell display manager compatibility	Yes
Connectivity	1 x VGA
Bezel width (edge of	12.8 mm (Top)
monitor to active area)	12.8 mm (Left/Right)
	16.9 mm (Bottom)
Security	Security-lock slot for cable lock (optional purchase)
Tilt angle	-5° to 21°

Resolution specifications

Model	E2223HV
Horizontal scan range	30 kHz to 83 kHz (automatic)
Vertical scan range	50 Hz to 75 Hz (automatic)
Maximum preset resolution	1920 x 1080 @ 60 Hz

Preset display modes

Display mode	Horizontal	Vertical	Pixel clock	Sync polarity
	frequency	frequency	(MHz)	(Horizontal/Vertical)
	(kHz)	(Hz)		
VESA, 720 x 400	31.5	70.1	28.3	-/+
VESA, 640 x 480	31.5	59.9	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 x1024	64.0	60.0	108.0	+/+
VESA, 1280 x1024	80.0	75.0	135.0	+/+
VESA, 1600 x 900	60.0	60.0	108.0	+/+
VESA, 1920 ×1080	67.5	60.0	148.5	+/+

Electrical specifications

Model	E2223HV
Video input signals	Analog RGB: 0.7 V ± 5 %,
	75 Ω input impedance
Synchronization	Separate horizontal and vertical synchronizations,
input signals	polarity-free TTL level,
	SOG (Composite SYNC on green)
AC input voltage/	100 VAC to 240 VAC/50 Hz or 60 Hz ± 3 Hz/0.7 A
frequency/current	
Inrush current	30 A (120 V AC Input)
	60 A (240 V AC Input)
Power Consumption	0.3 W (Off Mode) ¹
	0.3 W (Standby Mode) ¹
	12.13 W (On Mode) ¹
	19 W (Max) ²
	12.83 W (Pon) ³
	40.02 kWh (TEC) ³

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

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.



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.

² Max brightness and contrast setting.

 $^{^3}$ P_{on}: 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.

Physical characteristics

Model	E2223HV
Signal cable type:	D-Sub (VGA), 15 pins
Analog	

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.

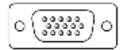
your Dell monitor.			
Dimensions (with stand):			
Height	384.17 mm (15.12 in.)		
Width	504.26 mm (19.85 in.)		
Depth	171.00 mm (6.73 in.)		
Dimensions (without	stand):		
Height	295.38 mm (11.63 in.)		
Width	504.26 mm (19.85 in.)		
Depth	49.64 mm (1.95 in.)		
Stand dimensions:			
Height	174.02 mm (6.85 in.)		
Width	222.03 mm (8.74 in.)		
Depth	171.00 mm (6.73 in.)		
Weight:			
Weight with packaging	4.01 kg (8.84 lb)		
With stand assembly and cables	2.90 kg (6.39 lb)		
Without stand assembly and cables	2.26 kg (4.98 lb)		
Weight of stand assembly	0.33 kg (0.73 lb)		

Environmental characteristics

Model	E2223HV
Temperature: Operating	0 °C to 40 °C (32 °F to 104 °F)
Non-operating: Storage/Shipping	-20 °C to 60 °C (-4 °F to 140 °F)
Humidity: Operating	10% to 80% (non-condensing)
Non-operating: Storage/Shipping	5% to 90% (non-condensing)
Altitude:	
Operating (maximum)	5,000 m (16,400 ft)
Non-operating (maximum)	12,192 m (40,000 ft)
Thermal dissipation	64.79 BTU/hour (maximum) 41.36 BTU/hour (typical)

Pin assignments

D-Sub 15-pin connector



Pin Number	Signal Assignment
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

Plug and play capability

You can install the monitor in any Plug and Play-compatible system. The monitor automatically provides the computer with its Extended Display Identification Data (EDID) using Display Data Channel (DDC) protocols so the computer can configure itself and optimize the monitor settings. Most monitor installations are automatic, you can select different settings as required. For more information about changing the monitor settings, see Operating your monitor.

LCD monitor quality and pixel policy

During the LCD Monitor manufacturing process, it is normal 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 about Dell Monitor Quality and Pixel Policy, see Dell Support site at www.dell.com/pixelguidelines.

Maintenance guidelines

Cleaning your monitor

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

△ CAUTION: Read and follow the Safety instructions before cleaning the monitor.

Improper cleaning methods can result in physical damage to Dell monitors. Physical defects may affect the screen and body of the monitor.

Follow the instructions in the list below when cleaning the monitor:

- To clean the Dell Monitor screen, lightly dampen a soft, clean cloth with water. If
 possible, use a special screen-cleaning tissue or solution suitable for the Dell Monitor
 screen.
- CAUTION: Do not use detergents of any kind or other chemicals such as benzene, thinner, ammonia, abrasive cleaners, alcohol, or compressed air.
- Do not directly spray the cleaning solution or even water on the surface of the monitor. Directly spraying liquid onto the panel will roll down to the bottom of the panel and corrode the electronics resulting in permanent damage.
- · Instead, apply solution or water to soft cloth material.
 - **NOTE:** Using cleaner may cause changes in the appearance of the monitor, such as color fading, milky film on the monitor, deformation, uneven dark shade, and screen surface peeling.

NOTE: Monitor damages due to improper cleaning methods and the use of benzene, thinner, ammonia, abrasive cleaners, alcohol, compressed air, detergent of any kind will lead to a Customer Induced Damage (CID). CID is not covered under the standard Dell warranty.

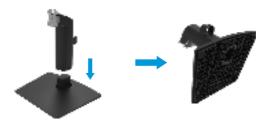
Setting up the monitor

Connecting the stand

- NOTE: The stand is not attached when the monitor is shipped from the factory.
- NOTE: The following procedure is applicable for the stand that shipped with your monitor.

To attach the monitor stand:

- 1. Assemble the stand riser to stand base.
 - a. Place the monitor stand base on a stable table top.
 - Slide the monitor stand body in the correct direction down onto the stand base until it clicks into place.



- 2. Attach the stand assembly to the monitor.
 - a. Place the monitor on a soft cloth or cushion near the edge of desk.
 - b. Align the stand assembly bracket to the monitor groove.
 - c. Insert the bracket towards monitor until it locks in place.
 - d. Attach VESA cover.



Connecting your monitor

- MARNING: Before you begin any of the procedures in this section, follow the Safety instructions.
- NOTE: Do not connect all cables to the computer at the same time. It is recommended to route the cables through the cable-management slot before you connect them to the monitor.
- 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.

To connect your monitor to the computer:

- 1. Turn off your computer and disconnect the power cable.
- 2. Connect VGA cable from your monitor to the computer.

Connecting VGA cable



Organizing cables

Use the cable-management clip to route the cables connected to your monitor.

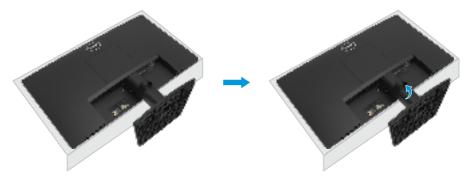


Removing the stand

- NOTE: To prevent scratches on the screen when removing the stand, ensure that the monitor is placed on a soft and clean surface.
- NOTE: The following procedure is applicable for the stand that shipped with your monitor.

To remove the stand:

- 1. a. Place the monitor on a soft cloth along the desk.
 - b. Tilt the stand upwards to access to the release button.



- a. Use a long and thin screwdriver to push the release latch located in a hole just above the stand.
 - b. Once the latch is released, remove the base away from the monitor.
 - Press down on the quick release tab latch on the bottom of the base to separate base from stand riser.



To remove the VESA cover:

Press the dimple on the VESA cover to release it from the back of the display.



Wall Mounting (Optional)



(Screw dimension: M4 x 10 mm).

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

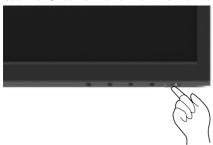
- 1. Place the monitor panel on a soft cloth or cushion on a stable flat table.
- 2. Remove the stand.
- 3. Use a screwdriver to remove the four screws securing the plastic cover.
- 4. Attach the mounting bracket from the wall mounting kit to the LCD.
- Mount the LCD on the wall by following the instructions that came with the base mounting kit.

NOTE: For use only with UL or CSA or GS-listed wall-mount bracket with minimum weight/load bearing capacity of 9.04 kg (19.93 lb) for E2223HV.

Operating your monitor

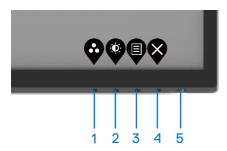
Turning on the monitor

Press the button to turn on the monitor.



Using the front panel controls

Use the control buttons at the bottom edge of the monitor to adjust the image being displayed.



The following table describes the control buttons:

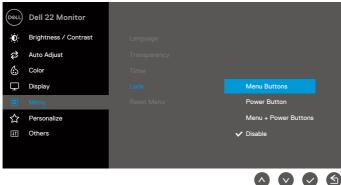
	Control buttons	Description
1	•	Use this button to choose from a list of preset modes.
	Preset mode	
2	•	For direct access to the Brightness and Contrast menu.
	Brightness/Contrast	
3		To launch the On-Screen Display (OSD) menu, or to access the list of items/options of a menu item. For
	Menu	more information, see Accessing the OSD menu.
4	\$	To exit or return to the OSD main menu.
	Exit	To be a the second of the Original of the Orig
5	U	To turn the monitor On or Off.
	Power button	Solid white light indicates that the monitor is turned on
	(with power-status light)	and functioning normally. Blinking white light indicates that the monitor is in Standby Mode.

Using the OSD lock function

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

Use the Lock menu to lock the button(s).

1. Select one of the following options.



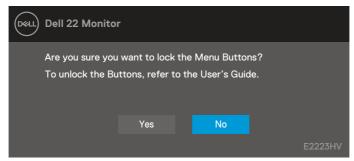








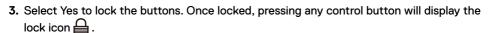
2. The following message appears.



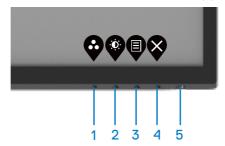




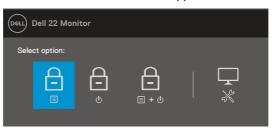




Use the front-panel control button to lock the button(s).



1. Press and hold Button 4 for four seconds, a menu appears on the screen.



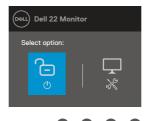
2. Select one of the following options:

	Options	Description
1		Select this option to lock OSD menu function.
	Menu Buttons lock	
2	<u>-</u>	Use this option to lock power button.
	Power Button lock	
3	<u>-</u>	Use this option to lock OSD menu and power button.
	Menu and Power Buttons lock	
4	*	Use this option to run the built-in diagnostics, see Built-in diagnostics.
	Built-in Diagnostics	

To unlock the button(s).

Press and hold **Button 4** for four seconds until a menu appears on the screen. The following table describes the options to unlock the front-panel control buttons.



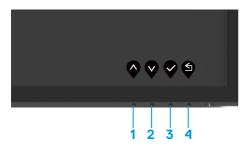




	Options	Description
1		Use this option to unlock OSD menu function.
	Menu Buttons unlock	
2	<u>ق</u>	Use this option to unlock power button.
	Power Button unlock	
3	□ • • • • • • • • • • • • • • • • • • •	Use this option to unlock OSD menu and power button.
	Menu and Power Buttons unlock	
4	*	Use this option to run the built-in diagnostics, see Built-in diagnostics.
	Built-in Diagnostics	

OSD controls

Use the buttons on the bottom edge of the monitor to adjust the image settings.



	Control buttons	Description
1	Q Up	Use the Up button to increase values or move up in a menu.
2	Down	Use the Down button to decrease values or move down in a menu.
3	⊘ OK	Use the OK button to confirm your selection in a menu.
4	Back	Use the Back button to go back to the previous menu.

Using the On-Screen Display (OSD) menu

Accessing the OSD menu

- NOTE: Any changes you make are automatically saved when you move to another menu, exit the OSD menu, or wait for the OSD menu to close automatically.
- 1. Press the button to display the OSD main menu.

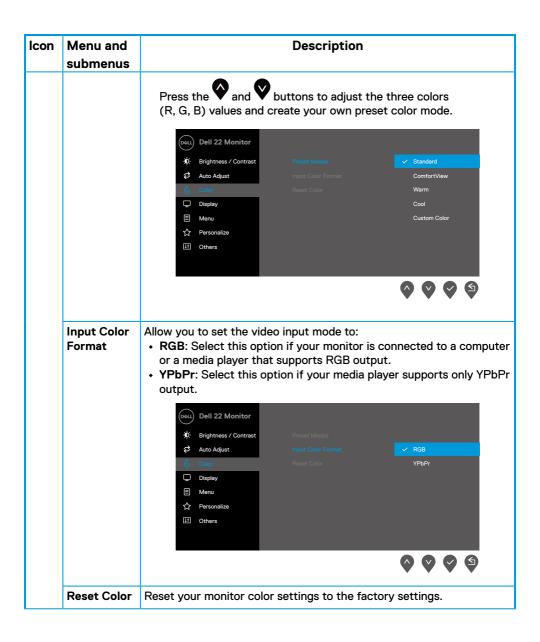


- 2. Press the and buttons to move between the setting options. As you move from one icon to another, the option name is highlighted.
- 3. Press the button once to activate the highlighted option.
- 4. Press and button to select the desired parameter.
- **5.** Press and then use the and buttons, according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

Icon	Menu and	Description	
10011	submenus	Description	
-			
•	Brightness/ Contrast	Use this option to control the brightness or contrast settings. Dell 22 Monitor	
		☆ Personalize II Others	
	Brightness	Brightness adjusts the luminance of the backlight. Press the button to increase the brightness and press the button to decrease the brightness (min. 0; max. 100).	
	Contrast	Adjust the brightness first, and then adjust the contrast only if further adjustment is necessary. Press the button to increase the contrast and press the button to decrease the contrast (min. 0; max. 100). The contrast function adjusts the degree of difference between darkness and lightness on the screen.	

Icon	Menu and	Description
icon		Description
	submenus	
₽	submenus Auto Adjust	Use this option to activate automatic setup and adjust menu. Dell 22 Monitor
		signal. After using Auto Adjustment, you can further tune your monitor by using the Pixel Clock (Coarse) and Phase (Fine) controls under Display.
		NOTE: Auto Adjust does not occur if you press the button while there are no active video input signals or attached cables.

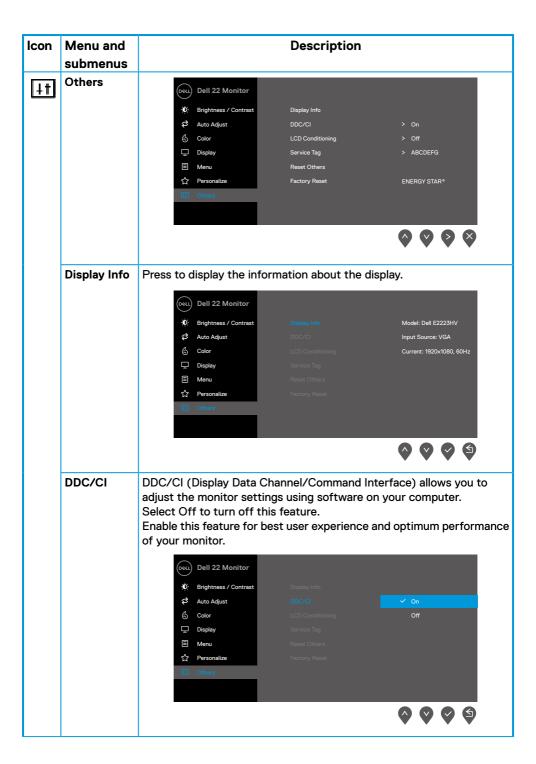
Menu and Icon Description submenus Color Use color to adjust the color setting mode. ell 22 Monitor Brightness / Contrast Preset Modes > Standard Auto Adjust > RGB Input Color Format Display ■ Menu IT Others \circ **Preset** When you select Preset Modes, you can choose Standard, Modes ComfortView. Warm. Cool. Custom Color from the list. Standard: Load 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. NOTE: To reduce the risk of eve strain and neck/arm/back/ shoulders pain from using the monitor for long periods of time, we suggest that you: - Set the screen about 20~28 in. (50~70 cm) from your eyes. - Blink frequently to moisten or lubricate your eyes. - Take regular 20-minute breaks every two hours. - Look away from your monitor and gaze at a distant object at 20 feet away for at least 20 seconds during the breaks. - Perform stretches to relieve tension in the neck/arm/back/ shoulders during the breaks. • Warm: Increase the color temperature. The screen appears warmer with a red/yellow tint. • Cool: Decrease the color temperature. The screen appears cooler with a blue tint. Custom Color: Allows you to manually adjust the color settings.

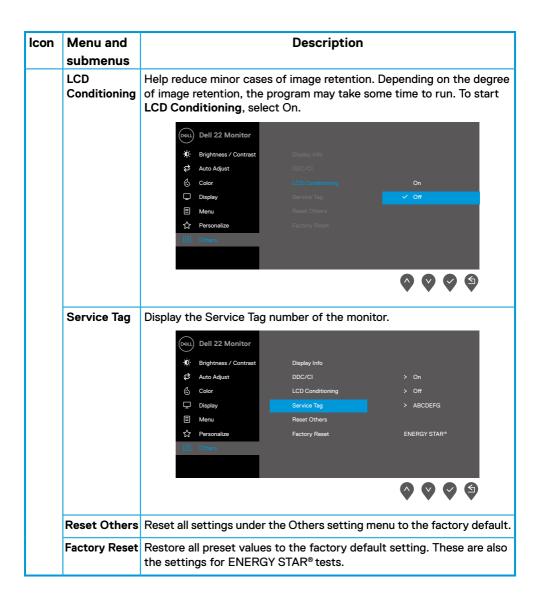


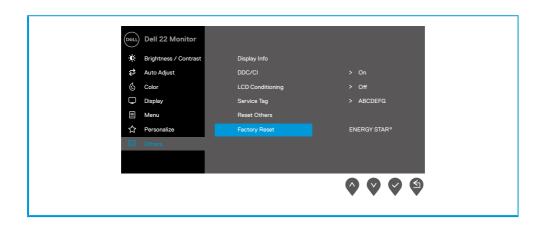
Icon	Menu and		Description	
.00	submenus	'	occorrption.	
\Box	Display	Use the display to adjust image.		
Ŧ		Auto Adjust Color Display Menu Personalize III Others	Aspect Ratio Horizontal Position Fertical Position Sharpness Pixel Clock Phase Response Time Reset Display	> 16:9 > 50 > 50 > 50 > 50 > 50 > 50 > 50 > 50
	Aspect Ratio	Adjust the image ratio to 16:9, 4:3, or 5:4.		
Horizontal Position Use or to move image left and right. Minimum is '0' (-). Maximum is '100' (+). Vertical Position Use the or to move image up and down. Minimum is '0' (-). Maximum is '100' (+).				
	Sharpness	This feature can make the image look sharper or softer. Use or or to adjust the sharpness from 0 to 100.		
Pixel Clock The Pixel Clock feature enables you to adjust in monitor according to your preference. Use or buttons to adjust for best image query presents are not obtained using the use the Pixel Clock (coarse) adjustment and the again.		eference.		
			-	
	Response Time	Allow you to select between Normal (12 ms), Fast (8 ms).		st (8 ms).
	Reset Display	Select this option to restore	default display setti	ngs.

lcon	Menu and	Description		
	submenus			
▣	Menu	Select this option to adjust the settings of the OSD, such as the languages of the OSD, the amount of time, the menu remains on screen, and so on.		
		Dell 22 Monitor ©: Brightness / Contrast Auto Adjust Color Display Lock Personalize Others Dell 22 Monitor Language > English > 20 > 20 > Display Lock > Disable Reset Menu		
	Language	Language options set 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 pressing the or buttons from 0 to 100.		
	Timer	OSD hold time: sets the length of time, the OSD will remain active after the last time you pressed a button. Use or to adjust the slider in 1 second increments, from 5 to 60 seconds.		
	Lock	With the control buttons on the monitor locked, you can prevent people from accessing the controls. It also prevents accidental activation in multiple monitors side-by-side setup. Dell 22 Monitor		

Icon	Menu and submenus	Description	
		 Menu Buttons: All Menu/function buttons (except the Power button) are locked and not accessible by the user. Power Button: Only the Power button is locked and not accessible by the user. Menu + Power Buttons: Both the Menu/function & Power buttons are locked and not accessible by the user. The default setting is Disable. NOTE: To unlock the button(s), press and hold key of the monitor for 4 seconds 	
	Reset Menu	Select this option to restore default menu settings.	
☆	Personalize Selecting this option allows you to set two shortcut keys at LED indicator function. Dell 22 Monitor Preset Modes Auto Adjust Shortcut Key 1 Power Button LED Power Button LED Power Button LED Power Button LED Others		
	Shortcut Key 1	Allow you to select one of the following: Preset Modes, Brightness/ Contrast, Auto Adjust, Aspect Ratio, to set the shortcut key 1.	
	Shortcut Key 2	Allow you to select one of the following: Preset Modes, Brightness/ Contrast, Auto Adjust, Aspect Ratio,to set the shortcut key 2.	
	Power Button LED	Allow you to set the power LED indicator On in On Mode or Off in On Mode to save energy.	
	Reset Personalization	Allow you to restore shortcut key to the default setting.	

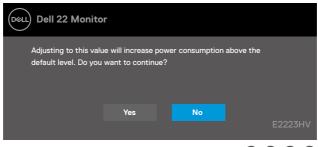






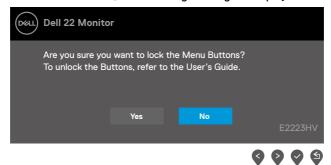
OSD warning messages

The following Power Warning Message box applies to Brightness functions for the first time when you adjust the Brightness level above the default level.



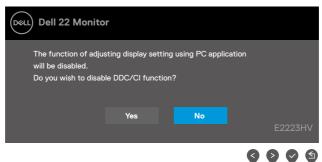


Before the Lock function is activated, the following message is displayed.



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

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



When the monitor enters Standby mode, the following message appears.



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



See Troubleshooting for more information.

Setting up display resolution on your monitor

Setting display resolution to 1920 x 1080

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

In Windows 7:

- 1. Right-click on the desktop and click Screen Resolution.
- 2. Click the drop-down menu of the Screen Resolution and select 1920 x 1080.
- 3. Click OK.

In Windows 8 or Windows 8.1:

- 1. Select the Desktop tile to switch to classic desktop.
- 2. Right-click on the desktop and click Screen Resolution.
- 3. Click the drop-down menu of the Screen Resolution and select 1920 x 1080.
- 4. Click OK.

In Windows 10 or Windows 11:

- 1. Right-click on the desktop and click Display Settings.
- 2. Click Advanced Display Settings.
- 3. Click the drop-down menu under **Resolution** and select 1920×1080 .
- 4. Click Apply.

If you do not see the recommended resolution as an option, you may need to update your graphics driver. Use one of the following methods to update the graphics driver:

Dell computer

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

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

Non-Dell computer

In Windows 7:

- 1. Right-click on the desktop and click Personalization.
- 2. Click Change Display Settings.
- 3. Click Advanced Settings.
- **4.** Identify your graphics controller supplier from the description at the top of the window. For example, NVIDIA, AMD, Intel, and so on.
- Refer to the graphic card provider website for updated driver. For example, https://www.AMD.com or https://www.NVIDIA.com.
- **6.** After installing the drivers for your graphics adapter, attempt to set the resolution to 1920×1080 again.

In Windows 8 or Windows 8.1:

- 1. 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. For example, NVIDIA, AMD, Intel, and so on.
- Refer to the graphic card provider website for updated driver. For example, https://www.AMD.com or https://www.NVIDIA.com.
- 7. After installing the drivers for your graphics adapter, attempt to set the resolution to 1920×1080 again.

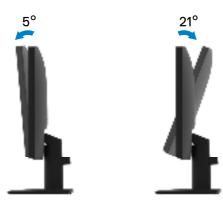
In Windows 10 or Windows 11:

- 1. Right-click on the desktop and click Display Settings.
- 2. Click Advanced display settings.
- 3. Click Display adapter properties.
- Identify your graphics controller supplier from the description at the top of the window. For example, NVIDIA, AMD, Intel, and so on.
- Refer to the graphic card provider website for updated driver. For example, https://www.AMD.com or https://www.NVIDIA.com.
- **6.** After installing the drivers for your graphics adapter, attempt to set the resolution to 1920×1080 again.
- NOTE: If you are unable to set the recommended resolution, please contact the manufacturer of your computer or consider purchasing a graphics adapter that supports the video resolution.

Using tilt

You can tilt the monitor for the most comfortable viewing angle.

NOTE: The stand is not attached when the monitor is shipped from the factory.



Troubleshooting

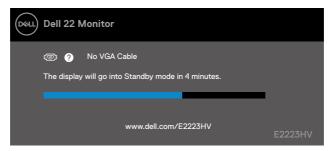
MARNING: Before you begin any of the procedures in this section, follow the Safety instructions.

Self-test

Your monitor provides a self-test feature that allows you to check 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.
- Disconnect all video cables from the monitor. This way, the computer does not 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 message also appears during normal operation, when the video cable is disconnected or damaged.
- 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 any screen abnormality you experience is an inherent problem with your monitor, or with your computer and video card.



Label	Description
1	Button 1
2	Button 2
3	Button 3
4	Button 4

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 4** for about 4 seconds and wait for a pop up menu.
- 3. Use **Button 1** or 2 to select the and press to confirm.

A gray test pattern appears at the beginning of the diagnostic program.

- 4. Carefully inspect the screen for abnormalities.
- 5. Press Button 1 to change the test patterns.
- Repeat steps 4 and 5 to inspect the display in red, green, blue, black, white and text screens.
- When in White color test screen, check for white color uniformity and if there white color appears greenish/reddish, etc.
- 8. Press Button 1 to end the diagnostic program.

Common problems

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

Common symptoms	Possible solutions
No video/Power LED off	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.
No video/Power LED on	 Increase brightness and contrast controls using the OSD.
	Perform monitor self-test feature check.
	Check for bent or broken pins in the video cable connector.
	Run the built-in diagnostics.
Poor focus	Eliminate video extension cables.
	• Reset the monitor to Factory Settings (Factory Reset).
	Change the video resolution to the correct aspect ratio.
Shaky/Jittery video	Reset the monitor to Factory Settings (Factory Reset).
	Check environmental factors.
	Relocate the monitor and test in another room.
Missing pixels	Cycle power On-off.
	 Pixel that is permanently off is a natural defect that can occur in LCD technology.
	 For more information about Dell Monitor Quality and Pixel Policy, see Dell Support site at:
	www.dell.com/pixelguidelines.
Stuck-on pixels	Cycle power On-off.
	 Pixel that is permanently off is a natural defect that can occur in LCD technology.
	For more information about Dell Monitor Quality and Pixel Policy, see Dell
	Support site at:
	www.dell.com/pixelguidelines.
Brightness problems	Reset the monitor to Factory Settings (Factory Reset).
	Adjust brightness and contrast controls using OSD.
Geometric distortion	Reset the monitor to Factory Settings (Factory Reset).
	Adjust horizontal and vertical using OSD.
Horizontal/Vertical lines	Reset the monitor to Factory Settings (Factory Reset).
	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.

Common symptoms	Possible solutions
Synchronization problems	 Reset the monitor to Factory Settings (Factory Reset). 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 safe mode.
Safety related issues	Do not perform any troubleshooting step.Contact Dell immediately.
Intermittent problems	 Try different Preset Modes in Color settings OSD. Adjust R/G/B value in Custom Color in Color settings OSD. Change the Input Color Format to RGB or YPbPr in the Color settings OSD. Run the built-in diagnostics.
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	 Try different Preset Modes in Color settings OSD. Adjust R/G/B value in Custom Color in Color settings OSD. Change the Input Color Format to RGB or YPbPr in the Color settings OSD. Run the built-in diagnostics.
Image retention from a static image left on the monitor for a long period of time	 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.
Video ghosting or overshooting	Change the Response Time in the Display OSD to Fast or Normal depending on your application and usage.

Product-specific problems

Specific symptoms	Possible solutions
Screen image is too small	 Check the Aspect Ratio setting in the Display settings OSD. Reset the monitor to Factory Settings (Factory Reset).
Cannot adjust the monitor with the buttons on the bottom of the panel	 Turn off the monitor, unplug the power cord, plug it back, and then turn on the monitor. Check if the OSD menu is locked. If yes, press and hold the Exit button (button 4) for four seconds to unlock.
No input signal when user controls are pressed	 Check the signal source. Ensure that the computer is not in standby or sleep mode by moving the mouse or pressing any key on the keyboard. Check if the video cable is plugged in properly. Disconnect and reconnect the video cable if necessary. Reset the computer or video player.
The picture does not fill the entire screen	 Due to different video formats (aspect ratio) of DVDs, the monitor may display in full screen. Run the built-in diagnostics.

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 Product Information Guide.

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

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

Install your monitor near a power outlet that you can easily reach. Disconnect the monitor by grasping the plug firmly and pulling it from the outlet. Never disconnect the monitor by pulling the cord.

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.

To get online Monitor support content, visit https://www.dell.com/support/monitors. To contact Dell for sales, technical support, or customer service issues:

- 1. Visit https://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.

EU product database for energy label and product information sheet

E2223HV: https://eprel.ec.europa.eu/qr/1034863