User's Guide Dell SE2416HM

Model No.: SE2416HM Regulatory model: SE2416HMc



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.

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About your monitor

Package contents

Your monitor ships with the components shown below. Ensure that you have received all the components and see Contacting Dell for more information if something is missing.

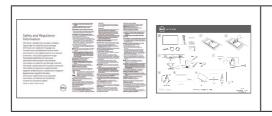


NOTE: Some items may be optional and may not ship with your monitor. Some features or media may not be available in certain countries.



NOTE: To set up with any other stand, please refer to the respective stand setup guide for setup instructions.

ML ····· č	• Monitor
	• Stand riser
	 Stand base
	 Power Cable (Varies by Countries)
	VGA Cable



- Quick Setup Guide
- Safety and Regulatory Information

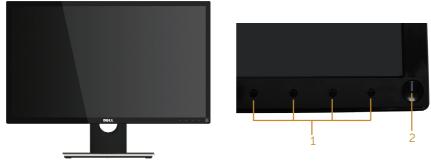
Product features

The **Dell SE2416HM** flat panel display has an active matrix, Thin-Film Transistor (TFT), Liquid Crystal Display (LCD), anti-static, and LED backlight. The monitor features include:

- **SE2416HM**: 60.47 cm (23.8 inch) viewable area display (measured diagonally). 1920 x 1080 resolution, plus full-screen support for lower resolutions.
- Wide viewing angle to allow viewing from a sitting or standing position, or while moving from side-to-side.
- VGA and DVI-D connectivity makes it simple and easy to connect with legacy and new systems.
- Plug and play capability if supported by your system.
- On-Screen Display (OSD) adjustments for ease of set-up and screen optimization.
- Security-lock slot.
- BFR/PVC-reduced.
- TCO-Certified Displays.
- Arsenic-Free glass and Mercury-Free for the panel only.
- High Dynamic Contrast Ratio (8,000,000:1).
- 0.3 W standby power when in the sleep mode.
- Energy Gauge shows the energy level being consumed by the monitor in real time.

Identifying parts and controls

Front view



Front panel controls

Label	Description
1	Function buttons (For more information, see Operating your monitor)
2	Power On/Off button

NOTE: For displays with glossy bezels the user should consider the placement of the display as the bezel may cause disturbing reflections from surrounding light and bright surfaces.

Back view





Back View without monitor stand Back View with monitor stand

Label	Description	Use
1	Security-lock slot	Secures monitor with security lock (security lock not included).
2	Barcode serial number and Service Tag label	Refer to this label if you need to contact Dell for technical support. The Dell service tag is used for Dell warranty and customer service management purposes and for records of the base system.
3	Cable management slot	Uses to organize cables by placing them through the slot.
4	Stand release button	Releases stand from monitor.

Side view



Bottom view



Bottom view without monitor stand

Label	Description	Use
1Power portConnect the power cable.		Connect the power cable.
2	DVI-D port	Connect your computer with DVI-D cable.
3	VGA port	Connect your computer with VGA cable.
4	Regulatory label	Lists the regulatory approvals.

Plug and play capability

You can install the monitor in any Plug and Play-compatible system. The monitor automatically provides the computer system with its Extended Display Identification Data (EDID) using Display Data Channel (DDC) protocols so the system can configure itself and optimize the monitor settings. Most monitor installations are automatic, you can select different settings if desired. For more information about changing the monitor settings, see Operating your 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 Dell Support site at **www.dell.com/support/monitors**.

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.

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

- To clean your 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 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 the black-colored monitor may get scratched and show white scuff marks.
- 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 detached when the monitor is shipped from the factory.

To attach the monitor stand:

- **1.** Place the monitor on a soft cloth or cushion.
- 2. Insert the tabs on the upper part of the stand in to the grooves on the back of the monitor.
- 3. Press down the stand till it snaps into place.



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 recommend to route the cables through the cable-management slot before you connect them to the monitor.

To connect your monitor to the computer:

1. Turn Off your computer and disconnect the power cable. Connect the VGA/DVI-D cable from your monitor to the computer.

Connecting the VGA cable



Connecting the DVI-D cable (sold separately)



Organizing cables



Removing the stand

NOTE: To prevent scratches on the LCD screen while removing the stand, ensure that the monitor is placed on a soft and clean surface.

To remove the stand:

- 1. Place the monitor on a soft cloth or cushion.
- 2. Use a long and thin screwdriver to push the release latch.
- **3.** Once the latch is released, remove the base away from the monitor.



Operating your monitor

Power on the monitor

Press the **U** button to turn on the monitor.



Using the front panel controls

Use the control buttons on the front of the monitor to adjust the image being displayed.



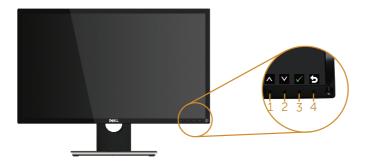
The following table describes the front panel buttons:

	Front Panel Button	Description
1	8	Use this button to choose from a list of preset modes.
	Shortcut key/Preset Modes	
2	Shortcut key/Input source	Use the input source menu to select between the different video signals that may be connected to your monitor.
3	Menu	Use the menu button to launch the On-Screen Display (OSD) and select the OSD Menu. See Accessing the OSD menu.

4	Exit	Use this button to go back to the main menu or exit the OSD main menu.
5		Use the power button to turn the monitor on and off.
	Power (with power light)	Solid white light indicates the monitor is On and fully functional. Blinking white light indicates the power save mode.

OSD controls

Use the buttons on the front of the monitor to adjust the image settings.



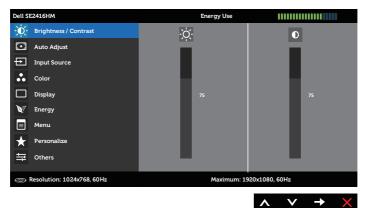
	Front Panel Button	Description
1	Up	Use the Up button to increase values or move up in a menu.
2	Down	Use the Down button to decrease values or move down in a menu.
3	ОК	Use the OK button to confirm your selection in a menu.
4	Back	Use the Back button to go back to the previous menu.

Using the on-screen display (OSD) menu

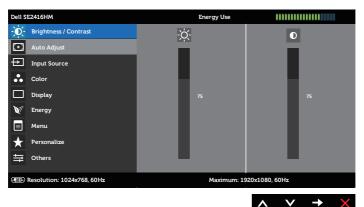
Accessing the OSD menu

- **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 automatically close.
 - 1. Press the 🗊 button to display the OSD main menu.

Main Menu for analog (VGA) input

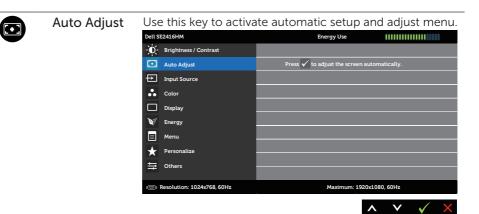


Main Menu for digital (DVI-D) input

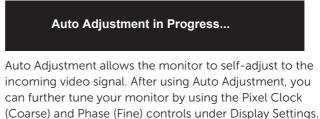


- 2. Press the A and V buttons to move between the setting options. As you move from one icon to another, the option name is highlighted. See the following table for a complete list of all the options available for the monitor.
- 3. Press the 🖨 button once to activate the highlighted option.
- 4. Press \land and \checkmark 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 to return to the main menu.

lcon	Menu and Submenus		Description		
8	Brightness/	Use this menu to activ	ate Brightness/Cor	ntrast adjustment.	
U	Contrast	Dell SE2416HM	Energy Use		
		- Drightness / Contrast	×.	D	
		Auto Adjust			
		Input Source			
		Color Display			
		V Energy	75	75	
		Menu			
		+ Personalize			
		(3) Resolution: 1024x768, 60Hz	Maximum: 1920	x1080, 60Hz	
				$\land \lor \rightarrow \times$	
-	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).			
		NOTE: Manual adjustr Dynamic Contrast is s	is disabled when		
-	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 tl			
		button to decrease the contrast (min. 0 / max. 100).			
		The Contrast function adjusts the degree of difference between darkness and lightness on the monitor screen.			



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



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

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

Ð

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



_				
• (*****) • (*****) • *****	VGA	Select the VGA input when you are using the VGA connector. Press \bigoplus to select the VGA input source.		
8 (1000000000000000000000000000000000000	DVI-D	Select the DVI-D input when you are using the DVI-D connectors. Press $ ightarrow$ to select the DVI-D input source.		
0	Color	Use Color to adjust t	he color setting mode.	
W		Dell SE2416HM	Energy Use	
		- D- Brightness / Contrast	Input Color Format RG	в
		Auto Adjust	Preset Modes Sta	ındard
		Input Source	Reset Color Settings	
		Color		
		Display		
		W Energy		
		Menu		
		+ Personalize		
		Resolution: 1024x768, 60Hz	Maximum: 1920x1080, 60Hz	
			^ V	→ ×

Input Color Allows you to set the video input mode to: Format RGB: Select this option if your monitor is connected to a computer (or DVD player) using the VGA cable or DVI-D cable. YPbPr: Select this option if your monitor is connected to a DVD player by YPbPr using the VGA cable or DVI-D cable, or if the DVD color output setting is not RGB. Dell SE2416HM Energy Use - Brightness / Contrast Input Color Format 主 Auto Adjust YPbPr Input Source Color Display 💓 Energy **∃** Menu + Personalize + Others Resolution: 1024x768, 60Hz Maximum: 1920x1080, 60Hz ∧ ∨ √

Preset Modes		set Modes, you can c Game, Paper, Color Te		
	 Standard: Loads th This is the default 	e monitor's default co preset mode.	olor settings.	
	 Multimedia: Loads applications. 	color settings ideal fo	or multimedia	
	• Movie: Loads colo	r settings ideal for mo	ovies.	
	Game: Loads color applications.	r settings ideal for mo	ost gaming	
	 Paper: Loads brightness and sharpness settings ideal for viewing text. Blend the text background to simulate paper media without affecting color images. Applies to RGB input format only. 			
	 Warm: Increases the color temperature. The screen appears warmer with a red/yellow tint. 			
	• Cool: Decreases the appears cooler wit	ne color temperature. h a blue tint.	The screen	
	 Custom Color: Allo settings. 	ows you to manually a	adjust the color	
		buttons to adjust the create your own prese		
	Dell SE2416HM	Energy Use		
	- Brightness / Contrast	Input Color Format		
	Auto Adjust	Preset Modes	Standard	
	Input Source Color	Reset Color Settings	Multimedia	
			Movie	
	Display		Paper	
	V Energy		Warm	
	Menu Personalize		Cool	
	→ Others		Custom Color	
	- Others			
	Resolution: 1024x768, 60Hz	Maximum: 1920x1	080, 60Hz	
		2		
Hue	green or purple. This	the color of the vide is used to adjust the or ✔ to adjust the hu	desired flesh	
		the green shade of th		
		-	-	
	•	the purple shade of t ent is available only w	-	
	Movie or Game pres		nen you select	

Movie or Game preset mode.

Saturation	This feature can adj image. Use \land or 🔇 '100'.			
	Press 🔥 to increase video image.	e the monochrome	appe	arance of the
	Press 文 to increase image.	e the colorful appea	arance	e of the video
	NOTE: Saturation ad select Movie or Gan		le onl	y when you
Reset Color Settings	Resets your monito	r color settings to t	he fac	ctory settings.
Display	Change image setti	ngs.		
	Dell SE2416HM	Energy Use	1	*****
	- Brightness / Contrast	Aspect Ratio		Wide 16:9
	Auto Adjust	Horizontal Position	•	50
	Input Source	Vertical Position	•	50
	Color	Sharpness		50 50
	Display	Pixel Clock Phase	<u>`</u>	58
	W Energy	Dynamic Contrast		
	Menu	Response Time		Normal
	★ Others	Reset Display Settings		
	C Resolution: 1024x768, 60Hz	Maximum: 1	920x1080, 6	$\checkmark \rightarrow \times$
Aspect Ratio	Adjusts the image ra	atio to Wide 16:9, 4	:3 or 5	5:4.
Sharpness	This feature can ma Use 🐼 or 文 to adj	-		
Response Time	User can select betw	ween Fast or Norma	al.	
Dynamic Contrast	Allows you to increa sharper and more d			o provide
	Press the 🗲 button or "Off".	to select the Dyna	mic C	Contrast "On"
	NOTE: Dynamic Co select Game or Mov		ner co	ontrast if you
Reset Display Settings	Select this option to	restore default dis	play s	ettings.

N -77	Energy	Dell SE2416HM	Energy Use		
W/		- Brightness / Contrast	Power Button LED		On During Active
		Auto Adjust	Reset Energy Settings		
		Input Source			
		Color Display			
		Energy			
		Menu			
		+ Personalize			
		C Others			
		Resolution: 1024x768, 60Hz	Maximun	n: 1920x1080, 6	50Hz
				^	\lor \rightarrow \times
	Power Button LED	Allows you to set the Active or Off During A			n During
	Reset Energy Settings	Select this option to re	estore default E	nergy S	Settings.
	Menu	Select this option to a as, the languages of the menu remains on scree	ne OSD, the am	ount o	
		- D- Brightness / Contrast	Language	Þ	English
		Auto Adjust	Transparency		20
		Input Source	Timer	•	20 s
		Color	Lock	•	Unlock
		Display	Reset Menu Settings		
		Energy			
		Personalize			
		Cthers			
		Resolution: 1024x768, 60Hz	Maximum	1: 1920x1080, 6	i0Hz
				^	$\vee \rightarrow \times$
	Language	Language options set languages (English, Sp Portuguese, Russian, S	anish, French, C	Germar	n, Brazilian
	Transparency	Select this option to c			
	Transparency	pressing the A and			
	Timer	OSD Hold Time: Sets	5		
		remain active after the	5 1		
		Use \Lambda or 文 to adjus from 5 to 60 seconds		second	d increments,

	Lock	Controls user access to adjustments. When Lock is selected, no user adjustments are allowed. All keys are locked except (5) key.
		NOTE: When the OSD is locked, pressing the menu key takes you directly to the OSD settings menu, with 'OSD Lock' pre-selected on entry. Press and hold b key for 10 seconds to unlock and allow user access to all applicable settings.
	Reset Menu Settings	Reset all OSD settings to the factory preset values.
€	Personalize	Users can choose a feature from Preset Modes, Brightness/Contrast, Auto adjust, Input Source or Aspect Ratio and set it as a shortcut key.
		Dell SE2416HM Energy Use Image: Second constraints Shortcut Key 1 Image: Shortcut Key 2 Brightness/Contrast Image: Shortcut Key 2 Brightness/Contrast<
	Shortcut Key 1	User can select one of the followings: Preset Modes, Brightness/Contrast, Auto adjust, Input Source and Aspect to set the Shortcut Key 1.
	Shortcut Key 2	User can select one of the followings: Preset Modes, Brightness/Contrast, Auto adjust, Input Source and Aspect to set the Shortcut Key 2.
	Reset Personalization	Allows you to restore shortcut key to the default setting.

Others	Dell SE2416HM	Energy Use	
	- Brightness / Contrast	DDC/CI	▶ Enable
	Auto Adjust	LCD Conditioning	Disable
	Input Source	Reset Other Settings	
	Color	Factory Reset	Reset All Settings
	Display		
	Energy		
	Menu		
	★ Personalize		
	Resolution: 1024x768, 60Hz	Maximum: 1	920x1080, 60Hz
	allows your monitor p balance and etc.) to be your computer. You can disable this fe Enable this feature for performance of your r	e adjustable via th eature by selectin best user experie	ne software on g Disable.
	Dell SE2416HM	Energy Use	
	- Drightness / Contrast	DDC/CI	✓ Enable
	+ Auto Adjust	LCD Conditioning	Disable
	Input Source	Reset Other Settings	
	Color	Factory Reset	
	Display		
	Energy		
	Menu		
	Personalize		
	Others		
	@ Resolution: 1024x768, 60Hz	Maximum:	1920x1080, 60Hz
			∧ v v 5

LCD Conditioning	Helps reduce minor ca on the degree of imag take some time to run Enable.	je retention, the pro	ogram may
	Dell SE2416HM	Energy Use	
	- D- Brightness / Contrast	DDC/CI	Enable
	Auto Adjust	LCD Conditioning	Disable
	Input Source	Reset Other Settings	
	Color	Factory Reset	Reset All Settings
	Display		
	💓 Energy		
	📃 Menu		
	🗙 Personalize		
	Others		
	@ Resolution: 1024x768, 60Hz	Maximum: 1920x	L080, 60Hz
		I	$\wedge \land \rightarrow \checkmark$
Reset Other Settings	Reset all settings unde factory preset values.	er the Others setting	g menu to the

Factory Reset	Reset all settings to the factory preset values.

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

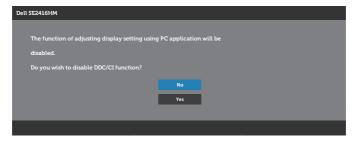
OSD warning messages

When the monitor does not support a resolution, the following message is displayed:



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.

The following message is displayed before the DDC/CI function is disabled:



When the monitor enters the Power Save Mode, the following message is displayed:



If you press any button other than the power button, one of the following messages is displayed depending on the selected input:

VGA input

Dell SE2416HM	
There is no signal coming from your computer. Press any key on the	
keyboard or move the mouse to wake it up. If there is no display, press the	
monitor button now to select the correct input source on the	
On-Screen-Display menu.	
@	

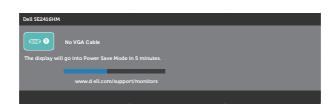
DVI-D input



If either VGA, DVI-D input is selected and the corresponding cable is not connected, a floating dialog box as shown below appears.

Dell SE2416HM	1		
(1)	No DVI-D Cable		
The display wi	ll go into Power Save Mode in 5 minutes.		
	www. dell.com/support/monitors		
			_

or



See Troubleshooting for more information.

Setting up your monitor

Setting the maximum resolution

To set the maximum resolution for the monitor:

In Windows 7, Windows 8, Windows 8.1 and Windows 10:

- 1. For Windows 8 and Windows 8.1, 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

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 www.dell.com/support, enter your computer's 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.

If you have a Dell desktop or a Dell portable computer with internet access

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



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

If you have a non Dell desktop, portable computer, or graphics card

In Windows 7, Windows 8, Windows 8.1 and Windows 10:

- 1. For Windows 8 and Windows 8.1 only, select the Desktop tile to switch to classic desktop.
- 2. Right-click on the desktop and click **Personalization**.
- 3. Click Change Display Settings.
- 4. Click Advanced Settings.
- 5. Identify your graphics controller supplier from the description at the top of the window (e.g. NVIDIA, ATI, Intel etc.).
- 6. Refer to the graphic card provider website for updated driver (for example, http://www.ATI.com OR http://www.NVIDIA.com).
- 7. After installing the drivers for your graphics adapter, attempt to set the resolution to 1920 x 1080 again.



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

Using tilt

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

Tilt

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



Troubleshooting

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

Self-Test

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

- **1.** Turn off both your computer and the monitor.
- **2.** Disconnect all video cables from the monitor. This way, the computer doesn't have to be involved.
- 3. Turn on the monitor.

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

Dell SE2416HM
CIDE O No DVI-D Cable
The display will go into Power Save Mode in 5 minutes.
www.dell.com/support/monitors
Dell SE2416HM
No VGA Cable
The display will go into Power Save Mode in 5 minutes.
www.d ell.com/support/monitors

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

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

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

Built-in diagnostics

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



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



To run the built-in diagnostics:

- 1. Ensure that the screen is clean (no dust particles on the surface of the screen).
- 2. Unplug the video cable(s) from the back of the computer or monitor. The monitor then goes into the self-test mode.
- **3.** Press and hold Button 1 and Button 4 simultaneously for 2 seconds. A gray screen appears.
- 4. Carefully inspect the screen for abnormalities.
- 5. Press Button 4 on the front panel again. The color of the screen changes to red.
- 6. Inspect the display for any abnormalities.
- 7. Repeat steps 5 and 6 to inspect the display in green, blue, black, white and text screens.

The test is complete when the text screen appears. To exit, press Button 4 again.

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

Common problems

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

Common Symptoms	Possible Solutions
No Video/Power LED off	 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. Ensure that the correct input source is selected via the Input Source menu.
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. Ensure that the correct input source is selected via the Input Source menu.
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 on Dell Monitor Quality and Pixel Policy, see Dell Support site at: www.dell.com/support/monitors.
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 on Dell Monitor Quality and Pixel Policy, see Dell Support site at: www.dell.com/support/monitors.
Brightness Problems	 Reset the monitor to Factory Settings (Factory Reset). Adjust brightness & contrast controls via OSD.

Geometric Distortion	 Reset the monitor to Factory Settings (Factory Reset). Adjust horizontal & vertical controls via 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.
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 the safe mode.
Safety Related Issues	Do not perform any troubleshooting steps.Contact Dell immediately.
Intermittent Problems	 Ensure that the video cable connecting the monitor to the computer is connected properly and is secure. Reset the monitor to Factory Settings (Factory Reset). Perform monitor self-test feature check to determine if the intermittent problem occurs in self-test mode.
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	 Change the Color Setting Mode in the Color Settings OSD to Graphics or Video depending on the application. 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	 Use the Power Management feature to turn off the monitor at all times when not in use (for more information, see Power management modes). 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	• Turn Off the monitor, unplug the power cord, plug it back, and then turn On the monitor.
buttons on the side panel	 Check if the OSD menu is locked. If yes, press and hold the menu button for 10 seconds to unlock. (For more information, see Lock).
No Input Signal when user controls are pressed	• Check the signal source. Ensure the computer is not in standby or sleep mode by moving the mouse or pressing any key on the keyboard.
	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

WARNING: Safety Instructions



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

For information on safety instructions, see the Product Information Guide.

Contacting 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:

1. Visit www.dell.com/support/monitors.

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

- 1. Visit 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.
- WARNING: For displays with glossy bezels the user should consider the placement of the display as the bezel may cause disturbing reflections from surrounding light and bright surfaces.

Flat panel specifications

Model	SE2416HM
Screen type	Active matrix-TFT LCD
Panel type	In-Plane Switching
Viewable image	
Diagonal	604.70 mm (23.81 in)
Horizontal, Active Area	527.04 mm (20.75 in)
Vertical, Active Area	296.46 mm (11.67 in)
Area	1562.46 cm ² (242.15 in ²)
Pixel pitch	0.2745 mm
Viewing angle	178 degrees (vertical) typical
	178 degrees (horizontal) typical
Luminance output	250 cd/m² (typical)
Contrast ratio	1000 to 1 (typical)
	8,000,000 to 1 (Dynamic Contrast)
Faceplate coating	Anti-glare with 3H hardness
Backlight	LED light bar system
Response time	6 ms typical (G to G)
Color depth	16.7 million colors
Color gamut	CIE 1976 (84%), CIE 1931 (72%)

Resolution specifications

Model	SE2416HM
Horizontal scan range	30 kHz to 83 kHz (automatic)
Vertical scan range	56 Hz to 76 Hz (automatic)
Maximum preset resolution	1920 x 1080 at 60 Hz

Supported video modes

Model	SE2416HM
Video display capabilities (DVI-D playback)	480p, 480i, 576p, 720p, 1080p, 576i, 1080i

Preset display modes

Display Mode	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (Horizontal / Vertical)
VESA, 720 x 400	31.5	70.1	28.3	-/+
VESA, 640 x 480	31.5	60.0	25.2	-/-
VESA, 640 x 480	37.5	75.0	31.5	-/-
VESA, 800 x 600	37.9	60.3	40.0	+/+
VESA, 800 x 600	46.9	75.0	49.5	+/+
VESA, 1024 x 768	48.4	60.0	65.0	-/-
VESA, 1024 x 768	60.0	75.0	78.8	+/+
VESA, 1152 x 864	67.5	75.0	108.0	+/+
VESA, 1280 x 1024	64.0	60.0	108.0	+/+
VESA, 1280 x 1024	80.0	75.0	135.0	+/+
VESA, 1600 x 1200	75.0	60.0	162.0	+/+
VESA, 1920 x 1080	67.5	60.0	148.5	+/+

Electrical specifications

Model	SE2416HM
Video input signals	 Analog RGB, 0.7 Volts +/-5%, positive polarity at 75 ohm input impedance
	 Digital DVI-D TMDS, 600mV for each differential line, positive polarity at 50 ohm input impedance
AC input voltage/frequency/ current	100 VAC to 240 VAC / 50 Hz or 60 Hz \pm 3 Hz / 1.5 A (typical)
Inrush current	• 120 V: 40 A (Max.) at 0°C (cold start)
	 240 V: 80 A (Max.) at 0°C (cold start)

Physical characteristics

Model	SE2416HM		
Signal cable type	Digital: detachable, DVI-D, Solid pins		
	• Analog: detachable, D-Sub, 15 pins		
Dimensions (with stand)			
Height	423.10 mm (16.66 in)		
Width	556.60 mm (21.91 in)		
Depth	179.90 mm (7.08 in)		
Dimensions (without stand)	^		
Height	330.10 mm (13.00 in)		
Width	556.60 mm (21.91 in)		
Depth	55 mm (2.17 in)		
Stand dimensions			
Height	177.00 mm (6.97 in)		
Width	250.00 mm (9.84 in)		
Depth	179.90 mm (7.08 in)		
Weight			
Weight with packaging	6.26 kg (13.80 lb)		
Weight with stand assembly and cables	4.30 kg (9.48 lb)		
Weight without stand assembly (no cables)	3.34 kg (7.36 lb)		
Weight of stand assembly	0.66 kg (1.45 lb)		
Front-frame gloss (minimum)	Black frame - 85 gloss units		

Environmental characteristics

Model		SE2416HM		
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 80 C (-4 F to 140 F)	
Humidity				
Operating		10% to 80% (non-condensing)		
Non-operating		• Storage	10% to 00% (non-condensing)	
			10% to 90% (non-condensing)	
Altitude				
Operating (maximum)		5,000 m (16,400 ft)		
Non-operating (maximum)		12,192 m (40,000 ft)		
Thermal dissipation	(maximum)	• 85.32 BTU/hour		
	(typical)	• 68.26 BTU/hour		

Power management modes

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

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

VESA Modes	Horizontal Sync	Vertical Sync	Video	Power Indicator	Power Consumption
Normal operation	Active	Active	Active	White	25 W (maximum)** 20 W (typical)
Active-off mode	Inactive	Inactive	Blanked	White (Glowing)	Less than 0.3 W
Switch off	-	-	-	Off	Less than 0.3 W

Power Consumption P _{on}	20 W
Total Energy Consumption (TEC)	63.8 kWh

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

This document is informational only and reflects laboratory performance. Your product may perform differently, depending on the software, components and peripherals you ordered and shall have no obligation to update such information. Accordingly, the customer should not rely upon this information in making decisions about electrical tolerances or otherwise. No warranty as to accuracy or completeness is expressed or implied.

I NOTE:

 $\rm P_{_{ON}}$: Power consumption of On Mode measured with reference to Energy Star test. TEC: Total energy consumption in kWh measured with reference to Energy Star test method.

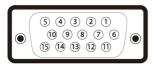
The OSD functions only in the normal operation mode. When any button is pressed in the Active-off mode, one of the following messages will be displayed:



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

Pin assignments

D-SUB connector



Pin Number	15-pin Side of the Connected Signal Cable
1	Video-Red
2	Video-Green
3	Video-Blue
4	GND
5	Self-test
6	GND-R
7	GND-G
8	GND-B
9	Computer 5V/3.3V
10	GND-sync
11	GND
12	DDC data
13	H-sync
14	V-sync
15	DDC clock

DVI-D connector

12345678 910111213141516 — • \odot 17 18 19 20 21 22 23 24

Pin Number	24-pin Side of the Connected Signal Cable
1	TMDS RX2-
2	TMDS RX2+
3	TMDS Ground
4	Floating
5	Floating
6	DDC Clock
7	DDC Data
8	Floating
9	TMDS RX1-
10	TMDS RX1+
11	TMDS Ground
12	Floating
13	Floating
14	+5 V/+3.3 V power
15	Self test
16	Hot Plug Detect
17	TMDS RX0-
18	TMDS RX0+
19	TMDS Ground
20	Floating
21	Floating
22	TMDS Ground
23	TMDS Clock+
24	TMDS Clock-