User's Guide Dell SE2416H

Model No.: SE2416H Regulatory model: SE2416Hc



Notes, cautions, and warnings



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

 \wedge **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.

2015 - 07 Rev. A00

Information in this document is subject to change without notice. © 2015 Dell Inc. All rights reserved.

Reproduction of these materials in any manner whatsoever without the written permission of Dell Inc. is strictly forbidden.

Trademarks used in this text: Dell and the DELL logo are trademarks of Dell Inc.; Microsoft and Windows are either trademarks or registered trademarks of Microsoft. Corporation in the United States and/or other countries, Intel is a registered trademark of Intel Corporation in the U.S. and other countries; and ATI is a trademark of Advanced Micro Devices. Inc. ENERGY STAR is a registered trademark of the U.S. Environmental Protection Agency. As an ENERGY STAR partner, Dell Inc. has determined that this product meets the ENERGY STAR guidelines for energy efficiency.

Other trademarks and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Dell Inc. disclaims any proprietary interest in trademarks and trade names other than its own.

Contents

About your monitor	5
Package contents	5
Product features	6
Identifying parts and controls	7
Plug and play capability	
Maintenance guidelines	
Setting up the monitor	11
Connecting the stand	
Connecting your monitor	
Organizing cables	
Removing the stand	13
Operating your monitor	14
Power on the monitor	14
Using the front panel controls	14
Using the on-screen display (OSD) menu	16
Setting up your monitor	29
Using tilt	

Tr	oubleshooting	32
	Self-Test	.32
	Built-in diagnostics	.33
	Common problems	.34
	Product-specific problems	.36
	Appendix	.37
	FCC notices (U.S. Only) and other regulatory information	.37
	Contacting Dell	.37
M	onitor specifications	38
	Flat panel specifications	.38
	Resolution specifications	.38
	Supported video modes	.39
	Preset display modes	.39
	Electrical specifications	.39
	Physical characteristics	40
	Environmental characteristics	.41
	Power management modes	.41
	Pin assignments	.43

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.

NeL	• Monitor
	• Stand riser
	 Stand base
	 Power Cable (Varies by Countries)
	• VGA Cable



- Drivers and Documentation Media
- Quick Setup Guide
- Safety and Regulatory
 Information

Product features

The **Dell SE2416H** flat panel display has an active matrix, Thin-Film Transistor (TFT), Liquid Crystal Display (LCD), anti-static, and LED backlight. The monitor features include:

- **SE2416H**: 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 HDMI 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.
- Software and documentation media includes an Information File (INF), Image Color Matching File (ICM), and product documentation.
- Dell Display Manager Software included (in the CD shipped with the monitor).
- Energy Saver feature for Energy Star compliance.
- Security-lock slot.
- EPEAT Silver Rating.
- 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

Lab	el	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.

Side view



Bottom view



Bottom view without monitor stand

Label	Description	Use	
1	Power port	Connect the power cable.	
2	HDMI port	Connect your computer with HDMI 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/HDMI cable from your monitor to the computer.

Connecting the VGA cable



Connecting the HDMI 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 **b**utton 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/	Use this button to directly access the Brightness/ Contrast menu.
	Brightness/Contrast	
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

Dell SE2416H		Energy Use			
÷ O -	Brightness / Contrast	۰ <u>ن</u>		D	
•	Auto Adjust				
Ð	Input Source				
•	Color				
	Display				
4	Audio				
V	Energy				
E	Menu				
*	Personalize				
ŧt	Others				
Besolution: 10	024x768, 60Hz		Maximum: 19	20x1080, 60Hz	

 \rightarrow

 $\wedge \vee \rightarrow$

 $\overline{\mathbf{A}}$

Main Menu for digital (HDMI) input

Dell SE2416H		Energy Use	
) O	Brightness / Contrast	بې	D
\odot	Auto Adjust		
Ð	Input Source		
••	Color		
	Display	75	75
A	Audio		
V	Energy		
E	Menu		
*	Personalize		
Ŧ	Others	_	_
Resolution:	1024x768, 60Hz	Maximum: 19	920x1080, 60Hz

- 2. Press the 🔊 and 💟 buttons to move between the setting options. As you move from one icon to another, the option name is highlighted. See the following table for a complete list of all the options available for the monitor.
- **3.** Press the \rightarrow 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			
	Brightness/	Use this menu to activate Brightness/Contrast adjustr				
	Contrast	Dell SE2416H	Energy Use			
		- Brightness / Contrast	×.	D		
		💽 Auto Adjust				
		Input Source Color				
		Color Display				
		Audio	75	75		
		Energy				
		📃 Menu				
		Personalize				
		Therefore There are a constrained and the constraint of the constr	Maximum: 1920x1080,	60H7		
-	Brightness	Brightness adjusts the luminance of the backlight.				
	Dirgittless					
		· · ·	Press the \Lambda button to increase the brightness and pre			
		 the v button to decrease the brightness (min. 0 / max. 100). NOTE: Manual adjustment of Brightness is disabled when Dynamic Contrast is switched On. 				
-	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		



Auto Adjust

Use this key to activate automatic setup and adjust menu.

Dell SE2416H		E	nergy Use	
÷Ŏ.	Brightness / Contrast			
•	Auto Adjust	Press 🗸 to	adjust the screen	automatically.
Ð	Input Source			
•	Color			
	Display			
₽	Audio			
V	Energy			
	Menu			
*	Personalize			
÷.	Others			
@ Resolution	: 1024x768, 60Hz		Maximum: 192	20x1080, 60Hz

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



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

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

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

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



(04928) 08928 08999)	VGA		e VGA input whe or. Press 🍑 to s	, j		
	HDMI	Select the HDMI input when you are using the HDMI connectors. Press 🔿 to select the HDMI input source.				
0	Color	Use Colo	or to adjust the c	olor setting mo	ode.	
V		Dell SE2416H		Energy Use		
		Ó	Brightness / Contrast	Input Color Format		RGB
			Auto Adjust	Preset Modes		Standard
		Ð	Input Source	Reset Color Settings		
		**	Color			
			Display			
		\square	Audio			
		Ŵ	Energy			
			Menu			
		*	Personalize			
		the second secon	Others			
		Resolution: 1024x768, 60Hz Maximum: 1920x1080, 60Hz				
					^	\checkmark \rightarrow

Select this optio uter (or DVD pla : Select this opt player by YPbPr	e video input mode to: on if your monitor is connected to layer) using the VGA cable or HDM tion if your monitor is connected t to using the VGA cable or HDMI cab utput setting is not RGB.
uter (or DVD pla : Select this opt blayer by YPbPr ne DVD color ou Brightness / Contrast Auto Adjust	tion if your monitor is connected t to using the VGA cable or HDMI cab utput setting is not RGB. Energy Voc RGB Imput Color Format RGB Preset Modes YPBPr
Dlayer by YPbPr ne DVD color of Brightness / Contrast Auto Adjust	using the VGA cable or HDMI cab utput setting is not RGB.
16H Brightness / Contrast Auto Adjust	Energy Use IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
Brightness / Contrast Auto Adjust	Input Color Format RGB Preset Modes YPbPr
Auto Adjust	Preset Modes YPbPr
Input Source	Peret Color Settinge
input source	Reset Color Settings
Color	
Display	
Audio	
Energy	
Menu	
Personalize	
Others	
	Personalize

Preset Modes		ia, Movie, Ga		an choose Standard, r Temp.or Custom
		d: Loads the he default pr		lt color settings.
	 Multime application 		olor settings ide	al for multimedia
			settings ideal for	movies.
	 Game: application 		settings ideal for	most gaming
	for view paper n	ing text. Ble	nd the text back t affecting color	ess settings ideal ground to simulate images. Applies to
			e color temperat h a red/yellow ti	
		ecreases the cooler with	e color temperat a blue tint.	ure. The screen
	Custom settings		ws you to manua	ally adjust the color
				the three colors reset color mode.
	Dell SE2416H		Energy Use	**************
	÷¢:	Brightness / Contrast Auto Adiust	Input Color Format Preset Modes	V Standard
	Ð	Input Source	Reset Color Settings	Multimedia
	*	Color		Movie
	D D	Display Audio		Game Paper
	V	Energy		Warm
		Menu		Cool
	★ ≒	Personalize Others		Custom Color
	@ Resolution	n: 1024x768, 60Hz	Maximum	: 1920x1080, 60Hz
				∧ ∧ ✓ ⊅
Hue	green or j	ourple. This i	- ·	the desired flesh
	-	-	•	hue from 0 to 100.
	Press \Lambda	to increase t	he green shade	of the video image.
	Press 💟	to increase t	he purple shade	of the video image.
		ue adjustmer Game preset		y when you select

Saturation This feature can adjust the color saturation of the video image. Use or to adjust the saturation from '0' to 100'. Press or to increase the monochrome appearance of the video image. Press or to increase the colorful appearance of the video image. Press or to increase the colorful appearance of the video image. NOTE: Saturation adjustment is available only when you select Movie or Game preset mode. Reset Color Settings Resets your monitor color settings to the factory settings. Display Change image settings. Image: New or the image ratio to Wide 16:9, 4.3 or 5:4. Sharpness This feature can make the image look sharper or softer. Use or to adjust the sharpness from 0 to 100. Response Time User can select between Fast or Normal. Dynamic Contrast Allows you to increase the level of contrast to provide sharper and more detailed image quality. Press the or button to select the Dynamic Contrast 'On' or 'Off'. NOTE: Dynamic Contrast provides higher contrast if you select Game or Movie preset mode. Reset Display Select this option to restore default display settings.							
video image. Press to to increase the colorful appearance of the video image. NOTE: Saturation adjustment is available only when you select Movie or Game preset mode. Reset Color Settings Display Change image settings. Display Change image settings. Image: Color Settings to the factory settings to the factory settings. Image: Settings Change image settings. Image: Settings Settings	Saturation	image. Use ለ or 💟 to adjust the saturation from '0' to					
image. NOTE: Saturation adjustment is available only when you select Movie or Game preset mode. Reset Color Settings Resets your monitor color settings to the factory settings. Display Change image settings. Display Change image settings. Aspect Ratio Adjusts the image ratio to Wide 16:9, 4:3 or 5:4. Sharpness This feature can make the image look sharper or softer. Use or to adjust the sharpness from 0 to 100. Response Time User can select between Fast or Normal. Dynamic Contrast Allows you to increase the level of contrast to provide sharper and more detailed image quality. Press the or button to select the Dynamic Contrast if you select Game or Movie presst mode. NOTE: Dynamic Contrast provides higher contrast if you select Game or Movie presst mode. Reset Display Select this option to restore default display settings.		-		e monochrom	e appe	earance of the	
select Movie or Game preset mode. Reset Color Settings Resets your monitor color settings to the factory settings. Display Change image settings. Display Change image settings. Image: Setting Settin		-	to increase the	e colorful appe	earanc	e of the video	
Settings Display Change image settings. Image: setting image setting				ble only when you			
Aspect RatioAdjusts the image ratio to Wide 16:9, 4:3 or 5:4.SharpnessThis feature can make the image look sharper or softer. Use i or i to adjust the sharpness from 0 to 100.Response TimeUser can select between Fast or Normal.Dynamic ContrastAllows you to increase the level of contrast to provide sharper and more detailed image quality. 		Resets y	our monitor co	lor settings to	the fac	ctory settings.	
Auto Adjust Auto Adjust Hortsonial Position 90 Provide Provide 90 Provide Provide 90 Auto Adjust Hortsonial Position 90 Provide Provide 90 Auto Hurst Hortsonial Position 90 Provide Hurst Hortsonial Position 90 Auto Hurst Hortsonial Position 90 Auto Hurst Heapone 90 Marku Heapone 100 90 Herd Buside Hurst Normal 100 Herd Buside Hurst Normal 100 Herd Buside Hurst Hurst Normal 100 Herd Buside Hurst Hurst Hurst Normal Herd Buside Hurst Hurst Hurst Hurst Hurst Herd Buside Hurst Hurst Hurst Hurst Hurst Hurst Herd Buside Hurst Hurst Hurst Hurst Hurst Hurst Hurst Hurst	Display	Change image settings.					
Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big settings Image: Sected big		Dell SE2416H	1	Energy Use			
Imput Source Vertical Position 90 Color Sharpness 90 Imput Source Pase Pose Imput Source Pase Pase 90 Imput Source Pase Pase Pase Imput Source Pase Pase Pase Pase Imput Source Pase Pase Pase Pase Pase		<u>ب</u>	Brightness / Contrast	Aspect Ratio	►	Wide 16:9	
Color Sharpness 0 Diplay Pixel Clock 50 Pixel Clock Pixel Clock 50 Pixel Clock Pixel Clock 60 Diplay Pixel Clock Pixel Clock Diplay Pixel Clock Pixel Clock Aspect Ratio Adjusts the image ratio to Vide 16:9, 4:3 or 5:4. Sharpness This feature can make the image look sharper or softer. Use or				Horizontal Position			
Image: Display Prest Clock 90 Image: Display Audio Prese 50 Image: Display Evergy Dynamic Contrast 01 Image: Display Meru Response Time Normal Image: Display Reset Display Settings Normal Image: Display Adjusts the image ratio to Wide 16:9, 4:3 or 5:4. Image: Display Aspect Ratio Adjusts Adjusts the image look sharper or softer. Use Image: Display or to adjust the sharpness from 0 to 100. Response Time User can select between Fast or Normal. Dynamic Allows you to increase the level of contrast to provide sharper and more detailed image quality. Press the or button to select the Dynamic Contrast "On" or "Off". NOTE: Dynamic Contrast provides higher contrast if you select Game or Movie preset mode. Reset Display Select this option to restore default display settings.							
Image: Second Secon							
DerryDynamic ContrastOrMenuResponse TimeNormalAspect RatioAdjusts the image ratio to Wide 16:9, 4:3 or 5:4.SharpnessThis feature can make the image look sharper or softer. Use or or to adjust the sharpness from 0 to 100.Response TimeUser can select between Fast or Normal.Dynamic ContrastAllows you to increase the level of contrast to provide sharper and more detailed image quality.Press the or off".NOTE: Dynamic Contrast provides higher contrast if you 							
Meru Response Time Normal Personalize Reset Display Settings Others Astronom 1920:1080, 60Hz Aspect Ratio Adjusts the image ratio to Wide 16:9, 4:3 or 5:4. Sharpness This feature can make the image look sharper or softer. Use or or or to adjust the sharpness from 0 to 100. Response Time User can select between Fast or Normal. Dynamic Contrast Allows you to increase the level of contrast to provide sharper and more detailed image quality. Press the or button to select the Dynamic Contrast "On" or "Off". NOTE: Dynamic Contrast provides higher contrast if you select Game or Movie preset mode. Reset Display Select this option to restore default display settings.							
Personalize Reset Display Settings Others Others Desclution: 1024/06.60Hz Maximum: 1920(080,60Hz) Aspect Ratio Adjusts the image ratio to Wide 16:9, 4:3 or 5:4. Aspect Ratio Adjusts the image ratio to Wide 16:9, 4:3 or 5:4. Sharpness This feature can make the image look sharper or softer. Use of or of to adjust the sharpness from 0 to 100. Response Time User can select between Fast or Normal. Dynamic Contrast Allows you to increase the level of contrast to provide sharper and more detailed image quality. Press the of button to select the Dynamic Contrast "On" or "Off". NOTE: Dynamic Contrast provides higher contrast if you select Game or Movie preset mode. Reset Display Select this option to restore default display settings.							
Image: Contrast Others Image: Resolution: 1024/768, 60Hz Actimum: 19201080, 60Hz Image: Resolution: 1024/768, 60Hz Image: Resolution: 1024/768, 60Hz Image: Resolution: 1024/768, 60Hz Adjusts the image ratio to Wide 16:9, 4:3 or 5:4. Image: Resolution: 1024/768, 60Hz Adjusts the image ratio to Wide 16:9, 4:3 or 5:4. Image: Resolution: 1024/768, 60Hz Adjusts the image ratio to Wide 16:9, 4:3 or 5:4. Image: Reset Display Select this option to restore default display settings.			Personalize				
Aspect Ratio Adjusts the image ratio to Wide 16:9, 4:3 or 5:4. Sharpness This feature can make the image look sharper or softer. Use on one to adjust the sharpness from 0 to 100. Response Time User can select between Fast or Normal. Dynamic Contrast Allows you to increase the level of contrast to provide sharper and more detailed image quality. Press the one button to select the Dynamic Contrast "On" or "Off". NOTE: Dynamic Contrast provides higher contrast if you select Game or Movie preset mode. Reset Display Select this option to restore default display settings.			Others				
Sharpness This feature can make the image look sharper or softer. Use or		📼 Resolu	tion: 1024x768, 60Hz	Maximum	n: 1920x1080, e	50Hz	
Sharpness This feature can make the image look sharper or softer. Use or			^	\lor \rightarrow \times			
Use or	Aspect Ratio	Adjusts the image ratio to Wide 16:9, 4:3 or 5:4.					
Response Time User can select between Fast or Normal. Dynamic Contrast Allows you to increase the level of contrast to provide sharper and more detailed image quality. Press the sharper and more detailed image quality. Press the sharper and more detailed image quality. Press the sharper and more detailed image quality. Press the sharper and more detailed image quality. Press the sharper and more detailed image quality. Press the sharper and more detailed image quality. Press the sharper and more detailed image quality. Press the sharper and more detailed image quality. Press the sharper and more detailed image quality. Press the sharper and more detailed image quality. Press the sharper and more detailed image quality. Press the sharper and more detailed image quality. Press the sharper and more detailed image quality. Press the sharper and more detailed image quality. Reset Display Select this option to restore default display settings.	Sharpness	-	-	-			
Dynamic Contrast Allows you to increase the level of contrast to provide sharper and more detailed image quality. Press the button to select the Dynamic Contrast "On" or "Off". Press the button to select the Dynamic Contrast "On" or "Off". NOTE: Dynamic Contrast provides higher contrast if you select Game or Movie preset mode. Select this option to restore default display settings.		Use 🚺 or $igvee$ to adjust the sharpness from 0 to 100.					
Contrast sharper and more detailed image quality. Press the → button to select the Dynamic Contrast "On" or "Off". NOTE: Dynamic Contrast provides higher contrast if you select Game or Movie preset mode. Reset Display Select this option to restore default display settings.	 Response Time	User ca	n select betwee	n Fast or Norn	nal.		
or "Off". NOTE: Dynamic Contrast provides higher contrast if you select Game or Movie preset mode. Reset Display Select this option to restore default display settings.						to provide	
select Game or Movie preset mode.Reset DisplaySelect this option to restore default display settings.			e 🔁 button to	select the Dyn	amic (Contrast "On"	
					gher co	ontrast if you	
		Select t	nis option to res	tore default di	splay s	settings.	

	Energy	Dell SE2416H ·☆ - - - - - - - - - - - - -	Brightness / Contrast Auto Adjust Input Source Color Display Audio Energy Menu Personalize Others Utavis 68, 60Hz	Energy Use Power Button LED Reset Energy Settings	n: 1920x1080, 6	Off During Active	
	Power Button LED	5		ower LED indic tive to save en		n During	
	Reset Energy Settings	Select thi	s option to res	store default Er	nergy S	Settings.	
	Menu	as, the lar menu ren ☆ ♡ ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥		Energy Use Language Transparency Timer Lock Reset Menu Settings	ount of	f time the English 20 20 s Unlock	
	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			ange the menu buttons from			
pressing the ▲ and ♥ buttons from Timer OSD Hold Time: Sets the length of time remain active after the last time you pr Use ▲ or ♥ to adjust the slider in 1 s from 5 to 60 seconds.					ressed	a button.	

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 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, Bightness/Contrast, Auto adjust, Input Source or Aspect ato adjust Fightness/Contrast, Auto adjust, Input Source or Aspect Bightness/Contrast Bightness/Cont					
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 SE2416H		Energy Use		
2		÷Ŏ.	Brightness / Contrast	DDC/CI		Enable
		$\overline{\mathbf{\Box}}$	Auto Adjust	LCD Conditioning	•	Disable
		Ð	Input Source	Reset Other Settings		
		*	Color	Factory Reset		Reset All Settings
			Display			
		₽	Audio			
		V	Energy			
			Menu			
		*	Personalize			
		苷	Others			
		C Resolut	tion: 1024x768, 60Hz	Maximun	n: 1920x1080,	50Hz
					^	\lor \rightarrow \times
		balance your co	•	adjustable via	the so	ftware on
		You can	i disable this fea	ture by selecti	ng Dis	able.
		Enable t	rience	and optimu		
		perform	ance of your m	onitor.		
		Dell SE2416H		Energy Use	I	
		֯:	Brightness / Contrast	DDC/CI	\checkmark	Enable
		Œ	Auto Adjust	LCD Conditioning		Disable
		Ð	Input Source	Reset Other Settings		
			Color	Factory Reset		
			Display			
		P	Audio			
		V	Energy			
			Menu			
		*	Personalize			

Others
Others
Resolution: 1024x768, 60Hz

Maximum: 1920x1080, 60Hz

✓ _

J



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 SE2416H	
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.	
@	

HDMI input



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

Dell SE2416H	
	No HDMI Cable
The display wil	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 SE2416H
Особорование Саве
The display will go into Power Save Mode in 5 minutes.
www. dell.com/support/monitors
Dell SE2416H
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 buttons on the side 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 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.

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

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

Contacting Dell

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.

MARNING: 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	SE2416H
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/m ² (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	SE2416H
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	SE2416H
Video display capabilities (HDMI)	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	SE2416H
Video input signals	 HDMI 1.3, 600mV for each differential line, 100 ohm input impedance per differential pair
AC input voltage/frequency/ current	100 VAC to 240 VAC / 50 Hz or 60 Hz ± 3 Hz / 0.75-0.3 A (1.6A for Mexico) (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	SE2416H		
Signal cable type	Digital: detachable, HDMI, 19 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	6.20 kg (13.66 lb)		
Weight with stand assembly and cables	4.30 kg (9.48 lb)		
Weight without stand assembly (no cables)	3.20 kg (7.05 lb)		
Weight of stand assembly	0.66 kg (1.45 lb)		
Front-frame gloss (minimum)	Black frame - 85 gloss units		

Environmental characteristics

Model		SE2416H		
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 90% (non-condensing)	
		Shipping		
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

Energy Star	Power Consumption	
On Mode	20 W ***	

** Maximum power consumption with max luminance.

*** Energy consumption (On Mode) is tested at 230 Volts / 50 Hz.

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.

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.





NOTE: This monitor is ENERGY STAR-compliant.

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



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	+5V POWER
19	HOT PLUG DETECT