Dell[™] E1609W Flat Panel Monitor User's Guide

- About Your Monitor
- Setting Up the Monitor
- Operating the Monitor
- Troubleshooting
- Appendix

Notes, Notices, and Cautions

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

NOTICE: A NOTICE indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

CAUTION: A CAUTION indicates a potential for property damage, personal injury, or death.

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Model E1609Wc

June 2008 Rev. A00

About Your Monitor Dell[™] E1609W Flat Panel Monitor User's Guide

- Package Contents
- Product Features
- Identifying Parts and Controls
- Monitor Specifications
- Plug and Play Capability
- <u>Maintenance Guidelines</u>

Package Contents

Your monitor comes with all the items shown below. Ensure that you have all the items. Contact Dell[™] if anything is missing.

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

	· · · · · · · · · · · · · · · · · · ·
	Monitor stand base
DHL	Monitor with stand
	Power Cable
	VGA Cable (attached to the monitor)
	1 Drivers and Documentation Media 1 Ouick Setup Guide 1 Safety Information

Product Features

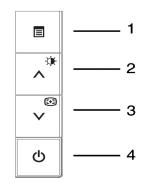
The Dell[™] E1609W flat panel display has an active matrix, thin-film transistor (TFT), liquid crystal display (LCD). The monitors features include:

- Dell E1609W has a 15.6-inch (395 mm) viewable area display.
- 1366x768 resolution, plus full-screen support for lower resolutions.
- Tilt capability.
- Removable pedestal and Video Electronics Standards Association (VESA) 100mm mounting holes for flexible mounting solutions.
- Plug and play capability if supported by your system.
- On-Screen Display (OSD) adjustments for ease of set-up and screen optimization.
- Software and documentation media which includes an information file (INF), Image color Matching File (ICM), and product documentation.
- Energy Saver feature for ENERGY STAR® compliance
- Asset Management Capable.

Identifying Parts and Controls

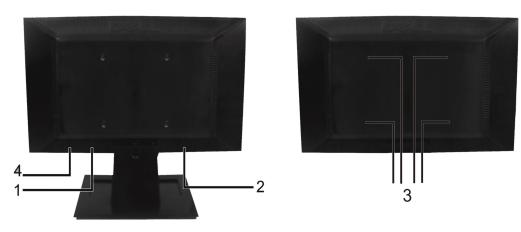
Front view





1.	OSD menu button	
2.	Up button /Brightness and Contrast	
3.	Down button /Auto adjust	
4.	Power On/Off button (with LED indicator)	

Back View

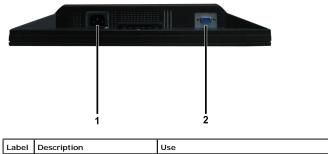


Label	Description	Use
1	Barcode serial number label	Refer to this label if you need to contact Dell for technical support.
2	Regulatory rating label	List the regulatory approvals.
3	VESA mounting holes (100mm)	To mount the monitor.
4	Security lock slot	Use a security lock with the slot to help secure your monitor.

Side View



Bottom View



Label	Description	Use	
1	AC power connector	To connect the monitor power cable.	
2	VGA connector	To connect your computer to the monitor using a VGA cable.	

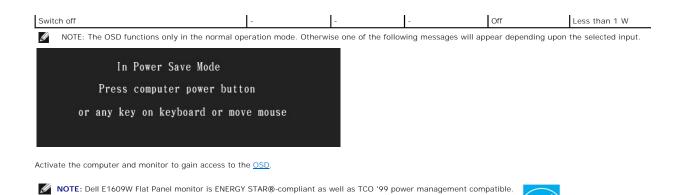
Monitor Specifications

The following sections give you information about the various power management modes and pin assignments for the various connectors on your monitor.

Power Management Modes

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

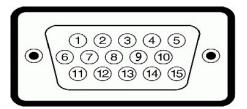
VESA Modes	Horizontal Sync	Vertical Sync	Video	Power Indicator	Power Consumptior
Normal operation (without Dell Soundbar active)	Active	Active	Active	Green	22 W (maximum)
Active-off mode	Inactive	Inactive	Blank	Amber	Less than 2 W



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

Pin Assignments

15-pin D-Sub connector



Pin Number	Monitor Side of the 15-pin Side Signal Cable
1	Video-Red
2	Video-Green
3	Video-Blue
4	GND
5	Self-test
6	GND-R
7	GND-G
8	GND-B
9	DDC +5V
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 Display Data Channel (DDC) protocols so that the system can configure itself and optimize the monitor settings. Most monitor installations are automatic. You ca different settings if required.

Flat Panel Specifications

Model number	Dell E1609W Flat Panel Monitor
Screen type	Active matrix - TFT LCD
Screen dimensions	15.6 inches (15.6-inch wide viewable image size)
Preset display area:	
1 Horizontal	347.5mm (13.7 inches)

ı Vertical	196.8mm (7.75 inches)
Pixel pitch	0.252mm
Viewing angle:	
1 Horizontal	90° typical
1 Vertical	65° typical
Luminance output	250CD/m ² (typical)
Contrast ratio	500 to 1 (typical)
Faceplate coating	Anti-glare
Backlight	CCFL edgelight system
Response Time	8ms typical
Color Gamut	65% (typical)*

Resolution Specifications

Model number	Dell E1609W Flat Panel Monitor
Scan range	
1 Horizontal	30 kHz to 83 kHz (automatic)
ı Vertical	56 Hz to 75 Hz (automatic)
Optimal preset resolution	1366 x 768 at 60 Hz
Highest preset resolution	1366 x 768 at 60 Hz

Electrical Specifications

Model number	Dell E1609W Flat Panel Monitor	
Video input signals	Analog RGB: 0.7 Volts +/-5%, 75 ohm input impedance	
Synchronization input signals	Separate horizontal and vertical synchronizations, polarity-free TTL level	
AC input voltage / frequency / current	100 to 240 VAC/50 or 60 Hz <u>+</u> 3 Hz/1.6A (Max.)	
Inrush current	120V: 30A (Max.) 240V: 60A (Max.)	

Preset Display Modes

The following table lists the preset modes for which Dell guarantees image size and centering:

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	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, 1366 x 768	47.7	59.8	85.5	+/+

Physical Characteristics

The following table lists the monitor physical characteristics:

Model Number Dell E1609W Flat Panel Monitor

Connector type	15-pin D-subminiature, blue connector;	
Signal cable type	Analog: Detachable, D-Sub, 15pins, shipped attached to the monitor	
Dimensions: (with stand)		
1 Height	11.90 inches (302.21mm)	
ı Width	14.94 inches (379.25 mm)	
1 Depth	5.47 inches (138.95 mm)	
Dimensions: (without stand)		
1 Height	9.00 inches (228.55 mm)	
ı Width	14.94 inches (379.25 mm)	
1 Depth	2.20 inches (56.00 mm)	
Stand dimensions:		
1 Height	4.53 inches (115.10 mm)	
1 Width	7.88 inches (199.92 mm)	
1 Depth	5.47 inches (138.95 mm)	
Weight with packaging	8.06 lbs (3.66 kg)	
Weight with stand assembly and cables	6.08 lbs (2.76 kg)	
Weight without stand assembly (For wall mount or VESA mount considerations - no cables)	5.24lbs (2.38 kg)	
Weight of stand assembly	0.59 lbs (0.27 kg)	

Environmental Characteristics

The following table lists the environmental conditions for your monitor:

Model Number	Dell E1609W Flat Panel Monitor
Temperature	
1 Operating	5° to 35°C (41° to 95°F)
1 Non-operating	Storage: -20° to 60°C (-4° to 140°F) Shipping: -20° to 60°C(-4° to 140°F)
Humidity	
1 Operating	10% to 80% (non-condensing)
1 Non-operating	Storage: 5% to 90% (non-condensing) Shipping: 5% to 90%(non-condensing)
Altitude	
1 Operating	3,657.6m (12,000 ft) max
1 Non-operating	12,192m (40,000 ft) max
Thermal dissipation	256.08 BTU/hour (maximum) 119.5 BTU/hour (typical)

LCD Monitor Quality & Pixel Policy

During the LCD Monitor manufacturing process, it is not uncommon for one or more pixels to become fixed in an unchanging state. The visible result is a fixed pix as an extremely tiny dark or bright discolored spot. In almost every case, these fixed pixels are hard to see and do not detract from display quality or usability. A to 5 fixed pixels is considered normal and within competitive standards. For more information, see Dell Support site at: support.dell.com.

Maintenance Guidelines

Carring for your Monitor

CAUTION: Read and follow the <u>safety instructions</u> before cleaning the monitor.

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

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

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

Appendix

Dell™ E1609W Flat Panel Monitor User's Guide

- CAUTION: Safety Instruction
- FCC Notice (U.S. Only) and other regulatory information
- Contacting Dell

CAUTION: Safety Instruction

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

Read and follow these instructions when connecting and using your computer monitor:

- To help avoid damaging your computer, be sure that the voltage selection switch on the power supply for the computer is set to match the alternating current (AC) power available at your location: o 115 volts (V)/60 hertz (Hz) in most of North and South America and some Far Eastern countries such as Japan, South Korea (also 220 volts (V)/60
 - hertz (Hz)), and Taiwan

0.230 volts (VI)/50 hertz (Hz) in most of Europe, the Middle East, and the Far East.
 Always be sure that your monitor is electrically rated to operate with the AC power available in your location.

NOTE: This monitor does not need or have a voltage selection switch for setting the AC voltage input. It will automatically accept any AC input voltag defined in the "Electrical Specifications" section.

- Do not store or use the LCD monitor in locations that are exposed to heat, direct sunlight, or extreme cold.

- Avoid moving the LCD monitor between locations with large temporature differences. Do not subject the LCD monitor to severe vibration or high impact conditions. For example, do not place the LCD monitor inside a car trunk. Do not store or use the LCD monitor in locations exposed to high humidity or dusty environment. Do not allow water or other liquids to spill on or into the LCD monitor. Keep flat panel monitor in room temperature conditions. Excessive cold or hot conditions can have an adverse effect on the liquid crystal of the display.
- Never insert anything metallic into the monitor openings. Doing so may create the danger of electric shock. To avoid electric shock, never touch the inside of the monitor. Only a qualified technician should open the monitor case. Never use your monitor if the power cable has been damaged. Do not allow anything to rest on the power cable. Keep the power cable away from where people could trip over it
- where people could trip over it. Be sure to grasp the plug, not the cable, when disconnecting the monitor from an electric socket. Openings in the monitor cabinet are provided for ventilation. To prevent overheating, these openings should not be blocked or covered. Avoid using the monitor on a bed, sofa, rug, or other soft surface, as doing so may block the ventilation openings in the bottom of the cabinet. If you place the monitor in a bookcase or an enclosed space, be sure to provide adequate ventilation and air flow. Place your monitor in a location with low humidity and minimum dust. Avoid places similar to a damp basement or dusty hallway. Do not expose the monitor to rain or use it near water (in kitchens, next to swimming pools, etc.). If the monitor accidentally gets wet, unplug it and contact an authorized dealer immediately. You can clean the monitor with a damp cloth when necessary, being sure to unplug the monitor first. Place the monitor on a solid surface and treat it carefully. The screen is made of glass and can be damaged if dropped or hit sharply.

- Locate your monitor near an easily accessible electric outlet. If your monitor does not operate normally in particular, if there are any unusual sounds or smells coming from it unplug it immediately and contact an authorized dealer or service center
- Do not attempt to remove the back cover, as you will be exposed to an electrical shock hazard. The back cover should only be removed by qualified
- service personnel. High temperatures can cause problems. Don't use your monitor in direct sunlight, and keep it away from heaters, stoves, fireplaces, and other sources of heat.
- Unplug the monitor when it is going to be left unused for an extended period of time. Unplug your monitor from the electric outlet before any service is performed.
- Hg Lamp(s) inside this product contains mercury and must be recycled or disposed of according to local, state or federal laws. For more information, Go Or contact the electronic industries alliance: <u>http://www.elae.org</u> for more information.

FCC Notice (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 talog

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and more services may not be available in your area. To contact Dell for sales, technical support, or customer service issues

- 1. Visit support.dell.com
- 2. Verify your country or region in the Choose A Country/Region drop-down menu at the bottom of the page

3. Click Contact Us on the left side of the page

- 4. Select the appropriate service or support link based on your need.
- 5. Choose the method of contacting Dell that is convenient for you.

Setting Up Your Monitor Dell™ E1609W Flat Panel Monitor User's Guide

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

1. Go to http://support.dell.com, 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 1366x768 again.

MOTE: If you are unable to set the resolution to 1366x768, please contact Dell™ to inquire about a Graphics Adapter that supports these resolutions.

Setting Up Your Monitor

Dell™ E1609W Flat Panel Monitor User's Guide

If you have non Dell desktop, portable computer, or graphic card

1. Right-click on the desktop and click Properties.

- 2. Select the Settings tab.
- 3. Select Advanced.
- 4. Identify your graphics controller supplier from the description at the top of the window (e.g. NVIDIA, ATI, Intel etc.).
- 5. Refer to the graphic card provider website for updated driver (for example, http://www.ATI.com OR http://www.NVIDIA.com).
- 6. After installing the drivers for your Graphics Adapter, attempt to set the resolution to ${\bf 1366x768}$ again.

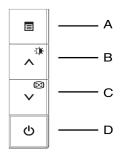
NOTE: If you are unable to set the resolution to 1366x768, please contact the manufacturer of your computer or consider purchasing a graphics adapter that will support the video resolution of 1366x768.

Operating the Monitor Dell[™] E1609W Flat Panel Monitor User's Guide

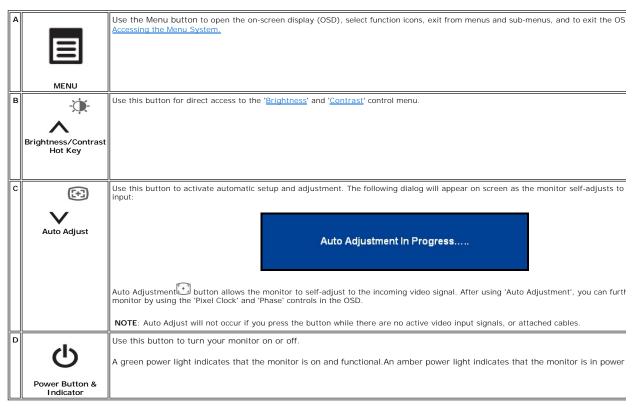
- Using the Front Panel
- Using the OSD Menu
- Setting the Optimal Resolution
- Using the Tilt

Using the Front Panel Buttons

Use the control buttons on the front of the monitor to adjust the characteristics of the image being displayed. As you use these buttons to adjust the controls, an OSD shows their numeric values as they change.



The following table describes the front panel buttons:



On Screen Menu/Display (OSD)

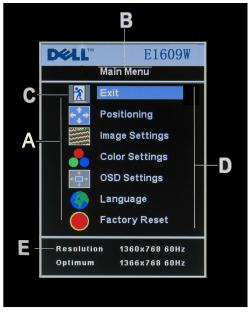
Direct-Access Functions

Function	Adjustment Method		
Auto adjustment	Use this button to activate automatic setup and adjustment. The following dialog will appear on screen as the monitor self-adjusts to the current input:		
	Auto Adjustment In Progress		
	Auto Adjustment 🗈 button 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' and 'Phase' controls in the OSD.		
	NOTE: Auto Adjust will not occur if you press the button while there are no active video input signals, or attached cables.		
Brightness / Contrast	NOTE: Auto Adjust will not occur if you press the button while there are no active video input signals, or attached cables. Brightness/Contrast Image: State of the st		

Using the OSD Menu

Accessing the Menu System

1. With the menu off, press the MENU button to open the OSD system and display the main features menu.



- Function icons Main Menu c Menu icon А в D Sub-Menu name Е Resolution
- Press the and + buttons to move between the function icons. As you move from one icon to another, the function name is highlighted to reflect the function or group of functions (sub-menus) represented by that icon. See the table below for a complete list of all the functions available for the monitor.
 Press the MENU button once to activate the highlighted function. Press -/+ to select the desired parameter, press menu to enter the slidebar then use the and + buttons, according to the indicators on the menu, to make your changes.
 Press the MENU button once to return to the main menu to select another function or press the MENU button two or three times to exit from the OSD.

Icon	Menu Name and Sub- menus	Description		
X	EXIT	This is used to exit out of the Main Menu.		
∠ ↑ →	Positioning:	Positioning' moves the viewing area around on the monitor screen.		
		When making changes to either the Horizontal or Vertical settings, no changes occur to the size of the viewing area; the image gets shifted based on what you select.		
		Minimum is '0' (-). Maximum is '100' (+).		
		Positioning		
		Exit X		
		Horizontal ← → 50		
		Vertical 50		
	Image			
	settings:			
	Auto Adjust	Even though your computer system can recognize your new flat panel monitor on startup, the 'Auto Adjustment' function will optimize the display settings for use with your particular setup.		
		NOTE: In most cases, 'Auto Adjust' produces the best image for your configuration; you can directly access this function via Auto Adjustment 🕑 hotkey.		
<u>}}</u>		The Phase and Pixel Clock adjustments allow you to adjust your monitor to your preference. Select Image Settings in the main OSD to access these settings.		
		Use the - and + buttons to adjust interference. Minimum: 0 ~ Maximum: 100		

	Phase	If satisfactory results are not obtained using the Phase adjustment, use the Pixel Clock adjustment and then use Phase again.		
		Image Settings		
		Auto Adjust will produce best image		
		Exit 🎦		
		Auto Adjust Press Menu		
		Pixel Clock		
		Phase 50		
		NOTE: This function may change the width of the display image. Use the 'Horizontal' and 'Position' menu to center the display image on the screen.		
-	Color Settings: NOTE: 'Color temperature' is a measure of the 'warmth' of the image colors (red/green/blue). The two available presets (' 'Red') favor blue and red accordingly. Select each one to see how each range suits your eye; or utilize the 'User Preset' or customize the color settings to your exact choice.			
		Adjusts the color temperature and saturation.		
		Color Settings(Graphics)		
		Exit		
		Color settings Mode -Graphics Video+		
		Color Presets Normal Preset Red Preset		
		Blue Preset User Preset		
		Red 100		
		Green E 100		
		Color Settings has the following options: Color Management :		
	Setting	Allows you to set the display mode to Graphics or Video.If your computer is connected to your monitor , choose video.		
i i		Allows you to select a preset color mode based on the viewing mode,different color presets for different viewing modes.		
		In the Graphics mode, you can choose the following preset modes: Graphics,you can choose Normal Preset, Red Preset,Blue Preset or User Preset.		
		Red Preset: Select this mode for a warm color temperature.		
		Blue Preset: Select this mode for a cool color temperature.		
		You can adjust the monitor color using User Preset, R, G, B.Normal Preset mean color temperature 6500K.		
		Select Blue Preset for a bluish tint. This color setting is used for text based applications (spreadsheets, programming, text editors, etc.).		
		Select Red Preset for a reddish tint.This color setting is used for color-intensive applications (photograph image editing, multimedia, movies, etc.).		
		Select Normal Preset for default color settings. This setting is also the "sRGB" standard default color space.		
		User Preset: Use the plus and minus buttons to increase or decrease each of the three colors (R, G, B) independently, in single digit increments, from 0 to 100.		
		In the Video modes, you can choose the following preset modes: Theater Preset , Sports Preset, Nature Preset.		

		Color Settings(Video)	
		Exit Image: Color settings Mode -Graphics Video+ Color Presets Theatre Preset	
		Sports Preset Nature Preset Hue Saturation	
		Select Theater Preset for playing a movie.	
		Select Sports Preset for viewing sports.	
		Select Nature Preset for general viewing. For general picture or web or watch TV, choose Nature Preset.	
	OSD Settings:	User can adjust the Hue(Tint)/Saturation based on the preference. Each time the OSD opens, it displays in the same location on the screen. 'OSD Settings' (horizontal/vertical) provides control over this location.	
+ == →	Horizontal Position	- and + buttons move OSD to the left and right.	
↑ ■ ↓	Vertical Position	- and + buttons move OSD down and up.	
•	Time:	The OSD stays active for as long as it is in use. 'OSD Hold Time': Sets the length of time the OSD will remain active after the last time you pressed a button. Use the - and + buttons to adjust the slider in 5 second increments, from 5 to 60 seconds.	
	OSD Lock	NOTE: Default 'OSD hold time' is 20 seconds. Controls user access to adjustments. When 'Yes' (+) is selected, no user adjustments are allowed. All buttons, except Menu, are locked.	
		All buttons can be locked or unlocked. Press the 'Menu' button for over 15 seconds to unlock the OSD menu.	
		On Screen Display(OSD) Exit	
		Horizontal Position ←□→ 50	
		Vertical Position 50	
		OSD Hold Time 20 Sec	
		OSD Lock - No Yes +	
		NOTE: When the OSD is locked, pressing the 'Menu' button will take the user directly to the 'OSD settings' menu, with 'OSD Lock' preselected on entry. Select 'No'(-) to unlock and allow user access to all applicable settings.	
Lan	iguage:	Language sets the OSD to display in one of the 7 languages (English, French, Spanish, German, Brazilian Portuguese, Russian, Simplified Chinese.).	
		Language Exit English Español Français Deutsch Português brasileiro	
		Русский Т 简体中文	

		NOTE: The language chosen affects only the language of the OSD. It has no effect on any software running on the computer.		
	Factory Reset:	Factory Reset returns the settings to the factory preset values for the selected group of functions.		
		Reset to Factory Settings		
		Exit		
		Position Settings Only		
		Color Settings Only		
		All Settings		
		IR Enable LCD Conditioning		
		DDC/CI - Enable Disable +		
		Exit is used to exit out of Factory Reset menu.		
		All settings, Resets all user adjustable settings except Language settings.		
		IR – Reduces minor cases of image retention. Enable LCD Conditioning: If an image appears to be stuck on the monitor, select LCD Conditioning to help eliminate any image		
		retention. Using the LCD Conditioning feature may take several hours. Severe cases of image retention are known as burn-in, the LCD Conditioning feature does not remove burn-in.		
		NOTE: Use LCD Conditioning only when you experience a problem with image retention.		
		Below warning message appears when you select "Enable LCD Conditioning":		
		This feature will help reduce minor cases of image retention.Depending on the degree of image retention, the program may take some time to run.Do you want to continue?- NoYes +		
		NOTE: Press any button on the monitor to terminate LCD Conditioning at any time.		
		LCD Conditioning is currently in progress. Press any button on the monitor to terminate LCD Conditioning at any time.		
		DDC/CI (Display Data Channel/Command Interface) allows you to adjust the monitor parameters (brightness, color, balance, etc.) via software applications on your PC.		
		Select Disable to disable this feature. For best user experience and optimum performance of your monitor, keep this feature enabled.		
		The function of adjusting display settings using PC applications will be disabled. Do you want to disable DDC <i>I</i> CI? - No Yes +		
		NOTE: If you select 'disable' for DDC/CI, the warning message appears on screen. You can select Yes or No according to need.		
L	1			

Automatic Save

With the OSD open, if you make an adjustment and then either proceed to another menu, or exit the OSD, the monitor automatically saves any adjustments you have made. If you make an adjustment and then wait for the OSD to disappear the adjustment will also be saved.

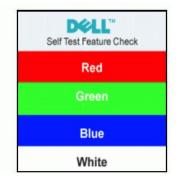
OSD Warning Messages

A warning message may appear on the screen indicating that the monitor is out of sync.



This means that the monitor cannot synchronize with the signal that it is receiving from the computer. Either the signal is too high or too low for the monitor to use. See <u>Specifications</u> for the Horizontal and Vertical frequency ranges addressable by this monitor. Recommended mode is 1366 X 768 @ 60Hz.

💋 NOTE: The floating 'Dell - self-test Feature Check' dialog appears on the screen if the monitor cannot sense a video signal.



Occasionally, no warning message appears, but the screen is blank. This could also indicate that the monitor is not synchronizing with the computer.

See Troubleshooting for more information.

Setting the Optimum Resolution

- Right-click on the desktop and select **Properties** Select the **Settings** tab. 1. 2.
- Set the screen resolution to 1366x 768.
 Click OK.

If you do not see 1366 x 768 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:

o Go to support.dell.com, enter your service tag, and download the latest driver for your graphics card.

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

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

Using the Tilt

You can tilt the monitor to best fit your viewing needs.



Setting Up Your Monitor

Dell[™] E1609W Flat Panel Monitor

Setting the display resolution to 1366X768 (Optimal)

For optimal display performance while using the Microsoft Windows operating systems, set the display resolution to 1366 x 768 pixels by performing the following steps:

1. Right-click on the desktop and click Properties.

2. Select the Settings tab.

3. Move the slider-bar to the right by pressing and holding left-mouse button and adjust the screen resolution to 1366X768.

4. Click OK.

If you do not see 1366X768 as an option, you may need to update your graphics driver. Please choose the scenario below that best describes the computer system you are using, and follow the provided directions:

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

2: If you have non Dell desktop, portable computer, or graphic card.

Dell[™] E1609W **Flat Panel Monitor**

- 1 User's Guide
- 1 Setting the display resolution to 1366x768 (Optimal)

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Model E1609Wc

June 2008 Rev. A00

Setting Up the Monitor Dell[™] E1609W Flat Panel Monitor User's Guide

- Attaching the Base
- Connecting Your Monitor
- Removing the Stand Base
- Removing the Stand for VESA wall mount

Attaching the Base

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



To attach the base of the stand to the monitor stand:

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

Connecting Your Monitor

A CAUTION: Before you begin any of the procedures in this section, follow the safety instructions.

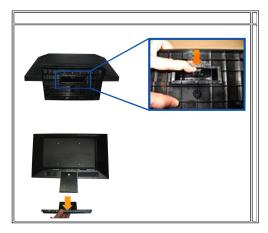
Connecting Your Monitor Using a VGA Cable



1. Turn off your computer and disconnect the power cable.

- 2. Connect the blue VGA cable to the blue connector on the computer and monitor.
- 3. Connect the power cable.

Removing the Stand Base



To remove the base of the stand from the monitor:

- 1. Place the monitor panel on soft cloth or cushion on a stable flat table.
- 2. Press and hold the release latch, while pulling the base of the stand away from the monitor.

Removing the Stand for VESA wall mount



To remove the stand assembly from the monitor:

- 1. Place the monitor panel on soft cloth or cushion on stable flat table.
- 2. Use a screwdriver to remove the three screws on the stand of the monitor as the below pictures shows.
- 3. Remove the stand assembly from monitor.

Troubleshooting Dell™ E1609W Flat Panel Monitor User's Guide

- Troubleshooting Your Monitor
- General Problems
- ٩ Product Specific Problems

A CAUTION: Before you begin any of the procedures in this section, follow the safety instructions.

Troubleshooting Your Monitor

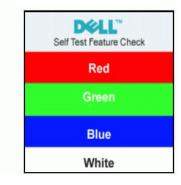
Self-Test Feature Check (STFC)

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

Turn off both your computer and the monitor

2. Unplug the video cable from the back of the computer. To ensure proper Self-Test operation, remove the Analog (blue connector) cables from the back of computer. 3. Turn on the monitor

The floating 'Dell[™] - Self-Test Feature Check' dialog box should appear on-screen (against a black background) if the monitor cannot sense a video signal and is working correctly. While in self-test mode, the power LED remains green. Also, depending upon the selected input, one of the dialogs shown below will continuously scroll through the screen.



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

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

OSD Warning Messages

For OSD-related issues, see OSD Warning Messages

Built-in Diagnostics

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

MOTE: 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:

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

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The test is complete when the white screen appears. To exit, press the $\,\Lambda\,\,$ button 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.

OSD Warning Messages

One of the following warning messages may appear on the screen indicating that the monitor is out of synchronization.



This means that the monitor cannot synchronize with the signal that it receives from the computer. Either the signal is too high or too low for the monitor to use. See <u>Monitor Specifications</u> for the Horizontal and Vertical frequency ranges addressable by this monitor. Recommended mode is 1366 X 768 @ 60Hz.

Occasionally, no warning message appears, but the screen is blank. This could also indicate that the monitor is not synchronizing with the computer or that the monitor is in power save mode.

General Problems

The following table contains general information about common monitor problems you might encounter.

COMMON SYMPTOMS	PROBLEM DESCRIPTION	POSSIBLE SOLUTIONS
No Video/Power LED off	No picture, monitor is dead	Check connection integrity at the both ends of the video cable, verify that the monitor and computer are plugged into a working electrical outlet, and that you have pressed the power button.
No Video/Power LED on	No picture or no brightness	 Press the input select button in the front of the monitor and ensure the correct input source is selected. Increase brightness & contrast controls. Perform monitor self-test feature check. Check for bent or broken pins on the end of the video cable. Reboot your computer and monitor. Run the built-in diagnostics.
Poor Focus	Picture is fuzzy, blurry, or ghosting	 Push Auto Adjust button. Adjust Phase and Clock controls via OSD. Eliminate video extension cables. Perform monitor reset. Lower video resolution or increase font size.
Shaky/Jittery Video	Wavy picture or fine movement	 Push Auto Adjust button. Adjust Phase and Clock controls via OSD. Perform monitor reset. Check environmental factors. Relocate and test in another room.
Missing Pixels	LCD screen has spots	 Cycle power on-off These are pixels that are permanently off and this is a natural defect that occurs in LCD technology. Run the built-in diagnostics.
Brightness Problems	Picture too dim or too bright	 Perform monitor reset. Push Auto Adjust button. Adjust brightness & contrast controls.
Geometric Distortion	Screen not centered correctly	 Perform monitor reset on "Position Settings Only". Push Auto Adjust button. Adjust the centering controls. Ensure monitor is in proper video mode.
Horizontal/Vertical Lines	Screen has one or more lines	 Perform monitor reset. Push Auto Adjust button. Adjust Phase and Clock controls via OSD. Perform monitor self-test feature check and determine if these lines are also in self-test mode. Check for bent or broken pins. Run the built-in diagnostics.
Sync Problems	Screen is scrambled or appears torn	 Perform monitor reset. Push Auto Adjust button. Adjust Phase and Clock controls via OSD. Perform monitor self-test feature check to determine if scrambled screen appears in self-test mode. Check for bent or broken pins.

		1 Boot up in the "safe mode".
LCD Scratched	Screen has scratches or smudges	1 Turn monitor off and clean the screen. 1 For cleaning instruction, see <u>Caring for your Monitor.</u>
Safety Related Issues	Visible signs of smoke or sparks	 Do not perform any troubleshooting steps. Monitor needs to be replaced.
Intermittent Problems	Monitor malfunctions on and off	 Ensure monitor is in proper video mode. Ensure video cable connection to computer and to the flat panel is secure. Perform monitor reset. Perform monitor self-test feature check to determine if the intermittent problem occurs in self-test mode.
Image Retention (from a static image)	Faint Shadow from the static image displayed appears on the screen	1 Use the Power Management feature to turn off the monitor at all times when not in use. Alternatively, use a dynamically changing screen saver left on the monitor for a long period of time.

Product Specific Problems

SPECIFIC SYMPTOMS	WHAT YOU EXPERIENCE	POSSIBLE SOLUTIONS
Screen image is too small	Image is centered on screen, but does not fill entire viewing area.	1 Perform monitor reset on "All Settings."
Cannot adjust the monitor with the buttons on the front panel	OSD does not appear on the screen.	 Turn off the monitor, unplug the power cord and then plug back and turn on the monitor.