Dell™ E2010H/E2210H/E2310H Flat Panel Monitor User's Guide

About Your Monitor

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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.**

About Your Monitor

Dell™ E2010H/E2210H/E2310H Flat Panel Monitor User's Guide

- Package Contents
- Product Features
- Identifying Parts and Controls
- Monitor Specifications
- Plug and Play Capability
- LCD Monitor Quality & Pixel Policy
- Maintenance Guidelines

Package Contents

Your monitor ships with all the components shown below. Ensure that you have received all the components and Contact Dell™ if anything 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.

	l Monitor
	l Stand
	l Power Cable
	l DVI Cable

	l VGA Cable (attached to the monitor)
	l *Drivers and Documentation* media l *Quick Setup Guide* l Safety Information

Product Features

The **Dell™ E2010H/E2210H/E2310H** flat panel display has an active matrix, thin-film transistor (TFT), liquid crystal display (LCD). The monitor features include:

- **E2010H:** 20 inch (508.0 mm) viewable area display. 1600x900 resolution, plus full-screen support for lower resolutions.

- **E2210H:** 21.5 inch (546.0 mm) viewable area display. 1920x1080 resolution, plus full-screen support for lower resolutions.

- **E2310H:** 23 inch (584.0 mm) viewable area display. 1920x1080 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.

- Tilt adjustment capability.

- Removable stand 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.

- Security lock slot.

- Halogen Reduced.

- EPEAT Gold Rating.

- Stand lock.

Identifying Parts and Controls

Front View

1.	Shortcut Key 1
2.	Shortcut Key 2
3.	OSD Menu
4.	Exit
5.	Power On/Off

Back View
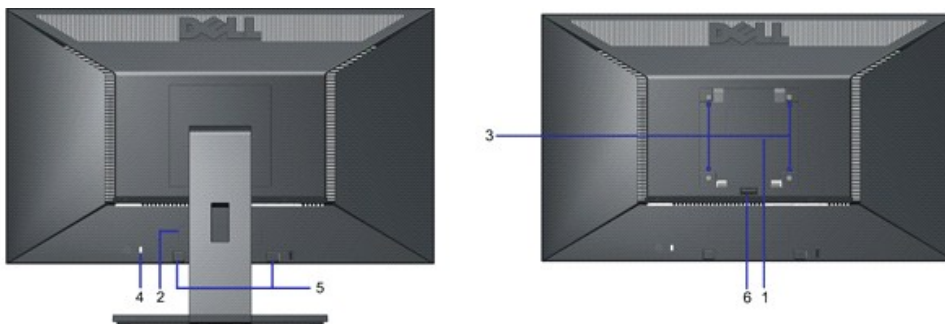
Label	Description	Use
1	Regulatory rating label	List the regulatory approvals.
2	Barcode serial number label	Refer to this label if you need to contact Dell for technical support.
3	VESA mounting holes (100 mm)	To mount the monitor.
4	Security lock slot	Use a security lock with the slot to help secure your monitor.
5	Dell soundbar mounting brackets	To attach the optional Dell Soundbar.
6	Stand release button	Press to release the stand.

Side View

Left Side   **Right Side**

Bottom View

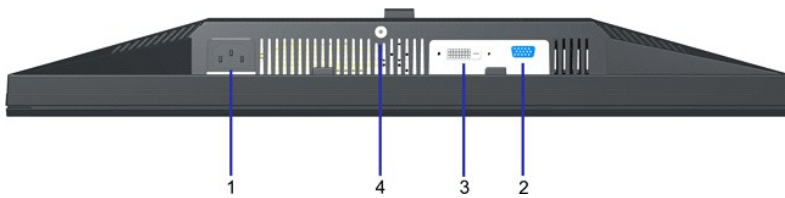| Label	Description	Use
1	AC power connector	To connect the monitor power cable.
2	VGA connector	To connect your computer to the monitor using a VGA cable.
3	DVI connector	To connect your computer to the monitor using a DVI cable
4	Stand lock	Disable stand release button and lock stand assembly with fastening a M3 machine screw.

Monitor Specifications

The following sections give you information about the various power management modes and pin assignments for the various connectors of 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 the computer detects input from keyboard, mouse, or other input devices, the monitor automatically resumes functioning. The following table shows the power automatic power saving feature:

E2010H

VESA Modes	Horizontal Sync	Vertical Sync	Video	Power Indicator	Power Consumption
Normal operation	Active	Active	Active	Blue	26 W
Active-off mode	Inactive	Inactive	Blank	Amber	Less than 1 W
Switch off	-	-	-	Off	Less than 1 W

E2210H

VESA Modes	Horizontal Sync	Vertical Sync	Video	Power Indicator	Power Consumption
Normal operation	Active	Active	Active	Blue	27 W
Active-off mode	Inactive	Inactive	Blank	Amber	Less than 1 W
Switch off	-	-	-	Off	Less than 1 W

E2310H

VESA Modes	Horizontal Sync	Vertical Sync	Video	Power Indicator	Power Consumption
Normal operation	Active	Active	Active	Blue	29 W
Active-off mode	Inactive	Inactive	Blank	Amber	Less than 1 W
Switch off	-	-	-	Off	Less than 1 W

The OSD will only function in the *normal operation* mode. When any button except power button is pressed in Active-off mode, the following messages will be displayed:

> **MESSAGE** **Dell E2X10H**
>
> There is no signal coming from your computer.
>
> Press any key on the keyboard or mouse to wake it up.
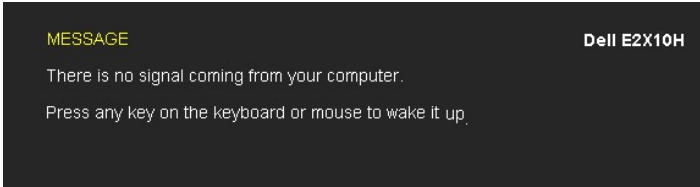
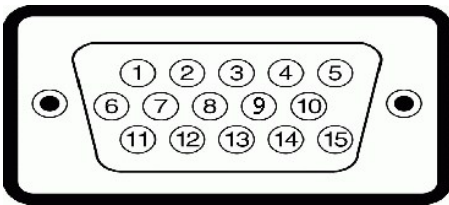Activate the computer and monitor to gain access to the OSD.

NOTE: Dell E2010H/E2210H/E2310H Flat Panel monitor is TCO03 and **ENERGY STAR**®-compliant.

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

DVI connector
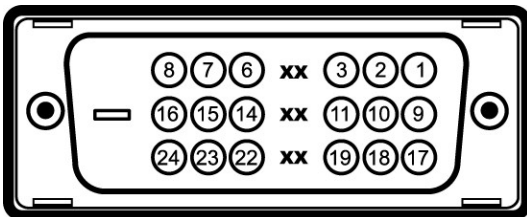
Pin Number	24-pin Side of the Connected Signal Cable

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	+5V/+3.3V 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-

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 Dat
(DDC) protocols so that the system can configure itself and optimize the monitor settings. Most monitor installations are automatic. You can select different settir

Flat Panel Specifications

Model number	Dell E2010H Flat Panel Monitor	Dell E2210H Flat Panel Monitor	Dell E2310H Flat Panel Monitor
Screen type	Active matrix - TFT LCD	Active matrix - TFT LCD	Active matrix - TFT LCD
Panel Type	TN	TN	TN
Screen dimensions	20.0 inches (20.0-inch wide viewable image size)	21.5 inches (21.5-inch wide viewable image size)	23 inches (23-inch wide viewable image size)
Preset display area:			
ı Horizontal	442.8 mm (17.4 inches)	476.6 mm (18.8 inches)	509.8 mm (20.1 inches)
ı Vertical	249.0 mm (9.8 inches)	268.1 mm (10.6 inches)	286.7 mm (11.3 inches)
Pixel pitch	0.277 mm	0.248 mm	0.266 mm
Viewing angle:			
ı Horizontal	170° typical	170° typical	170° typical
ı Vertical	160° typical	160° typical	160° typical
Luminance output	250 CD/m² (typical)	250 CD/m² (typical)	250 CD/m²(typical)
Contrast ratio	1000 to 1 (typical)	1000 to 1 (typical)	1000 to 1 (typical)
Faceplate coating	Anti-glare	Anti-glare	Anti-glare
Backlight	2 CCFL edgelight system	2 CCFL edgelight system	2 CCFL edgelight system
Response Time	5ms typical	5ms typical	5ms typical
Color Gamut	72% (typical)	72% (typical)	72% (typical)

*Dell E2010H/E2210H/E2310H Flat Panel monitor color gamut (typical) is based on CIE 1976 (83%) and CIE1931 (72%) test standards.

Resolution Specifications

Model number	Dell E2010H/E2210H/E2310H Flat Panel Monitor
Scan range	
ı Horizontal	30 kHz to 83 kHz (automatic)
ı Vertical	50 Hz to 75 Hz (automatic)
Maximum preset resolution	1600 x 900 at 60 Hz (For E2010H) 1920 x 1080 at 60 Hz (For E2210H/E2310H)

Electrical Specifications

Model number	Dell E2010H/E2210H/E2310H 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 $\pm$ 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	70.0	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	60.0	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 (For E2210H/E2310H)	64.0	60.0	108.0	+/+
VESA, 1280 x 1024 (For E2210H/E2310H)	80.0	75.0	135.0	+/+
VESA, 1600 x 900 (For E2010H)	55.5	60.0	97.8	+/-
VESA, 1920 x 1080 (For E2210H/E2310H)	67.5	60.0	148.5	+/+

Physical Characteristics

The following table lists the monitor physical characteristics:

Model Number	Dell E2010H Flat Panel Monitor	Dell E2210H Flat Panel Monitor	Dell E2310H
Connector type	15-pin D-subminiature, blue connector; DVI-D, white connector	15-pin D-subminiature, blue connector; DVI-D, white connector	15-pin D-sub white conne
Signal cable type	Analog: Detachable, D-Sub, 15pins, shipped attached to the monitor Digital: Detachable, DVI-D, Solid pins, shipped detached from the monitor	Analog: Detachable, D-Sub, 15pins, shipped attached to the monitor Digital: Detachable, DVI-D, Solid pins, shipped detached from the monitor	Analog: Deta attached to Digital: Deta detached fro
Dimensions: (with stand)			
ı Height	363.2 mm (14.30 inches)	381.0 mm (15.00 inches)	401.8 mm (
ı Width	481.2 mm (18.94 inches)	515.0 mm (20.28 inches)	548.8 mm (

ι Depth	151.9 mm (5.98 inches)	158.9 mm (6.26 inches)	164.0 mm (6
Dimensions: (without stand)			
ι **Height**	287.6 mm (11.32 inches)	306.5 mm (12.07 inches)	325.7 mm (1
ι Width	481.2 mm (18.94 inches)	515.0 mm (20.28 inches)	548.8 mm (2
ι Depth	60.0 mm (2.36 inches)	64.5 mm (2.54 inches)	63.5 mm (2.
Stand dimensions:			
ι Height	289.3 mm (11.39 inches)	298.3 mm (11.74 inches)	310.8 mm (1
ι Width	250.9 mm (9.88 inches)	258.9 mm (10.19 inches)	265.9 mm (1
ι Depth	158.9 mm (6.26 inches)	158.9 mm (6.26 inches)	164.0 mm (6
Weight with packaging	6.35 kg (14.00 lbs)	6.54 kg (14.38 lbs)	6.76 kg (14.
Weight with stand assembly and cables	4.85 kg (10.67 lbs)	5.11 kg (11.24 lbs)	5.76 kg (12.
Weight without stand assembly (For wall mount or VESA mount considerations - no cables)	3.50 kg (7.7 lbs)	3.59 kg (7.90 lbs)	4.10 kg (9.0
Weight of stand assembly	0.94kg (2.07 lbs)	1.00 kg (2.20 lbs)	1.14 kg (2.5

Environmental Characteristics

The following table lists the environmental conditions for your monitor:

Model Number	Dell E2010H/E2210H/E2310H Flat Panel Monitor
Temperature	
ι Operating	0° to 40°C (32° to 104°F)
ι Non-operating	Storage: -20° to 60°C (-4° to 140°F) Shipping: -20° to 60°C(-4° to 140°F)
Humidity	
ι Operating	10% to 80% (non-condensing)
ι Non-operating	Storage: 5% to 90% (non-condensing) Shipping: 5% to 90%(non-condensing)
Altitude	
ι Operating	3,657.6 m (12,000 ft) max
ι Non-operating	12,192 m (40,000 ft) max
Thermal dissipation	**E2010H:** 102.5 BTU/hour (maximum) 88.8 BTU/hour (typical) **E2210H:** 130.0 BTU/hour (maximum) 106.0 BTU/hour (typical) **E2310H:** 136.8 BTU/hour (maximum) 112.8 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
dark or bright discolored spot.When the pixel remains permanently lit, it is known as a "bright dot." When the pixel remains black, it is known as a "dark dot."
In almost every case, these fixed pixels are hard to see and do not detract from display quality or usability. A display with 1 to 5 fixed pixels is considered norma
For more information, see Dell Support site at: support.dell.com.

Maintenance Guidelines

Caring 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 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 a darker-colored monitor may scratch and show white scuff marks more than a lighter-colored monitor.
- To help maintain the best image quality on your monitor, use a dynamically changing screen saver and power off your monitor when not in use.

Appendix

Dell™ E2010H/E2210H/E2310H Flat Panel Monitor User's Guide

● Safety Instructions
● FCC Notice (U.S. Only) and Other Regulatory Information
● Contacting Dell

⚠ CAUTION: Safety Instructions

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

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.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

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 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™ E2010H/E2210H/E2310H Flat Panel Monitor

If you have a Dell™ desktop or a Dell™ 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 **1600 x 900 (for E2010H) or 1920x1080 (for E2210H/E2310H)** again.

NOTE: If you are unable to set the resolution to 1600 x 900 (for E2010H) or 1920x1080 (for E2210H/E2310H) , please contact Dell™ to inquire about a Graphics Adapter that supports these resolutions.

Setting Up Your Monitor

Dell™ E2010H/E2210H/E2310H Flat Panel Monitor

If you have a non Dell™ desktop, portable computer, or graphics 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 **1600 x 900 (for E2010H) or 1920 x 1080 (for E2210H/E2310H)** again.

NOTE: If you are unable to set the resolution to 1600 x 900 (for E2010H) or 1920 x 1080 (for E2210H/E2310H), please contact the manufacturer of your computer or consider purchasing a graphics adapter that will support the video resolution of 1600 x 900 (for E2010H) or 1920 x 1080 (for E2210H/E2310H).

Operating the Monitor

Dell™ E2010H/E2210H/E2310H Flat Panel Monitor User's Guide

- Using the Front Panel Controls
- Using the On-Screen Display (OSD) Menu
- Setting the Maximum Resolution
- Using the Dell Soundbar (Optional)
- Using the Tilt

Power On the Monitor

Press the ⏻ button to turn on the monitor.
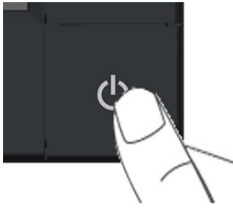
Using the Front Panel Controls

Use the keys on the front of the monitor to adjust the image settings.
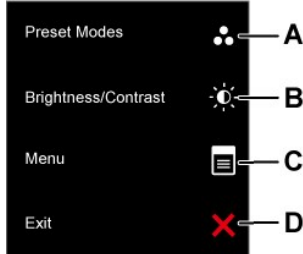
|	Front panel Key	Description
A	Preset Modes	Use the Preset modes key to choose from a list of preset color modes. See Using the OSD Menu.
B	Brightness / Contrast	Use the Brightness / Contrast key to adjust the brightness and contrast.
C	Menu	Use the Menu key to access the Menu.
D	Exit	Use the Exit key to exit the Menu.

Using the On-Screen Display (OSD) Menu

Accessing the Menu Syste

1. Press the ⬛ button to open the OSD menu and display the main menu.

Main Menu

Menu		Dell E2X10H
☀ **Brightness / Contrast**	Brightness ▶	75
⊡ Auto Adjust	Contrast ▶	75
⇥ Input Source		
⦂ Color Settings		
▭ Display Settings		
≡ Other Settings		
★ Personalize		
▭ Resolution: 1024x768 @ 60Hz	Maximum Resolution: 1600x900 @ 60Hz	
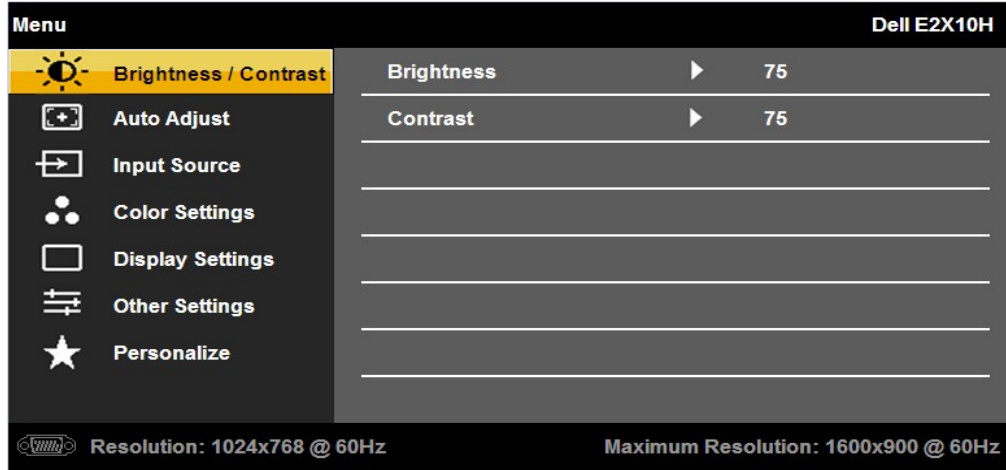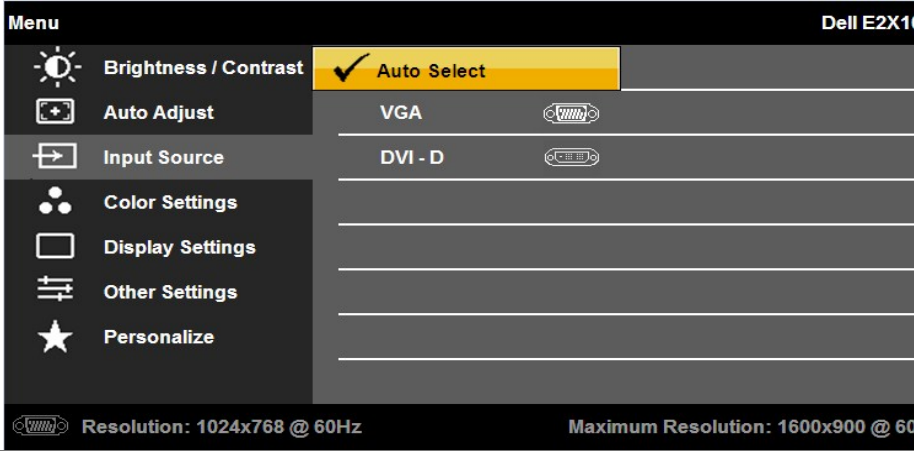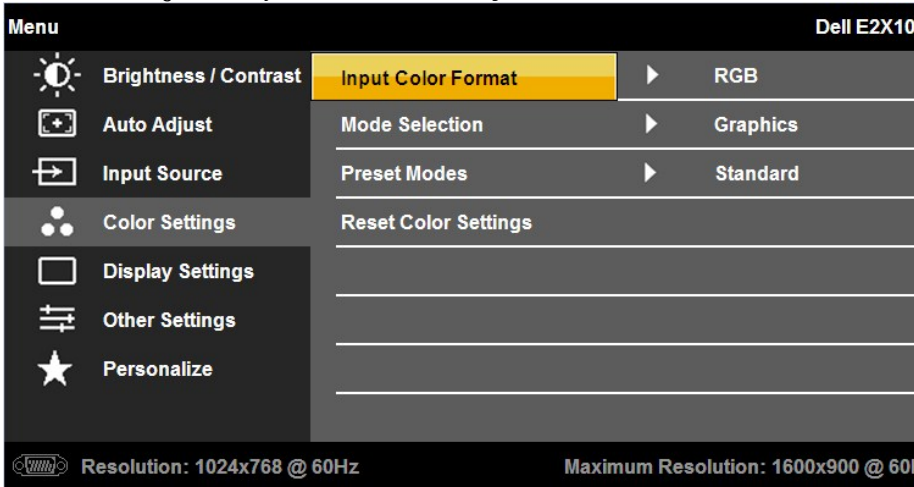
2. Press the ⌃ and ⌄ buttons to toggle between options in the Menu. As you move from one icon to another, the option name is highlighted.

3. To select the highlighted item on the menu press the ➜ button again.

4. Press the ➜ button to enter the slide bar and then use the ⌃ or ⌄ buttons, according to the indicators on the menu, to make your changes.

5. Select the ✖ to exit from the on-screen Display menu or select ✔ to accept and return to the previous menu.

The table below provides a list of all the OSD menu options and their functions.

Icon	Menu and Submenus	Description
☀	**BRIGHTNESS/CONTRAST**	Use the Brightness and Contrast menu to adjust the Brightness/Contrast.
		Menu Dell E2X10
		☀ Brightness / Contrast **Brightness** ▶ 75
		⊡ Auto Adjust Contrast ▶ 75
		⇥ Input Source
		⦂ Color Settings
		▭ Display Settings
		≡ Other Settings
		★ Personalize
		▭ Resolution: 1024x768 @ 60Hz Maximum Resolution: 1600x900 @ 60
	Brightness	Press the ⌃ key to increase brightness and press the ⌄ key to decrease brightness (min 0 ~ max 100).
	Contrast	Press the ⌃ key to increase contrast and press the ⌄ key to decrease contrast (min 0 ~ max 100).

|		
Auto Adjust	Use this key to activate automatic setup and adjust menu. The following dialog appears on a black screen as the monit	
	Auto Adjustment in Progress...	
	Auto Adjustment allows the monitor to self-adjust to the incoming video signal. After using Auto Adjustment, you can fu (Coarse) and Phase (Fine) controls under Image Settings.	
	NOTE: Auto Adjust does not occur if you press the button while there are no active video input signals or attached cab	
INPUT SOURCE	Use the INPUT SOURCE menu to select between different video signals that may be connected to your monitor.	
	Menu Dell E2X10	
	Brightness / Contrast ✓ Auto Select	
	Auto Adjust VGA	
	Input Source DVI - D	
	Color Settings	
	Display Settings	
	Other Settings	
	Personalize	
	Resolution: 1024x768 @ 60Hz Maximum Resolution: 1600x900 @ 60	
VGA	Select VGA input when you are using the analog (VGA) connector. Push ⬤ to select the VGA input source.	
DVI-D	Select DVI-D input when you are using the Digital (DVI) connector. Push ⬤ to select the DVI input source.	
Scan for Sources	Select Auto Select to scan for available input signals.	
COLOR SETTINGS	Use the **Color Setting** menu to adjust the monitor's color settings.	
	Menu Dell E2X10	
	Brightness / Contrast Input Color Format ▶ RGB	
	Auto Adjust Mode Selection ▶ Graphics	
	Input Source Preset Modes ▶ Standard	
	Color Settings Reset Color Settings	
	Display Settings	
	Other Settings	
	Personalize	
	Resolution: 1024x768 @ 60Hz Maximum Resolution: 1600x900 @ 60	
Input Color Format	Allows you to set the video input mode to:	
	l **RGB**: Select this option if your monitor is connected to a computer or DVD player using the HDMI cable or the HD l **YPbPr**: Select this option if your DVD player supports only YPbPr output.	
Mode Selection	Allows you to set the display mode to:	
	l **Graphics**: Select this mode if your monitor is connected to your computer. l **Video**: Select this mode if your monitor is connected to a DVD player.	
	NOTE: Depending upon the Display Mode you select the Preset Modes available for your monitor change.	
Preset Mode	Allows you to choose from a list of preset color modes. In the **Graphics** mode, you can set the color to the following preset values:	
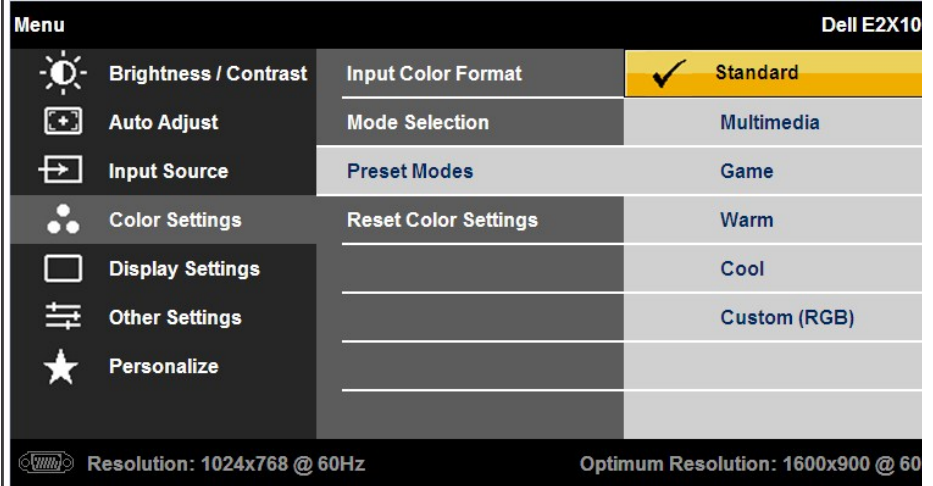
- l **Standard**: Loads the monitor's default color settings. This is the default preset mode.
- l **Multimedia**: Loads color settings ideal for multimedia applications.
- l **Game**: Loads color settings ideal for most gaming applications.
- l **Warm**: Increase the color temperature. The screen appears warmer with a red/yellow tint.
- l **Cool**: Decreases the color temperature. The screen appears cooler with a blue tint.
- l **Custom (RGB)**: Allows you to manually adjust the color settings. press the ⊙ and ⊙ keys to adjust the Red, your own preset color mode.

In the **Video** mode, you can set the color to the following preset values:
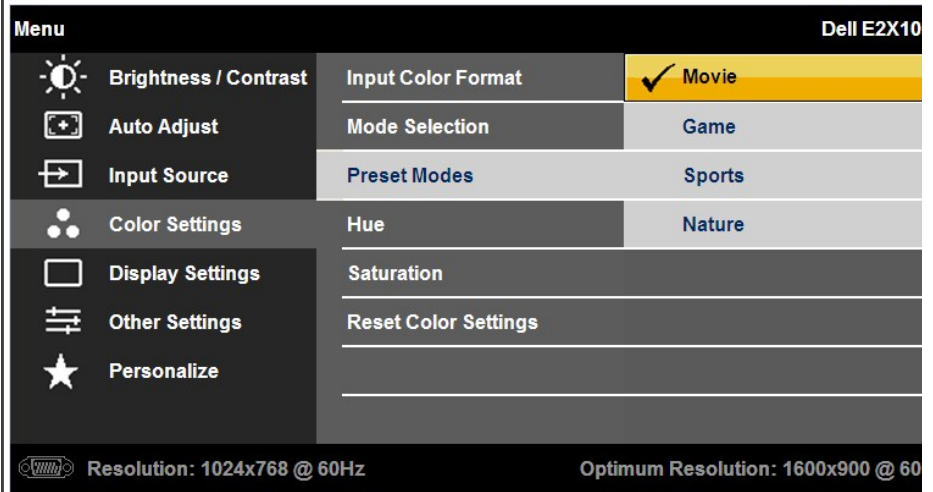
- l **Movie**: Loads color settings ideal for movies. This is the default preset mode.
- l **Game**: Loads color settings ideal for most gaming applications.
- l **Sports**: Loads color settings ideal for sports.
- l **Nature:** Loads color settings ideal for nature.

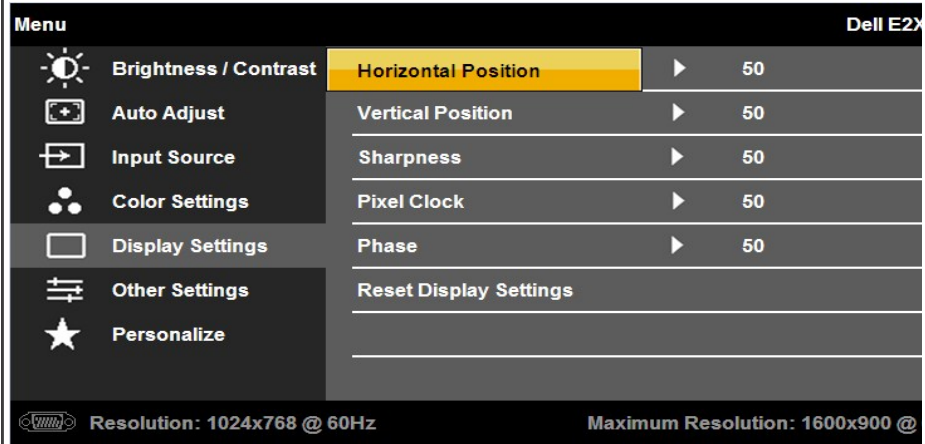|	
Hue	Allows you to adjust the skin tone of the image. Use ⊙ or ⊙ to adjust the hue from '0' to '100'. **NOTE:** Hue adjustment is available only in the **Video** mode.
Saturation	Allows you to adjust the color saturation of the image. Use ⊙ or ⊙ to adjust the saturation from '0' to '100'. **NOTE:** Saturation adjustment is available only in the **Video** mode.
Reset Color Settings	Resets your monitor's color settings to the factory defaults.
DISPLAY SETTINGS	Use the **Displays Settings** menu to adjust the monitor's display settings.

Menu				Dell E2X
☀ Brightness / Contrast	**Horizontal Position**	▶	50	
⊡ Auto Adjust	Vertical Position	▶	50	
→ Input Source	Sharpness	▶	50	
⋯ Color Settings	Pixel Clock	▶	50	
▭ Display Settings	Phase	▶	50	
⇄ Other Settings	Reset Display Settings			
★ Personalize				
⌹ Resolution: 1024x768 @ 60Hz		Maximum Resolution: 1600x900 @		

Back

Press ↺ to go back to the main menu.

Horizontal Position

Use the ⌃ or ⌄ buttons to adjust image left and right. Minimum is '0' (-). Maximum is '100' (+).

Vertical Position

Use the ⌃ or ⌄ buttons to adjust image up and down. Minimum is '0' (-). Maximum is '100' (+)

Sharpness

This feature can make the image look sharper or softer. Use ⌃ or ⌄ to adjust the sharpness from '0' to '100'

Pisel Clock

The Phase and Pixel Clock adjustments allow you to adjust your monitor to your preference. Use ⌃ or ⌄ buttons to a

Phase

If satisfactory results are not obtained using the Phase adjustment, use the Pixel Clock (coarse) adjustment and then
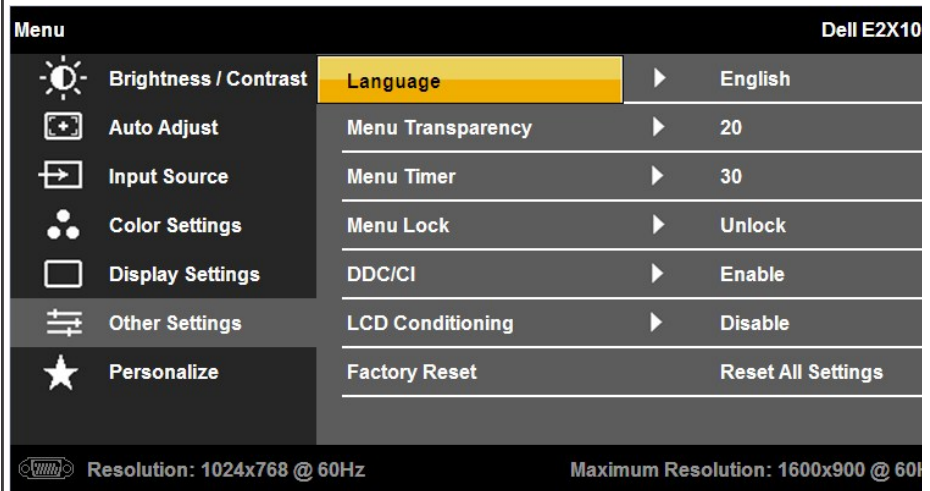
Reset Display Settings

Select this option to restore default display settings.

OTHER SETTINGS

Select this option to adjust the settings of the OSD, such as, the languages of the OSD, the amount of time the menu r

Menu				Dell E2X10
☀ Brightness / Contrast	**Language**	▶	English	
⊡ Auto Adjust	Menu Transparency	▶	20	
→ Input Source	Menu Timer	▶	30	
⋯ Color Settings	Menu Lock	▶	Unlock	
▭ Display Settings	DDC/CI	▶	Enable	
⇄ Other Settings	LCD Conditioning	▶	Disable	
★ Personalize	Factory Reset		Reset All Settings	
⌹ Resolution: 1024x768 @ 60Hz		Maximum Resolution: 1600x900 @ 60I		

Back

Press ↺ to go back to the main menu.

Language

Allows you to set the OSD display to one of eight languages: English, Spanish, French, German, Japanese, Brazilian Por

Menu Transparency

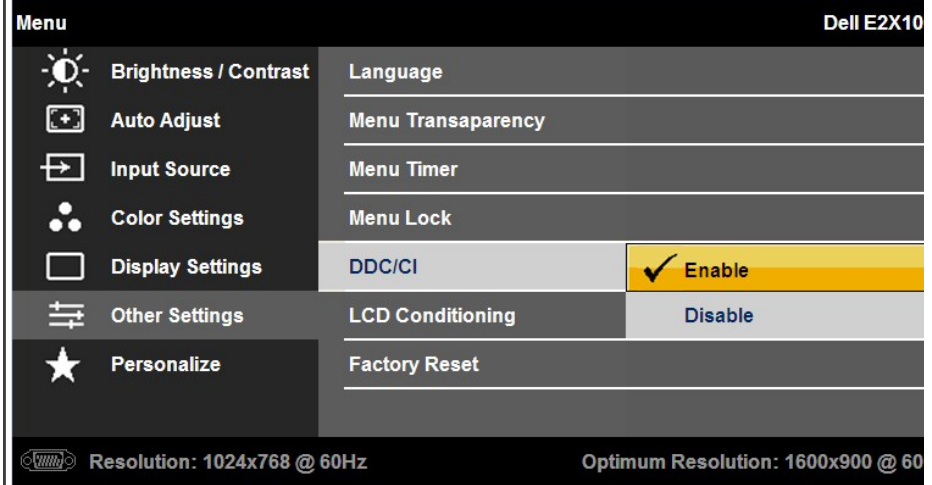Allows you to adjust the OSD background from opaque to transparent.

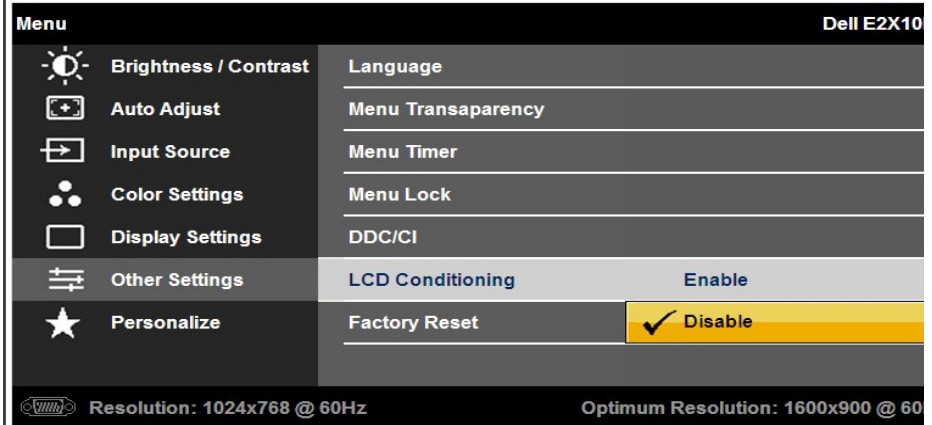|	**Menu Timer**	Allows you to set the time for which the OSD remains active after you press a key on the monitor.
		Use the ⏶ and ⏷ keys to adjust the slider in 1 second increments, from 5 to 60 seconds.
	Menu Lock	Controls user access to adjustments. When **Lock** is selected, no user adjustments are allowed.
		NOTE: When the OSD is locked, press the first OSD control above the Power On/Off control for 15 seconds to unlock it
	DDC/CI	DDC/CI (Display Data Channel/Command Interface) allows a software on your computer to adjust the monitor display s balance etc.
		Enable (Default): Optimizes the performance of your monitor and provides a better customer experience.
		Disable: Disables the DDC/CI option and the following message appears on the screen.

Menu			Dell E2X10
🔆 **Brightness / Contrast**	**Language**		
⊡ **Auto Adjust**	**Menu Transaparency**		
⊞ **Input Source**	**Menu Timer**		
⠪ **Color Settings**	**Menu Lock**		
▢ **Display Settings**	**DDC/CI**	✓ **Enable**	
⇄ **Other Settings**	**LCD Conditioning**	**Disable**	
★ **Personalize**	**Factory Reset**		

🖳 Resolution: 1024x768 @ 60Hz	Optimum Resolution: 1600x900 @ 60

|	**LCD Conditioning**	Helps reduce minor cases of image retention. Depending on the degree of image retention, the program may take som feature by selecting "Enable".

Menu			Dell E2X10
🔆 **Brightness / Contrast**	**Language**		
⊡ **Auto Adjust**	**Menu Transaparency**		
⊞ **Input Source**	**Menu Timer**		
⠪ **Color Settings**	**Menu Lock**		
▢ **Display Settings**	**DDC/CI**		
⇄ **Other Settings**	**LCD Conditioning**	**Enable**	
★ **Personalize**	**Factory Reset**	✓ **Disable**	

🖳 Resolution: 1024x768 @ 60Hz	Optimum Resolution: 1600x900 @ 60

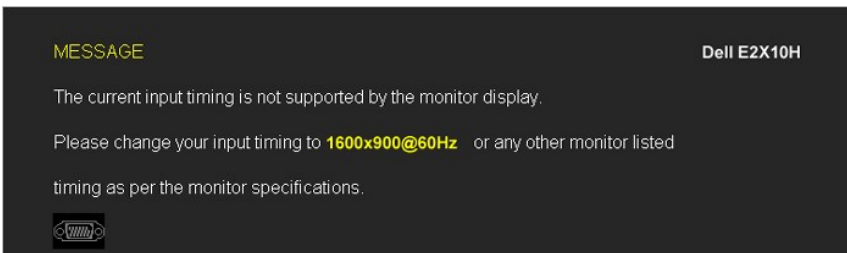|	**Factory Reset**	Resets all OSD settings to the factory preset values.
★	**Personalize**	Allows you to adjust shortcut key for: 1. Preset modes, 2. Brightness / Contrast, 3. Auto Adjust, 4. Input Source

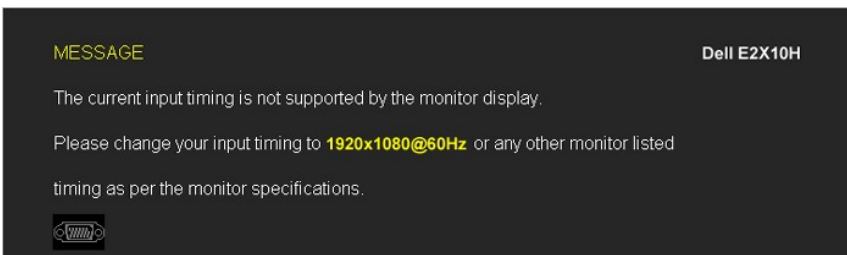|		
	Back	Press ⤺ to go back to the main menu.
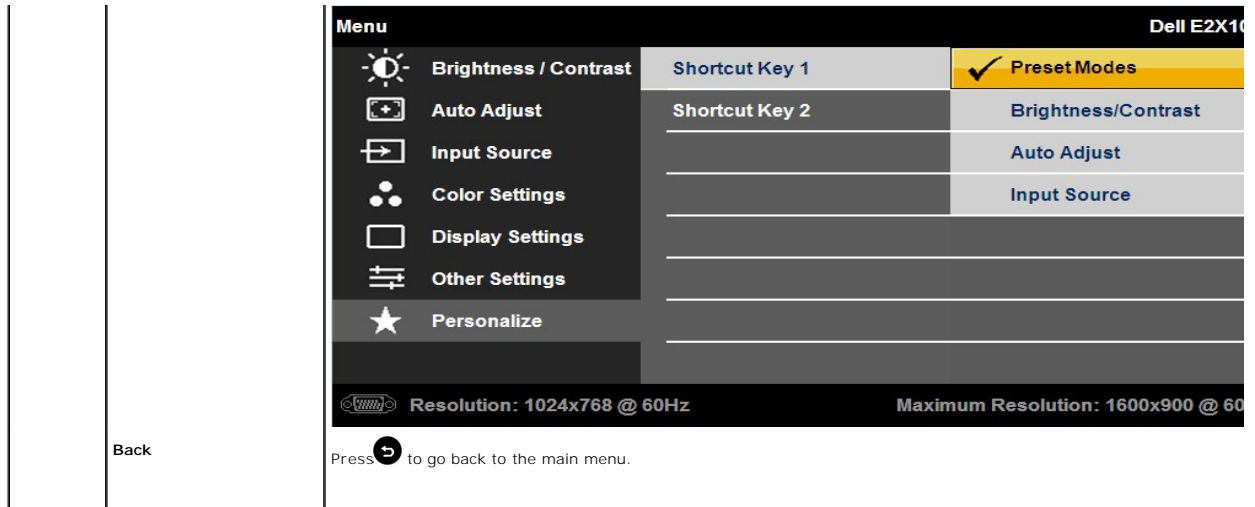
OSD Warning Messages

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

E2010H:



E2210H/E2310H:

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 1600 x 900 (for E2010H) or 1920 x 1080 (for E2210H/E2310H).

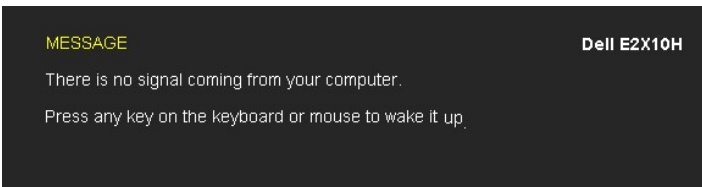You will see the following message before the DDC/CI function is disabled.
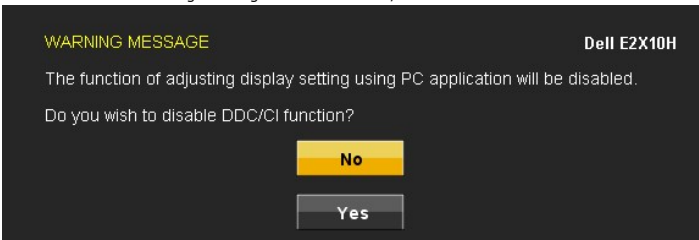
When the monitor enters the Power Save mode, the following message appears:

MESSAGE   Dell E2X10H

Entering Power Save Mode.
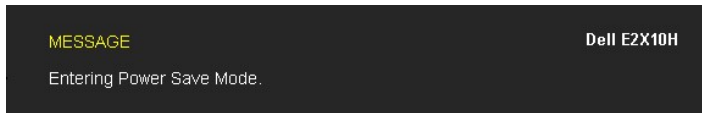
Activate the computer and wake up the monitor to gain access to the OSD

If you press any button other than the power button the following messages will appear depending on the selected input:

MESSAGE   Dell E2X10H

There is no signal coming from your computer.

Press any key on the keyboard or mouse to wake it up.

If either VGA or DVI-D input is selected and both VGA and DVI-D cables are not connected, a floating dialog box as shown below appears.

Dell E2X10H   Dell E2X10H

No VGA Cable   or   No DVI-D Cable
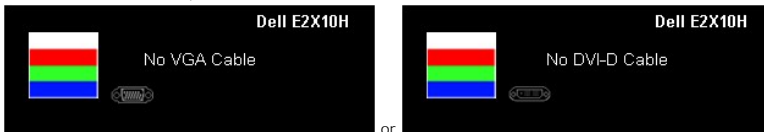
See Solving Problems for more information.

Setting the Maximum Resolution

To set the Maximum resolution for the monitor:

1. Right-click on the desktop and select **Properties**.
2. Select the **Settings** tab.
3. Set the screen resolution to 1600 x 900 (for E2010H) or 1920 x 1080 (for E2210H/E2310H).
4. Click **OK**.

If you do not see 1600 x 900 (for E2010H) or 1920 x 1080 (for E2210H/E2310H)as an option, you may need to update your graphics driver. Depending on your computer, complete one of the following procedures:

  l 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.
  l If you are using a non-Dell computer (portable or desktop):
      o Go to the support site for your computer and download the latest graphic drivers.
      o Go to your graphics card website and download the latest graphic drivers.

Using the Dell Soundbar (Optional)

The Dell Soundbar is a stereo two channel system, mountable on Dell Flat Panel Displays. The Soundbar has a rotary volume and on/off control to adjust the overall system level, a LED for power indication, and two audio headset jacks.
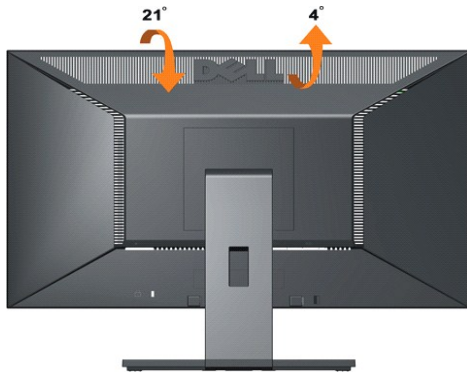

1.	Power/volume control
2.	Power indicator
3.	Headphone connectors

Using the Tilt

Tilt

With the built-in pedestal, you can tilt the monitor for the most comfortable viewing angle.

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

Setting Up Your Monitor

Dell™ E2010H/E2210H/E2310H Flat Panel Monitor

Setting the display resolution to1600 x 900 (for E2010H) or 1920 x 1080 (for E2210H/E2310H) (Maximum)

For optimal display performance while using the Microsoft Windows operating systems, set the display resolution to 1600 x900 (for E2010H) or 1920 x 1080 (for E2210H/E2310H)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 **1600 x900 (for E2010H)** or **1920 x 1080 (for E2210H/E2310H)**.

4. Click **OK**.

   If you do not see **1600 x900 (for E2010H)** or **1920 x 1080 (for E2210H/E2310H)** 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 a non Dell™ desktop, portable computer, or graphics card.

Dell™ E2010H/E2210H/E2310H Flat Panel Monitor

User Guide

Setting the display resolution to 1600 x 900 (for E2010H) or 1920 x 1080(for E2210H/E2310H) (Maximum)

Setting Up the Monitor

Dell™ E2010H/E2210H/E2310H Flat Panel Monitor User's Guide

- Attaching the Stand
- Connecting Your Monitor
- Attaching the Dell Soundbar (Optional)
- Removing the Stand Base
- Wall mounting (Optional)

Attaching the Stand

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

Remove the monitor cover and place the monitor on it.

1. Fit two tabs on the upper part of the stand to the groove on the back of the monitor.
2. Lower the monitor so that the monitor mounting area snaps onto the stand.

## Connecting Your Monitor

> ⚠ **CAUTION:** Before you begin any of the procedures in this section, follow the Safety Instructions.

To connect your monitor to the computer:

1. Turn off your computer and disconnect the power cable.
2. Connect either the white (digital DVI-D) or the blue (analog VGA) display connector cable to the corresponding video port on the back of your computer. **Do not connect both cables on the same computer.** Use both the cables only when they are connected to two different computers with appropriate video systems

    Connecting the VGA Cable
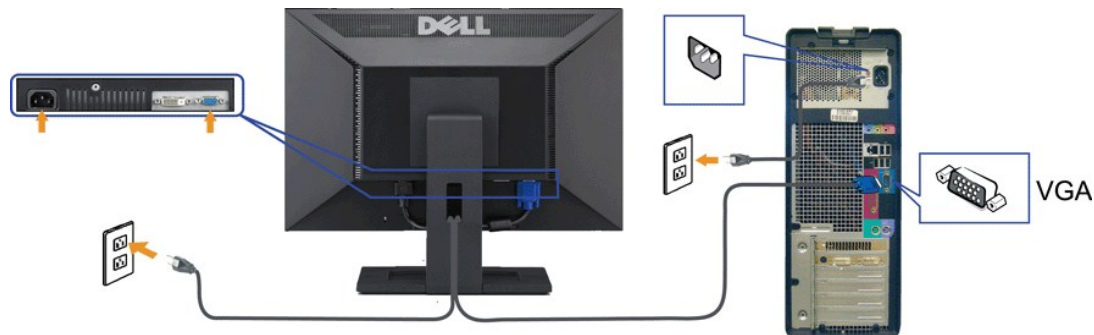
    Connecting the DVI Cable
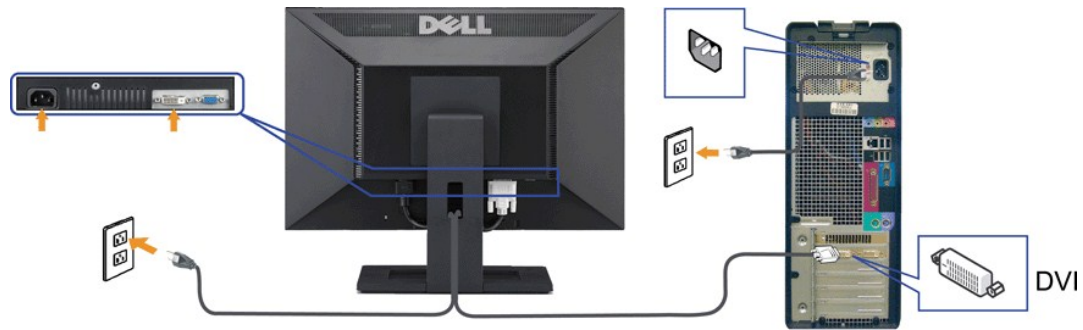
CAUTION: The Graphics are used for the purpose of illustration only. Appearance of the computer may vary.

Attaching the Dell Soundbar(Optional)

NOTICE: Do not use with any device other than the Dell Soundbar.

To attach the Soundbar:

1. Working from the rear of the monitor, attach Soundbar by aligning the two slots with the two tabs along the bottom of the monitor.
2. Slide the Soundbar to the left until it snaps into place.
3. Connect the Soundbar with the DC power connector from the Soundbar Power Adaptor.
4. Insert the mini stereo plug from the back of the Soundbar into the computer's audio output jack.

Removing the Stand

NOTE: To prevent scratches on the LCD screen place the monitor on a soft cloth or cushion.
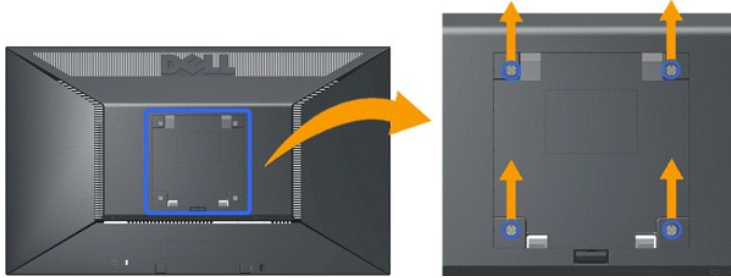
To remove the stand:

1. Press and hold the stand release button.
2. Lift the stand up and away from the monitor .

Wall Mounting (Optional)

(Screw dimension: M4 x 10mm).

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

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

NOTE: For use only with UL (Underwriters Laboratories) Listed Wall Mount Bracket with minimum weight/load bearing capacity of 4.36kg.

Troubleshooting

Dell™ E2010H/E2210H/E2310H Flat Panel Monitor

- Self-Test
- Common Problems
- Product Specific Problems

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

Self-Test

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

1. Turn off both your computer and the monitor.
2. Unplug the video cable from the back of the computer. To ensure a proper Self-Test operation, remove both Digital (white connector) and the Analog (blue connector) cables from the back of computer.
3. Turn on the monitor.

   The floating 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 blue. Also, depending upon the selected input, one of the dialogs shown below will continuously scroll through the screen.

Dell E2X10H		Dell E2X10H
No VGA Cable	or	No DVI-D Cable
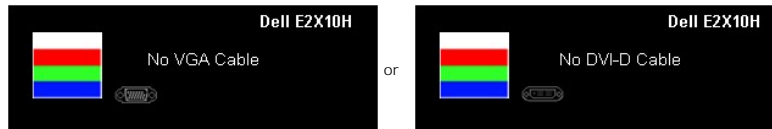
4. This box also appears during normal system operation, if the video cable becomes disconnected or damaged.
5. Turn off your monitor and reconnect the video cable; then turn on both your computer and the monitor.

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

📝 **NOTE:** Self-test feature check is not available for S-Video, Composite, and Component video modes.

Built-in Diagnostics

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

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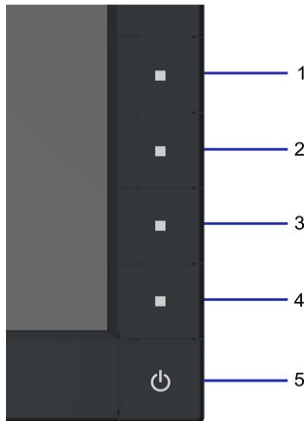
To run the built-in diagnostics:

A. Ensure that the screen is clean (no dust particles on the surface of the screen).
B. Unplug the video cable from the back of the computer or monitor. The monitor then goes into the self-test mode.
C. Press and hold the 1st and 4th buttons on the front panel, simultaneously for 2 seconds. A gray screen appears.
D. Carefully inspect the screen for abnormalities.
E. Press the 4th button on the front panel again. The color of the screen changes to red.
F. Inspect the display for any abnormalities.
G. Repeat steps E and F to inspect the display in green, blue, and white colored screens.

The test is complete when the white screen appears. To exit, press the 4th 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.

Common Problems

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

Common Symptoms	What You Experience	Possible Solutions
No Video/Power LED off	No picture	l Ensure that the video cable connecting the monitor and the computer is properly connected and secure. l Verify that the power outlet is functioning properly using any other electrical equipment. l Ensure that the power button is depressed fully.
No Video/Power LED on	No picture or no brightness	l Increase brightness & contrast controls via OSD. l Perform monitor self-test feature check. l Check for bent or broken pins in the video cable connector. l Run the built-in diagnostics.
Poor Focus	Picture is fuzzy, blurry, or ghosting	l Perform Auto Adjust via OSD. l Adjust the Phase and Pixel Clock controls via OSD. l Eliminate video extension cables. l Reset the monitor to Factory Settings. l Change the video resolution to the correct aspect ration (16:9).
Shaky/Jittery Video	Wavy picture or fine movement	l Perform Auto Adjust via OSD. l Adjust the Phase and Pixel Clock controls via OSD. l Reset the monitor to Factory Settings. l Check environmental factors. l Relocate the monitor and test in another room.
Missing Pixels	LCD screen has spots	l Cycle power on-off. l Pixel that is permanently off is a natural defect that can occur in LCD technology. l Run the built-in diagnostics.
Stuck-on Pixels	LCD screen has bright spots	l Cycle power on-off. l Pixel that is permanently off is a natural defect that can occur in LCD technology. l Run the built-in diagnostics.
Brightness Problems	Picture too dim or too bright	l Reset the monitor to Factory Settings. l Auto Adjust via OSD. l Adjust brightness & contrast controls via OSD.
Geometric Distortion	Screen not centered correctly	l Reset the monitor to Factory Settings. l Auto Adjust via OSD. l Adjust brightness & contrast controls via OSD.
Horizontal/Vertical Lines	Screen has one or more lines	l Reset the monitor to Factory Settings. l Perform Auto Adjust via OSD. l Adjust Phase and Pixel Clock controls via OSD. l Perform monitor self-test feature check and determine if these lines are also in self-test mode. l Check for bent or broken pins in the video cable connector. l Run the built-in diagnostics.
Synchronization Problems	Screen is scrambled or appears torn	l Reset the monitor to Factory Settings. l Perform Auto Adjust via OSD. l Adjust Phase and Pixel Clock controls via OSD. l Perform monitor self-test feature check to determine if the scrambled screen appears in self-test mode. l Check for bent or broken pins in the video cable connector. l Restart the computer in the *safe mode*.
Safety Related Issues	Visible signs of smoke or sparks	l Do not perform any troubleshooting steps. l Contact Dell immediately.
Intermittent Problems	Monitor malfunctions on & off	l Ensure that the video cable connecting the monitor to the computer is connected properly and is secure. l Reset the monitor to Factory Settings. l Perform monitor self-test feature check to determine if the intermittent problem occurs in self-test mode.
Missing Color	Picture missing color	l Perform monitor self-test feature check. l Ensure that the video cable connecting the monitor to the computer is connected properly and is secure. l Check for bent or broken pins in the video cable connector.
Wrong Color	Picture color not good	l Change the Color Setting Mode in the Color Settings OSD to Graphics or Video depending on the application. l Try different Color Preset Settings in Color Settings OSD. Adjust R/G/B value in Color

		Settings OSD if the Color Management is turned off. l Change the Input Color Format to PC RGB or YPbPr in the Advance Setting OSD. l Run the built-in diagnostics.
Image retention from a static image left on the monitor for a long period of time	Faint shadow from the static image displayed appears on the screen	l Use the Power Management feature to turn off the monitor at all times when not in use (for more information, see Power Management Modes). l Alternatively, use a dynamically changing screensaver. l In OSD Menu, under Reset to Factory Settings, select Enable LCD Conditioning. Using this option may take several hours before the image is eliminated. l **NOTE:** Image Burn-in is not covered by your warranty.

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	l Reset the monitor to Factory Settings.
Cannot adjust the monitor with the buttons on the front panel	OSD does not appear on the screen	l Turn off the monitor, unplug the power cord, plug back, and then turn on the monitor.
No Input Signal when user controls are pressed	No picture, the LED light is blue. When press "up", "down" or "Menu" key, the message " No input signal " will appear.	l Check the signal source. Ensure the Computer is not in the power saving mode by moving the mouse or pressing any key on the keyboard. l **Check whether the signal cable is plugged in properly. Re**-plug the signal cable if necessary. l Reset the computer or video player.
The picture does not fill the entire screen.	The picture cannot fill the height or width of the screen	l Due to different video formats (aspect ratio) of DVDs, the monitor may display in full screen. l Run the built-in diagnostics.