

Dell™ E228WFP Flat Panel Monitor User's Guide

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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.

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Model E228WFP

November 2006 Rev. A00

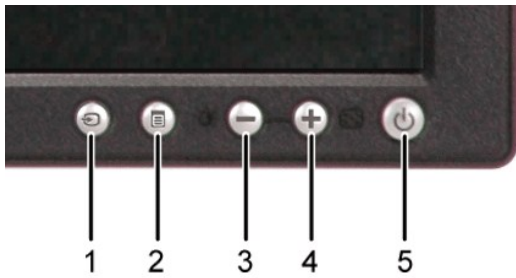
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About Your Monitor

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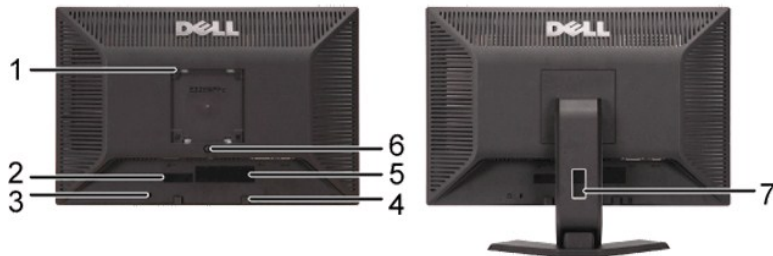
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Front View



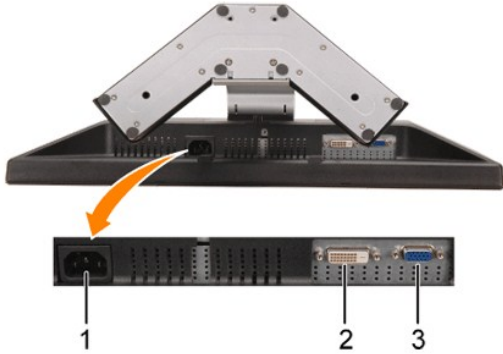
| | |
|----|---|
| 1. | Input source select button |
| 2. | OSD menu / select button |
| 3. | Brightness & Contrast / Down (-) button |
| 4. | Auto-adjust / Up (+) button |
| 5. | Power button (with power light indicator) |

Back View



| | | |
|---|--|--|
| 1 | VESA mounting holes (100mm) (Behind attached VESA plate) | Use to mount the monitor with VESA compliance (100mm) bracket. |
| 2 | Barcode serial number label | Refer to this label if you need to contact Dell for technical support. |
| 3 | Security lock slot | Use a security lock with the slot to help secure your monitor. |
| 4 | Dell Soundbar mounting brackets | Attach the optional Dell Soundbar. |
| 5 | Regulatory rating label | List the regulatory approvals. |
| 6 | Stand removal button | Press to release the stand from the monitor. |
| 7 | Cable management hole | Help organize cables by placing them through the hole. |

Bottom View



| | | |
|---|-----------------|----------------------------------|
| 1 | Power connector | Insert the power cable. |
| 2 | DVI connector | Connect your computer DVI cable. |
| 3 | VGA connector | Connect your computer VGA cable. |

Side View



Left side


Right side

Monitor Specifications

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 input from keyboard, mouse, or other input devices is detected by the computer, the monitor automatically 'wakes up'. The following table shows the power consumption and signaling of this automatic power saving feature:

| VESA Modes | Horizontal Sync | Vertical Sync | Video | Power Indicator | Power Consumption |
|------------------|-----------------|---------------|---------|-----------------|-------------------|
| Normal operation | Active | Active | Active | Green | 45 W (typical) |
| Active-off mode | Inactive | Inactive | Blanked | Amber | Less than 2 W |
| Switch off | - | - | - | Off | Less than 1 W |

 **NOTE:** The OSD only functions in the 'normal operation' mode. One of the following messages appears when the "menu" or "plus" buttons are pressed when in Active-off mode.

1: Auto detect
In Power Save Mode
Press computer power button
or any key on keyboard or move mouse

or

2: Analog Input
In Power Save Mode
Press computer power button
or any key on keyboard or move mouse

or

3: Digital Input
In Power Save Mode
Press computer power button
or any key on keyboard or move mouse

Activate the computer and 'wake up' the monitor to gain access to the [OSD](#).

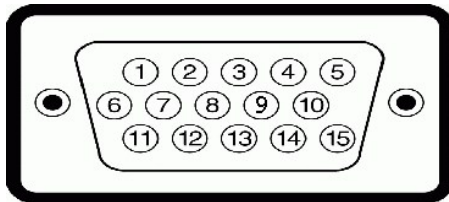
This monitor is **ENERGY STAR**®-compliant as well as TCO '99 power management compatible.



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

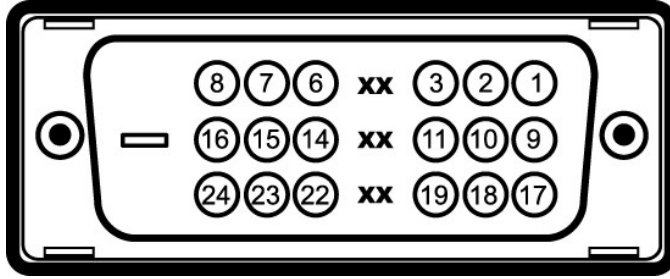
Pin Assignments

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 |

24-pin Digital-Only DVI Connector



Note: Pin 1 is at the top right.

| Pin | Signal Assignment | Pin | Signal Assignment | Pin | Signal Assignment |
|-----|------------------------|-----|------------------------|-----|------------------------|
| 1 | T.M.D.S. Data 2- | 9 | T.M.D.S. Data 1- | 17 | T.M.D.S. Data 0- |
| 2 | T.M.D.S. Data 2+ | 10 | T.M.D.S. Data 1+ | 18 | T.M.D.S. Data 0+ |
| 3 | T.M.D.S. Data 2 Shield | 11 | T.M.D.S. Data 1 Shield | 19 | T.M.D.S. Data 0 Shield |
| 4 | No Pin | 12 | No Pin | 20 | No Pin |
| 5 | No Pin | 13 | No Pin | 21 | No Pin |
| 6 | DDC Clock | 14 | +5V Power | 22 | T.M.D.S. Clock Shield |
| 7 | DDC Data | 15 | Ground (for +5V) | 23 | T.M.D.S. Clock + |
| 8 | No Connect | 16 | Hot Plug Detect | 24 | T.M.D.S. Clock - |

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 that the system can configure itself and optimize the monitor settings. If desired, you can select different settings, but in most cases monitor installation is automatic.

General

Model number E228WFP

| | |
|----------------------|--|
| Screen type | Active matrix - TFT LCD |
| Screen dimensions | 22 inches (22-inch viewable image size) |
| Preset display area: | |
| Horizontal | 473.76 mm (18.65 inches) |
| Vertical | 296.1 mm (11.66 inches) |
| Pixel pitch | 0.282 mm |
| Viewing angle | 160° (vertical) typ, 160° (horizontal) typ |
| Luminance output | 300 CD/m ² (typ) |
| Contrast ratio | 800 to 1 (typ) |
| Faceplate coating | Antiglare with hard-coating 3H |
| Backlight | CCFL edgelight system |
| Response Time | 5ms typical |

Resolution

| | |
|---|------------------------------|
| Horizontal scan range | 30 kHz to 83 kHz (automatic) |
| Vertical scan range | 56 Hz to 75 Hz (automatic) |
| Optimal preset resolution | 1680 x 1050 at 60 Hz |
| Highest preset resolution | 1680 x 1050 at 60 Hz |
| Video display capabilities(DVI HD playback) | 480p/576p/720p |

Preset Display Modes

| Display Mode | Horizontal Frequency (kHz) | Vertical Frequency (Hz) | Pixel Clock (MHz) | Sync Polarity (Horizontal/Vertical) |
|-------------------|----------------------------|-------------------------|-------------------|-------------------------------------|
| VESA, 720 x 400 | 31.5 | 70.0 | 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 | 60.3 | 49.5 | +/+ |
| 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 | +/+ |
| VESA, 1280 x 1024 | 64.0 | 60.0 | 135.0 | +/+ |
| VESA, 1280 x 1024 | 80.0 | 75.0 | 135.0 | +/+ |
| VESA, 1680 x 1050 | 65.0 | 60.0 | 146.25 | +/+ |

Electrical

Video input signals

Analog RGB, 0.7 Volts +/-5%, positive polarity at 75 ohm input impedance
Digital DVI-D TMDS, 600mV for each differential line, positive polarity at 50 ohm input impedance with HDCP support

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 / 1.5A

Inrush current

120V: 30A (Max.)
240V: 60A (Max.)

Physical Characteristics

Connector type

15-pin D-subminiature, blue connector; DVI-D, white connector

Signal cable type

Digital: Detachable, DVI-D, Solid pins, shipped detached from the monitor

Analog: Detachable, D-Sub, 15pins, shipped attached to the monitor

Dimensions (with stand):

| | |
|--------|--------------------------|
| Height | 16.10 inches (409.10 mm) |
| Width | 20.12 inches (511.14 mm) |
| Depth | 5.87 inches (149.16 mm) |

Dimensions: (without stand)

| | |
|--------|--------------------------|
| Height | 13.13 inches (333.54 mm) |
| Width | 20.12 inches (511.14 mm) |
| Depth | 2.56 inches (65.00 mm) |

Stand dimensions:

| | |
|--------|--------------------------|
| Height | 11.92 inches (302.83 mm) |
| Width | 12.20 inches (309.93 mm) |
| Depth | 5.90 inches (149.98 mm) |

Weight with packaging

20.94 lbs (9.5 kg)

| | |
|--|--------------------|
| Weight with stand assembly and cables | 15.65 lbs (7.1 kg) |
| Weight without stand assembly (For wall mount or VESA mount considerations - no cables) | 11.46 lbs (5.2 kg) |
| Weight of stand assembly | 2.65 lbs (1.2 kg) |



Environmental

| | |
|---------------------|---|
| Temperature: | |
| Operating | 5° to 35°C (41° to 95°F) |
| Nonoperating | Storage: -20° to 60°C (-4° to 140°F) Shipping: -20° to 60°C (-4° to 140°F) |
| Humidity: | |
| Operating | 10% to 80% (noncondensing) |
| Nonoperating | Storage: 5% to 90% (noncondensing) Shipping: 5% to 90% (noncondensing) |
| Altitude: | |
| Operating | 3,657.6m (12,000 ft) max |
| Nonoperating | 12,192 m (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 pixel that appears 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 display with 1 to 5 fixed pixels is considered normal and within competitive standards. For more information, see Dell Support site at: support.dell.com

Caring for Your Monitor

-  **CAUTION:** Read and follow the [safety instructions](#) before cleaning the monitor.
-  **CAUTION:** Before cleaning the monitor, unplug the monitor power cable from the electrical outlet.

- 1 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 antistatic coating. Do not use benzene, thinner, ammonia, abrasive cleaners, or compressed air.
 - 1 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.
 - 1 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.
 - 1 Handle your monitor with care as darker-colored plastics may scratch and show white scuff marks more than lighter-colored monitor.
 - 1 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.
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Appendix

Dell™ E228WFP Flat Panel Monitor

- [FCC Identification Information](#)
- [CAUTION: Safety Instruction](#)
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FCC Identification Information


FCC Notice (U.S. Only)

FCC Class B

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the manufacturer's instruction manual, may cause interference with radio and television reception. This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules.

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.
- 2 This device must accept any interference received, including interference that may cause undesired operation.

 **NOTICE:** The FCC regulations provide that changes or modifications not expressly approved by Dell Inc. could void your authority to operate this equipment.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference with radio or television reception, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by one or more of the following measures:

- 1 Reorient the receiving antenna.
- 1 Relocate the system with respect to the receiver.
- 1 Move the system away from the receiver.
- 1 Plug the system into a different outlet so that the system and the receiver are on different branch circuits.

If necessary, consult a representative of Dell Inc. or an experienced radio/television technician for additional suggestions.

The following information is provided on the device or devices covered in this document in compliance with the FCC regulations:

- 1 Product name: E228WFP
- 1 Model number: E228WFPC
- 1 Company name:


Dell Inc.

Worldwide Regulatory Compliance & Environmental Affairs

One Dell Way


Round Rock, TX 78682 USA 512-338-4400

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:

- 1 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.
 - o 230 volts (V)/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 voltage defined in the "Electrical Specifications" section.


- 1 Do not store or use the LCD monitor in locations that are exposed to heat, direct sunlight, or extreme cold.
- 1 Avoid moving the LCD monitor between locations with large temperature differences.
- 1 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.
- 1 Do not store or use the LCD monitor in locations exposed to high humidity or dusty environment.
- 1 Do not allow water or other liquids to spill on or into the LCD monitor.
- 1 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.
- 1 Never insert anything metallic into the monitor openings. Doing so may create the danger of electric shock.
- 1 To avoid electric shock, never touch the inside of the monitor. Only a qualified technician should open the monitor case.
- 1 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.
- 1 Be sure to grasp the plug, not the cable, when disconnecting the monitor from an electric socket.
- 1 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.


- 1 Place your monitor in a location with low humidity and minimum dust. Avoid places similar to a damp basement or dusty hallway.
- 1 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.
- 1 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.
- 1 Locate your monitor near an easily accessible electric outlet.
- 1 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.
- 1 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.
- 1 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.
- 1 Unplug the monitor when it is going to be left unused for an extended period of time.
- 1 Unplug your monitor from the electric outlet before any service is performed.
- 1 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: <http://www.eiae.org> for more information.

Contacting Dell


You can contact Dell through the Internet and by phone:

- 1 For support through the web, go to support.dell.com.
- 1 For worldwide support through the web, use the *Choose A Country/Region* menu near the bottom of the page, or see the web addresses listed in the following table.
- 1 For support by e-mail, see the e-mail addresses listed in the following table.

 **NOTE:** Toll-free numbers are for use within the country for which they are listed.

 **NOTE:** In certain countries, support specific to Dell? XPS? computers is available at a separate telephone number listed for participating countries. If you do not see a telephone number listed that is specific for XPS computers, you may contact Dell through the support number listed and your call will be routed appropriately.

- 1 For support by phone, use the phone numbers and codes provided in the following table. If you need assistance in determining which codes to use, contact a local or an international operator.

 **NOTE:** The contact information provided was deemed correct at the time that this document went to print and is subject to change.

| Country (City) International Access Code Country Code City Code | Service Type | Area Codes, Local Numbers, and Toll-Free Numbers Web and E-mail Address |
|--|---|--|
| Anguilla | Online Support | www.dell.com/ai |
| | E-mail Address | la-techsupport@dell.com |
| | Technical Support, Customer Service, Sales | toll-free: 800-335-0031 |
| Antigua and Barbuda | Online Support | www.dell.com.ag |
| | Technical Support, Customer Service, Sales | la-techsupport@dell.com |
| | | 1-800-805-5924 |
| Aomen Country Code: 853 | Technical Support | toll-free: 0800-105 |
| | Customer Service (Xiamen, China) | 34 160 910 |
| | Transaction Sales (Xiamen, China) | 29 693 115 |
| Argentina (Buenos Aires) International Access Code: 00 Country Code: 54 City Code: 11 | Online Support | www.dell.com.ar |
| | E-mail for Desktops and Portables | la-techsupport@dell.com |
| | E-mail for Servers and EMC @ Storage Products | la_enterprise@dell.com |
| | Customer Service | toll-free: 0-800-444-0730 |
| | Technical Support - Dell PowerApp™, Dell PowerEdge™, Dell PowerConnect™, and Dell PowerVault™ | toll-free: 0-800-222-0154 |
| | Technical Support Services | toll-free: 0-800-444-0724 |
| Aruba | Sales | 0-810-444-3355 |
| | Online Support | www.dell.com.aw |
| | Technical Support, Customer Service, Sales | la-techsupport@dell.com toll-free: 800-1578 |
| Australia (Sydney) International Access Code: 0011 Country Code: 61 City Code: 2 | Online Support | support.ap.dell.com support.ap.dell.com/contactus |
| | Technical Support | |
| | Technical Support for XPS computers only | toll-free: 1300 790 877 |
| | Home and Home Office | toll-free: 1300-655-533 |
| | Medium and Large Business | toll-free: 1800-633-559 |
| | Small Business, Education, Local Government | toll-free: 1800-060-889 |
| | Customer Service | toll-free: 1300-662-196 |
| Austria (Vienna) International Access Code: 900 Country Code: 43 | Online Support | support.euro.dell.com |
| | Technical Support for XPS computers only | tech_support_central_europe@dell.com |
| | Home/Small Business Sales | 08 20 24 05 30 81 |
| | Home/Small Business Fax | 08 20 24 05 30 00 |
| | Home/Small Business Customer Service | 08 20 24 05 30 49 08 20 24 05 30 14 |

| | | |
|---|--|--|
| City Code: 1 | Home/Small Business Support | 08 20 24 05 30 17 |
| | Preferred Accounts/Corporate Customer Service | 08 20 24 05 30 16 |
| | Preferred Accounts/Corporate Support | 08 20 24 05 30 17 |
| | Switchboard | 08 20 24 05 30 00 |
| Bahamas | Online Support | www.dell.com/bs la-techsupport@dell.com |
| | Technical Support, Customer Service, Sales | toll-free: 1-866-874-3038 |
| Barbados | Online Support | www.dell.com/bb la-techsupport@dell.com |
| | Technical Support, Customer Service, Sales | 1-800-534-3142 |
| Belgium (Brussels) International Access Code: 00 Country Code: 32 City Code: 2 | Online Support | support.euro.dell.com |
| | Technical Support for XPS computers only | 02 481 92 96 |
| | General Support | 02 481 92 88 |
| | General Support Fax | 02 481 92 95 |
| | Customer Service | 02 713 15 65 |
| | Corporate Sales | 02 481 91 00 |
| | Fax | 02 481 92 99 |
| | Switchboard | 02 481 91 00 |
| Bermuda | Online Support | www.dell.com/bm la-techsupport@dell.com |
| | Technical Support, Customer Service, Sales | 1-877-890-0751 |
| Bolivia | Online Support | www.dell.com/bo la-techsupport@dell.com |
| | Technical Support, Customer Service, Sales | toll-free: 800-10-0238 |
| Brazil International Access Code: 00 Country Code: 55 City Code: 51 | Online Support | www.dell.com/br BR_TechSupport@dell.com |
| | Customer Service and Tech Support | 0800 970 3355 |
| | Technical Support Fax | 51 2104 5470 |
| | Customer Service Fax | 51 2104 5480 |
| British Virgin Islands | Sales | 0800 970 3390 |
| | Technical Support, Customer Service, Sales | toll-free: 1-866-278-6820 |
| Brunei Country Code: 673 | Technical Support (Penang, Malaysia) | 604 633 4966 |
| | Customer Service (Penang, Malaysia) | 604 633 3101 or toll-free: 801 1012 |
| | Transaction Sales (Penang, Malaysia) | 604 633 3101 or toll-free: 801 1012 |
| Canada (North York, Ontario) International Access Code: 011 | Online Order Status | www.dell.ca/ostatus |
| | Online Support | support.ca.dell.com |
| | AutoTech (automated Hardware and Warranty Support) | toll-free: 1-800-247-9362 |
| | Customer Service | |
| | Home/Home Office | toll-free: 1-800-847-4096 |
| | Small Business | toll-free: 1-800-906-3355 |
| | Medium/Large Business, Government, Education | toll-free: 1-800-387-5757 |
| | Hardware Warranty Phone Support | |
| | XPS Computers Only | toll-free: 1-866-398-8977 |
| | Computers for Home/Home Office | toll-free: 1-800-847-4096 |
| | Computers for Small/Medium/Large Business, Government | toll-free: 1-800-387-5757 |
| | Printers, Projectors, Televisions, Handheld, Digital Jukebox, and Wireless | 1-877-335-5767 |
| | Sales | |
| | Home and Home Office Sales | toll-free: 1-800-999-3355 |
| | Small Business | toll-free: 1-800-387-5752 |
| Medium/Large Business, Government | toll-free: 1-800-387-5755 | |
| Spare Parts and Extended Service | 1 866 440 3355 | |
| Cayman Islands | Online Support | la-techsupport@dell.com |
| | Technical Support, Customer Service, Sales | 1-877-262-5415 |
| Chile (Santiago) Country Code: 56 City Code: 2 | Online Support | www.dell.com/cl la-techsupport@dell.com |
| | Sales and Customer Support | toll-free: 1230-020-3397 or 800-20-1385 |
| | | |
| | Online Support | support.dell.com.cn |
| | Technical Support E-mail | support.dell.com.cn/email |
| | Customer Service E-mail | customer_cn@dell.com |
| | Technical Support Fax | 592 818 1350 |
| | Technical Support - XPS computers only | toll-free: 800 858 0540 |

| | | |
|---|---|---|
| China (Xiamen) Country Code: 86 City Code: 592 | Technical Support - Dell™ Dimension™ and Dell Inspiron™ | toll-free: 800 858 2969 |
| | Technical Support - Dell OptiPlex™, Dell Latitude™, and Dell Precision™ | toll-free: 800 858 0950 |
| | Technical Support - Servers and Storage | toll-free: 800 858 0960 |
| | Technical Support - Projectors, PDAs, Switches, Routers, etc. | toll-free: 800 858 2920 |
| | Technical Support - Printers | toll-free: 800 858 2311 |
| | Customer Service | toll-free: 800 858 2060 |
| | Customer Service Fax | 592 818 1308 |
| | Home and Small Business | toll-free: 800 858 2222 |
| | Preferred Accounts Division | toll-free: 800 858 2557 |
| | Large Corporate Accounts GCP | toll-free: 800 858 2055 |
| | Large Corporate Accounts Key Accounts | toll-free: 800 858 2628 |
| | Large Corporate Accounts North | toll-free: 800 858 2999 |
| | Large Corporate Accounts North Government and Education | toll-free: 800 858 2955 |
| | Large Corporate Accounts East | toll-free: 800 858 2020 |
| | Large Corporate Accounts East Government and Education | toll-free: 800 858 2669 |
| | Large Corporate Accounts Queue Team | toll-free: 800 858 2572 |
| | Large Corporate Accounts South | toll-free: 800 858 2355 |
| | Large Corporate Accounts West | toll-free: 800 858 2811 |
| | Large Corporate Accounts Spare Parts | toll-free: 800 858 2621 |
| | Colombia | Online Support |
| Technical Support, Customer Service, Sales | | 01-800-915-4755 |
| Costa Rica | Online Support | www.dell.com/cr la-techsupport@dell.com |
| | Technical Support, Customer Service, Sales | 0800-012-0231 |
| Czech Republic (Prague) International Access Code: 00 Country Code: 420 | Online Support | support.euro.dell.com czech_dell@dell.com |
| | Technical Support | 22537 2727 |
| | Customer Service | 22537 2707 |
| | Fax | 22537 2714 |
| | Technical Fax | 22537 2728 |
| | Switchboard | 22537 2711 |
| Denmark (Copenhagen) International Access Code: 00 Country Code: 45 | Online Support | support.euro.dell.com |
| | Technical Support for XPS computers only | 7010 0074 |
| | Technical Support | 7023 0182 |
| | Customer Service - Relational | 7023 0184 |
| | Home/Small Business Customer Service | 3287 5505 |
| | Switchboard - Relational | 3287 1200 |
| | Switchboard Fax - Relational | 3287 1201 |
| | Switchboard - Home/Small Business | 3287 5000 |
| | Switchboard Fax - Home/Small Business | 3287 5001 |
| Dominica | Online Support | www.dell.com/dm la-techsupport@dell.com |
| | Technical Support, Customer Service, Sales | toll-free: 1-866-278-6821 |
| Dominican Republic | Online Support | www.dell.com/do la-techsupport@dell.com |
| | Technical Support, Customer Service, Sales | 1-800-156-1588 |
| Ecuador | Online Support | www.dell.com/ec la-techsupport@dell.com |
| | Technical Support, Customer Service, Sales (calling from Quito) | toll-free: 999-119-877-655-3355 |
| | Technical Support, Customer Service, Sales (calling from Guayaquil) | toll-free: 1800-999-119-877-655-3355 |
| El Salvador | Online Support | www.dell.com/sv la-techsupport@dell.com |
| | Technical Support, Customer Service, Sales | 800-6132 |
| Finland (Helsinki) International Access Code: 990 Country Code: 358 City Code: 9 | Online Support | support.euro.dell.com fi_support@dell.com |
| | Technical Support | 0207 533 555 |
| | Customer Service | 0207 533 538 |
| | Switchboard | 0207 533 533 |
| | Fax | 0207 533 530 |
| | Sales under 500 employees | 0207 533 540 |
| | Sales over 500 employees | 0207 533 533 |
| | Online Support | support.euro.dell.com |
| Technical Support for XPS computers only | 0825 387 129 | |
| Home and Small Business | | |

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| France (Paris) (Montpellier) International Access Code: 00 Country Code: 33 City Codes: (1) (4) | Technical Support | 0825 387 270 |
| | Customer Service | 0825 823 833 |
| | Switchboard | 0825 004 700 |
| | Switchboard (calls from outside of France) | 04 99 75 40 00 |
| | Sales | 0825 004 700 |
| | Fax | 0825 004 701 |
| | Fax (calls from outside of France) | 04 99 75 40 01 |
| | Corporate | |
| | Technical Support | 0825 004 719 |
| | Customer Service | 0825 338 339 |
| | Switchboard | 01 55 94 71 00 |
| | Sales | 01 55 94 71 00 |
| | Fax | 01 55 94 71 01 |
| | | |
| Germany (Frankfurt) International Access Code: 00 Country Code: 49 City Code: 69 | Online Support | support.euro.dell.com tech_support_central_europe@dell.com |
| | Technical Support for XPS computers only | 069 9792 7222 |
| | Technical Support | 069 9792-7200 |
| | Home/Small Business Customer Service | 0180-5-224400 |
| | Global Segment Customer Service | 069 9792-7320 |
| | Preferred Accounts Customer Service | 069 9792-7320 |
| | Large Accounts Customer Service | 069 9792-7320 |
| | Public Accounts Customer Service | 069 9792-7320 |
| | Switchboard | 069 9792-7000 |
| | | |
| Greece International Access Code: 00 Country Code: 30 | Online Support | support.euro.dell.com |
| | Technical Support | 00800-44 14 95 18 |
| | Gold Service Technical Support | 00800-44 14 00 83 |
| | Switchboard | 2108129810 |
| | Gold Service Switchboard | 2108129811 |
| | Sales | 2108129800 |
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| Grenada | Online Support | www.dell.com/gd la-techsupport@dell.com |
| | Technical Support, Customer Service, Sales | toll-free: 1-866-540-3355 |
| Guatemala | Online Support | www.dell.com/gt la-techsupport@dell.com |
| | Technical Support, Customer Service, Sales | 1-800-999-0136 |
| Guyana | Online Support | la-techsupport@dell.com |
| | Technical Support, Customer Service, Sales | toll-free: 1-877-270-4609 |
| Hong Kong International Access Code: 001 Country Code: 852 | Online Support | support.ap.dell.com support.dell.com.cn/email |
| | Technical Support - XPS computers only | 00852-3416 6923 |
| | Technical Support - Dimension and Inspiron | 00852-2969 3188 |
| | Technical Support - OptiPlex, Latitude, and Dell Precision | 00852-2969 3191 |
| | Technical Support - Servers and Storage | 00852-2969 3196 |
| | Technical Support - Projectors, PDAs, Switches, Routers, etc. | 00852-3416 0906 |
| | Customer Service | 00852-3416 0910 |
| | Large Corporate Accounts | 00852-3416 0907 |
| | Global Customer Programs | 00852-3416 0908 |
| | Medium Business Division | 00852-3416 0912 |
| | Home and Small Business Division | 00852-2969 3105 |
| | | |
| India | Online Support | support.ap.dell.com |
| | Portable and Desktop Support | |
| | Desktop Support E-mail | india_support_desktop@dell.com |
| | Portable Support E-mail | india_support_notebook@dell.com |
| | Phone Numbers | 080-25068032 or 080-25068034 or your city STD code + 60003355 or toll-free: 1-800-425-8045 |
| | Server Support | |
| | E-mail | india_support_Server@dell.com |
| | Phone Numbers | 080-25068032 or 080-25068034 or your city STD code + 60003355 or toll-free: 1800 425 8045 |
| | Gold Support Only | |
| | E-mail | eec_ap@dell.com |
| | Phone Numbers | 080-25068033 or your city STD code + 60003355 or toll-free: 1-800-425-9045 |
| | XPS Support Only | |
| | E-mail | Indiaxps_AP@dell.com |

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| | Phone Numbers | 080-25068066 or toll-free: 1-800-425-2066 |
| | Customer Service | |
| | Home and Small Business | India_care_HSB@dell.com toll-free: 1800-4254051 |
| | Large Corporate Accounts | India_care_REL@dell.com toll-free: 1800-4252067 |
| | Sales | |
| | Large Corporate Accounts | 1600 33 8044 |
| | Home and Small Business | 1600 33 8046 |
| Ireland (Cherrywood) International Access Code: 00 Country Code: 353 City Code: 1 | Online Support | support.euro.dell.com dell_direct_support@dell.com |
| | Technical Support | |
| | XPS computers only | 1850 200 722 |
| | Business computers | 1850 543 543 |
| | Home computers | 1850 543 543 |
| | At Home Support | 1850 200 889 |
| | Sales | |
| | Home | 1850 333 200 |
| | Small Business | 1850 664 656 |
| | Medium Business | 1850 200 646 |
| | Large Business | 1850 200 646 |
| | Sales E-mail | Dell_IRL_Outlet@dell.com |
| | Customer Service | |
| | Home and Small Business | 01 204 4014 |
| | Business (greater than 200 employees) | 1850 200 982 |
| | General | |
| | Fax/Sales Fax | 01 204 0103 |
| | Switchboard | 01 204 4444 |
| | U.K. Customer Service (dial within U.K. only) | 0870 906 0010 |
| | Corporate Customer Service (dial within U.K. only) | 0870 907 4499 |
| U.K. Sales (dial within U.K. only) | 0870 907 4000 | |
| Italy (Milan) International Access Code: 00 Country Code: 39 City Code: 02 | Online Support | support.euro.dell.com |
| | Home and Small Business | |
| | Technical Support | 02 577 826 90 |
| | Customer Service | 02 696 821 14 |
| | Fax | 02 696 821 13 |
| | Switchboard | 02 696 821 12 |
| | Corporate | |
| | Technical Support | 02 577 826 90 |
| | Customer Service | 02 577 825 55 |
| | Fax | 02 575 035 30 |
| Jamaica | Switchboard | 02 577 821 |
| | Online Support | la-techsupport@dell.com |
| | Technical Support, Customer Service, Sales (dial from within Jamaica only) | 1-800-440-9205 |
| Japan (Kawasaki) International Access Code: 001 Country Code: 81 City Code: 44 | Online Support | support.jp.dell.com |
| | Technical Support - XPS computers only | toll-free: 0120-937-786 |
| | Technical Support outside of Japan - XPS computers only | 81-44-520-1235 |
| | Technical Support - Dimension and Inspiron | toll-free: 0120-198-226 |
| | Technical Support outside of Japan - Dimension and Inspiron | 81-44-520-1435 |
| | Technical Support - Dell Precision, OptiPlex, and Latitude | toll-free: 0120-198-433 |
| | Technical Support outside of Japan - Dell Precision, OptiPlex, and Latitude | 81-44-556-3894 |
| | Technical Support - Dell PowerApp, Dell PowerEdge, Dell PowerConnect, and Dell PowerVault | toll-free: 0120-198-498 |
| | Technical Support outside of Japan - PowerApp, PowerEdge, PowerConnect, and PowerVault | 81-44-556-4162 |
| | Technical Support - Projectors, PDAs, Printers, Routers | toll-free: 0120-981-690 |
| | Technical Support outside of Japan - Projectors, PDAs, Printers, Routers | 81-44-556-3468 |
| | Faxbox Service | 044-556-3490 |
| | 24-Hour Automated Order Status Service | 044-556-3801 |
| | Customer Service | 044-556-4240 |
| | Business Sales Division - up to 400 employees | 044-556-1465 |
| | Preferred Accounts Division Sales - over 400 employees | 044-556-3433 |
| | Public Sales - government agencies, educational institutions, and medical institutions | 044-556-5963 |
| | Global Segment Japan | 044-556-3469 |
| | Individual User | 044-556-1657 |
| | Individual User Online Sales | 044-556-2203 |

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| | Individual User Real Site Sales | 044-556-4649 |
| | Switchboard | 044-556-4300 |
| Korea (Seoul) | Online Support | support.ap.dell.com |
| | Technical Support for XPS computers only | toll-free: 080-999-0283 |
| | Technical Support, Customer Service | toll-free: 080-200-3800 |
| | Technical Support - Dimension, PDA, Electronics, and Accessories | toll-free: 080-200-3801 |
| | Sales | toll-free: 080-200-3600 |
| | Fax | 2194-6202 |
| International Access Code: 001 | | |
| Country Code: 82 | | |
| City Code: 2 | Switchboard | 2194-6000 |
| Latin America | Customer Technical Support (Austin, Texas, U.S.A.) | 512 728-4093 |
| | Customer Service (Austin, Texas, U.S.A.) | 512 728-3619 |
| | Fax (Technical Support and Customer Service) (Austin, Texas, U.S.A.) | 512 728-3883 |
| | Sales (Austin, Texas, U.S.A.) | 512 728-4397 |
| | Sales Fax (Austin, Texas, U.S.A.) | 512 728-4600 |
| | | or 512 728-3772 |
| Luxembourg | Online Support | support.euro.dell.com |
| | Support | 342 08 08 075 |
| | Home/Small Business Sales | +32 (0)2 713 15 96 |
| | Corporate Sales | 26 25 77 81 |
| | Customer Service | +32 (0)2 481 91 19 |
| | Fax | 26 25 77 82 |
| International Access Code: 00 | | |
| Country Code: 352 | | |
| Malaysia (Penang) | Online Support | support.ap.dell.com |
| | Technical Support - XPS computers only | toll-free: 1 800 885 784 |
| | Technical Support - Dell Precision, OptiPlex, and Latitude | toll-free: 1 800 880 193 |
| | Technical Support - Dimension, Inspiron, and Electronics and Accessories | toll-free: 1 800 881 306 |
| | Technical Support - PowerApp, PowerEdge, PowerConnect, and PowerVault | toll-free: 1800 881 386 |
| | Customer Service | toll-free: 1800 881 306 (option 6) |
| | Transaction Sales | toll-free: 1 800 888 202 |
| | Corporate Sales | toll-free: 1 800 888 213 |
| International Access Code: 00 | | |
| Country Code: 60 | | |
| City Code: 4 | | |
| Mexico | Online Support | www.dell.com/mx la-techsupport@dell.com |
| | Technical Support | 001-866-563-4425 |
| | Sales | 50-81-8800 or 001-800-888-3355 |
| | Customer Service | 001-877-384-8979 or 001-877-269-3383 |
| | Main | 50-81-8800 or 001-800-888-3355 or 001-866-851-1754 |
| | | |
| International Access Code: 00 | | |
| Country Code: 52 | | |
| Montserrat | Online Support | la-techsupport@dell.com |
| | Technical Support, Customer Service, Sales | toll-free: 1-866-278-6822 |
| Netherlands Antilles | Online Support | la-techsupport@dell.com |
| | Technical Support, Customer Service, Sales | 001-800-882-1519 |
| Netherlands (Amsterdam) | Online Support | support.euro.dell.com |
| | Technical Support for XPS computers only | 020 674 45 94 |
| | Technical Support | 020 674 45 00 |
| | Technical Support Fax | 020 674 47 66 |
| | Home/Small Business Customer Service | 020 674 42 00 |
| | Relational Customer Service | 020 674 4325 |
| | Home/Small Business Sales | 020 674 55 00 |
| | Relational Sales | 020 674 50 00 |
| | Home/Small Business Sales Fax | 020 674 47 75 |
| | Relational Sales Fax | 020 674 47 50 |
| | Switchboard | 020 674 50 00 |
| | Switchboard Fax | 020 674 47 50 |
| | International Access Code: 00 | |
| Country Code: 31 | | |
| City Code: 20 | | |
| New Zealand | Online Support | support.ap.dell.com support.ap.dell.com/contactus |
| | Technical Support for XPS computers only | toll-free: 0800 335 540 |
| | Technical Support, Customer Service, Sales | 0800 441 567 |
| International Access Code: 00 | | |
| Country Code: 64 | | |
| Nicaragua | Online Support | www.dell.com/ni la-techsupport@dell.com |
| | Technical Support, Customer Service, Sales | 001-800-220-1377 |
| Norway (Lysaker) | Online Support | support.euro.dell.com |
| | Technical Support for XPS computers only | 815 35 043 |

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| International Access Code: 00 Country Code: 47 | Technical Support | 671 16882 |
| | Relational Customer Service | 671 17575 |
| | Home/Small Business Customer Service | 23162298 |
| | Switchboard | 671 16800 |
| | Fax Switchboard | 671 16865 |
| Panama | Online Support | www.dell.com/pa la-techsupport@dell.com |
| | Technical Support, Customer Service, Sales | 011-800-507-1264 |
| Peru | Online Support | www.dell.com/pe la-techsupport@dell.com |
| | Technical Support, Customer Service, Sales | 0800-50-669 |
| Poland (Warsaw) International Access Code: 011 Country Code: 48 City Code: 22 | Online Support | support.euro.dell.com pl_support_tech@dell.com |
| | Customer Service Phone | 57 95 700 |
| | Customer Service | 57 95 999 |
| | Sales | 57 95 999 |
| | Customer Service Fax | 57 95 806 |
| | Reception Desk Fax | 57 95 998 |
| | Switchboard | 57 95 999 |
| | Online Support | support.euro.dell.com |
| | Technical Support | 707200149 |
| Portugal International Access Code: 00 Country Code: 351 | Customer Service | 800 300 413 |
| | Sales | 800 300 410 or 800 300 411 or 800 300 412 or 21 422 07 10 |
| | Fax | 21 424 01 12 |
| | Online Support | www.dell.com/pr la-techsupport@dell.com |
| Puerto Rico | Technical Support | toll-free: 1-866-390-4695 or 1-866-851-1760 |
| | Customer Service and Sales | 1-877-537-3355 |
| | Online Support | www.dell.com/kn la-techsupport@dell.com |
| St. Kitts and Nevis | Technical Support, Customer Service, Sales | toll-free: 1-866-540-3355 |
| | Online Support | www.dell.com/lc la-techsupport@dell.com |
| St. Lucia | Technical Support, Customer Service, Sales | toll-free: 1-866-464-4352 |
| | Online Support | www.dell.com/vc la-techsupport@dell.com |
| St. Vincent and the Grenadines | Technical Support, Customer Service, Sales | toll-free: 1-866-464-4353 |
| | Online Support | support.ap.dell.com |
| Singapore (Singapore) International Access Code: 005 Country Code: 65 | 1 The phone numbers in this section should be called from within Singapore or Malaysia only. | |
| | Technical Support - XPS computers only | toll-free: 1800 394 7464 |
| | Technical Support - Dimension, Inspiron, and Electronics and Accessories | toll-free: 1 800 394 7430 |
| | Technical Support - OptiPlex, Latitude, and Dell Precision | toll-free: 1 800 394 7488 |
| | Technical Support - PowerApp, PowerEdge, PowerConnect, and PowerVault | toll-free: 1 800 394 7478 |
| | Customer Service | toll-free: 1 800 394 7430 (option 6) |
| | Transaction Sales | toll-free: 1 800 394 7412 |
| | Corporate Sales | toll-free: 1 800 394 7419 |
| Slovakia (Prague) International Access Code: 00 Country Code: 421 | Online Support | support.euro.dell.com czech_dell@dell.com |
| | Technical Support | 02 5441 5727 |
| | Customer Service | 420 22537 2707 |
| | Fax | 02 5441 8328 |
| | Tech Fax | 02 5441 8328 |
| | Switchboard (Sales) | 02 5441 7585 |
| South Africa (Johannesburg) International Access Code: 09/091 Country Code: 27 | Online Support | support.euro.dell.com dell_za_support@dell.com |
| | Gold Queue | 011 709 7713 |
| | Technical Support | 011 709 7710 |
| | Customer Service | 011 709 7707 |
| | Sales | 011 709 7700 |

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| City Code: 11 | Fax | 011 706 0495 |
| | Switchboard | 011 709 7700 |
| Southeast Asian and Pacific Countries | Technical Support, Customer Service, and Sales (Penang, Malaysia) | 604 633 4810 |
| | Online Support | support.euro.dell.com |
| Spain (Madrid) International Access Code: 00 Country Code: 34 City Code: 91 | Home and Small Business | |
| | Technical Support | 902 100 130 |
| | Customer Service | 902 118 540 |
| | Sales | 902 118 541 |
| | Switchboard | 902 118 541 |
| | Fax | 902 118 539 |
| | Corporate | |
| | Technical Support | 902 100 130 |
| | Customer Service | 902 115 236 |
| | Switchboard | 91 722 92 00 |
| Sweden (Upplands Vasby) International Access Code: 00 Country Code: 46 City Code: 8 | Fax | 91 722 95 83 |
| | Online Support | support.euro.dell.com |
| | Technical Support for XPS computers only | 77 134 03 40 |
| | Technical Support | 08 590 05 199 |
| | Relational Customer Service | 08 590 05 642 |
| | Home/Small Business Customer Service | 08 587 70 527 |
| | Employee Purchase Program (EPP) Support | 020 140 14 44 |
| | Technical Support Fax | 08 590 05 594 |
| | Sales | 08 587 705 81 |
| | Switzerland (Geneva) International Access Code: 00 Country Code: 41 City Code: 22 | Online Support |
| Technical Support for XPS computers only | | 0848 338 857 |
| Technical Support - Home and Small Business | | 0844 811 411 |
| Technical Support - Corporate | | 0844 822 844 |
| Customer Service - Home and Small Business | | 0848 802 202 |
| Customer Service - Corporate | | 0848 821 721 |
| Main | | 0848 335 599 |
| Fax | | 022 799 01 90 |
| Sales | | 022 799 01 01 |
| Taiwan International Access Code: 002 Country Code: 886 | | Online Support |
| | Technical Support - XPS computers only | toll-free: 0080 186 3085 |
| | Technical Support - OptiPlex, Latitude, Inspiron, Dimension, and Electronics and Accessories | toll-free: 0080 186 1011 |
| | Technical Support - Servers and Storage | toll-free: 0080 160 1256 |
| | Customer Service | toll-free: 0080 160 1250 (option 5) |
| | Transaction Sales | toll-free: 0080 165 1228 |
| | Corporate Sales | toll-free: 0080 165 1227 |
| | Online Support | support.ap.dell.com |
| Thailand International Access Code: 001 Country Code: 66 | Technical Support (OptiPlex, Latitude, and Dell Precision) | toll-free: 1800 0060 07 |
| | Technical Support (PowerApp, PowerEdge, PowerConnect, and PowerVault) | toll-free: 1800 0600 09 |
| | Customer Service | toll-free: 1800 006 007 (option 7) |
| | Corporate Sales | toll-free: 1800 006 009 |
| | Transaction Sales | toll-free: 1800 006 006 |
| Trinidad/Tobago | Online Support | www.dell.com/tt la-techsupport@dell.com |
| | Technical Support, Customer Service, Sales | toll-free: 1-888-799-5908 |
| Turks and Caicos Islands | Online Support | www.dell.com/tc la-techsupport@dell.com |
| | Technical Support, Customer Service, Sales | toll-free: 1-877-441-4735 |
| U.K. (Bracknell) International Access Code: 00 Country Code: 44 | Online Support | support.euro.dell.com dell_direct_support@dell.com |
| | Customer Service Online | support.euro.dell.com/uk/en/ECare/form/home.asp |
| | Sales | |
| | Home and Small Business Sales | 0870 907 4000 |
| | Corporate/Public Sector Sales | 01344 860 456 |
| | Customer Service | |
| | Home and Small Business | 0870 906 0010 |
| | Corporate | 01344 373 185 |
| | Preferred Accounts (500-5000 employees) | 0870 906 0010 |
| | Global Accounts | 01344 373 186 |

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| City Code: 1344 | Central Government | 01344 373 193 |
| | Local Government & Education | 01344 373 199 |
| | Health | 01344 373 194 |
| | <i>Technical Support</i> | |
| | XPS Computers Only | 0870 366 4180 |
| | Corporate/Preferred Accounts/PCA (1000+ employees) | 0870 908 0500 |
| | Other Dell Products | 0870 353 0800 |
| | <i>General</i> | |
| | Home and Small Business Fax | 0870 907 4006 |
| | Uruguay | Online Support |
| | | la-techsupport@dell.com |
| Technical Support, Customer Service, Sales | | toll-free: 000-413-598-2521 |
| U.S.A. (Austin, Texas) International Access Code: 011 Country Code: 1 | Dell Services for the Deaf, Hard-of-Hearing, or Speech-Impaired | toll-free: 1-877-DELLTTY (1-877-335-5889) |
| | Fax | toll-free: 1-800-727-8320 |
| | Technical Support | support.dell.com |
| | XPS | toll-free: 1-800-232-8544 |
| | Home and Home Office | toll-free: 1-800-624-9896 |
| | Portable and Desktop AutoTech | toll-free: 1-800-247-9362 |
| | Small Business | toll-free: 1-800-456-3355 |
| | Medium and Large Business | toll-free: 1-877-671-3355 |
| | State and Local Government | toll-free: 1-800-981-3355 |
| | Federal Government | toll-free: 1-800-727-1100 |
| | Healthcare | toll-free: 1-800-274-1550 |
| | K-12 Education | toll-free: 1-888-977-3355 |
| | Higher Education | toll-free: 1-800-274-7799 |
| | Printers, Projectors, PDAs, and MP3 Players | toll-free: 1-877-459-7298 |
| | Customer Service | toll-free: 1-800-624-9897 |
| | Automated Order Status | toll-free: 1-800-433-9014 |
| | Small Business | toll-free: 1-800-456-3355 |
| | Medium and Large Business | toll-free: 1-877-671-3355 |
| | State and Local Government | toll-free: 1-800-981-3355 |
| | Federal Government | toll-free: 1-800-727-1100 |
| | Healthcare | toll-free: 1-800-274-1550 |
| | K-12 Education | toll-free: 1-888-977-3355 |
| | Higher Education | toll-free: 1-800-274-7799 |
| | Employee Purchase Program (EPP) | toll-free: 1-800-695-8133 |
| | <i>Financial Services</i> | www.dellfinancialservices.com |
| | Leases and Loans | toll-free: 1-877-577-3355 |
| | Dell Preferred Accounts (DPA) | toll-free: 1-800-283-2210 |
| | <i>Sales</i> | 1-800-289-3355 or 1-800-879-3355 |
| | Dell Outlet Store | toll-free: 1-888-798-7561 |
| | Software and Peripherals Sales | toll-free: 1-800-671-3355 |
| U.S. Virgin Islands | Online Support | www.dell.com/vi |
| | | la-techsupport@dell.com |
| | Technical Support, Customer Service, Sales | toll-free: 1-877-702-4360 |
| Venezuela | Online Support | www.dell.com/ve |
| | | la-techsupport@dell.com |
| | Technical Support, Customer Service, Sales | 0800-100-4752 |

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Setting Up Your Monitor

Dell™ E228WFP Flat Panel Monitor

If you have a Dell™ desktop with no internet access

1. Right-click on the desktop and click **Properties**.
2. Select the **Settings** tab.
3. Select **Advanced**. if you are using Windows XP, click the **Adapter** tab.
4. Identify your graphics controller supplier from the description at the top of the window (e.g. NVIDIA, ATI, Intel etc.).
5. Follow the directions listed below for your identified Graphics Adapter:
 - o **ATI:**
 1. [ATI Folder on the CD](#) (RADEON & RAGE family only; excludes mobile and FireGL platforms).
 2. Run the installation by double clicking the executable file.
 3. After installing the drivers, attempt to set the resolution to 1680x1050 again.
 - o **NVidia:**
 1. [NVidia folder on the CD](#) (GEFORCE & TNT2 family only; excludes mobile and QUADRO chipsets).
 2. Run the installation by double clicking the executable file.
 3. After installing the drivers, attempt to set the resolution to 1680x1050 again.

 **NOTE:** If you are unable to set the resolution to 1680x1050, please contact Dell™ to inquire about a Graphics Adapter that supports these resolutions.

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Setting Up Your Monitor

Dell™ E228WFP 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 **1680x1050** again.

 **NOTE:** If you are unable to set the resolution to 1680x1050, please contact Dell™ to inquire about a Graphics Adapter that supports these resolutions.

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Setting Up Your Monitor

Dell™ E228WFP Flat Panel Monitor

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. Please 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 **1680x1050** again.

 **NOTE:** If you are unable to set the resolution to 1680x1050, please contact the manufacturer of your computer or consider purchasing a graphics adapter that will support the video resolution of 1680x1050.

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Setting Up Your Monitor

Dell™ E228WFP Flat Panel Monitor

Important instructions and graphic drivers to set the display resolution to 1680X1050 (Optimal)

For optimal display performance while using the Microsoft Windows® operating systems, set the display resolution to 1680 x 1050 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 **1680X1050**.
4. Click **OK**.

If you do not see **1680X1050** 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 with no internet access.](#)

2: [If you have a Dell™ desktop or a Dell™ portable computer with internet access.](#)

3: [If you have non Dell™ desktop, portable computer, or graphic card.](#)

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Dell™ E228WFP Flat Panel Color Monitor

- [User Guide](#)
- [Important instructions and graphic drivers to set the display resolution to 1680x1050 \(Optimal\)](#)

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Model E228WFP

November 2006 Rev. A00

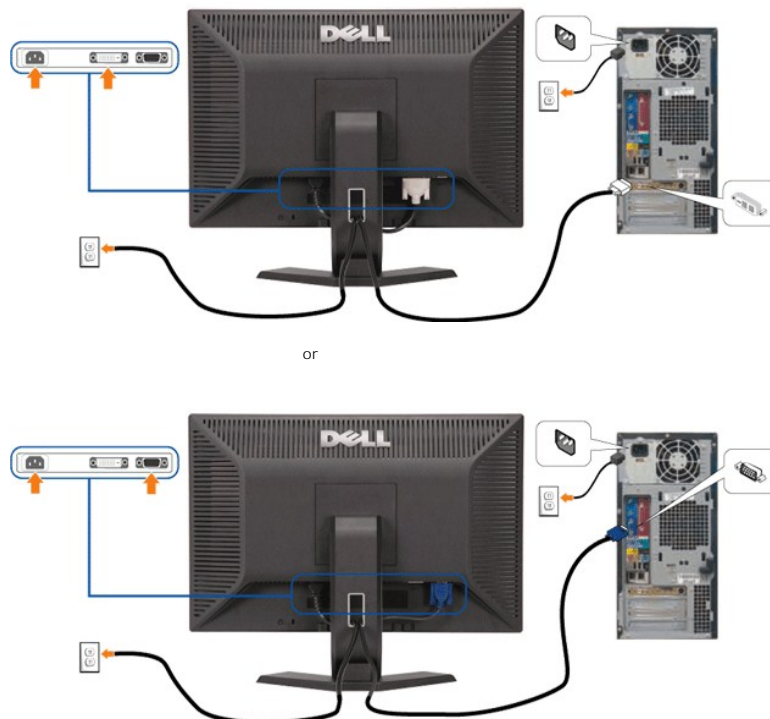
Setting Up Your Monitor

Dell™ E228WFP Flat Panel Monitor User's Guide

- [Connecting Your Monitor](#)
 - [Using the Front Panel](#)
 - [Using the OSD Menu](#)
 - [Setting the Optimal Resolution](#)
 - [Using the Dell Soundbar \(Optional\)](#)
-

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 perform the following steps/instructions.

1. Turn off your computer and disconnect the power cable.
 2. Connect either the white DVI or the blue VGA cable to the connectors on the computer and the monitor.
 3. Connect the power cables.
 4. Turn on your monitor and, computer. If you do not see an image, push the Input select button and ensure the correct input source is selected. If you still do not see an image, see [Troubleshooting your monitor](#).
-

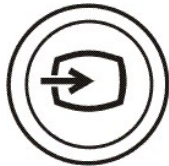
Using the Front Panel Button

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



A B C D E

A

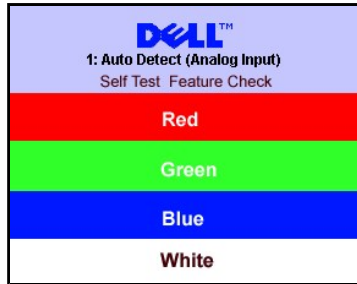


Input select

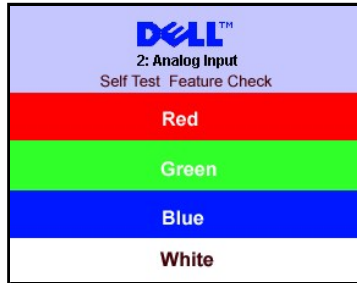
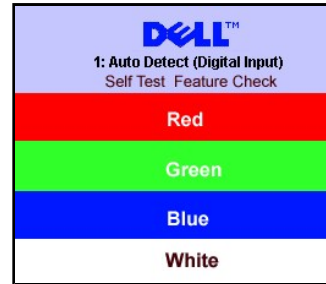
Use the Input Select button to select between two different video signals that may be connected to you

Description of auto- sync detect: If both VGA and DVI cables are connected to one PC, this monitor will c image automatically just as long as a video signal is present in either VGA or DVI outputs. When connec display to two PCs, if using screen savers, best to set both to the exact times. Whichever mouse is mov activate that video input first.

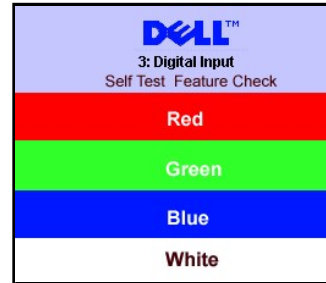
NOTE: The floating 'Dell Self-test Feature Check' dialog appears on a black background if the cannot sense a video signal. Using the input select button, select the desired input to be teste Analog Input or Digital Input. Disconnect the video cable from the video card and the Dell Se Feature Check dialogue box will appear if the display is operating correctly.



or



or



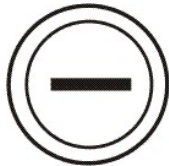
B



OSD menu / select

The Menu button is used to open and exit the on-screen display (OSD), and exit from menus and sub-m [Using the OSD Menu.](#)

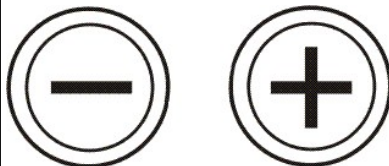
C



Brightness/Contrast Hot Key

Use this button for direct access to the "Brightness" and "Contrast" control menu.



C, D



Down (-) and Up (+)

Use these buttons to adjust (decrease/increase ranges) items in the OSD menu.

NOTE: You can activate automatic scroll feature by pressing and holding either + or - button.

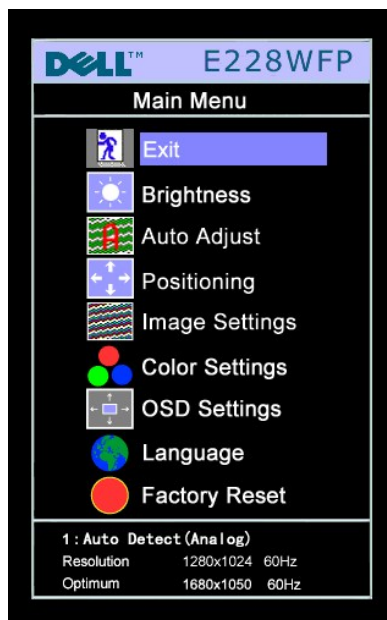
| | | |
|---|---|---|
| D |  <p>Auto Adjust</p> | <p>Use this button to activate automatic setup and adjust menu. The following dialog appears on a black s monitor self-adjusts to the current input:</p> <div style="text-align: center; border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;">Auto Adjust In Progress</div> <p>Auto Adjustment allows the monitor to self-adjust to the incoming video signal. After using Auto Adjustn further tune your monitor by using the Pixel Clock (Coarse) and Phase (Fine) controls under Image Sett</p> <p>NOTE: Auto Adjust will not occur if you press the button while there are no active video input or attached cables.</p> |
| E |  <p>Power Button and Indicator</p> | <p>Use the power button to turn the monitor on and off.</p> <p>The green light indicates the monitor is on and fully functional. An amber light indicates power save mo</p> |

Using the OSD Menu

NOTE: If you change the settings and then either proceed to another menu or exit the OSD menu, the monitor automatically saves those changes. The changes are also saved if you change the settings and then wait for the OSD menu to disappear.

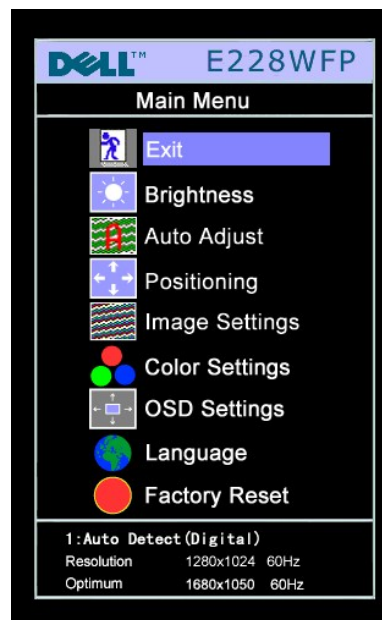
1. Push the MENU button to open the OSD menu and display the main menu.

Main Menu for Auto Detect Analog (VGA) Input

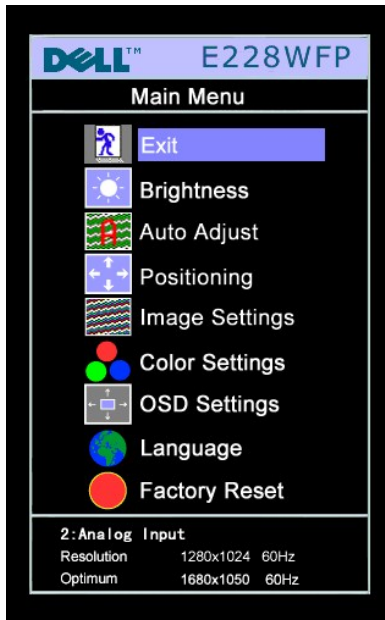


Main Menu for Analog (VGA) Input

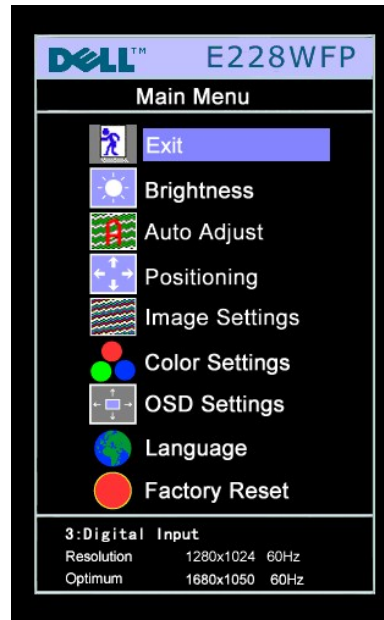
Main Menu for Auto Detect Digital (DVI) Input



Main Menu for digital (DVI) Input



or

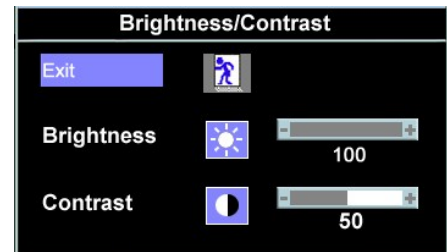


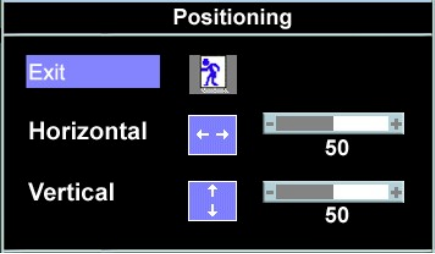


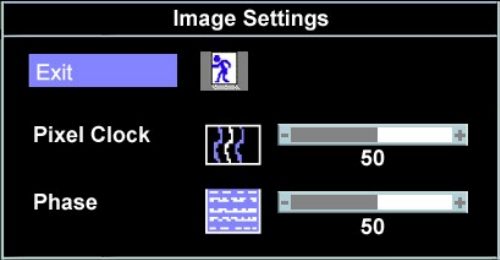

NOTE: Auto Adjust, Positioning and Image Settings are only available when you are using the analog (VGA) connector.

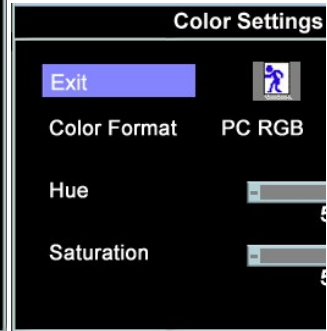
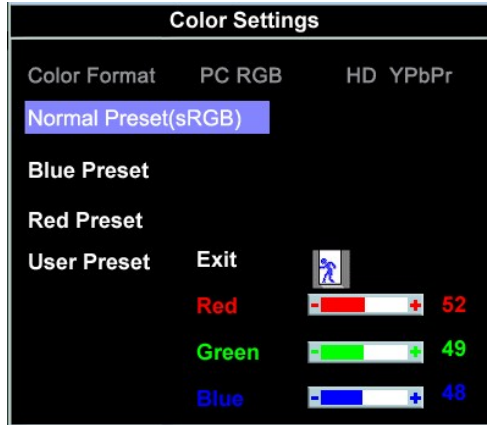
2. Push the - and + buttons to move between the setting options. As you move from one icon to another, the option name is highlighted. See the table below for a complete list of all the options available for the monitor.
3. Push the MENU button once to activate the highlighted option.
4. Push - and + button to select the desired parameter.
5. Push MENU to enter the slide bar and then use the - and + buttons, according to the indicators on the menu, to make your changes.
6. Push the MENU button once to return to the main menu to select another option or push the MENU button two or three times to exit from the OSD menu.

When the OSD is locked, pressing the menu button takes the user directly to the OSD settings menu, with OSD Lock selected. Select No (-) to unlock and allow user access to all applicable settings.

| Icon | Menu and Submenus | Description |
|------|-------------------------------------|---|
| | Exit | Select to exit the Main menu. |
| | Brightness/Contrast | <p>Brightness adjusts the luminance of the backlight.</p> <p>Adjust Brightness first, then adjust Contrast only if further adjustment is necessary.</p> <p>Push the + button to increase luminance and push the - button to decrease luminance (min 0 ~ max 100)</p> <p>Contrast adjusts the degree of difference between darkness and lightness on the monitor screen.</p> <p>Push the + button to increase the contrast and push the - button to decrease the contrast (min 0 ~ max</p> |
| | Positioning: Horizontal Vertical | <p>Positioning moves the viewing area around on the monitor screen.</p> <p>When making changes to either the Horizontal or Vertical settings, no changes occur to the size of the vie selection.</p> <p>Minimum is 0 (-) and maximum is 100 (+).</p> |



| | | |
|---|---|--|
| | |  <p>Positioning</p> <p>Exit [Exit button icon]</p> <p>Horizontal [Left/Right arrow icon] 50</p> <p>Vertical [Up/Down arrow icon] 50</p> <p>NOTE: When using DVI source, the Positioning option is not available.</p> |
|  | <p>Auto Adjust</p> | <p>Even though your computer recognizes your monitor on startup, the Auto Adjustment function optimizes t setup.</p> <p>Select to activate automatic setup and adjustment. The following dialog appears on a black screen as the</p> <div style="text-align: center; border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;">Auto Adjust In Progress</div> <p>Auto Adjustment allows the monitor to self-adjust to the incoming video signal. After using Auto Adjustme the Pixel Clock (Coarse) and Phase (Fine) controls under Image Settings.</p> <p>NOTE: In most cases, Auto Adjust produces the best image for your configuration.</p> <p>NOTE: When using DVI source, the Auto Adjust is not available.</p> |
|  | <p>Image settings:</p> <p>Pixel Clock (Coarse)</p> <p>Phase (Fine)</p> | <p>The Phase and Pixel Clock adjustments allow you to more closely adjust your monitor to your preference. OSD menu, by selecting Image Settings.</p> <p>Use the - and + buttons to make adjustments. (Minimum: 0 ~ Maximum: 100)</p> <p>If satisfactory results are not obtained using the Phase adjustment, use Pixel Clock (Coarse) and then us</p> <p>NOTE: This function may change the width of the display image. Use the Horizontal function of the display image on the screen.</p> <div style="text-align: center; border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;">  <p>Image Settings</p> <p>Exit [Exit button icon]</p> <p>Pixel Clock [Wavy icon] 50</p> <p>Phase [Dotted icon] 50</p> </div> <p>NOTE: When using DVI source, the Image Settings option is not available.</p> |
|  | <p>Color Settings</p> | <p>Color Settings adjusts the color temperature, color hue, and saturation.</p> <p>The color hue is most noticeable in areas of white.</p> |



Color Format

Blue Preset

Red Preset

Normal Preset

User Preset

Hue

Saturation

NOTE: Pixel Clock and Phase Adjustments are only available for "VGA" input.

1 To achieve the different color domain for PC RGB and HD YPbPr (HD YPbPr is suitable for HD video p PC graphics display over DVI.).

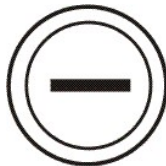
1 Blue Preset is selected to obtain a bluish tint. This color setting is typically used for text based appl editors, etc.).

1 Red Preset is selected to obtain a redder tint. This color setting is typically used for color-intensive multimedia, movies, etc.).

1 Normal Preset is selected to obtain the default (factory) color settings. This setting is also the "sRG

1 User Preset: Use the plus and minus buttons to increase or decrease each of the three colors (R, G, from 0 to 100).

1 This feature can make color shift of video image to green or purple. This is used to adjust for desire from '0' to '100'.



makes video image shade into greenish.



makes video image shade into purplish.

NOTE: Hue adjustment only available for video playback via DVI using HD YPbPr.






makes video image looks more monochrome.



makes video image looks more colorful.

NOTE: Saturation adjustment only available for video playback via DVI using HD YPbPr.


| | | |
|---|--|---|
|  | <p>OSD Settings:</p> <p>Horizontal Position</p> <p>Vertical Position</p> <p>OSD Hold Time</p> <p>OSD Lock</p> | <p>Adjust the settings for the OSD, including the location and the amount of time the menu remains on-screen.</p> <p>Position of the OSD:</p> <ul style="list-style-type: none"> 1 To adjust the horizontal position of the OSD, use the - and + buttons, and move OSD to the left and right. 1 To adjust the vertical position of the OSD, use the - and + buttons, and move OSD down and up. <p>OSD Hold Time:</p> <p>The OSD stays active for as long as it is in use. Adjusting the hold time, sets the length of time the OSD remains active after a button is pressed. Use the - and + buttons to adjust the slider in 5 second increments, from 5 to 60 seconds.</p> <p>OSD Lock:</p> <p>Controls user access to adjustments. When Yes (+) is selected, no user adjustments are allowed. All buttons are disabled.</p> <p>NOTE: When the OSD is locked, pressing the menu button takes the user directly to the OSD settings. Pressing the menu button (-) to unlock and allow user access to all applicable settings.</p> <div data-bbox="967 699 1432 1073" data-label="Image"> </div> <p>NOTE: You can also lock or unlock the OSD by pushing and holding the Menu button for 15 seconds.</p> |
|  | <p>Language</p> | <p>Select to have the OSD display in one of five languages (English, French, Spanish, German, or Japanese).</p> <div data-bbox="1045 1163 1378 1497" data-label="Image"> </div> <p>NOTE: The change only affects the OSD. It has no effect on any software running on the computer.</p> |





Factory Reset:


Reset the OSD menu options to the factory preset values.

Reset to Factory Settings

 Exit
Exit

 Position Settings Only

 Color Settings Only

 All Settings

DDC/CI - Enable
Disable

Exit — Select to exit out of Reset to Factory Settings menu without resetting any OSD options.

Position settings only — Change the settings for Image Position back to original factory settings.

Color settings only — Change the Red, Green, and Blue settings back to their original factory settings and


All settings — Change all the user-adjustable settings including color, position, brightness, contrast, and language of the OSD does not change.

DDC/CI: — Enable the DDC/CI control function.

DDC/CI (Display Data Channel/Command Interface) allows your monitor parameters (brightness, color balance) to be adjusted from the PC.

Default is "Enable". You can disable this feature by selecting "Disable".

For best user experience and optimum performance of your monitor, keep this feature enabled.

 **NOTE: If user select "Disable", display Warning message box as below. Select "Yes" to disable DDC/CI and return to "Reset to Factory Settings" menu. Warning message time-out in 20 sec.**

The function of adjusting display settings using PC applications will be disabled.

Do you want to disable DDC/CI? - No Yes +

OSD Warning Messages

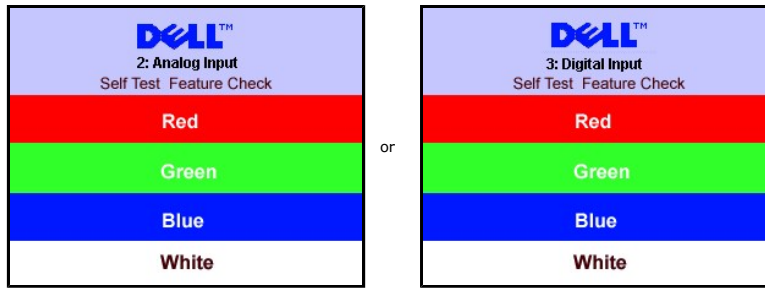
One of the following warning messages may appear on the screen indicating that the monitor is out of synchronization.

| | | |
|--|----|---|
| 1: Auto Detect (Analog Input) Cannot Display This Video Mode Optimum resolution 1680 x1050 60Hz | or | 1: Auto Detect (Digital Input) Cannot Display This Video Mode Optimum resolution 1680 x1050 60Hz |
| 2: Analog Input Cannot Display This Video Mode Optimum resolution 1680 x1050 60Hz | or | 3: Digital Input Cannot Display This Video Mode Optimum resolution 1680 x1050 60Hz |

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 [Specifications](#) for the Horizontal and Vertical frequency ranges addressable by this monitor. Recommended mode is 1680 X 1050 @ 60Hz.

 **NOTE: The floating Dell Self-test Feature Check dialog appears on-screen if the monitor cannot sense a signal cable .**

| | | |
|--|----|---|
| DELL™ 1: Auto Detect (Analog Input) Self Test Feature Check | or | DELL™ 1: Auto Detect (Digital Input) Self Test Feature Check |
| Red | | Red |
| Green | | Green |
| Blue | | Blue |
| White | | White |



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

See [Solving Problems](#) for more information.

Setting the Optimal Resolution

1. Right-click on the desktop and select **Properties**.
2. Select the **Settings** tab.
3. Set the screen resolution to 1680 x 1050, 60Hz
4. Click **OK**.

If you do not see 1680 x 1050 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):

- 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 adaptable to mount on Dell Flat Panel Displays. The SoundBar has a rotary volume and on/off control to adjust the overall system level, a blue LED for power indication, and two audio headset jacks.




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


Soundbar Attachment to the Monitor





1. Working from the rear of the monitor, attach Soundbar by aligning the two slots with the two tabs along the bottom rear of the monitor.
2. Slide the Soundbar to the left until it snaps into the place.
3. Connect the soundbar with the power brick.
4. Plug the power cables of the power brick into a nearby outlet.
5. Insert the lime green mini stereo plug from the rear of the Soundbar into the computer's audio output jack.

 **NOTE:** *The graphic is for illustration only. Product appearance may vary.*

 **NOTE:** *The base removal is not necessary to install the soundbar. Shown with base detached for illustration purposes only.*

Solving Problems

Dell™ E228WFP Flat Panel Monitor User's Guide

- [Troubleshooting Your Monitor](#)
- [General Problems](#)
- [Product Specific Problems](#)
- [Troubleshooting Your Soundbar](#)


 **CAUTION:** Before you begin any of the procedures in this section, follow the [safety instructions](#).

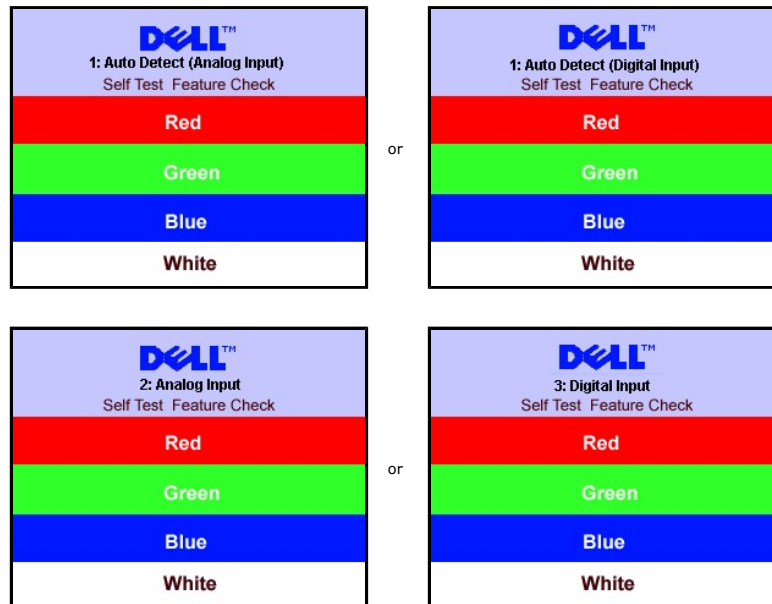
Troubleshooting Your Monitor

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:

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

 **NOTE:** The floating 'Dell Self-test Feature Check' dialog box should appear on-screen on 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.



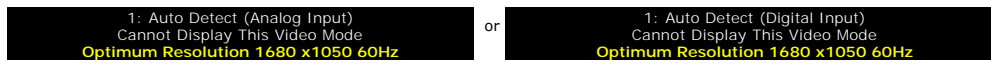
This box also appears during normal system operation if the video cable becomes disconnected or damaged.

4. 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

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



2: Analog Input
Cannot Display This Video Mode
Optimum Resolution 1680 x1050 60Hz

or

3: Digital Input
Cannot Display This Video Mode
Optimum Resolution 1680 x1050 60Hz

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 [Monitor Specifications](#) for the Horizontal and Vertical frequency ranges addressable by this monitor. Recommended mode is 1680 X 1050 @ 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 a 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 | <ul style="list-style-type: none"> 1 Press the input select button in the front of the monitor and ensure the correct input source is selected. 1 Increase brightness & contrast controls. 1 Perform monitor self-test feature check. 1 Check for bent or broken pins on the end of the video cable. 1 Reboot your computer and monitor. |
| Poor Focus | Picture is fuzzy, blurry, or ghosting | <ul style="list-style-type: none"> 1 Push Auto Adjust button. 1 Adjust Phase and Clock controls via OSD. 1 Eliminate video extension cables. 1 Perform monitor reset. 1 Lower video resolution or increase font size. |
| Shaky/Jittery Video | Wavy picture or fine movement | <ul style="list-style-type: none"> 1 Push Auto Adjust button. 1 Adjust Phase and Clock controls via OSD. 1 Perform monitor reset. 1 Check environmental factors. 1 Relocate and test in another room. |
| Missing Pixels | LCD screen has spots | <ul style="list-style-type: none"> 1 Cycle power on-off 1 These are pixels that are permanently off and this is a natural defect that occurs in LCD technology. |
| Brightness Problems | Picture too dim or too bright | <ul style="list-style-type: none"> 1 Perform monitor reset. 1 Push Auto Adjust button. 1 Adjust brightness & contrast controls. |
| Geometric Distortion | Screen not centered correctly | <ul style="list-style-type: none"> 1 Perform monitor reset on "Position Settings Only". 1 Push Auto Adjust button. 1 Adjust the centering controls. 1 Ensure monitor is in proper video mode. |
| Horizontal/Vertical Lines | Screen has one or more lines | <ul style="list-style-type: none"> 1 Perform monitor reset. 1 Push Auto Adjust button. 1 Adjust Phase and Clock controls via OSD. 1 Perform monitor self-test feature check and determine if these lines are also in self-test mode. 1 Check for bent or broken pins. |
| Sync Problems | Screen is scrambled or appears torn | <ul style="list-style-type: none"> 1 Perform monitor reset. 1 Push Auto Adjust button. 1 Adjust Phase and Clock controls via OSD. 1 Perform monitor self-test feature check to determine if scrambled screen appears in self-test mode. 1 Check for bent or broken pins. 1 Boot up in the "safe mode". |
| LCD Scratched | Screen has scratches or smudges | <ul style="list-style-type: none"> 1 Turn monitor off and clean the screen. 1 For cleaning instruction, see Caring for your Monitor. |
| Safety Related Issues | Visible signs of smoke or sparks | <ul style="list-style-type: none"> 1 Do not perform any troubleshooting steps. 1 Monitor needs to be replaced. |
| Intermittent Problems | Monitor malfunctions on and off | <ul style="list-style-type: none"> 1 Ensure monitor is in proper video mode. 1 Ensure video cable connection to computer and to the flat panel is secure. 1 Perform monitor reset. 1 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 | <ul style="list-style-type: none"> 1 Use the Power Management feature to turn off the monitor at all times |

| | | |
|--|---------------------------------|--|
| left on the monitor for a long period of time) | displayed appears on the screen | when not in use. Alternatively, use a dynamically changing screensaver. NOTE: Image Burn-In is not covered by your warranty. |
| Input auto switching to another source | Can't select input source | 1 Under "Auto Detect" mode if one of the DVI or VGA signal is lost (or cable disconnected) the display will automatically switch to the other input source where a signal exist. |

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. | 1 Turn off the monitor, unplug the power cord and then plug back and turn on the monitor. |

Troubleshooting Your Soundbar


| COMMON SYMPTOMS | WHAT YOU EXPERIENCE | POSSIBLE SOLUTIONS |
|-------------------------|--|--|
| No Sound | No power to Soundbar - the power indicator is off. | <ul style="list-style-type: none"> 1 Turn the Power/Volume knob on the Soundbar clockwise 1 check if the power indicator (green LED) on the front of the Soundbar is lit 1 Confirm that the power cable from the Soundbar is plugged into a power outlet 1 Confirm that the monitor has power. 1 If the monitor has no power, see Troubleshooting your monitor problem. |
| No Sound | Soundbar has power - power indicator is on. | <ul style="list-style-type: none"> 1 Plug the audio line-in cable into the computer's audio line-in port 1 Set all Windows volume controls to their maximum. 1 Play some audio content on the computer (i.e. audio CD or MP3 file) 1 Turn the Power/Volume knob on the Soundbar clockwise to the maximum setting. 1 Clean and reseal the audio line-in plug. 1 Test the Soundbar using another audio source (i.e. portable music player) |
| Distorted Sound | Computer's sound card is used as the audio source. | <ul style="list-style-type: none"> 1 Clear any obstructions between the Soundbar and the computer's audio line-in port 1 Confirm that the audio line-in plug is completely inserted into the computer's audio line-in port 1 Set all Windows volume controls to their midpoints. 1 Decrease the volume of the audio application. 1 Turn the Power/Volume knob on the Soundbar counter-clockwise to the minimum setting. 1 Clean and reseal the audio line-in plug. 1 Troubleshoot the computer's sound card. 1 Test the Soundbar using another audio source (i.e. portable music player) |
| Distorted Sound | Other audio source is used. | <ul style="list-style-type: none"> 1 Clear any obstructions between the Soundbar and the audio source 1 Confirm that the audio line-in plug is completely inserted into the audio source 1 Decrease the volume of the audio source. 1 Turn the Power/Volume knob on the Soundbar counter-clockwise to the minimum setting. 1 Clean and reseal the audio line-in plug. |
| Unbalanced Sound Output | Sound from only one side of Soundbar | <ul style="list-style-type: none"> 1 Clear any obstructions between the Soundbar and the audio source 1 Confirm that the audio line-in plug is completely inserted into the audio source 1 Set all Windows audio balance controls (L-R) to their neutral position 1 Clean and reseal the audio line-in plug. 1 Troubleshoot the computer's sound card. 1 Test the Soundbar using another audio source (i.e. portable music player) |
| Low Volume | Volume is too low. | <ul style="list-style-type: none"> 1 Clear any obstructions between the Soundbar and the audio source 1 Turn the Power/Volume knob on the Soundbar clockwise to the maximum setting. 1 Set all Windows volume controls to their maximum. 1 Increase the volume of the audio application. 1 Test the Soundbar using another audio source (i.e. portable music player) |

Using Your Monitor Stand

Dell™ E228WFP Flat Panel Monitor User's Guide

- [Attaching the Stand](#)
 - [Organizing Your Cables](#)
 - [Using the Tilt](#)
 - [Removing the Stand](#)
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Attaching the Stand

 NOTE: Stand is detached when the monitor is shipped from the factory.



1. Place the stand on a flat surface.
 2. Fit the groove on the back of the monitor onto the two tabs of the stand.
 3. Lower the monitor so that the monitor mounting area snaps on/locks to stand.
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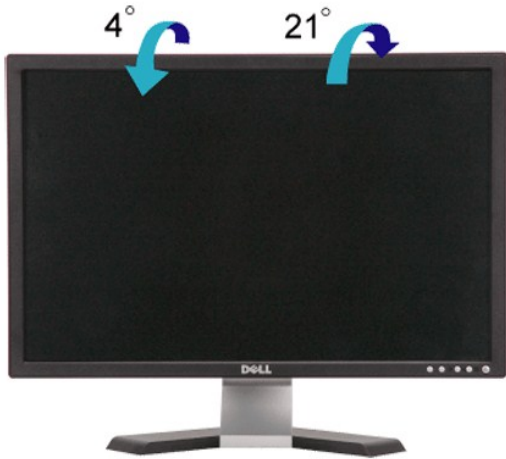
Organizing Your Cables



After attaching all necessary cables to your monitor and computer, (See [Connecting Your Monitor](#) for cable attachment,) use the cable management hole to neatly organize all cables as shown above.

Using the Tilt


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



Removing the Stand

After placing the monitor panel on a soft cloth or cushion, press and hold the stand removal button, and then remove the stand.



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

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