ATTACHMENT K – USERS MANUAL

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FCC Warning

Class B Computing Device

Information to the User

This equipment has been tested and found to comply with the limits for a class B digital device pursuant to part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-Consult the dealer or an experienced radio/TV technician for help and for additional suggestions.

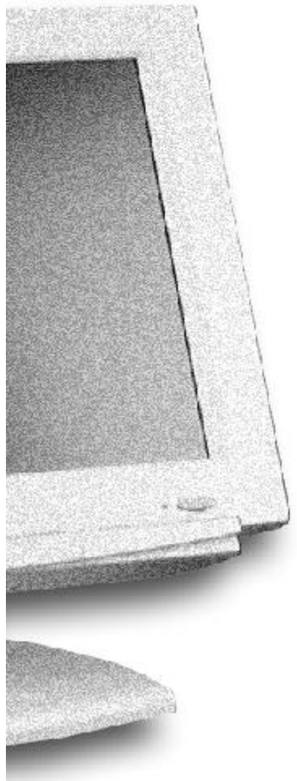
The user may find the following booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve Radio-TV interference Problems." This booklet is available from the U.S. Government Printing Office, Washington, D.C. 20402, Stock No. 004-000-00345-4.

FCC Warning

The user is cautioned that changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

NOTE: In order for an installation of this product to maintain compliance with the limits for a Class B device, shielded cables must be used.

Gateway



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Gateway

Gateway

Flat Panel Display User's Guide

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Using Your Flat Panel Display

1

The FPD 1520 Flat Panel Display is a high-resolution color LCD with:

- 1024 × 768 maximum resolution
- Over 16 million colors
- Excellent contrast and legibility
- Space-saving and lightweight design
- Reduced power usage

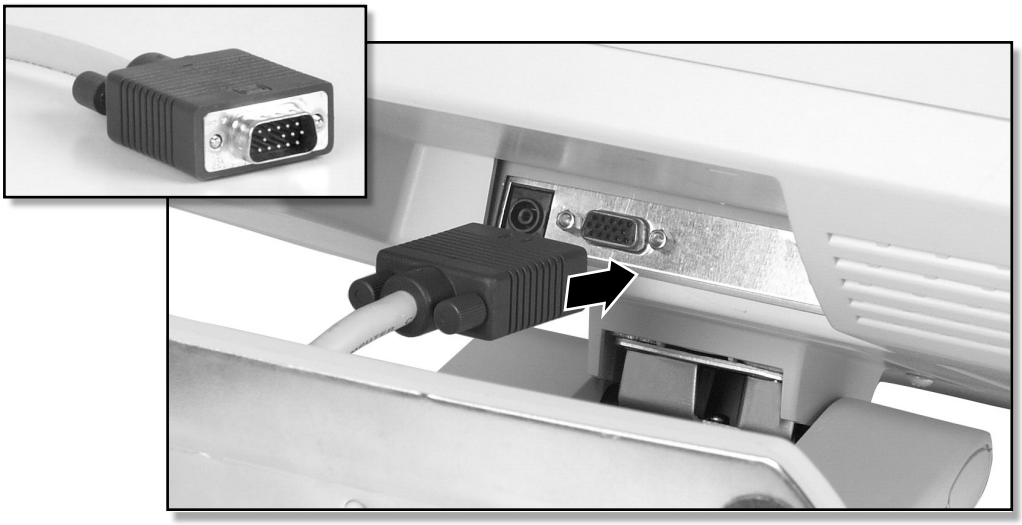
Connecting the flat panel display

To connect the flat panel display:

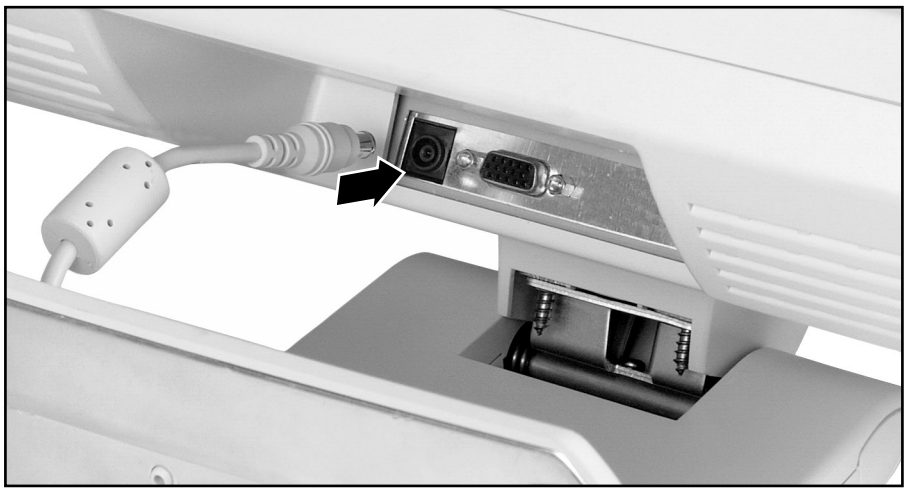
1. Position the computer and monitor so you can easily reach the back panel of each.
2. Set the monitor upright, then feed the power and video cables through the hole in the stand.

3. Lay the monitor down on its back.

4 Connect one end of the video cable to the matching video port on the underside of the monitor. If your computer has both a digital video port and an analog video port, we recommend using the digital video connection.



5 Connect the DC power cord to the DC power connector on the underside of the monitor.



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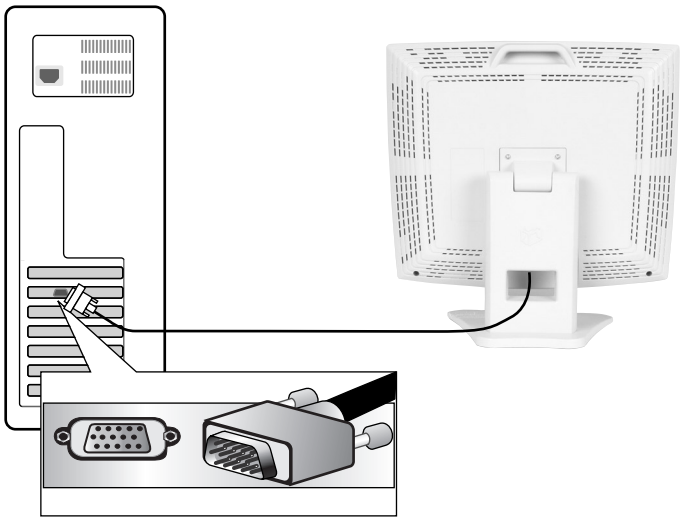
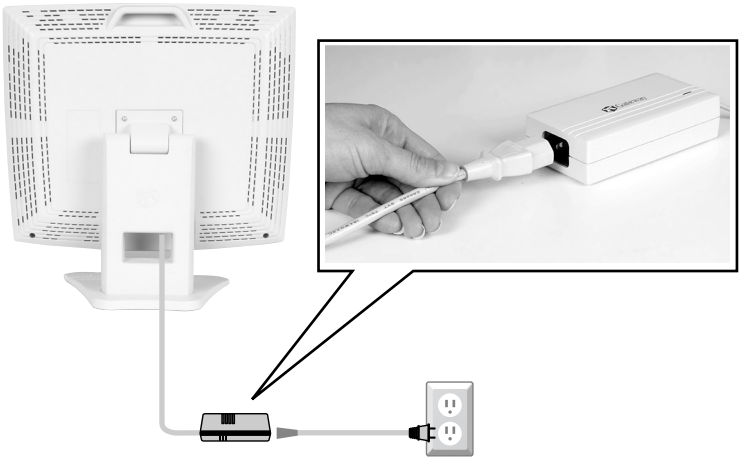
6 Return the display to its upright position.

7 Make sure your computer is turned off, then connect the other end of the video cable to the matching video port on the back of your computer.



8 Plug the small end of the AC power cord into the power adapter, then plug the other end of the AC power cord into a properly grounded electrical outlet.



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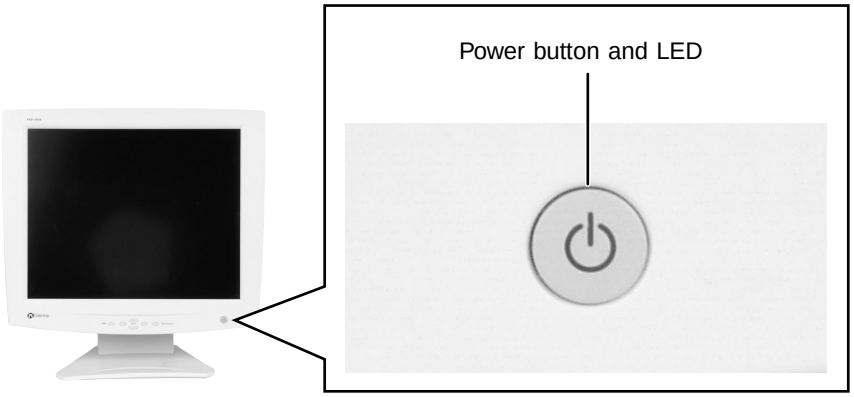
Starting the flat panel display

To start the monitor:

1 Press the power button once. The LED on the button turns on.



2 Turn on the computer.

3 After the computer is running, the LED on the power button should be green. Allow about 10 seconds for the display image to appear. If the power LED is not green or you do not see an display image, check the connections. For more troubleshooting information, see "Troubleshooting" on page 17.

4 Adjust the tilt of the display for the best viewing angle.

5 Adjust the controls to get the best picture. Press the △ button to automatically adjust your display image to the ideal settings. Adjust other display settings by using the On-Screen Display (OSD). For more information, see "Adjusting display settings" on page 6.

Important

When adjusting your display settings, **always** press the △ button before entering the OSD. This will automatically adjust your display image to the ideal settings for the current screen resolution size (display mode).

The best display mode is 1024 × 768.

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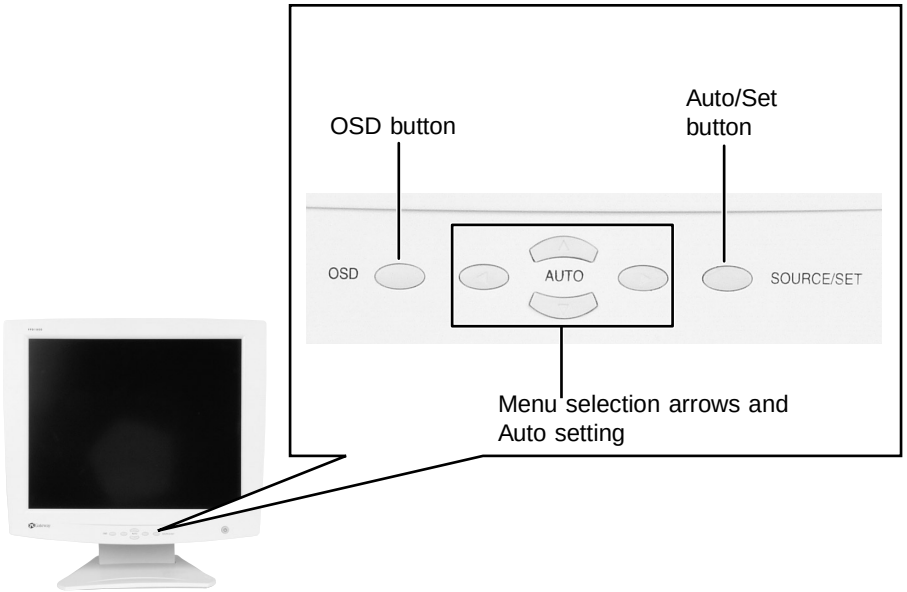
Adjusting display settings

You can adjust your display image by using external controls (located on the display itself) and software controls (accessible in Windows).

External controls

This flat panel display features an On-Screen Display (OSD) that lets you adjust and save contrast, brightness, and other settings for the display. The flat panel display saves changes you make to the settings, even if you turn the display off.



- **OSD**. Press to view the OSD. Press again to exit.
- **Arrows**.
  OSD active: Press to select or adjust OSD options.
  OSD inactive: Press ◁ and ▷ to adjust the contrast, and press ▷ once then △ and ▽ to adjust the brightness. Press
- **Auto/Set**.
  OSD active: Press to enter a selection in the OSD.
  OSD inactive: Press the **Auto/Set** button to re-detect the video source.

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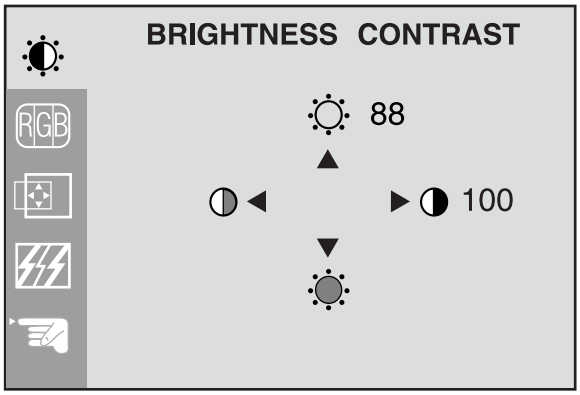
OSD options

To adjust the OSD settings:

1. Press the **OSD** button. The OSD menu opens.
2. Use the △ and ▽ buttons to highlight a control, then press the **Auto/Set** button.
3. Use the △ ▽ ◁ ▷ buttons to adjust the control to the desired level.
4. When you have finished making all adjustments, press the **OSD** button to exit the OSD.

OSD menus

You can access any of these menus in the OSD:

OSD Adjust	Description
	**Brightness.** Press the △ and ▽ buttons to adjust the brightness of the screen. Maximize the life of your monitor by using the lowest brightness setting you are comfortable with. You may need to readjust brightness once the monitor is warmed up. **Contrast.** Press the ◁ and ▷ buttons to adjust the contrast of the screen.

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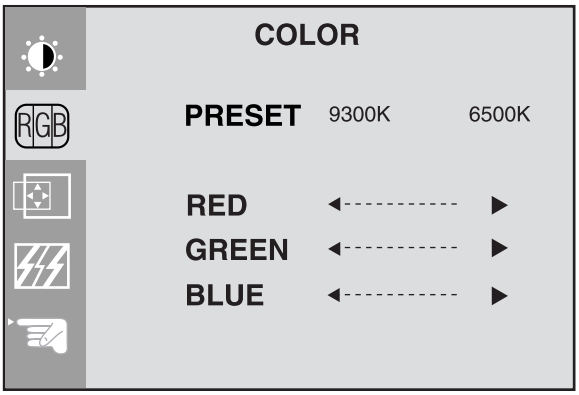
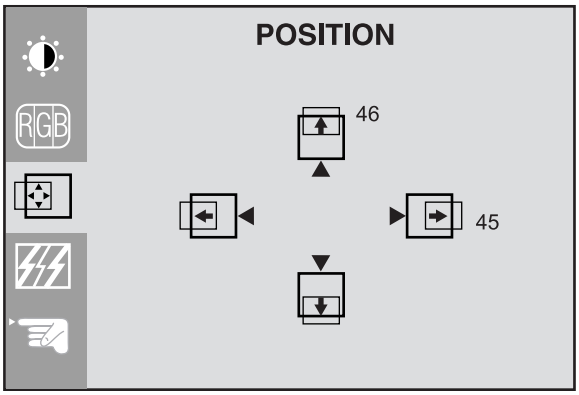
OSD Adjust	Description
	**Preset.** Press the ◁ and ▷ buttons to adjust the color temperature. 9300K is bluish white. 6500K is reddish white. **Red, Green, Blue.** Press the ◁ and ▷ buttons to adjust your own color levels.
	**Vertical position.** Press the △ and ▽ buttons to move the image up and down. **Horizontal position.** Press the ◁ and ▷ buttons to move the image left and right. The Auto function configures the vertical and horizontal position for you. For more information on the Auto function, see “External controls” on page 6.

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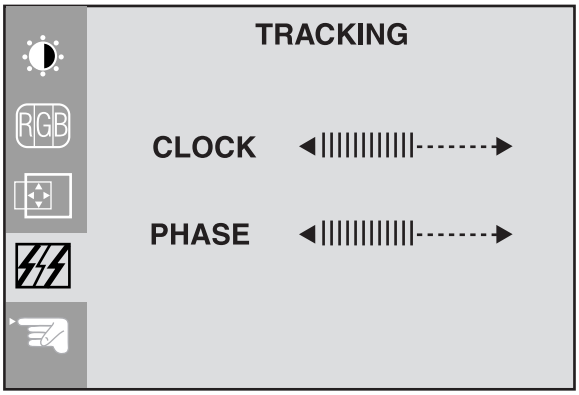
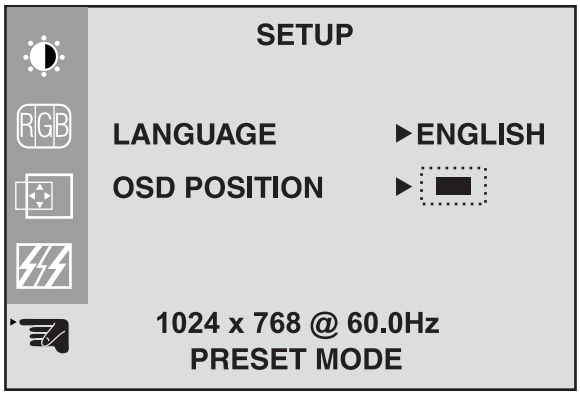
OSD Adjust	Description
	**Clock.** Press the ◁ and ▷ buttons to minimize any vertical bars or stripes visible on the screen background. The horizontal screen size will also change. **Phase.** Press the ◁ and ▷ buttons to remove any horizontal distortion, and clear or sharpen the image of characters.
	**Language.** Press the ◁ and ▷ buttons to change the OSD language display setting. **OSD Position.** Press the ◁ and ▷ buttons to adjust the OSD window position on the screen.

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Software controls

Adjusting the color depth and screen resolution are two of the most basic display settings you may need to change.

Adjusting the color depth

Color depth is the number of colors your flat panel display uses. Different image types require various color depths for optimum appearance on your flat panel display. For example, simple color drawings may appear adequately in 256 colors while color photographs need millions of colors to be displayed with optimum quality.

Windows lets you choose from several color depth settings for your flat panel display. We recommend that the 32-bit True Color setting be used at all times.

If the color in your images seems “false” or “jumpy,” especially after you have played a game or run a video-intensive program, check the color depth setting and return it to 32-bit True Color, if necessary.

Help and Support

For more information on adjusting the color depth, click **Start**, then select **Help and Support** or **Help**.

To change the color depth:

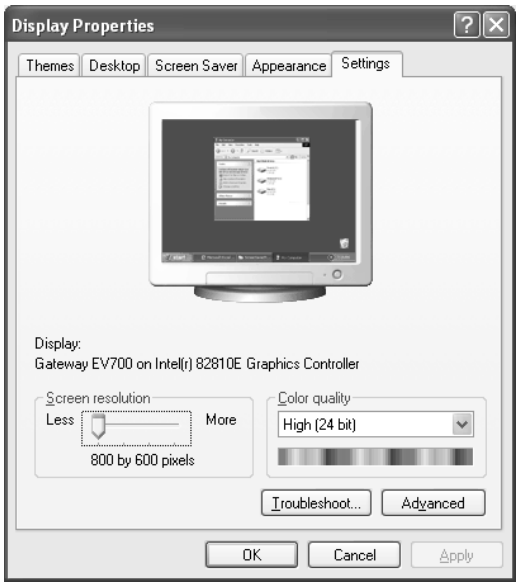
1 In Windows XP, click **Start**, then select **Control Panel**. Click **Appearance and Themes**.

- OR -

In Windows Me, Windows 2000, or Windows 98, click **Start**, then select **Settings**, then **Control Panel.**

2 Click/Double-click the **Display** icon. The Display Properties dialog box opens.

3 Click the **Settings** tab.



4 Select a setting from the **Color Quality** or **Colors** list.

5 To save your changes in Windows XP, click **OK**, then click **Yes**.

- OR -

To save your changes in Windows Me, Windows 2000, or Windows 98, click **OK**, then click **OK** again.

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Adjusting the screen resolution

You can change the screen resolution to a size you prefer. For example, you can increase the resolution to fit more icons on your desktop, or you can decrease the resolution to make reading and identifying objects on the display easier. The higher the resolution, the smaller individual components of the screen (such as icons and menu bars) appear.

Important

The best screen resolution setting for your 15-inch flat panel display is 1024 × 768.

Help and Support

For more information on adjusting the resolution, click **Start**, then select **Help and Support** or **Help**.

To change the screen resolution:

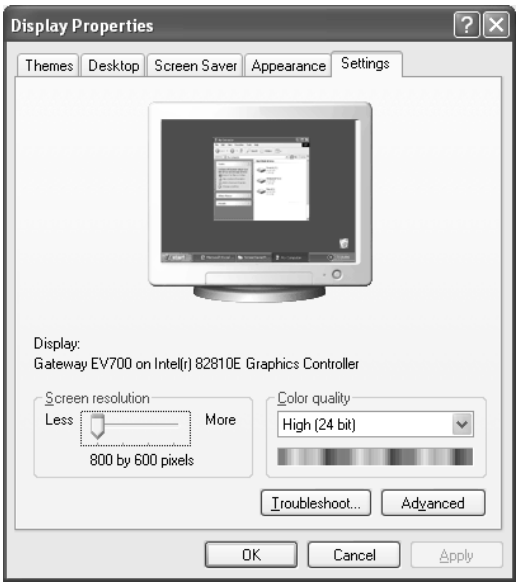
1. In Windows XP, click **Start**, then select **Control Panel**. Click **Appearance and Themes**.

   - OR -

   In Windows Me, Windows 2000, or Windows 98, click **Start**, then select **Settings**, then **Control Panel.**

2. Click/Double-click the **Display** icon. The Display Properties dialog box opens.

3 Click the **Settings** tab.



4 Drag the **Screen Resolution** or **Screen area** slider to the size you prefer.

5 To save your changes in Windows XP, click **OK**, then click **Yes**.

- OR -

To save your changes in Windows Me, Windows 2000, or Windows 98, click **OK**, then click **OK** again.

Video modes

Your monitor supports several video modes.

- Best display mode is 1024 × 768.

The supported video modes are:

Display Modes (Resolution)		Horizontal Frequency	Vertical Frequency
1	640 × 480	31.47 KHz	60 Hz
2	640 × 480	37.5 KHz	75 Hz
3	720 × 400	31.47 KHz	70 Hz
4	800 × 600	37.88 KHz	60 Hz
5	800 × 600	46.88 KHz	75 Hz
6	1024 × 768 (best display mode)	48.36 KHz	60 Hz

If you do not use the best mode for your monitor, the display may look slightly "fuzzy" or may have a black border around the edges.

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Power management

ENERGY STAR

As an ENERGY STAR® Partner, Gateway has determined that this product meets the ENERGY STAR guidelines for energy efficiency.

This monitor complies with the EPA's International ENERGY STAR Program, which is a program designed to encourage manufacturers of computer equipment to build circuitry into their products to reduce energy consumption during time of non-use.

Energy declaration

When connected to a computer that supports the VESA Display Power Management Signaling (DPMS) Protocol, this monitor can conserve significant energy by reducing power consumption during periods of non-use. When the computer goes into the energy saving mode, the monitor will then enter the Active Off mode (different from total shut down). In the Active Off mode the Power LED will still show amber.

By following these conventions the power can be reduced to the following levels:

VESA state	LED indicator	Power Consumption
On	Green	<35 W
Active Off	Amber	<5 W

To “wake” the monitor when it is in Active Off mode, move your mouse or press any keyboard key.

You can change the period of time after which the monitor enters these low power states by accessing the power management options in the Control Panel.

Maintenance

To keep your monitor in optimal working order:

- Do not block the ventilation holes.
- Do not expose the monitor to rain or use near water.
- Keep the monitor away from radiators or heat vents.
- Keep the monitor out of direct sunlight.

Clean the monitor using a soft cloth lightly moistened with water only. Wipe the cabinet, screen, and controls.

Caution

Do not use any type of abrasive pad or glass cleaner. You will permanently scratch the LCD panel.

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Troubleshooting

If you have problems with your monitor, the information in this troubleshooting section may help you solve them.

Important

Make sure that the monitor has warmed up for approximately 30 minutes before making any judgments about the picture quality.

No power

- Make sure the power cord is properly connected to both the back of the flat panel display and the wall outlet. For more information on connecting the power cord, see “Connecting the flat panel display” on page 2.

No picture

- Make sure the power cord is properly connected to both the back of the monitor and the wall outlet.
- Make sure the video cable is securely connected to the back of the monitor and computer.
- Make sure the monitor power button is turned on.
- If the power saving indicator is orange:
  - Make sure that the computer is turned on.
  - Move the mouse or press any key on the keyboard to bring the monitor out of Active Off mode.
  - Check the video port and the end of the video cable for any pins that might be bent or pushed in.
  - Make sure that the video cable is not damaged.
  - Restart the computer with the monitor turned on.
- Perform a monitor self-test by turning off your monitor and unplugging the video cable from the back of the computer. Turn the monitor back on and wait for ten seconds. If the monitor is functioning properly, a self-diagnostic screen appears.

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Display colors are wrong

- Press the AUTO/SET button to automatically adjust your display image to the ideal settings.
- Check the video port and the end of the video cable for any pins that might be bent or pushed in.
- Make sure the video cable is securely connected to the back of the monitor and computer.
- Make sure that the video cable is not damaged.
- Restart the system with the monitor turned on.

Picture has shadows or “ghosts”

- Press the AUTO/SET button to automatically adjust your display image to the ideal settings.
- Remove any extension cables or switchboxes.
- Check the video port and the end of the video cable for any pins that might be bent or pushed in.
- Make sure the video cable is securely connected to the back of the monitor and computer.
- Make sure that the video cable is not damaged.

Color is not uniform

- Make sure the monitor warms up for at least 30 minutes before making a final judgment about color uniformity or brightness.
- Press the AUTO/SET button to automatically adjust your display image to the ideal settings.

Image is not sized or centered properly

- Press the AUTO/SET button to automatically adjust your display image to the ideal settings.
- Use the position controls to adjust the image. For instructions on how to change your display settings, see “Adjusting display settings” on page 6.

Image cannot be adjusted full screen

Some video modes used by your monitor produce images that cannot be adjusted all the way out to the bezel edge (the edge where the screen glass and monitor casing meet).

This condition does **not** indicate that the monitor is defective.

Specifications

Specifications are subject to change without notice or obligation.

Display	15-inch flat panel active-matrix TFT (Thin Film Transistor) LCD
Best screen resolution	1024 × 768
Display colors	Over 16 million colors
Power input	DC 12 V 3 A
Power consumption	Normal operation: <35 W Active Off operation: <5 W
Dimensions	12.25 × 15.375 × 8 (38.74 × 39.05 × 20.32 cm)
Power Management	Meets EPA ENERGY STAR® and VESA DPMS requirements
Certifications	UL, CSA, FCC Class B

Many products for Gateway and its subsidiaries are custom engineered by our suppliers to Gateway specifications and may vary from similarly marketed products.

Safety, Regulatory, and Legal Information

A

Important safety information

Your Gateway system is designed and tested to meet the latest standards for safety of information technology equipment. However, to ensure safe use of this product, it is important that the safety instructions marked on the product and in the documentation are followed.

Warning

Always follow these instructions to help guard against personal injury and damage to your Gateway system.

Setting up your system

- Read and follow all instructions marked on the product and in the documentation before you operate your system. Retain all safety and operating instructions for future use.
- Do not use this product near water or a heat source such as a radiator.
- Set up the system on a stable work surface.
- The product should only be operated from the type of power source indicated on the rating label.
- If your product has a voltage selector switch, make sure that the switch is in the proper position for your area. The voltage selector switch is set at the factory to the correct voltage.
- Openings in the monitor case are provided for ventilation. Do not block or cover these openings. Make sure you provide adequate space, at least 6 inches (15 cm), around the system for ventilation when you set up your work area. Never insert objects of any kind into the monitor ventilation openings.

- Some products are equipped with a three-wire power cord to make sure that the product is properly grounded when in use. The plug on this cord will only fit into a grounding-type outlet. This is a safety feature. If you are unable to insert the plug into an outlet, contact an electrician to install the appropriate outlet.
- If you use an extension cord with this system, make sure that the total ampere rating on the products plugged into the extension cord does not exceed the extension cord ampere rating.
- If your system is fitted with a TV Tuner, cable, or satellite receiver card, make sure that the antenna or cable system is electrically grounded to provide some protection against voltage surges and buildup of static charges.

Care during use

- Do not walk on the power cord or allow anything to rest on it.
- Do not spill anything on the system. The best way to avoid spills is to avoid eating and drinking near your system.
- When the monitor is turned off, a small amount of electrical current still flows through the monitor. To avoid electrical shock, always unplug all power cables and modem cables from the wall outlets before cleaning the system.
- Unplug the system from the wall outlet and refer servicing to qualified personnel if:
  - The power cord or plug is damaged.
  - Liquid has been spilled into the system.
  - The system does not operate properly when the operating instructions are followed.
  - The system was dropped or the cabinet is damaged.
  - The system performance changes.

Warning

To prevent electric shock, never remove the cover. No user serviceable parts inside. Refer servicing to qualified service personnel.

Replacement parts and accessories

Use only replacement parts and accessories recommended by Gateway.

Important

Do not use Gateway products in areas classified as hazardous locations. Such areas include patient care areas of medical and dental facilities, oxygen-laden environments, or industrial facilities.

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Regulatory compliance statements

United States of America

Federal Communications Commission (FCC)
Unintentional emitter per FCC Part 15

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio and television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment to an outlet on a different circuit from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help.

Compliance Accessories: The accessories associated with this equipment are: shielded video cable. These accessories are required to be used in order to ensure compliance with FCC rules.

FCC declaration of conformity

Responsible party:

Gateway Companies, Inc.
610 Gateway Drive, North Sioux City, SD 57049
(605) 232-2000 Fax: (605) 232-2023

This device complies with Part 15 of the FCC Rules. Operation of this device 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.

Caution

Changes or modifications not expressly approved by Gateway could void the FCC compliance and negate your authority to operate the product.

EPA ENERGY STAR

As an ENERGY STAR® Partner, Gateway has determined that this product meets the ENERGY STAR guidelines for energy efficiency when used with a computer equipped with a Display Power Management System.

Notices

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San Diego, CA 92121 USA

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In the interest of continued product development, Gateway reserves the right to make improvements in this manual and the products it describes at any time, without notices or obligation.

Trademark Acknowledgments

1-800-GATEWAY, ActiveCPR, ALR, AnyKey, black-and-white spot design, CrystalScan, Destination, DestiVu, EZ Pad, EZ Point, Field Mouse, Gateway 2000, Gateway Country, gateway.net, Gateway stylized logo, Perfect Scholar, Solo, TelePath, Vivitron, stylized “G” design, and “You’ve got a friend in the business” slogan are registered trademarks and black-and-white spotted box logo, GATEWAY, Gateway Astro, Gateway@Work, Gateway Connected touch pad, Gateway Connected music player, Gateway Cyber:)Ware, Gateway Education:)Ware, Gateway Flex Case, Gateway Gaming:)Ware, Gateway GoBack, Gateway Gold, Gateway Learning:)Ware, Gateway Magazine, Gateway Micro Server, Gateway Money:)Ware, Gateway Music:)Ware, Gateway Networking Solutions, Gateway Online Network (O.N.) solution, Gateway Photo:)Ware, Gateway Professional PCs, Gateway Profile, Gateway Solo, green stylized GATEWAY, green stylized Gateway logo, Gateway Teacher:)Ware, Gateway Video:)Ware, HelpSpot, InforManager, Just click it!, Learn@Gateway, Kids BackPack, SERVE-TO-ORDER, Server Watchdog, SpotShop, Spotshop.com, and Your:)Ware are trademarks of Gateway, Inc. Intel, Intel Inside logo, and Pentium are registered trademarks and MMX is a trademark of Intel Corporation. Microsoft, MS, MS-DOS, and Windows are trademarks or registered trademarks of Microsoft Corporation. All other product names mentioned herein are used for identification purposes only, and may be the trademarks or registered trademarks of their respective companies.