

**hp pavilion
mx703/m703
monitor guide**



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Hewlett-Packard Company
P.O. Box 4010
Cupertino, CA 95015-4010
USA

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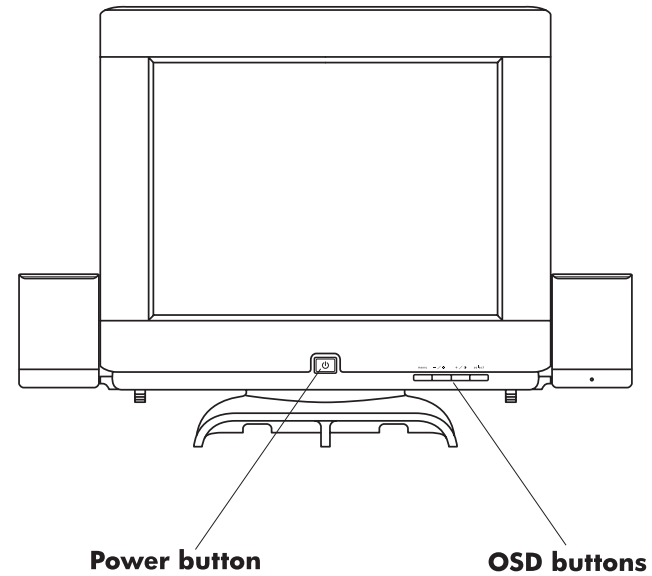
Introduction

The HP Pavilion mx703 Monitor and the HP Pavilion m703 Monitor are high-resolution color monitors designed for use with HP Pavilion home PCs and other PCs. The monitors include brackets for the two supplied speakers. The optional subwoofer is not included with the monitor.

The CRT (cathode-ray tube) monitor comes in two styles, mx703 with a flat screen and m703 with a curved screen.

Other features include:

- Onscreen adjustment of display settings.
- Support for high refresh rates to reduce screen flicker and eyestrain.
- Built-in tilt and swivel base.



Inventory

Check your monitor box for the following items:

- Monitor
- Monitor power cord
- Two speakers
- Power adapter for speakers
- Power adapter power cord (one-piece or alternate two-piece)
- Documentation (including this guide)

For Your Safety

For your safety and the protection of your monitor, follow these procedures:

- Always connect the monitor to a grounded, three-prong power outlet. Use only the factory-supplied power cord. If the power cord is lost or damaged, you should purchase a power cord that is approved for use in your country/region.



Warning: *To completely disconnect power from the monitor, you must remove the power cable from the power socket.*

- To prevent electrical shock, do not remove the back cover of the monitor. Only qualified service personnel should remove the cover.
- Do not place objects on top of the monitor that could fall into the vents or block airflow.
- To avoid the risk of damage to the monitor and electrical shock to yourself, do not expose the monitor to rain or moisture.
- Adjust only those controls with operations that are covered in this manual. Improperly adjusting other controls can result in damage and could require repair by a service technician.

If any of the following conditions occur, unplug the monitor and contact a qualified service technician:

- The power cord or plug is frayed or damaged.
- You have spilled liquid into the monitor.
- The monitor has been exposed to rain or water.
- The monitor does not operate correctly when the operating instructions are followed.
- The monitor has been dropped or the cabinet has been damaged.
- The performance of the monitor changes abruptly.

Additional Safety Information

This product has been evaluated for connection to an “IT” power system (an AC distribution system with no direct connection to earth, according to IEC 950).

AC Power Safety Warning



Warning: *Locate the monitor near an AC outlet. The AC power cord is your HP monitor’s main AC disconnecting device and must be easily accessible at all times. For your safety, the power cord provided with your system has a grounded plug. Always use the power cord with a properly grounded wall outlet to avoid the risk of electrical shock.*

Working in Comfort

To optimize your comfort and productivity, it’s important that you set up your work area correctly and use your HP equipment properly. With that in mind, we have developed some setup and use recommendations for you to follow based on established ergonomic principles.

You can consult the onscreen version of “Working in Comfort” in the Help and Support Center, or visit HP’s Working in Comfort Web site at:

<http://www.hp.com/ergo>

Installation

Follow the instructions in this chapter to install your monitor.



Warning: *The monitor is a heavy object. Exercise caution, or get help when lifting it, to prevent back injury.*

Note: *Before installing the monitor, refer to your PC and video adapter documentation. You may need to make changes to accommodate the monitor.*

Placing the Monitor

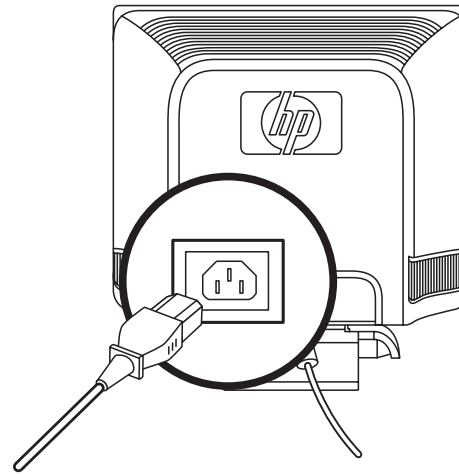
Place the monitor on a flat, sturdy surface. Choose an area that is free from excessive heat, moisture, and sunlight. Locate the monitor as far as possible from sources of electromagnetic interference, such as transformers, motors, fluorescent lighting, and other PC monitors.

Connecting the Power and Video Cables

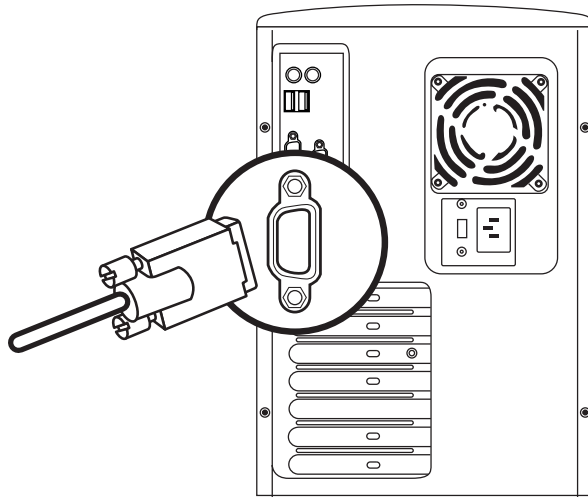
Before connecting any cables, be sure to read the safety instructions at the beginning of this manual. The PC and monitor must be turned off.

To connect the power and video cables:

- 1 Connect the power cord to the back of the monitor.



- 2 Plug the power cord into a power outlet.
- 3 Connect the blue plug on the video cable to the video port of your PC. If you have an HP Pavilion, this port is usually marked in blue. However, on some HP Pavilions, the port could be marked in orange. (The illustration below is for reference only. Check your PC user's guide for the video port location.)

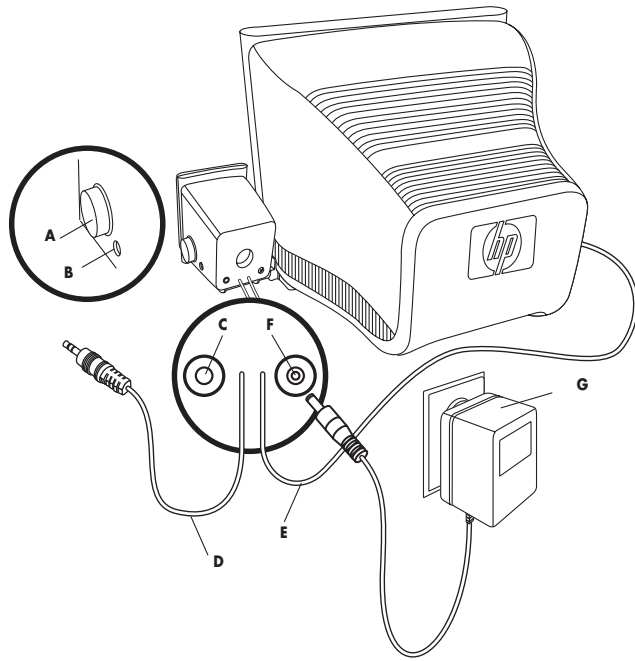


Installing the Speakers

The speakers are designed for use with the PC and mount on the monitor. You may have two speakers, or two speakers and an optional subwoofer (not included with the monitor). See "Installing the Two-Speaker and Subwoofer System" on page 10 for installing and connecting the subwoofer.

Installing the Two-Speaker System

The left and right speakers mount to brackets on each side of the monitor or sit on the desktop. The right speaker has connectors and the On/Volume knob.

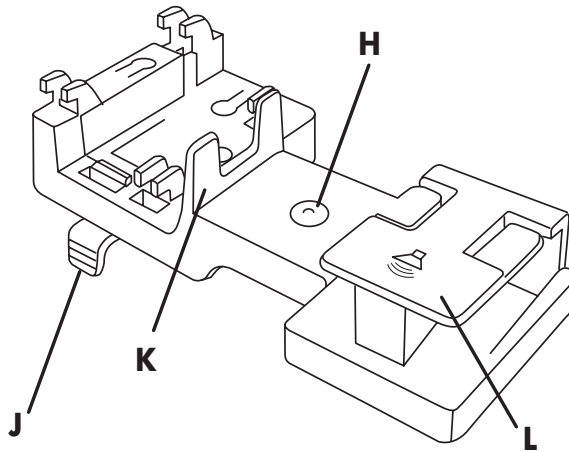


Item	Right speaker	Purpose
A	On/Volume knob	Turns on and adjusts right/left speaker sound level
B	Headphones connector	Accepts headphones plug and mutes right/left speakers
C	Control cable connector (purple)	Accepts subwoofer control cable, mutes right/left speakers and subwoofer when headphones are connected
D	Speaker audio cable (green)	Carries audio signal, plugs into PC or subwoofer
E	Left speaker audio (hardwired) cable	Carries left speaker audio signal
F	Power adapter cable connector	Accepts adapter cable, carries power for right/left speakers
G	Speaker power adapter	Provides power to right/left speakers (alternate two-piece adapter not shown)

To place the two-speaker system

If you are not using the brackets for the speakers, position the speakers and continue with "To connect the two-speaker system."

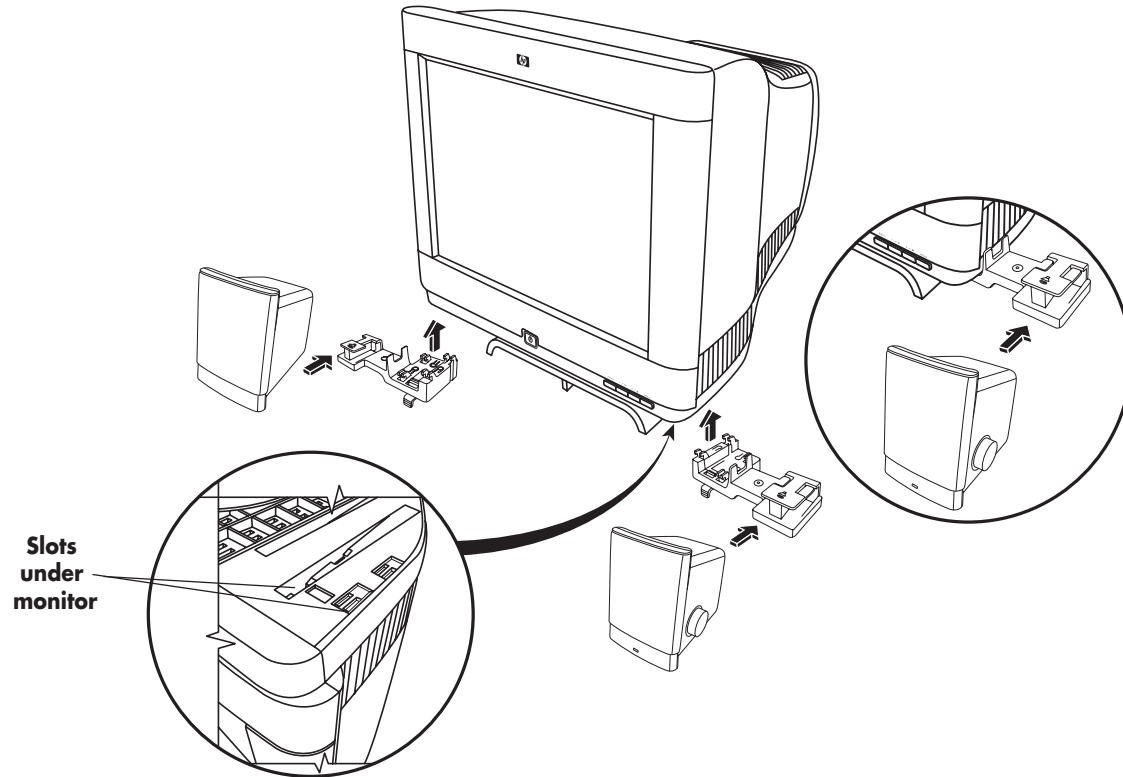
- 1 Locate the left and the right speaker brackets (see **H**).



Item	Speaker bracket	Purpose
H	Circled-R or circled-L	Identifies bracket for left side (circled-L) or right side (circled-R) of monitor
J	Release tab	Releases bracket from bottom of monitor
K	High ridge	Is flush with outside of monitor when bracket is installed
L	Speaker mount	Holds speaker

- 2 Locate the slots underneath and on both sides of the monitor. Do not lift or tip the monitor.

3 Note the correct orientation of the brackets shown in the figure.



- 4** Insert the bracket into the slots on the monitor and slide the bracket toward the front of the monitor.

If you need to remove the bracket, press the tab **J** beneath the bracket and slide the bracket back.

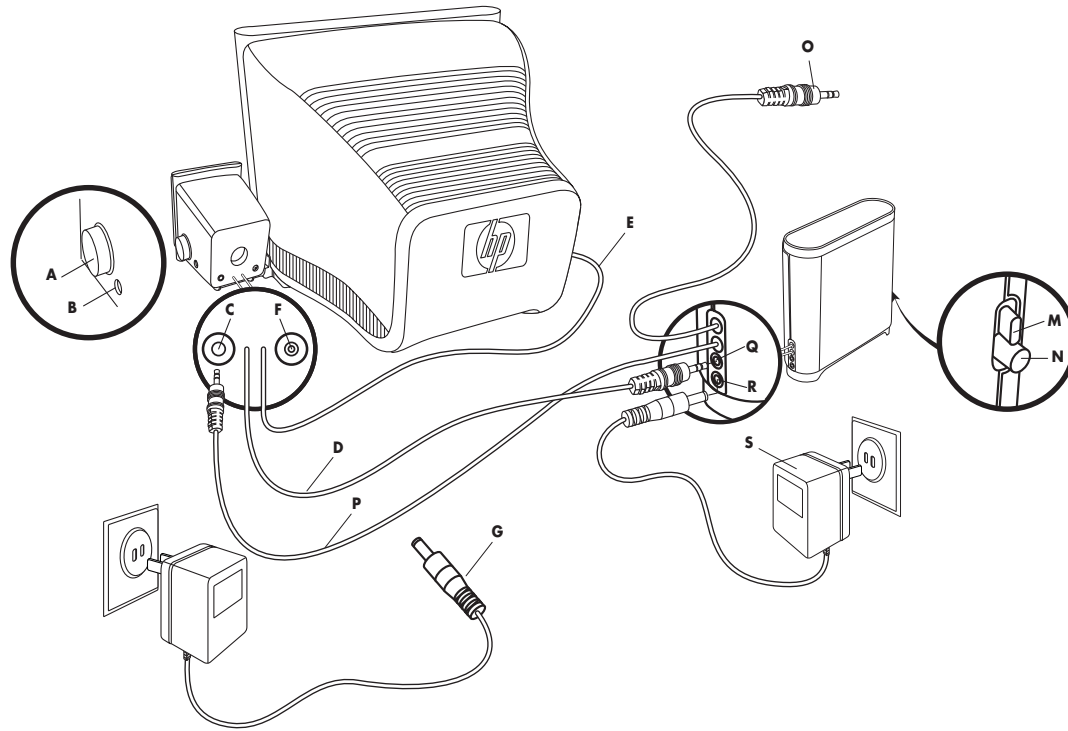
- 5** Align the bottom of the speaker with the bracket **L**, and then slide the speaker onto the bracket.

To connect the two-speaker system

- 1** Plug the power adapter **G** cable into the back of the right speaker **F**. Connect the power adapter in a wall receptacle.
- 2** Plug the right speaker audio cable (green) **D** into the PC. Refer to your PC user's guide for instructions on how to connect your speakers to the PC.
- 3** Turn on the PC, the monitor, and then the right speaker On/Volume knob **A**. To turn on the monitor, see "Turning the Monitor On and Off" on page 12.

Installing the Two-Speaker and Subwoofer System

This configuration uses an optional subwoofer (not provided) and the two speakers included with the monitor.



Item	Subwoofer	Purpose
M	On button	Turns on subwoofer
N	Volume knob	Adjusts subwoofer sound level
O	Subwoofer audio cable (green)	Carries audio signal, plugs into PC
P	Control cable (purple)	Carries subwoofer control signal to right speaker, mutes speakers and subwoofer when headphones are connected
Q	Subwoofer audio connector (green)	Accepts right speaker audio cable (green)
R	Power adapter cable connector	Accepts adapter cable and carries power for subwoofer
S	Power adapter	Provides power to subwoofer (alternate two-piece adapter not shown)

To place the two-speaker and subwoofer system

- 1** Place the two speakers using the steps in “To place the two-speaker system” on page 7.
- 2** Place the subwoofer on the top of, or under your computer desk.

To connect the two-speaker and subwoofer system

- 1** Plug the power adapter **S** cable into the back of the subwoofer **R**. Plug the power adapter into a wall receptacle.
- 2** Plug the right speaker audio cable (green) **D** into the subwoofer connector (green) **Q**.
- 3** Plug the subwoofer control cable (purple) **P** into the right speaker connector (purple) **C**.
- 4** Plug the subwoofer audio cable (green) **R** into the PC. Refer to your PC user’s guide for instructions on how to connect your speakers to the PC.

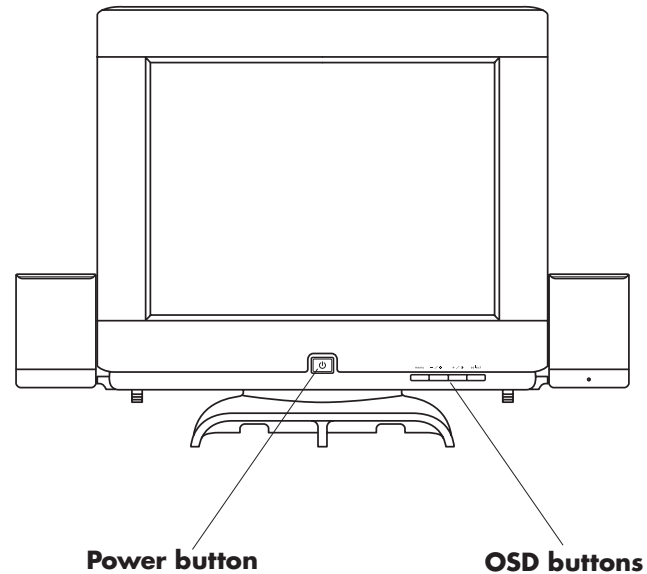
- 5 Turn on the PC, the monitor, the subwoofer power button **M**, and then the right speaker On/Volume knob **A**. To turn on the monitor, see “Turning the Monitor On and Off” on page 12.

Using the Monitor

This chapter contains information about using the monitor.

Turning the Monitor On and Off

Use the Power button on the front panel to turn the monitor on and off. When the monitor is on, the Power button is illuminated. The light is blue when the monitor and PC are active and yellow/amber when the monitor is in one of its reduced power modes.



The monitor’s power-management features reduce power consumption to low levels when your PC has been inactive for a specified period of time. See “Minimizing Energy Use” on page 15 for more information.

Because of the monitor's power-management features, you don't normally need to turn off the monitor when it's not in use. When turned off, the monitor uses the same amount of power that it uses in Sleep mode (less than 4 watts).

If your PC doesn't support DPMS power-management, you can reduce power consumption by turning off the monitor when it won't be used for an extended period. You can turn the monitor off even if you leave the PC running.



Warning: *To completely disconnect power from the monitor, you must remove the power cord from the AC power outlet or surge protector.*

Degaussing the Display

Degaussing removes magnetism that causes unwanted color variations. Degauss the display any time you notice unusual color variations.

Note: *Do not degauss more frequently than once every 30 minutes, or the degauss will be incomplete. It is not necessary to degauss unless you have moved the monitor.*

There are two degaussing methods. Each time you turn on the monitor, it is automatically degaussed. You can also use the Degauss option in the On Screen Display (OSD) Main Menu window to degauss the display.

See "Using the OSD Main Menu window" on page 18 for instructions.

Setting the Screen Resolution

The screen resolution determines the amount of information shown in the display. Screen resolution refers to the number of dots, or *pixels*, used to make up an image. A low screen resolution means that the display uses a relatively small number of relatively large dots. A higher resolution means that more dots of a smaller size make up the image. With higher screen resolutions, icons, windows, and text are smaller on the screen, but more information can be displayed.

The monitor supports many common screen resolutions. The suggested resolution is 1024 x 768 (dots x lines) at a refresh rate of 85 Hz.

Use the Display Properties in the Windows Control Panel to set the screen resolution. To select the screen refresh rate, see "To select the screen refresh rate" on page 15.

To set the screen resolution

- 1 Right-click an empty part of the desktop.
- 2 Click **Properties**. The Display Properties window opens.
- 3 Click the **Settings** tab.
- 4 Adjust the screen resolution.
- 5 Click **Apply**.
- 6 Click **OK**.

Selecting Refresh Rate

To minimize eyestrain and maximize the performance of your monitor, use the highest possible image refresh rate or vertical frequency for which you don't perceive flicker (generally at or above 75 Hz for most users). The image refresh rate is the number of times per second that the image is refreshed. The "Pre-Set Video Modes" table shows the image refresh rates supported by the monitors at different screen resolutions. The suggested refresh rate is 85 Hz with a resolution of 1024 x 768 (dots x lines).

Use the Display Properties in the Windows Control Panel to select the refresh rate. To set the screen resolution, see "To set the screen resolution" on page 14.

To select the screen refresh rate

- 1 Right-click an empty part of the desktop.
- 2 Click **Properties**. The Display Properties window opens.
- 3 Click the **Settings** tab.
- 4 Click the **Advanced** button.
- 5 Click the **Monitor** tab.
- 6 Under *Monitor settings*, click the drop-down arrow and select a refresh rate from the available values.
- 7 Click **Apply**.
- 8 Click **OK**.

Minimizing Energy Use

HP Pavilion PCs support VESA Display Power Management Signaling (DPMS). Power-management features reduce the monitor's power consumption after a period of keyboard inactivity.

The monitor supports three different power-saving modes — Standby, Suspend, and Sleep. See “DPMS Power-Management Features” on page 34 for a description of the characteristics of each mode.

When the monitor is in one of its power-saving modes, the screen is blanked out and the front panel power indicator is yellow/amber. Consult your PC user’s guide for information about setting the power-saving modes.

Cleaning the Screen

To clean the screen:

- 1 Turn off and unplug the monitor.
- 2 Spray a soft cotton cloth with regular household glass cleaner, and then gently wipe the screen.



Warning: *Don’t use cleaning solutions containing fluoride, acids, or alkalis. Never use hard or abrasive cleaning products to clean the screen.*

- 3 Dry the screen with a soft cotton cloth.
- 4 Plug in the monitor and turn it on.

Adjusting the Viewing Angle

The monitor’s pedestal mounting enables you to adjust the viewing angle. You can tilt and swivel the monitor to find the most comfortable viewing position.

Changing Display Settings

Use the On Screen Display (OSD) features of the monitor to change settings. The buttons on the front panel control onscreen icons and windows.



Using the Front Panel

Use the four buttons on the front of the monitor to control OSD functions:

-
- menu** Menu button opens the OSD Main Menu window or closes the OSD window.
 - / *** Minus button decreases a setting if an adjustment window is open. In a window, the button moves the pointer downward through the icon menu. With no menu window open, Minus opens the Brightness adjustment.
 - + / ⏏** Plus button increases a setting if an adjustment window is open. In a window, the button moves the pointer upward through the icon menu. With no menu window open, Plus opens the Contrast adjustment.
 - select** Select button in the OSD Main Menu window opens the adjustment bar for the selected icon, or opens the corresponding window.

Using the OSD Main Menu window

The OSD Main Menu window enables you to make changes to a variety of display settings. You open the Main Menu window by pressing the Menu button when no other OSD windows are displayed on the screen.



In the OSD Main Menu window, the following functions are available:



Brightness/Contrast Opens the Brightness/Contrast window.



Size/Position Opens the Size/Position window.



Advanced Opens the Advanced window for setting Color, Rotation, and other image settings.



Degauss Degausses the display and restores image quality.



Factory settings Opens the window for selecting the factory settings.



Language Opens a menu to set the language of the OSD.



Information Opens a screen showing the current mode and other information, including the monitor serial number.



Exit Closes the OSD Main Menu window and saves any changes you have made (except User Color).

Some settings use an adjustment bar. You lengthen or shorten the adjustment bar with the Plus (+) or Minus (-) button. A number next to the bar shows the percentage of the current setting relative to its maximum value.



To use the OSD Main Menu window:

- 1 Press the Menu button on the front of the monitor to open the OSD Main Menu window.
- 2 Press the Plus (+) or Minus (-) button to move among the icons in the window.
- 3 When the icon for the function you want is highlighted, press the Select button.
 - If you select the **Degauss** or **Exit** option, the option takes effect immediately.
 - If you select any other option, the window for the option appears.

- 4 To close the OSD Main Menu window, select the **Exit** icon, or press the Menu button.



Note: Only a highlighted icon and the Exit icon display a descriptive text.

Using the Brightness/Contrast Window

The Brightness/Contrast window allows you to adjust the brightness and contrast of an image.

To open the Brightness/Contrast window, select the **Brightness/Contrast** icon in the OSD Main Menu window.





In the Brightness/Contrast window, the following functions are available:



Brightness Adjusts the luminance level in the image.



Contrast Adjusts the difference in luminance between light and dark areas of the image.



Default settings Adjusts the Brightness and Contrast settings to the factory default values.



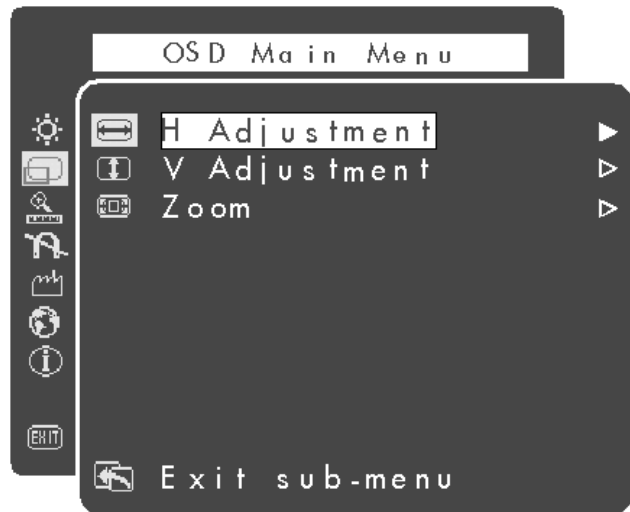
Exit sub-menu Closes the window, saves any changes you have made, and opens the OSD Main Menu window.

Using the Size/Position Window

The Size/Position window allows you to open windows for adjusting the horizontal and vertical size and position of an image, or for adjusting the zoom.

To open the Size/Position window, select the **Size/Position** icon in the OSD Main Menu window.





In the Size/Position window, the following functions are available:



H Adjustment Opens the Horizontal Adjustment window.



V Adjustment Opens the Vertical Adjustment window.

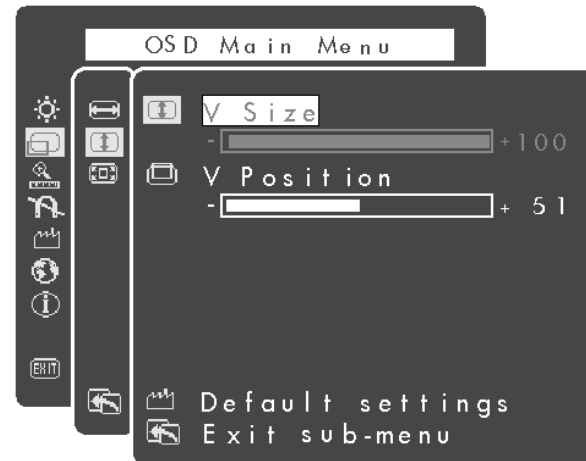


Zoom Opens the Zoom window.



Exit sub-menu Closes the window, saves any changes you have made, and opens the OSD Main Menu window.

To open a window, select the icon in the Size/Position window. The example shown below is the V Adjustment window.



In the H Adjustment window, the following functions are available:



H Size Adjusts the horizontal size of the image.



H Position Adjusts the horizontal position of the image.



Default settings Adjusts the H Size and H Position settings to the factory default values.



Exit sub-menu Closes the window, saves any changes you have made, and opens the Size/Position window.

In the V Adjustment window, the following functions are available:



V Size Adjusts the vertical size of the image.



V Position Adjusts the vertical position of the image.



Default settings Adjusts the V Size and V Position settings to the factory default values.



Exit sub-menu Closes the window, saves any changes you have made, and opens the Size/Position window.

In the Zoom window, the following functions are available:



Zoom Adjusts the zoom of the image.

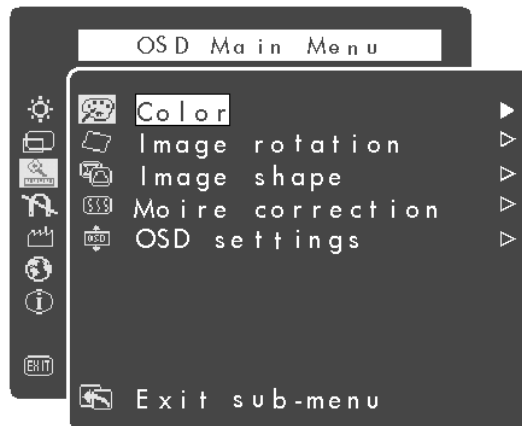


Exit sub-menu Closes the window, saves any changes you have made, and opens the Size/Position window.

Using the Advanced Window

The Advanced window allows you to select windows to correct the shape and position of an image beyond the basic vertical and horizontal sizing and positioning that you can do in the Size/Position window.

To open the Advanced window, select the **Advanced** icon in the OSD Main Menu window.



In the Advanced window, the following functions are available:



Color Adjusts the color temperature of the image.



Image rotation Adjusts the angle of the image.



Image shape Adjusts the shape of the image.



Moiré correction Reduces wavy colored lines or patterns in the background of your image. Horizontal and vertical controls are available.

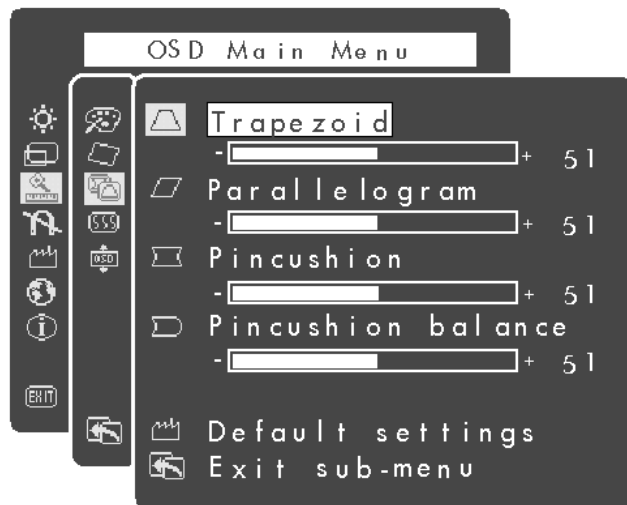


OSD settings Adjusts the position of the OSD on the screen and the maximum timeout.

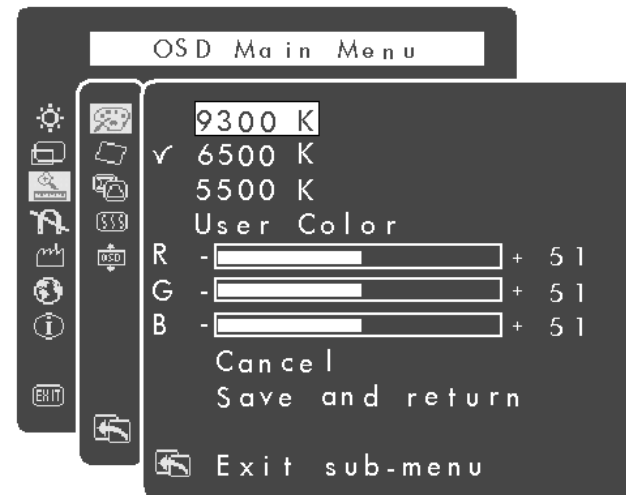


Exit sub-menu Closes the window, saves any changes you have made, and opens the OSD Main Menu window.

To open a window, select the icon in the Advanced window. The example that follows is the Image shape window.



To open the Color window, select the **Color** icon in the Advanced window.



In the Color window, the following functions are available:

9300 K Adjusts the color temperature of the image to a pre-set value.

6500 K Adjusts the color temperature of the image to a pre-set value.

5500 K Adjusts the color temperature of the image to a pre-set value.

User Color (R, B, G) Adjusts the color temperature of the image for the specific value.

Cancel/Save and return Cancels or saves the changes you made.



Exit sub-menu Closes the window, saves any changes you have made, and opens the Advanced window.

Choosing the Color Temperature

The default color settings are optimized for best results, but you can change the color temperature temporarily when necessary. (If you need to save color settings for a particular software program, use the User Color setting.)

You can choose between three settings: 9300 K, 6500 K, and 5500 K.

The 9300 K setting is often used for office environments or fluorescent lighting. The 6500 K setting is often used in environments with incandescent lighting. The 5500 K setting is often used for viewing photography or artwork proofs prior to printing.

When you want to make very precise adjustments to the screen color, you can individually adjust the red, green, and blue (RGB) values that make up the screen image. For example, under unique ambient lighting conditions, you may need to adjust the screen color so that it more closely matches the ambient lighting conditions. You make these adjustments by individually setting red, green, and blue (RGB) values.

Make sure to let the monitor warm up fully before trying to match colors precisely. It takes the monitor up to 30 minutes to warm up completely after being turned on or recovering from a power-saving state.

In the Image rotation window, the following functions are available:



Rotation Adjusts the angle of the image.









Default settings Adjusts the Image rotation setting to the factory default values.



Exit sub-menu Closes the window, saves any changes you have made, and opens the Advanced window.

In the Image shape window, the following functions are available:

-  **Trapezoid** Makes the vertical sides of the image parallel to each other.
-  **Parallelogram** Squares the image.
-  **Pincushion** Adjusts any tapering or bowing of both sides of the image.
-  **Pincushion Balance** Straightens the left or right side of the image when only one side of the image is bowed.
-  **Default settings** Adjusts the Image shape settings to the factory default values.
-  **Exit sub-menu** Closes the window, saves any changes you have made, and opens the Advanced window.

To open the Moiré correction window, select the icon in the Advanced window.



In the Moiré correction window, the following functions are available:



Moiré correction (yes, no) Shows the current setting and allows you to lock or unlock the Moiré settings.



V Moiré Reduces vertical wavy colored lines or patterns in the background of your image.

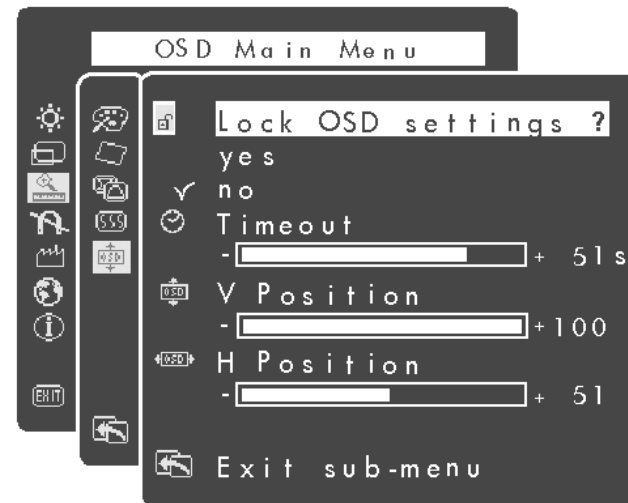


H Moiré Reduces horizontal wavy colored lines or patterns in the background of your image.



Exit sub-menu Closes the window, saves any changes you have made, and opens the Advanced window.

To open the OSD settings window, select the icon in the Advanced window.



In the OSD settings window, the following functions are available:



Lock OSD settings (yes, no) Shows the current setting and allows you to lock or unlock the OSD settings.



Timeout Sets the maximum idle time in seconds that the monitor displays an OSD menu. The monitor closes the OSD window when the maximum is reached.



V Position Adjusts the vertical position of the OSD window.



H Position Adjusts the horizontal position of the OSD window.



Exit sub-menu Closes the window, saves any changes you have made, and opens the Advanced window.

The default OSD window position for the windows is the center of the screen, but you can change the window position.

Using Degauss

To degauss the monitor, select the **Degauss** icon in the OSD Main Menu window.



Degauss Degausses the display and restores image quality.

Degaussing removes magnetism that causes unwanted color variations. Each time you turn on the monitor, it is automatically degaussed. It is not necessary to degauss unless you have moved the monitor.

Using the Factory Settings Window

To open the Factory settings window, select the **Factory settings** icon in the OSD Main Menu window.



In the Factory settings window, the following functions are available:



Factory settings (yes, no) Shows the current mode. Select **yes** to restore the factory settings for all values.



Exit sub-menu Closes the window, saves any changes you have made, and opens the OSD Main Menu window.

Using the Language Window

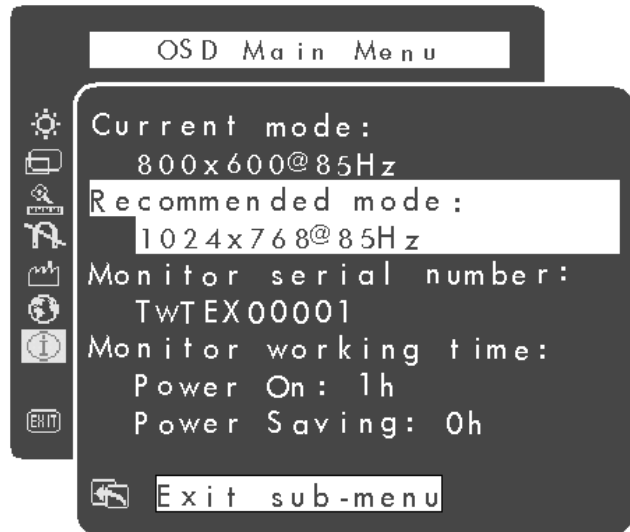
To open the Language window, select the **Language** icon in the OSD Main Menu window.



In the Language window, you select the language for the text in the OSD window.

Using the Information Window

To open the Information window, select the **Information** icon in the OSD Main Menu window.



The Information window lists information about the current resolution and refresh rate (scan frequency), the serial number of the monitor, and the monitor working time as Power On hours and Power Saving hours. The resolution and the refresh rate are set in the Windows Control Panel. See "To set the screen resolution" on page 14 or "To select the screen refresh rate" on page 15.

Technical Information

This chapter contains technical information about the monitors.

The mx703 monitor and m703 monitor are compatible with IBM PC, PC-compatible, and PS/2 PCs. Each monitor is also compatible with VESA power-management standards. (See "DPMS Power-Management Features" on page 34.)

Monitor Information

mx703 Picture tube	17 in (43.1 cm) flat, 90° deflection, black matrix, phosphor P22 medium short, 0.25 mm dot pitch
m703 Picture tube	17 in (43.1 cm) curved, 90° deflection, black matrix, phosphor P22 medium short, 0.27 mm dot pitch
Maximum viewable area	310 mm (H) x 230 mm (V) 12.9 in (H) x 8.97 in (V) 16 in (406.4 mm) diagonal

Monitor Information

Raster (vertical) frequency	50–140 Hz
Line (horizontal) frequency	30–70 kHz
Power source	100–240 V [~] , 50/60 Hz (auto switching)
Power consumption	75 W maximum
Dot rate	108 MHz
Pedestal	Tilt: 5° forward, 14° backward Swivel: –60° left or right
Dimensions (W x H x D)	415 x 442 x 438 mm 16.3 x 17.4 x 17.2 in
Net weight	17 kg (37.5 lb.)
Operating Conditions	
Temperature	5° to 35° C (41° to 95° F)
Humidity	15% to 80%, non-condensing
Altitude	0 to 2286 m (0 to 7500 ft)
Storage Conditions	
Temperature	–25° to 60° C (–13° to 140° F)
Humidity	0% to 90%, non-condensing
Altitude	0 to 4572 m (15,000 ft)

Pre-Set Video Modes

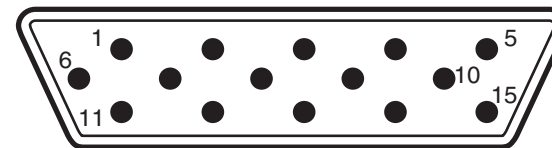
The monitor supports the following industry-standard combinations of screen resolution and refresh rates. Other combinations are possible, but may require adjustments to the image size and position. (See "Using the OSD Main Menu window" on page 18 for information about making these adjustments.)

The asterisk (*) denotes primary mode. This is the suggested mode for display.

Resolution (dots x lines)	60 Hz	70 Hz	75 Hz	85 Hz
640 x 350	N/A	✓	N/A	N/A
640 x 480	✓	N/A	✓	✓
720 x 400	N/A	✓	N/A	N/A
800 x 600	✓	N/A	✓	✓
1024 x 768	✓	N/A	✓	✓*
1280 x 1024	✓	N/A	N/A	N/A

Pin Assignments

The following figure illustrates the 15-pin D-sub male video connector used by the monitor. The table shows the pin assignments.



Note: Because of a policy of continuous product improvement, pin assignments are subject to change without notice.

Pin Number	Assignment
1	Red video input
2	Green video input
3	Blue video input
4	Ground
5	Ground (self test)
6	Red video return
7	Green video return
8	Blue video return
9	5 V
10	Floating or Ground (Sync ground)
11	Ground
12	DDC Data (SDA)
13	Horizontal synchronization
14	Vertical synchronization
15	DDC Data clock (SCC)

DPMS Power-Management Features

To maximize screen life, take advantage of your PC's power-management system to control your monitor.

- The monitor can recognize power-management signals from VESA Display Power Management Signaling (DPMS) video adapters, such as those in HP Pavilion and many other PCs. When the monitor receives an appropriate signal, it reduces its power but remains ready for quick use. The power light on the front panel turns yellow/amber when the monitor is in a power-saving mode.
- VESA DPMS video adapters reduce monitor power consumption by setting the horizontal and/or vertical synchronization signals to inactive. The monitor recovers quickly when the synchronization signals are reapplied.

- Standby and Suspend modes offer low power consumption with rapid recovery, while Sleep mode offers the lowest power consumption and a somewhat slower recovery.

The following table shows the characteristics of the normal operating mode and the three power-saving modes.

VESA Display Power Management Signaling (DPMS)				
Mode	Video	Hor. Sync.	Vert. Sync.	Power Used
On	Active	Yes	Yes	≤75 W
Standby	Blank	No	Yes	≤15 W
Suspend	Blank	Yes	No	≤4 W
Sleep	Blank	No	No	≤4 W

Regulatory Information

Federal Communications Commission (FCC) Notice

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. 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 harmful 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 the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult a dealer or an experienced radio or television technician for help.

Modifications

The FCC requires the user to be notified that any changes or modifications made to the device that are not expressly approved by Hewlett-Packard Company may void the user's authority to operate the equipment.

Cables

Connections to this device must be made with shielded cables with metallic RFI/EMI connector hoods to maintain compliance with FCC Rules and Regulations.

Declaration of Conformity for Products Marked with FCC Logo, United States Only

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

For questions regarding your product, contact:

Hewlett-Packard Company
P.O. Box 692000, Mail Stop 530113
Houston, Texas 77269-2000
or call (+1) (208) 472-4357

For questions regarding this FCC declaration, contact:

Hewlett-Packard Company
P.O. Box 692000, Mail Stop 510101
Houston, Texas 77269-2000
or call (+1) (281) 514-3333

Declaration of VCCI Class B Compliance

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると受信障害を引き起こすことがあります。
取り扱い説明書に従って正しい取り扱いをして下さい。

Notice for Korea (Class B)

사용자 안내문 (B급기기)
이 기기는 비업무용으로 전자파장해 검정을 받은 기기로서, 주거지역에서는 물론 모든 지역에서 사용할 수 있습니다.

Canadian Notice

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Avis Canadien

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

European Union Notice

Products bearing the CE Marking comply with the EMC Directive (89/336/EEC) and the Low Voltage Directive (73/23/EEC) issued by the Commission of the European Community and if this product has telecommunication functionality, the RTTE Directive (1999/5/EC).

Compliance with these directive implies conformity to the following European norms (in parentheses are the equivalent international standards and regulations):

EN 55022 (CISPR 22) — Electromagnetic Interference

EN 55024 (IEC6100-4-2, 3, 4, 5, 6, 8, 11) —
Electromagnetic Immunity

EN 61000-3-2 (IEC6100-3-2) — Power Line Harmonics

EN 61000-3-3 (IEC61000-3-3) — Power Line Flicker

EN 60950 (IEC 60950) — Product Safety

X-Ray Radiation Notice

During operation, this product emits X-rays; however, it is well shielded and meets the safety and health requirements of various countries/regions, such as the Radiation Act of Germany and the Radiation Control for Health and Safety Act of the United States.

Radiation emitted by this product is less than 0.1 mR/hr (1 μ Sv/hr) at a distance of 10 centimeters from the surface of the cathode-ray tube. The X-ray radiation primarily depends on the characteristics of the cathode-ray tube and its associated low-voltage and high-voltage circuitry. Internal controls have been adjusted to ensure safe operation. Only qualified personnel should perform any internal adjustments, as specified in the service manual for this product.

Replace the cathode-ray tube with an identical CRT only.

ENERGY STAR Compliance

Hewlett-Packard Pavilion PCs and Monitors marked with the ENERGY STAR® logo on the packaging box qualify with the U.S. Environmental Protection Agency's ENERGY STAR guidelines for energy efficiency.



Products with the ENERGY STAR label are designed to use less energy, help you save money on utility bills, and help protect the environment.

ENERGY STAR® is a registered trademark owned by the U.S. government.

Power Cords

The power cord set (flexible cord or wall plug) received with the product meets the requirements for use in the country/region where you purchased the equipment.

If you need to obtain a power cord for a different country/region, you should purchase a power cord that is approved for use in that country/region.

The power cord must be rated for the product and for the voltage and current marked on the product electrical ratings label. The voltage and current rating of the cord should be greater than the voltage and current rating marked on the

product. In addition, the diameter of the wire must be a minimum of 0.75 mm or 18 AWG, and the length of the cord must be between 6 feet (1.8 m) and 12 feet (3.6 m). If you have questions about the type of power cord to use, contact your HP authorized service provider.

A power cord should be routed so that it is not likely to be walked on or pinched by items placed upon it or against it. Particular attention should be paid to the plug, electrical outlet, and the point where the cord exits from the product.

Environmental Information

HP has a strong commitment toward the environment. Your HP monitor has been designed to respect the environment as much as possible.

HP can also take back your old monitor for recycling when it reaches the end of its useful life.

HP has a product take-back program in several countries/regions. The collected equipment is sent to one of HP's recycling facilities in Europe or the USA. As many parts as possible are reused. The remainder is recycled. Special care is taken for batteries and other potentially toxic substances, which are reduced to non-harmful components through a special chemical process. If you require more details about HP's product take-back program, contact your dealer or your nearest HP Sales Office.

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