COMPAQ

User's Guide

Compaq V700 Color Monitor

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User's Guide

Compaq V700 Color Monitor

Compaq Computer Corporation

English

Product Features

The monitor features include the following:

- 17-inch CRT with a 16.0-inch (40.6 cm) diagonal viewable image size

- On-screen display for screen adjustments in six different languages: English, Dutch, French, German, Italian, and Spanish

- Plug and Play capability if supported by your system

- Tilt control (image rotation) functionality

- Automatically scans all horizontal frequencies between 30 and 85 kHz and vertical frequencies between 50 and 160 Hz

- Supports VGA, Super VGA, and resolutions up to 1280×1024 and 1600×1200 modes

- Energy Saver feature, when activated, results in a power savings of greater than 90 percent

- Macintosh-compatible timing with optional connector

- Compliant with the following regulated specifications:
  - ❏ Swedish MPR II 1990
  - ❏ EPA Energy Star
  - ❏ European Union CE Directives
  - ❏ Swedish TCO 1999

Universal Driver Manager

This monitor may require a graphics driver (and/or .INF file) that is compatible with your computer's graphics adapter. The CD-ROM included with this monitor contains an .INF file (see the section on Information Files). Compaq has also created a Universal Driver Manager (UDM) release that supports all graphics adapters found on Compaq Deskpro and Compaq Workstation products. The UDM eases graphics driver deployment across Compaq platforms ensuring cross-compatibility and backward-compatibility. The resulting solution enables customers to manage and control ongoing software maintenance costs. The UDM is available on the *Compaq Support Software CD* for Compaq Desktop, Portable, and Workstation Products and the Compaq World Wide Web site (www.compaq.com).

Information Files

The CD-ROM included with this monitor contains two information files that should be installed onto your computer—an .INF file and an .ICM file. The .INF file defines monitor resources and provides specifications used by Microsoft Windows 95 and Windows 98 to install support software for certain hardware devices. The .INF file ensures monitor compatibility and optimization with your computer's graphics adapter. The .ICM file provides color matching consistency from monitor screen to printer and is activated from within the graphics programs that have this feature. To install these files on your computer, insert the Compaq CD-ROM into your computer's CD drive and select the software from the menu that displays on your monitor screen. INF file updates are downloadable by clicking on:
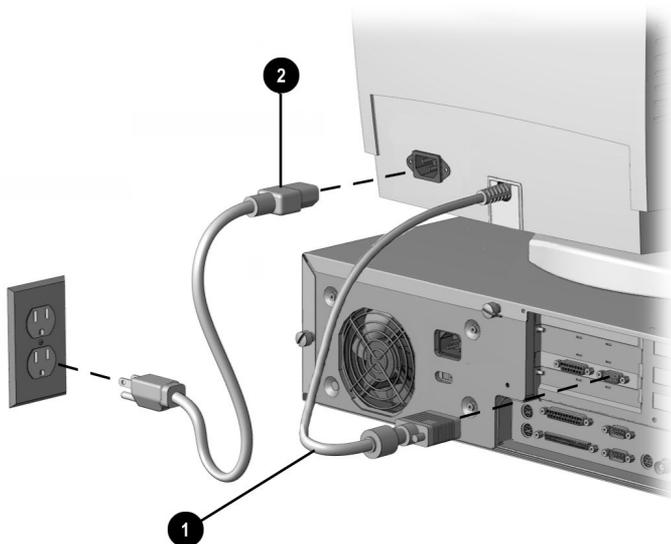www.compaq.com/products/monitors/index.html

Setting Up the Monitor

To set up the monitor, ensure that the power is turned off to the monitor, computer system, and other attached devices, then follow these steps:

1. Place the monitor in a convenient, well-ventilated location near your computer.

2. Connect the monitor signal cable ❶ to the 15-pin connector on the rear panel of the computer and tighten the screws.

✎ Be sure the signal cable aligns with the 15-pin connector. Do not force the cable onto the connector or you may damage the signal cable.

3. Connect the monitor power cord ❷ to the rear panel of the monitor, then plug the other end into an electrical outlet that is easily accessible and close to the monitor.

> ⚠ **WARNING:** To reduce the risk of electric shock or damage to your equipment:
>
> - Do not disable the power cord grounding plug. The grounding plug is an important safety feature.
> - Plug the power cord into a grounded (earthed) electrical outlet that is easily accessible at all times.
> - Disconnect power from the monitor by unplugging the power cord from the electrical outlet.
> - Do not place anything on power cords or cables. Arrange them so that no one may accidentally step on or trip over them. Do not pull on a cord or cable. When unplugging from the electrical outlet, grasp the cord by the plug.

Operating the Monitor

Front Control Panel

	Icon	Control	Function
❶	▤	Select Button	1. Launches on-screen display. 2. Selects Function adjustments. 3. Exits menus and on-screen display.
❷	–	Minus Button	Selects and adjusts functions.
❸	+	Plus Button	Selects and adjusts functions.
❹	▯	Power Switch	Turns the monitor on and off.
❺	▯	Power Saving LED	1. Green indicates monitor is turned on. 2. Amber indicates suspend mode. 3. Amber indicates sleep mode.

✎ Setting Contrast and Brightness controls to their maximum settings may cause the screen to seem out of focus. To correct this appearance, decrease the Brightness setting.

On-Screen Display Settings

The adjustments for screen settings are located in the on-screen display (OSD) and can be viewed in one of six available languages. The on-screen Main Menu displays the following seven functions:
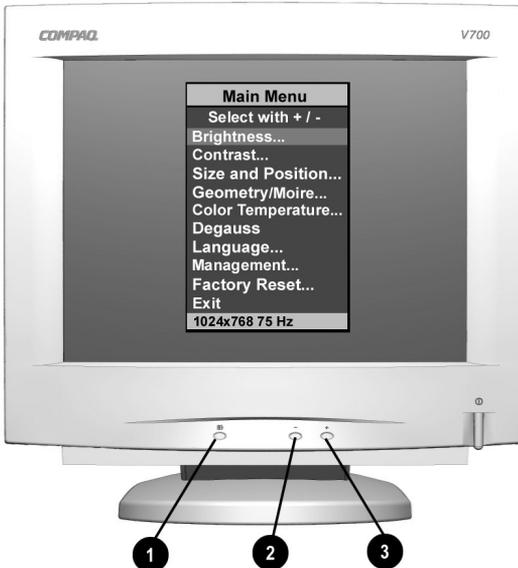
Main Menu	Menu Level 2	Menu Level 3
Brightness	Displays Adjustment scale.	
Contrast	Displays Adjustment scale.	
Size and Position …	Width Horizontal Position Height Vertical Position Cancel *Save and Return*	Displays Adjustment scale for each selection.
Geometry/Moiré …	Pincushion Tilt (Rotation) Trapezoid Parallelogram Horizontal Moiré Vertical Moiré Cancel *Save and Return*	Displays Adjustment scale for each selection.
Color …	9300K 6500K Cancel Save and Return	Displays Adjustment scale for each selection.
Degauss		
Language …	Deutsch English Espanol Francais Italiano Nederlands Save and Return	
Management …	Power Saver Mode Display Serial Number	ON/OFF ON/OFF Displays Serial Number
Factory Reset	Confirm Reset Reset Cancel	
Exit		

✎ The degauss selection does not have a menu. When you select degauss, the monitor corrects color impurities on the screen without bringing up another menu. Color impurities are usually caused by moving or rotating the monitor or by external magnetic fields. The monitor screen automatically degausses when the monitor is turned on. After the degauss selection has been used, there is a 20-minute delay until the degauss circuitry is restored and the degauss function can be used at full strength again.

Making Adjustments Using the OSD

To make a selection from the on-screen display:

1. Press the *Select* button ❶ on the monitor front panel to display the Main Menu on the monitor screen.

Monitor with On-Screen Display

✎ The bar on the bottom of the OSD menu shows the current operating resolution.

2. To make a selection from the Main Menu, press the *Minus* (−) button ❷ located on the monitor front panel to scroll down, or press the *Plus* (+) button ❸ to reverse or scroll up.

3. Highlight your choice and press the *Select* button ❶ again. For example, if your selection is Size and Position, press the *Minus* button ❷ until Size and Position is highlighted, then press the *Select* button ❶ to choose it.

4. A second level menu displays additional menu items. To make a selection, press the *Minus* (−) button ❷ to scroll down, or press the *Plus* (+) button ❸ to reverse or scroll up.

5. Highlight your choice and press the *Select* button.

6. The third level displays a sizing window to adjust the selected function. To adjust the sizing window, press the *Minus* button to decrease the number of degrees, or press the *Plus* button to increase the number of degrees.

7. Press the *Select* button after the adjustment is made.

8. To save the new adjustment, select *Save and Return* and press the *Select* button. To cancel an adjustment, select *Cancel* and press the *Select* button.

9. Select *Exit* from the Main Menu and press the *Select* button again to exit the on-screen display.

Adjusting Picture Quality

Allow the monitor to warm up for 30 minutes before performing the following procedures. The picture image stabilizes after a warm-up period.

Optimizing Contrast

For best results, set your screen to a dark background (such as the DOS prompt) before adjusting the following settings:

1. Set the brightness and contrast controls to their lowest settings.

2. Increase brightness until the background portions of the screen are visible, then slowly reduce brightness until the background is just extinguished.

3. Adjust contrast control to your preference.

Optimizing Focus

The default image size is preset at the factory. The Size and Position controls in the on-screen display can be used to increase the screen size beyond the default setting. However, expanding the screen image beyond the default settings may degrade the focus at the outer edge of the screen.

To enhance focus, use the lowest brightness level that gives satisfactory results in your viewing environment.

✎ Settings that maximize contrast may not offer optimum focus, and settings that maximize focus may not offer optimum contrast.

Display Resolutions Default Settings

The resolution settings listed below are the most commonly used modes and are set as factory defaults. The monitor automatically recognizes these preset/preload modes as they are requested by a software program.

Display Resolutions

Preset Modes	Resolutions
1. Industry Standard	640 × 480 at 60 Hz/31.5 kHz
2. VESA	640 × 480 at 75 Hz/37.5 kHz
3. VESA	640 × 480 at 85 Hz/43.3 kHz
4. Industry Standard	720 × 400 at 70 Hz/31.5 kHz
5. VESA	800 × 600 at 75 Hz/46.9 kHz
6. VESA	800 × 600 at 85 Hz/53.7 kHz
7. Apple Macintosh Display Mode	832 × 624 at 74.5 Hz/49.7 kHz
8. VESA	1024 × 768 at 75 Hz/60.0 kHz
9. VESA	1024 × 768 at 85 Hz/68.7 kHz
10. Apple Macintosh Display Mode	1152 × 870 at 75 Hz/68.6 kHz
11. VESA	1280 × 1024 at 75 Hz/80 kHz
12. VESA	1600 × 1200 at 65 Hz/81.3 kHz

Maximum Refresh Rates

This monitor is capable of the maximum refresh rates listed in the following table. However, the video adapter installed in your computer must also be capable of supporting these refresh rates in order for them to operate. Most of the new video adapters being shipped and sold in computers today are capable of supporting these calculated refresh rates. Certain video adapters may provide different timing parameters which could result in slightly different maximum refresh rates.

Maximum Refresh Resolutions

640 × 480 at 160 Hz
800 × 600 at 130 Hz
1024 × 768 at 100 Hz
1280 × 1024 at 75 Hz
1600 × 1200 at 65 Hz

User Modes

The video controller signal may occasionally call for a mode that is not preset if:

- You are not using a compatible Compaq video adapter.

- You are not using a preset mode.

If this occurs, you may need to readjust the parameters of the monitor screen by using the on-screen display. User changes can be made to any or all of these modes and saved in memory. The monitor automatically stores the new setting, then automatically recognizes the new mode just as it does a preset mode. In addition to the 12 preset/preload modes that can be changed and stored, there are five user modes that can be entered and stored. When the five user mode settings are exceeded, the newest setting will replace the setting closest to its own setting. When "Factory Reset" is selected from the OSD menu, the factory preset values will replace the saved user settings in operation at the time.

To revert back to the factory default settings, select Reset from the Factory Reset menu in the on-screen display, and the factory default resolutions will replace the user changes made for the operating original display mode.

Energy Saver Feature

The energy saver feature has three different modes of operation:

- Full power mode

- Suspend mode

- Sleep mode

By selecting settings in the computer's Energy Saver utility, you determine the length of inactivity before the monitor goes into suspend or sleep mode.

The following table describes the monitor energy saver levels available during the different modes of operation.

Energy Saver Levels		
Mode	Power Consumption	Description
Full Power	Less than 115 watts	ON = Normal operation Power LED is green.
Suspend	Less than 15 watts	Monitor screen is blanked. Power LED turns amber. Full power mode returns quickly.
Sleep	Less than 5 watts	Monitor screen is blanked. Power LED turns amber. There is a brief warm-up period before returning to full power mode.

Refer to your computer manual for instructions on setting energy saver features (sometimes referred to as power management features).

✎ The energy saver features for monitors only work when connected to computers that have energy saver features.

Care and Maintenance

This section explains how to care for and maintain your Compaq monitor during normal everyday use.

Protecting the Monitor

To protect your monitor from overheating and other types of damage, follow these suggestions:

- Use only a power source and connection appropriate for this monitor, as indicated on the marking label/back plate.

- If an extension cord or power strip is used, make sure that the cord or strip is rated for the product and that the total ampere ratings of all products plugged into the extension cord or power strip do not exceed 80% of the extension cord or strip ampere ratings limit.

- Do not overload an electrical outlet, power strip, or convenience receptacle. The overall system load must not exceed 80% of the branch circuit rating. If power strips are used, the load should not exceed 80% of the power strip input rating.

- Install the monitor near an outlet that you can easily reach. Disconnect the product by grasping the plug firmly and pulling it from the outlet. Never disconnect it by pulling the cord.

- Unplug the monitor from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners.

- Slots and openings in the cabinet are provided for ventilation. These openings must not be blocked or covered. Never push objects of any kind into cabinet slots or other openings.

- Do not place plants on top of the monitor. Water or dirt from the plant may fall into the vents.

- Do not drop the monitor or place it on an unstable surface.

- Do not allow anything to rest on the power cord. Do not walk on the cord.

- Keep the monitor in a well-ventilated area, away from excessive light, heat, and moisture. Keep the monitor away from high capacity transformers, electric motors, and other strong magnetic fields.

- In a two-monitor system, place the monitors as far apart from each other as possible to lessen interference between them.

- Do not open the monitor cabinet or attempt to service this product yourself. Adjust only those controls that are covered by the operating instructions. If the monitor is not operating properly or has been dropped or damaged, contact your Compaq authorized dealer, reseller, or service provider.

Cleaning the Monitor

To clean the monitor, follow these steps:

1. Turn off the monitor and the computer.

2. Dust the monitor by wiping the screen and the cabinet with a soft, clean cloth.

If the screen requires additional cleaning, use any antistatic CRT screen cleaner.

> **CAUTION:** Do not use benzene, thinner, ammonia, or any volatile substance to clean the monitor screen or cabinet. These chemicals may damage the monitor screen and cabinet finish.

Shipping the Monitor

Keep the original packing box in a storage area. You may need it later if you move or ship your monitor.

appendix

Agency Regulatory Notices

Federal Communications Commission 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 the 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 this device that are not expressly approved by Compaq Computer Corporation 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:

>   Compaq Computer Corporation
>   P. O. Box 692000, Mail Stop 530113
>   Houston, Texas 77269-2000
>
>   Or, call - 1-800- 652-6672 (1-800-OK COMPAQ)

For questions regarding this FCC declaration, contact:

>   Compaq Computer Corporation
>   P. O. Box 692000, Mail Stop 510101
>   Houston, Texas 77269-2000
>
>   Or, call - (281) 514-3333

To identify this product, refer to the Part, Series, or Model number found on the product.

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 Notice

Products with the CE Marking comply with both the EMC Directive (89/336/EEC) and the Low Voltage Directive (73/23/EEC) issued by the Commission of the European Community.

Compliance with these directives implies conformity to the following European norms:

- EN55022 (CISPR 22) - Radio Frequency Interference
- EN50082-1 (IEC801-2, IEC801-3, IEC801-4) - Electromagnetic Immunity
- EN60950 (IEC950) - Product Safety

Japanese Notice

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取扱説明書に従って正しい取り扱いをして下さい。

German Ergonomics Notice

Compaq Computers, when tested with the Compaq V700 monitors, were evaluated and found compliant to the requirements of ZH 1/618 (German Safety Regulations for Display Work Places in the Office Sector).

EPA Energy Star Compliance

Monitors that are marked with the Energy Star Logo meet the requirements of the EPA Energy Star program. As an Energy Star Partner, Compaq Computer Corporation has determined that this product meets the Energy Star guidelines for energy efficiency. Specific details on using the Energy Saving features can be found in the energy saver or power management section of the computer manual.

Specifications

Compaq V700 Color Monitor		
Display	17-in FS CRT	43.18 cm
Viewable Image Size (diagonal)	16.0 in	40.6 cm
Screen Treatment	Antiglare and antistatic coating on all models	
Approx. Unpacked Weight	40.8 lb	18.5 kg
Approx. Maximum Dimensions		
Height	17.49 in	44.4 cm
Depth	16.98 in	43.1 cm
Width	16.7 in	42.4 cm
Maximum Graphics Resolution	1600 × 1200 at 65 Hz Refresh Rate	
Text Mode	VGA or higher	
Phosphor/Horiz. Dot Pitch	P22, 0.22 mm	
Horizontal Frequency	30 to 85 kHz	
Vertical Frequency	50 to 160 Hz	
Environmental Requirements Temperature		
Operating Temperature	50° to 95°F	10° to 35°C
Storage Temperature	-22° to 140°F	-30° to 60°C
Humidity (Non-condensing)		
Operating	20 to 80%	
Non-Operating	5 to 90%	
Power Source	100-120 VAC, 50-60 Hz	
	200-240 VAC, 50-60 Hz	
Power Consumption	< 115 watts	
Input Terminal	15-pin D-type connector with cable	

Color Display Values

CIE* Chromaticity Coordinates		
	X	**Y**
Red	0.645	0.321
Green	0.285	0.600
Blue	0.142	0.057
White Point (9300 K)	0.281 (+/- .03)	0.311 (+/- .03)
White Point (6500 K)	0.313 (+/- .03)	0.329 (+/- .03)
Gamma: 2.27		

*Commission International d'Eclairage, 1931 Standard.

Power Cord Set Requirements

The monitor power supply is provided with Automatic Line Switching (ALS). This feature allows the monitor to operate on input voltages between 100-120V or 200-240V.

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

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

The power cord must be rated for the product and for the voltage and current marked on the product's 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 mm² or 18AWG, 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 Compaq 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.