# Notice

## *User's Guide*

**Compaq V75 Color Monitor**

**Compaq Computer Corporation**

# *book* 1

# ENGLISH

**Introduction**

The Compaq V75 Color Monitor is a microprocessor-based, intelligent scanning monitor that automatically locks in on the most common display modes. This monitor operates most efficiently when used with a Compaq compatible graphics controller.



**Product Features**

The monitor features include the following:

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

■ Easy-to-access front panel controls to adjust screen brightness and contrast

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

- Universal Serial Bus (USB) pass-through connectors for use with USB peripherals (mouse, etc.)

- Plug and Play capability if supported by your system

- Tilt control (image rotation) functionality

- Automatically scans all horizontal frequencies between 31.5 and 69 kHz and vertical frequencies between 50 and 100 Hz

- Supports VGA, Super VGA, and $1024 \times 768$ resolutions

- 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 1995

### Graphics Driver

Compaq has created a Universal Driver Manager (UDM) release that supports all Compaq QVision graphics controllers and most graphics controllers found on Compaq Deskpro products. The UDM eases graphics driver deployment across all Compaq Deskpro 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 *Support Software* CD for Compaq Desktop, Portable, and Workstation Products and the Compaq World Wide Web site (www.compaq.com).

✎ If the updated Universal Driver Manager that supports the Compaq monitor is not available on the Web site, contact your authorized Compaq dealer or reseller.

■ You can order the *Support Software CD* for Compaq Desktop, Portable, and Workstation Products. This compact disc contains the latest device drivers, utilities, and flashable ROM images needed to run MS-DOS, Microsoft Windows 3.1, Windows 95, Windows NT Workstation, and IBM OS/2 on your Compaq commercial Desktop, Portable, or Workstation product.

■ You can download the Support software from the Compaq World Wide Web site (www.compaq.com).

■ You can purchase backup diskettes from your Compaq authorized reseller, dealer, or service provider.

If you choose to purchase the *Support Software CD,* you have two options:

■ You can purchase a single CD-ROM that gives you one-time access to the latest support software (North America only, Compaq part number 272505-001).

■ You can purchase a yearly subscription that delivers up to 12 monthly CD-ROMs (Compaq part number 183426-xxx).

The annual subscription ensures your continuous access to the latest developments.

For help and service outside of the U.S. and Canada or to order the CD or backup diskettes, contact your Compaq authorized reseller, dealer, or service provider.

✎ If you call Compaq to place an order, be sure to have the serial number of your monitor available. The serial number is located on the back of your monitor. This number is necessary for all purchases.

## 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.  Remove the door on the rear panel by grasping the thumb tab and pulling down.

3. 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.



4. 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 feature. This equipment is designed to be connected to a grounded (earthed) power outlet that is easily accessible to the operator. The grounding plug is an important safety feature.

⚠ **CAUTION:** Be sure that the power outlet you plug your power cord into is easily accessible and located as close to the monitor as possible. When you need to disconnect power to the equipment, be sure to unplug the power cord from the power outlet.

## USB Connectors

The base of the monitor has two Universal Serial Bus (USB) connectors. Use USB connector ❶ to connect the USB signal cable to the computer. Use connector ❷ to connect USB compatible plug and play devices such as a keyboard, mouse, or joystick if supported by your computer. This feature provides USB pass-through and does not support USB host requirements.

△ **CAUTION:** This USB connector is not designed for use with high speed USB devices such as a video camera, scanner, etc. Compaq recommends connecting high speed devices directly to the computer.



✎ These USB connectors operate as a pass-through system. Your computer must have a USB host controller installed for any USB-connected devices to operate.

△ **CAUTION:** To prevent deterioration of signal transfer or malfunction of USB devices, USB cables should not exceed 9.75 feet (2.95 meters) in length. This specific length includes both the USB upstream cable and the USB downstream cable.

## Operating the Monitor



### Front Control Panel

| | Icon | Control | Function |
|---|---|---|---|
| ❶ | ◐ | Contrast | Adjusts contrast. |
| ❷ | ☼ | Brightness | Adjusts brightness. |
| ❸ | 🖳 | Select Button | 1. Launches on-screen display.<br>2. Selects Function adjustments.<br>3. Exits menus and on-screen display. |
| ❹ | – | Minus Button | Selects and adjusts functions. |
| ❺ | + | Plus Button | Selects and adjusts functions.. |
| ❻ | ☼ | Power Saving LED | 1. Green indicates monitor is turned on.<br>2. Yellow indicates suspend mode.<br>3. Amber indicates sleep mode. |
| ❼ | ⏻ | Power Switch | Turns the monitor on and off. |

✎ 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:

■ Size and Position—Adjusts the horizontal and vertical size and position of the screen.

■ Geometry—Adjusts the screen to the required pincushion, tilt, or trapezoid viewing area.

■ Moiré—Minimizes interference patterns that occasionally appear on the screen.

■ Degauss—Corrects image distortion or color impurity caused by magnetic fields.

■ Language—Lists six languages available to display on-screen menus.

■ Power Saver—Turns power saving features On/OFF.

■ Factory Reset—Resets the screen to its factory settings.

## Individually Adjusted Modes

The following functions are individually adjustable for each mode:

■ Horizontal Size and Position

■ Vertical Size and Position

■ Pincushion

■ Trapezoid

Settings for Tilt, Moiré, Manual Degauss, and Language Selection apply to all modes.

## 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. The Main Menu will display on the monitor screen.



*Monitor with On-Screen Display*

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

✎ The degauss selection does not have a menu. When you select degauss, the monitor will correct 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.

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

6. The third level displays a sizing window for adjusting the selected function. To adjust, 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.

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 modes as they are requested by a software program.

| Display Resolutions | |
|---|---|
| Preset Modes | Resolutions |
| 1. VESA | 1280 × 1024 at 63.9 kHz/60 Hz |
| 2. VESA | 1024 × 768 at 68.7 kHz/85 Hz |
| 3. VESA | 1024 × 768 at 60.0 kHz/75 Hz |
| 4. VESA | 1024 × 768 at 48.3 kHz/60 Hz |
| 5. VESA | 800 × 600 at 53.7 kHz/85 Hz |
| 6. VESA | 800 × 600 at 46.9 kHz/75 Hz |
| 7. VESA | 800 × 600 at 37.8 kHz/60 Hz |
| 8. Industry Standard | 720 × 400 at 31.5 kHz/70 Hz |
| 9. VESA | 640 × 480 at 37.5 kHz/75 Hz |
| 10. Industry Standard | 640 × 480 at 31.5 kHz/60 Hz |
| 11. Macintosh Display Mode | 832 × 624 at 49.72 kHz/74.5 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 graphics 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 11 preset modes that can be changed and stored, there are 4 user modes that can be entered and stored. When the 4 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 yellow. Full power mode returns quickly. |
| Sleep | Less than 8 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.

■ When you connect the monitor to an outlet or extension cord, be sure the total ampere rating of the products connected to the outlet does not exceed the current rating of the electrical outlet, and the total ampere rating of the products connected to the cord does not exceed the rating of the cord.

■ 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.

■ 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 such as ammonia 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 this 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 Series/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.

## German Ergonomics Notice

Compaq Computers, when tested with the Compaq 623 and 624 Series monitors, were evaluated and found compliant to the requirements of ZH 1/618 (German Safety Regulations for Display Work Places in the Office Sector) in the Text Mode ($720 \times 400$) using MS-DOS Version 3.31 (or higher) and BASICA as published by Compaq Computer Corporation.

### 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.

### 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
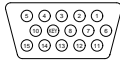
■ EN60950 (IEC950) - Product Safety

### Japanese Notice

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、電波障害を引き起こすことがあります。取扱説明書に従って正しい取り扱いをしてください。

# SPECIFICATIONS

| Compaq V75 Color Monitor | | |
|---|---|---|
| **Display** | 17-in FS CRT | 43.18 cm |
| **Viewable Image Size (diagonal)** | 16.0 in | 40.6 cm |
| **Screen Treatment** | Antiglare/antistatic coating | |
| **Approximate Weight (Unpacked)** | 44 lb | 20 kg |
| **Maximum Dimensions** | | |
| Height | 17.3 in | 43.9 cm |
| Depth | 17.3 in | 43.9 cm |
| Width | 16.6 in | 42.1 cm |
| **Maximum Graphics Resolution** | 1024 × 768 at 85 Hz Refresh Rate | |
| **Text Mode** | VGA or higher | |
| **Phosphor/Dot Pitch** | P22, 0.26 mm | |
| **Horizontal Frequency** | 31.5 to 69 kHz | |
| **Vertical Frequency** | 50 to 100 Hz | |
| **Environmental Requirements Temperature** | | |
| Operating Temperature | 32° to 104°F | 0° to 40°C |
| Storage Temperature | -22° to 140°F | 0° to 60°C |
| **Humidity (Non-Condensing)** | | |
| Operating | 10 to 90% | |
| 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 | |

## Connector Pin Assignments

### Signal Cable

| Connector | Pin | Signal |
|-----------|-----|--------|
| | 1 | Red Video |
| | 2 | Green Video |
| | 3 | Blue Video |
| | 4 | Open |
| | 5 | Return |
| | 6 | Red Gnd |
| | 7 | Green Gnd |
| | 8 | Blue Gnd |
| | 9 | Reserved (No Pin) |
| | 10 | Sync Return |
| | 11 | Open |
| | 12* | Bidirectional Data (SDA) |
| | 13 | H-Sync/Composite Sync |
| | 14 | V-Sync |
| | 15* | Data Clock (SCL) |

\* DDC Signals

## Color Display Values

### CIE* Chromaticity Coordinates

| | X | Y |
|---|---|---|
| Red | 0.625 | 0.340 |
| Green | 0.280 | 0.595 |
| Blue | 0.155 | 0.070 |
| White Point (9300 K) | 0.283 (+/- .03) | 0.298 (+/- .03) |
| White Point (6500 K) | 0.313 (+/- .03) | 0.329 (+/- .03) |
| Gamma: 2.5 | | |

*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.

Power cord sets must meet the requirements of the country where you use the monitor. For more information on power cord set requirements, contact your Compaq authorized dealer, reseller or service provider.

### General Requirements

The requirements listed below are applicable to all countries:

1. The length of the power cord set must be at least 5.00 feet (1.5 m) and a maximum of 9.75 feet (3.0 m).

2. All power cord sets must be approved by an acceptable accredited agency responsible for evaluation in the country where the power cord set will be used.

3. The power cord set must have a minimum current capacity of 10 amps and a nominal voltage rating of 125 VAC or 5 amps at 250 volts AC, as required by each country's power system.

4. The appliance coupler must meet the mechanical configuration of an EN 60 320/IEC 320 Standard Sheet C13 connector, for mating with appliance inlet on the rear of the unit.

## Country-Specific Requirements

| Power Cord Set Requirements: By Country | | |
|---|---|---|
| Country | Accredited Agency | Applicable Note Numbers |
| Australia | EANSW | 1 |
| Austria | OVE | 1 |
| Belgium | CEBC | 1 |
| Canada | CSA | 2 |
| Denmark | DEMKO | 1 |
| Finland | FIMKO | 1 |
| France | UTE | 1 |
| Germany | VDE | 1 |
| Italy | IMQ | 1 |
| Japan | MITI | 3 |
| The Netherlands | KEMA | 1 |
| Norway | NEMKO | 1 |
| Sweden | SEMKO | 1 |
| Switzerland | SEV | 1 |
| United Kingdom | BSI | 1 |
| United States | UL | 2 |

Notes:

1. The flexible cord must be <HAR> Type HO5VV-F, 3-conductor, 0.75 mm$^2$ conductor size. Power cord set fittings (appliance coupler and wall plug) must bear the certification mark of the agency responsible for evaluation in the country where it will be used.

2. The flexible cord must be Type SVT or equivalent, No. 18 AWG, 3-conductor. The wall plug must be a two-pole grounding type with a NEMA 5-15P (15A, 125V) or NEMA 6-15P (15A 250V) configuration.

3. The appliance coupler, flexible cord, and wall plug must bear a "T" mark and registration number in accordance with the Japanese Dentori Law. The flexible cord must be Type VCT or VCTF, 3-conductor, 0.75mm$^2$ conductor size. The wall plug must be a two-pole grounding type with a Japanese Industrial Standard C8303 (15A, 125V) configuration.