Notice

The information in this guide is subject to change without notice.

User's Guide

Compaq TFT8000 Flat Panel Monitor

Compaq Computer Corporation

English

Product Features

The Compaq TFT8000 Flat Panel Monitor has an active matrix, thin-film transistor (TFT), liquid crystal display (LCD). The monitor features include the following:

- Large 18.1-inch (45.97 cm) viewable area display

- 1280×1024 resolution, plus full-screen support for lower resolutions

- Wide viewing angle to allow viewing from a sitting or standing position, or moving side-to-side

- Removable base for flexible mounting solutions

- Plugs into a standard VGA connector; does not require a special graphics adapter card

- Plug and play capability if supported by your system

- Universal Serial Bus (USB) bus-powered hub interface—plug and play connectors for use with USB devices (mouse, keyboard, etc.)

- On-Screen Display (OSD) adjustments in six different languages: English, Dutch, French, German, Italian, and Spanish for ease of set-up and screen optimization

- Diskette included that contains an information file (INF), Image Color Matching file (ICM), and the Compaq LCD Display Assistant setup and configuration utility

- Programmable sleep mode timer

- Security lock slot

- Fault Management and AssetControl

- Energy Saver feature for Energy Star compliance

- Compliant with the following regulated specifications:
  - ❏ Swedish MPR II 1990
  - ❏ EPA ENERGY STAR
  - ❏ European Union CE Directives
  - ❏ Swedish TCO 1995

Universal Driver Manager

This monitor may require a graphics driver (and/or .INF file) that is compatible with your computer's graphics adapter. A diskette containing an .INF file is included with this monitor (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

This monitor includes a diskette with 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 Windows 95 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, follow the instructions on the "Configuring Your Compaq LCD Monitor" card located in the Program License Agreement envelope along with the diskette.

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 one end of the monitor signal cable ❹ to one of the two connectors ❷ on the rear panel of the monitor; connect the other end 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.
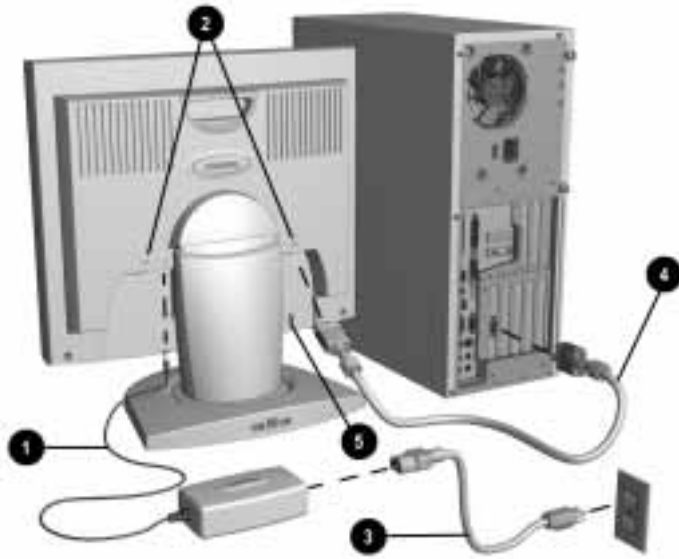
3. Connect the monitor power cord that extends from the AC adapter ❶ into the back of the monitor.

4. Connect one end of the AC power cord ❸ to the AC adapter and the other end to an electrical outlet that is easily accessible and close to the monitor.

⚠ **CAUTION:** When connecting the monitor, be sure to use the AC adapter supplied with the monitor. Failure to use this AC adapter may result in damage 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.

✎ For security purposes, this monitor has been fitted with a slot ❺ for use with a security cable lock that can be purchased separately at most computer stores.

✎ At this time, install the Compaq LCD Display Assistant utility included on the INF/ICM diskette. Use the on-screen instructions to adjust the picture quality of your monitor. To install this utility onto your computer, follow the instructions on the "Configuring Your Compaq LCD Monitor" card located in the Program License Agreement envelope.

IMPORTANT: Always activate a screen saver program, the programmable sleep mode timer, or turn off the monitor when it is not in use for a prolonged period of time. All LCD monitors that display the same static image on the screen for a prolonged period of time may exhibit screen image retention. Please note that image retention is not a permanent condition and will fade over a period of time. Image retention is a condition that may occur on all LCD screens.

USB Connectors

The base of the monitor has three Universal Serial Bus (USB) connectors, one of which serves as the connection to the computer. USB connectors automate peripheral connection by using plug and play install procedures; plug in the USB device while the system is turned on and use it. Use USB connectors ❶ and ❸ to connect USB-compatible plug and play devices such as a keyboard, mouse, or joystick if supported by your computer. Use USB connector ❷ to connect the USB signal cable to the computer.

IMPORTANT: These USB connectors are not designed for use with high-power USB devices such as a video camera, scanner, etc. Compaq recommends connecting high-power USB devices directly to the computer.

To maintain the integrity of signal transfers on USB devices, do not use a cable extender with any USB cable. Low-power USB devices usually have an attached cable that measures about 3 meters.

✎ Most USB-connected devices will operate with Compaq computers using Microsoft Windows 95, OSR Version 2.1. If a USB-connected device fails to operate, it may require a special device driver that is not supplied with this version of Microsoft Windows. Contact your local driver vendor for driver availability.

✎ Do not daisy-chain a bus-powered device to a bus-powered hub device that is connected to a USB connector on this monitor. For example, do not connect a mouse to a keyboard that is directly connected to the monitor. The secondary bus-powered device will not operate. All USB bus-powered devices should be connected directly to the monitor, an external powered hub, or to your computer.

Removing the Monitor Base

Before you can mount the monitor onto a swing arm or other mounting fixture, you must remove the monitor from the base.

⚠ **CAUTION:** Before beginning to disassemble the monitor, be sure the monitor is turned off and the power and signal cables are both disconnected.

To remove the monitor from the base, complete the following steps:

1. Lay the front bezel down on a soft area to prevent it from getting scratched, defaced, or broken.

2. Grasp the base cap ❶ and gently press in the sides; then lift up and pull off the base cap.

3. Remove the two screws ❷ as shown below.
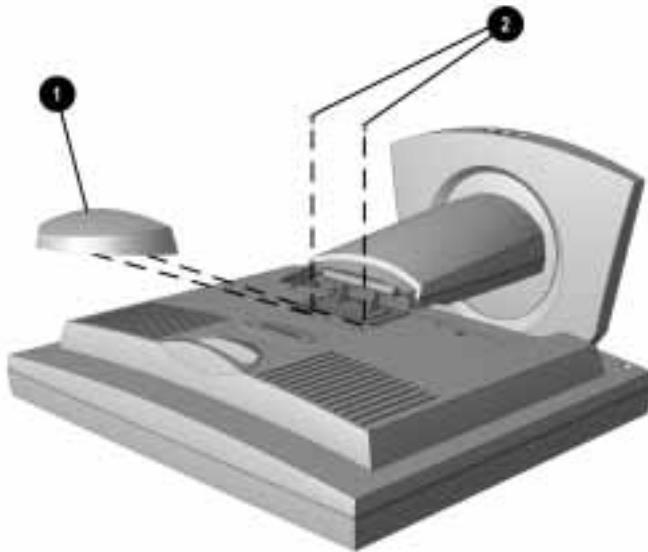
4. Remove the base from the monitor by pushing it in towards the monitor, then lifting up to unhook it.
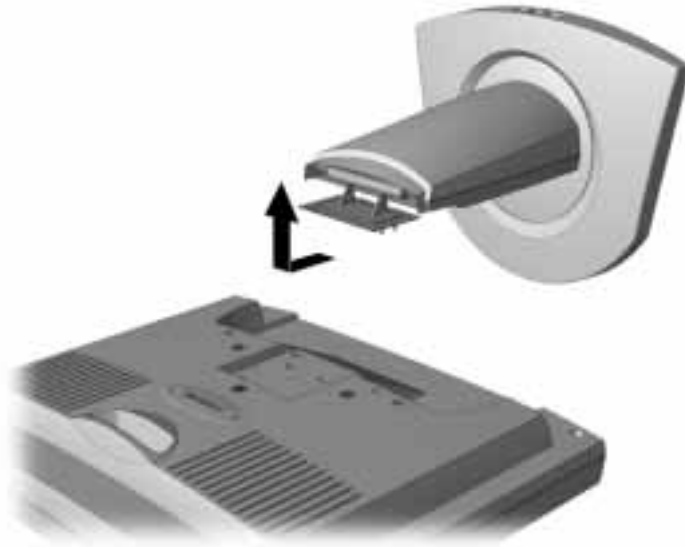
When the base is removed, four threaded mounting holes are exposed on the monitor panel to be used for mounting purposes. These mounting holes are compliant with the Video Electronics Standards Association (VESA) standard for mounting flat panel displays.

To mount the monitor on a swing arm or other mounting fixture, follow the instructions included with the mounting fixture to be used.

Operating the Monitor

Front Panel Controls

No./Icon		Control	Function
❶	⊕A ⊙ ⊕B	Computer Signal Switch	Selects the computer signal to receive when two computers are connected to the monitor at the same time.
❷	🗐	Menu button	1. Launches first and second-level on-screen menus. 2. Exits menus and on-screen display.
❸	−	Minus button	Selects and adjusts the functions.
❹	+	Plus button	Selects and adjusts the functions.
❺	⏻	Power switch	Turns the monitor on and off.
❻		Power LED	1. Green indicates monitor is turned on. 2. Amber indicates sleep mode. 3. Blinking Amber indicates Programmable Sleep Timer*.

*Programmable Sleep Timer enables you to set a time for the monitor to power on and power off at the same time every day. It eliminates the need to turn off the monitor at the end of the day and conserves energy. To set this mode, refer to Sleep Timer in the on-screen display.

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 following menu shows the functions at each level:

Menu Level 1	Menu Level 2	Menu Level 3
Brightness	Adjustment scale	
Contrast	Adjustment scale	
Position	Horizontal Position Vertical Position Cancel Save and Return	Adjustment scale Adjustment scale
Color	9300 K 6500 K Custom Color Cancel Save and Return	Adjustment scale Adjustment scale Color adjustment scale
Digital Conversion	Clock Clock Phase Clock Phase Fine Cancel Save and Return	Adjustment scale Adjustment scale Adjustment scale
Language	Deutsch English Espanol Francais Italiano Nederlands Save and Return	
Management	Power Saver Mode Display Serial Number Sleep Timer	ON OFF ON OFF Displays Serial Number Set Current Time Set SLEEP Time Set ON Time TIMER: ON/OFF SLEEP NOW
	Cancel Save and Return	
Factory Reset	Resets the screen to its factory settings. Cancel/Reset	
Exit	Turns off the on-screen menu.	

How to Adjust Settings

To launch the on-screen display Main Menu:

1. Press the Menu button ❶ on the monitor front panel. The Main Menu will display on the monitor screen.

2. To select an item from the Main Menu, scroll down by pressing the Minus (-) button ❷ located on the monitor front panel. To reverse or back up, press the Plus (+) button ❸.

3. Highlight your choice and press the Menu button ❶ again.

   For example, to select the Position menu, press the Minus button ❷ until Position is highlighted, then press the Menu button ❶ to display the submenu for Position.

Monitor with On-Screen Display

4. A second-level menu displays with expanded menu items. Again, to make a selection, press the Minus (−) button ❷ to scroll down or press the Plus (+) button ❸ to reverse or back up.

5. Highlight your choice, then select *Save and Return*. To void any changes made, select *Cancel* instead of *Save and Return.*

✎ The second-level menu for Brightness and Contrast displays an adjustment screen. Use the Minus button to decrease and the Plus button to increase the screen brightness and contrast.

6. Access the third level menu by selecting a function and pressing the Menu button. Adjust the third level menu displays using the same procedures as the second level.

7. To exit from the on-screen menu, select *Exit* from the Main Menu. If the display is a second or third-level menu, select *Save and Return* or *Cancel,* then select *Exit* from the Main Menu.

The on-screen display is easy to use, just follow the instructions on the screen.

Computer Signal Switch

This monitor has two signal connectors on the rear panel for connecting two computers to the monitor. When two computers are connected to the monitor and both are turned on, select the computer signal you want to use by doing the following:

■ On the front panel, set the computer signal switch (❶ in the Front Panel Controls table) to A for the computer connected to the left side of the monitor.

■ Set the computer select switch to B for the computer connected to the right side of the monitor.

If only one computer is connected or turned on, set the computer select switch to the center position. The input signal is automatically determined.

Special OSD Messages

Special OSD messages will appear on the monitor screen when identifying the following monitor conditions:

- **Input Signal Out of Range**—Indicates the monitor is unable to access the appropriate input signal.

- **Going to Sleep**—Indicates the screen display is entering a sleep mode.

- **Check Video Cable or Input Select**—Indicates the video cable may not be plugged into the computer or the selected video input is not accurate.

- **2 Inputs Active…Select A or B** — Indicates two active videos are connected and the computer signal switch needs to be moved from the center position to a select position.

Programmable Sleep Timer

The Programmable Sleep Timer is an energy-saving feature that enables you to set a time for the monitor to power on and off at the same time every day. This also extends the life of the backlight bulbs in the monitor. The Sleep Timer has five settings:

- Set Current Time
- Set SLEEP Time
- Set ON Time
- TIMER: ON/OFF
- SLEEP NOW

To set the timer:

1. Press the Menu button on the monitor front panel to display the Main Menu.

2. Scroll down and highlight *Management.*

3. Press the Menu button to select *Management.*

4. Scroll down and highlight and select *Sleep Timer*→ *Set Current Time*.

✎ You must set the current local time before you reset the time for *SLEEP Time* or *ON Time.*

5. Press the Menu button once to enter the adjustment mode for hours—the hours will blink.

6. Press the Minus or Plus buttons to adjust the hour.

7. Press the Menu button again to enter the time for minutes—the minutes will blink.

8. Press the Minus or Plus buttons to adjust the minutes.

9. Press the Menu button to lock in the time chosen.

10. After setting the current time, the blinking highlight automatically skips to *Set SLEEP Time* "hours." Repeat steps 6 through 9 to set *SLEEP Time.*

    If you do not want to set *SLEEP Time,* press the Menu button twice, then select *Save and Return* to exit the menu.

11. After setting SLEEP Time, the blinking highlight automatically skips to *Set ON Time* "hours." Repeat steps 6 through 9 to set *ON Time*.

12. Set the Timer mode to *ON* to activate the Sleep Timer settings.

13. When you are finished, select *Save and Return* to exit the menu.

The fifth selection *SLEEP NOW* turns the monitor backlights off immediately and stays in sleep mode until the next *On Time* activates or the menu button is pressed.

Adjusting Screen Quality

Allow the monitor to warm up for 20 minutes before performing the following procedures. The screen image stabilizes after a warm-up period.

✎ Use the Compaq LCD Display Assistant utility included on the INF/ICM diskette to adjust the screen quality of your monitor. It provides on-screen instructions. To install this utility onto your computer, follow the instructions on the "Configuring Your Compaq LCD Monitor" card located in the Program License Agreement envelope.

Optimizing Digital Conversion

This monitor contains advanced circuitry that allows the flat panel screen to function like a standard monitor. Three controls in the on-screen display can be adjusted to improve image performance or digital conversion: Clock, Clock Phase, and Clock Phase Fine.

IMPORTANT: The Clock must first be set correctly since the Clock Phase settings are dependent on the main Clock setting.

■ Clock—Increase/decrease the value to minimize any vertical bars or stripes visible on the screen background.

■ Clock Phase—Increase/decrease the value to minimize video distortion or video jitter.

■ Clock Phase Fine—Increase/decrease the value to fine-tune or focus the display.

✎ When adjusting the Clock and Clock Phase values, if the monitor images become distorted, continue adjusting the values until the distortion disappears. To restore the factory settings, select *Reset* from the *Factory Reset* menu in the on-screen display.

Display Resolutions

The display resolutions listed below are the most commonly used modes and are set as factory defaults. This monitor automatically recognizes these preset modes and they will appear properly sized and centered on the screen.

Display Resolutions	
Preset Modes	**Resolutions**
1. Industry Standard	640 × 350 at 31.5 kHz/70 Hz
2. Industry Standard	640 × 480 at 31.5 kHz/60 Hz
3. VESA	640 × 480 at 37.5 kHz/75 Hz
4. VESA	640 × 480 at 43.3 kHz/85 Hz
5. Industry Standard	720 × 400 at 31.5 kHz/70 Hz
6. VESA	800 × 600 at 37.8 kHz/60 Hz
7. VESA	800 × 600 at 46.9 kHz/75 Hz
8. VESA	800 × 600 at 53.7 kHz/85 Hz
9. Macintosh-compatible	832 × 624 at 49.7 kHz/75 Hz
10. VESA	1024 × 768 at 48.4 kHz/60 Hz
11. VESA	1024 × 768 at 60 kHz/75 Hz
12. VESA	1024 × 768 at 68.7 kHz/85 Hz
13. Macintosh-compatible	1152 × 870 at 68.7 kHz/75 Hz
14. SUN-compatible	1152 × 900 at 61.8 kHz/66 Hz
15. VESA	1280 × 1024 at 63.9 kHz/60 Hz
16. VESA	1280 × 1024 at 79.9 kHz/75 Hz

User Modes

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

■   You are not using a Compaq standard 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 recognizes the new mode just as it does a preset mode. In addition to the 16 factory preset modes, there are 10 user modes that can be entered and stored.

Energy Saver Feature

The energy saver feature has three different modes of operation:

■ Full power

■ Sleep

■ Programmable Sleep

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

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

Energy Saver Levels*		
Mode	**Power Usage**	**Description**
Full Power	Less than 60 watts	ON = Normal operation Power LED is green.
Sleep	Less than 8 watts	Monitor screen is blanked. Backlights are turned off. Power LED turns amber. There is a brief warm-up period before returning to full power mode.
Programmable Sleep	Less than 8 watts	Monitor screen is blanked. Backlights are turned off. Power LED blinks amber. There is a brief warm-up period before returning to full power mode.

*Since the USB hub is powered from the computer, the energy saver levels listed for the monitor are not affected by USB devices connected to the USB ports.

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.

■ 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. Never use water to clean an LCD screen.

Shipping the Monitor

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