

hp L1810 D5069 18.1-inch LCD Color Monitor (18.1-inch Viewable Image)

User's Guide

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Important Safety Instructions

WARNING

For your safety always connect equipment to a grounded wall outlet. Always use a power cord with a properly grounded plug, such as the one provided with the equipment, or one in compliance with your national safety standards. This equipment can be disconnected from the power by removing the power cord from the power outlet. This means the equipment must be located close to an easily accessible power outlet.

To avoid electrical shock, do not open the monitor's cover. There are no user-serviceable parts inside. Only qualified service personnel should service these parts.

Make sure your PC is powered off before connecting or disconnecting a display peripheral.

Working in Comfort

Thank you for selecting HP monitor equipment.

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 online version of Working in Comfort preloaded on the hard disk of HP computers, or visit HP's Working in Comfort web site at:

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

CAUTION



The lightning flash with arrowhead symbol, situated within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" which may be of sufficient magnitude to constitute a risk of electric shock.



The exclamation mark within an equilateral triangle is intended to alert the user to the presence of important operating and servicing instructions in the literature accompanying the appliance.

WARNING

Before you connect any cables or install your HP monitor, refer to the above safety instructions. Refer also to the user's manual that accompanies your PC and the video adapter to ensure this equipment is correctly installed.

What Your New Monitor Offers

Your HP monitor is a 18.1-inch (diagonal and viewable image), high resolution, liquid crystal multi-synchronous color monitor. Multi-synchronous means that the monitor supports a large range of video modes (see "Supported Video Modes" on page 21). It is optimized to be used with all Hewlett-Packard computers.

Your HP LCD color monitor has the following features:

- A 18.1-inch Thin Film Transistor (TFT) liquid crystal display. It has a non-glare, antistatic screen coating.
- Large viewing angle.
- Support of video modes up to 1280 × 1024 at a 75 Hz refresh rate.
- A DVI-D connector and a VGA connector on the rear panel enabling connection to two computers.
- Hot key auto-adjustment of display position, clock and phase for the VGA input.
- Power management system (VESA¹ standard) controlled from suitably equipped HP computers to automatically reduce the power consumption of the monitor. Complies with the Energy Star Computers Program initiated by the US EPA² specification for energy efficient monitors. As an Energy Star Partner, Hewlett-Packard has determined that this product meets the Energy Star guidelines for energy efficiency.³
- Plug and Play capability (compliant with VESA DDC1, DDC2B standards) that enables the monitor to identify itself to suitably equipped HP computers.
- Your HP monitor complies with ISO 9241-3/8 and ZH-1/618 ergonomic standards.
- Your HP monitor complies with TCO 99 requirements.
- Your monitor complies with MPRII guidelines for upper limits of electrical and electrostatic emissions, from the Swedish National Board of Measurement and Testing.
- USB-Hub (Universal Serial Bus-Hub) integrated in the monitor base (some models only). Allows you to connect one up- and 4 downstream USB devices.
- Slot for security lock.
- A programmable sleep mode timer which can prolong the life of your monitor.

1. VESA is the Video Electronics Standards Association

2. The US EPA is the United States Environmental Protection Agency

Unpacking Your Monitor

Check for the following items. If they are missing or damaged, consult your place of purchase immediately.

- 1 LCD monitor
- 1 power cord and adapter
- 1 VGA cable
- 1 DVI cable
- 1 USB cable
- 1 quick set-up card
- 1 warranty booklet
- 1 CD-ROM

3. ENERGY STAR is a US registered service mark of the USEPA.

Setting Up Your Monitor

Where to Place the Monitor

Place your monitor on a flat sturdy surface. Ensure the operating site is free from excessive heat and moisture.

WARNING

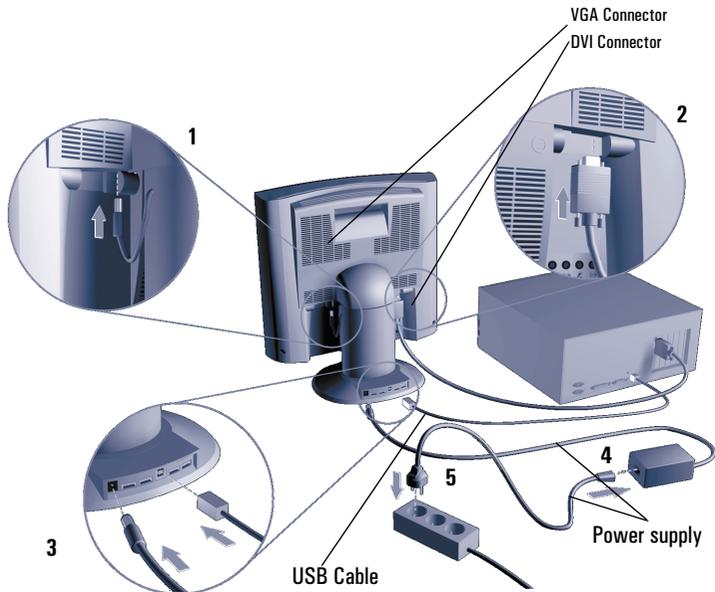
Before you connect any cables, or install your HP monitor, refer to the safety instructions at the beginning of this manual. Refer also to the user's manual that accompanies your PC and video adapter to ensure this equipment is correctly installed.

Connecting the Cables

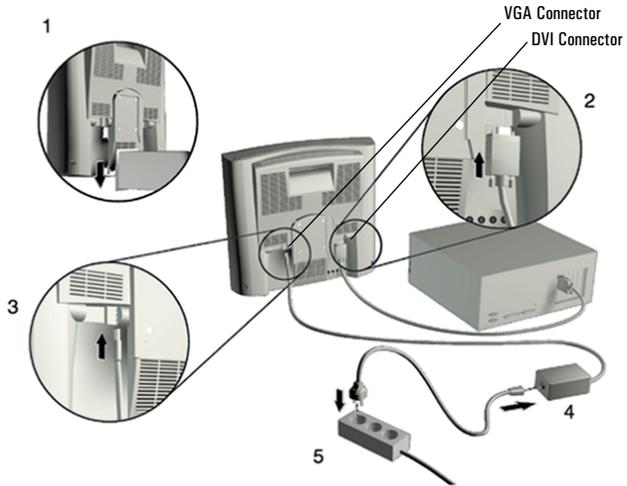
Make sure the system power is turned off. Look at the diagram below and follow the steps which show you how to connect the cables to your LCD monitor. (Stand version).

Connecting Two Computers to the Monitor

Your LCD monitor has two signal connectors: one DVI-D and one VGA connector, located on the rear panel (see "Selecting Video Input" on page 16). You may connect your monitor to two computers at the same time

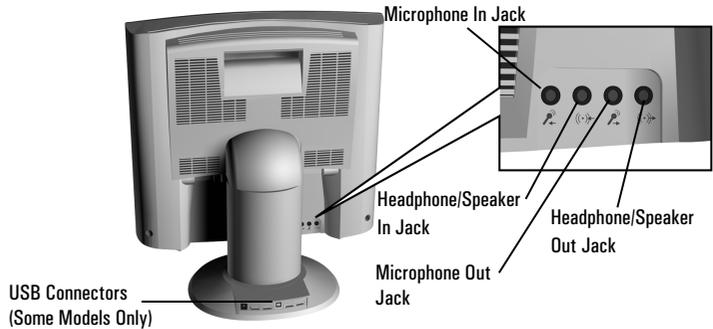


Connecting the Cables continued.



Connecting Additional Devices to Your Monitor

The following diagram indicates additional devices that can be connected.



USB Connectors (Models A & J Only)

A USB-hub is integrated in the base of your monitor stand. USB connectors automate peripheral connection by using plug and play install procedures. Connect your USB device to your computer as indicated in the section "Connecting the Cables" on page 5. Connect USB compatible plug and play devices such as a keyboard, mouse, joystick or digital USB camera (if supported by your computer) to any of the four remaining downstream connectors.

Connecting Headphones/Speakers and a Microphone

Your monitor has headphone/speaker and microphone sockets on the rear panel.

How To Install The Drivers

In order to take advantage of the Plug & Play functionality of your Windows 95/98/2000 operating system, HP Monitors come with a driver.

To install this driver:

Windows 95
and 98 Users

- 1 Click on **Start**, select **Settings**, then click **Control Panel**.
- 2 Double click on **Display**.
- 3 Click on the **Settings** tab.
- 4 Click on **Advanced Properties** or **Advanced...** and select the **Monitor** tab.
- 5 Click on **Change...** to select the model of the HP Monitor you are using.
- 6 Click on **Have Disk...**
- 7 Click on **Browse...** to find the ***.INF** file on your CD-ROM under the **\Drivers** directory and click on **OK**.
- 8 Select your monitor type from the **Models** box and click on **OK** to install the selected monitor.

Windows
2000 Users
only

- 1 Click on **Start**, select **Settings**, then click **Control Panel**.
- 2 Double click on **Display**.
- 3 Click on the **Settings** tab.
- 4 Click on **Advanced Properties** or **Advanced...** and select the **Monitor** tab.
- 5 Click on **Properties**.
- 6 Click on the **Driver** tab.
- 7 Click on **Update Driver...** and click on **Next**.
- 8 Select the **Recommended** option and click on **Next**.
- 9 Check the **Specify a Location** box.
- 10 Find and open the ***.INF** file on your CD-ROM under the **\Drivers** directory and click on **OK**.
- 11 Click on **Next** to install the selected monitor.

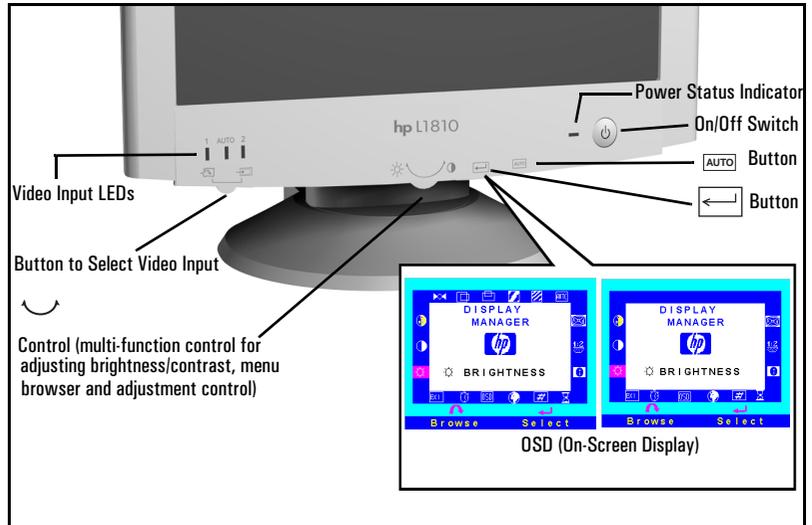
Your operating system and your HP Monitor are now set up to work in optimum conditions.

If the installation procedure of your monitor driver on your Windows 95/98/2000 version is different or you need more detailed installation information, please refer to Windows 95/98/2000 user's manual.

To download the latest version, visit our HP Monitors Support web site at: <http://www.hp.com/go/monitorsupport>

Adjusting Your Monitor

You can adjust your monitor for VGA specific parameters (i.e. position, phase, clock), the contrast and brightness and select a video input channel using the controls located on the front panel of your monitor.



Adjustments to the LCD monitor's features are made from the OSD (on-screen display).

- 1 Press  to enter the OSD main menu.
- 2 Select the feature you require using the  control, then press  to confirm your selection.

NOTE

To exit the main menu select **EXIT** from the OSD main menu. You can exit all menus at any time by double clicking the button.

When to Adjust your Monitor

- 1 Using the DVI interface (video input **LED number 1** is **on**).
When the monitor is installed for the first time - The only adjustment you may need to perform concerns the contrast, brightness and color. This is a specific advantage of DVI.
- 2 Using the VGA interface (video input **LED number 2** is **on**).
 - When the monitor is installed for the first time
 - If the resolution or frequency has been changed
 - If the graphic card has been changed
 - If the monitor is connected to a different computer

NOTE

It is recommended that you select a video mode of 1280 x 1024 at 60Hz on your computer for optimum performance.

How to Adjust Your Monitor

In order to adjust VGA specific parameters (i.e. position, phase, clock), please run the HP optimizer utility "**D5069adj.exe**" which is provided on the CD-ROM.

For other adjustments and configurations, refer to the following sections.

Your optimizer utility also contains driver for Windows 95, Windows 98 or Windows 2000 **D:\Drivers*.INF**.

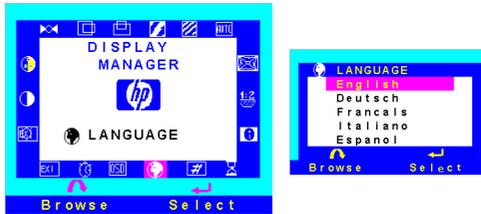
USING Your Monitor

Changing the Language of your OSD

Your OSD operates in several different languages.

To change the language of your OSD main menu:

- 1 Select  from the OSD menu, then press  to enter the **LANGUAGE** submenu.

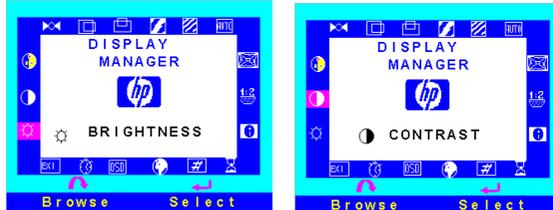


- 2 Select a language from the list using the  control, then press  to confirm your selection and return to the main menu.

Brightness and Contrast

To adjust brightness and contrast directly:

- 1 Rotate the adjustment control to select ☀ or 🌑



- 2 Make your adjustments using the ⤴ control.
It is recommended that you select a value of around 70% for brightness and 50% for contrast.
- 3 Press ⏪ to save your adjustments.

NOTE

You can also adjust the contrast and brightness by selecting 🌑 **CONTRAST** or ☀ **BRIGHTNESS** from the OSD main menu. Make your adjustments using the ⤴ control, then press to return to the OSD main menu.

Auto-Adjustment

The Auto-adjustment feature is suitable for VGA input only. Press the **AUTO** button to activate the function. For optimal automatic adjustment it is recommended to display a 'test pattern'. To do so run the HP optimizer utility "**D5069adj.exe**" which is provided on the CD-ROM.



NOTE

With auto-adjustment it is not necessary to adjust **H POSITION**, **V POSITION**, **CLOCK** or **PHASE**. However, if the results are unsatisfactory, follow the on-screen instructions in the HP Optimizer Utility to adjust these options manually.

Color

Your monitor displays a combination of red, blue and green to show a full color image. To change the proportions of red, blue and green, you need to change the color temperature:

- 1 Select  and press  to enter the **COLOR** submenu.



- 2 Select the feature you require using the , then press  to confirm your selection.
- 3 a) If you are selecting a preset color temperature, select **EXIT**, then press  to return to the main menu.
b) Otherwise, select **R**, **G** or **B** from the **USER COLOR** submenu that appears and then press  to confirm your selection.
- 4 Adjust the color level using the  controls, then press  to save your selection.
- 5 Select **SAVE AND EXIT**, then press  to return to the main menu.

NOTE

To reset the color settings in the **USER COLOR** submenu, select **RESET** and press  to confirm your selection, then continue with step 5.

Restoring the Default Settings

This function is only available when using the VGA input (video input **LED 2** in **on**). The restored settings concern VGA specific adjustments only.

To return to the position, clock and phase default settings:

- 1 Select  then press  to enter the **MODE RECALL** submenu.

HP 18.1 LCD " Color Monitor User's Guide

USING Your Monitor

- 2 Select **YES** using the  control, then press  to confirm your selection.



The monitor image will disappear for a few seconds while the monitor restores its default settings.

Setting the Timer

Your monitor has a time control function that can prolong the lifetime of your monitor. This enables you to set a time for your monitor to power on and power off each day. To set the timer:

- 1 Select  then press  to enter the **TIMER** submenu



- 2 Select the feature you require using the  control, then press  to confirm your selection.

The following table describes the time control options available:

| Menu Item | Use to | Action |
|--------------|---|--|
| Current Time | Set the current local time | 1. Select the hour setting using the  control, then press  to confirm your selection. |
| Standby Time | Set the time at which you wish your LCD to switch OFF | 2. Select the correct hour, then press  to confirm your selection. |
| On Time | Set the time at which you wish your LCD to switch ON | 3. To select the minute setting repeat steps 1 and 2. 4. When the correct time is set, select EXIT , then press  to return to the TIMER submenu. |
| Timer ON/OFF | Switch the timer ON or OFF | 1. Select ON or OFF using the  control. 2. Press  to make your selection and return to the TIMER submenu. |

3 Select **EXIT**, then press  to return to the main menu.

NOTE

When the monitor is in power off mode the front panel indicator flashes amber. To reactivate your monitor when in power off mode, press the on/off button.

Every time your monitor is unplugged you will need to reset your monitor's timer.

Adjusting the Image Size

If the display properties in your computer are set to a resolution lower than 1280 x 1024, your monitor will be of lower quality when in full-screen mode. This is due to the approximations made in the scaling process. To display the image at the optimum quality:

- 1 Select  from the on-screen main menu and press  to enter the **IMAGE SIZE** submenu.



USING Your Monitor

- 2 Select the feature you require using the  control, then press  to confirm your selection and return to the main menu.

The following table describes the options available:

| Image Size Menu Item | Use to... |
|----------------------|---|
| FULL SCREEN | Display the image at a size that fills the entire screen |
| ASPECT RATIO | Display the image at maximum size, while maintaining the aspect ratio of the original image |
| 1:1 | Display the image at actual pixel size |

NOTE

If you are using a video resolution of 1280 × 1024, selecting **ASPECT RATIO** will not alter the size of the image.

Selecting Video Input

The rear of your monitor has two video input connectors to connect one or two computers (see “Connecting Two Computers to the Monitor, on page 5”). The Video Input LEDs located on the front panel of the monitor indicate which connector is receiving input. Use either Auto or Manual selection to select the appropriate input.

Auto Selection

When you first connect your computer to the monitor, the monitor automatically selects one of the following combinations, depending on which connector is receiving input.



If two operational computers are connected, the monitor automatically selects the computer that has input priority (see “Selecting Input Priority” on page 17). If the monitor detects no input from the computer with priority, it automatically searches for a signal from the second computer.

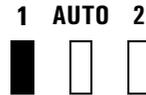
NOTE



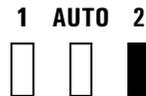
Manual Selection

To manually select an input channel, use the video input button. This is located beneath the front panel of the monitor next to the Video Input **LED's**.

If you want to receive a signal from a computer connected to  1 (DVI) select the following.



If you want to receive a signal from a computer connected to  2 (VGA) select the following:



If two operational computers are connected, the monitor is only able to detect input from the computer connected to the connector selected.

NOTE

To return to auto selection at any time select AUTO connectors 1 (DVI) and 2 (VGA).

Selecting Input Priority

When your monitor is connected to two computers, you will need to give priority to one computer. This computer is selected every time you switch on your monitor and when using auto selection (see “Auto Selection” on page 16). To choose which computer has priority:

- 1 Select  from the main menu, then press  to enter the **INPUT PRIORITY** submenu.



- 2 Select **INPUT 1** or **INPUT 2** using the adjustment control, then press  to save your selection and return to the OSD main menu.

The displayed image will disappear for a few seconds. The message **Auto Video Input Selection Priority to 1** (or 2 depending on your selection) appears while the monitor makes your selection.

NOTE

Input 1 and **Input 2** correspond to connectors 1 and 2 on the rear of the monitor.

Obtaining Information

To obtain information about your monitor, select one of the following main menu items:

| Menu Item | Select to... |
|---|--|
|  SERIAL NUMBER | Display the serial number of your monitor |
|  BACKLIGHT TIMES | Display the estimated life span of the monitor's backlight |
|  MODE INFO | Display the video mode currently in use ¹ Display the preset modes and user modes available ² |

1. Contains a record of any adjustments that the user makes in the main menu system.
2. Standard factory configurations.

Changing the OSD Settings

To change the position of the OSD or adjust the length of time each menu is displayed:

- 1 Select  and press  to enter the **OSD MANAGER** submenu.



- 2 Select the feature you require using the adjustment control, then press  to confirm your selection.

The following table describes the OSD settings available:

| OSD Manager Menu Item | Use to Adjust... | Action |
|----------------------------------|---|---|
| PROTECTED OSD | (See "Protected OSD" on page 20) | |
| OSD TIMEOUT | The duration your on-screen menu appears on screen | Adjust the number of seconds using the adjustment control, then press  to return the OSD MANAGER submenu. |
| INFORM ON/OFF | The duration the information box appears on screen when your monitor is switched on | Select ON or OFF using the adjustment control, then press  to confirm your selection. |
| V POSITION | The vertical position of the OSD | Adjust the position of the menu using the adjustment control, then press  to return to the OSD MANAGER submenu. |
| H POSITION | The horizontal position of the OSD | |

3 Select **EXIT**, then press  to return to the main menu.

Protected OSD

When this mode is selected the user can adjust the brightness/contrast and OSD Manager only. To enable or disable protected OSD mode:

- 1 Select **PROTECTED OSD** to enter the **PROTECTED OSD** submenu.



- 2 Select each digit of the six figure password¹ using the  control, pressing  each time to confirm your selection.
- 3 When you have selected the correct password a submenu is displayed. Select **YES** or **NO** to select or deselect Protected OSD, then press  to exit.

Setting the Amount of Displayed Information

To set the amount of displayed information, change the *screen resolution* of your computer. The higher the screen resolution, the more information you can see on the screen. It is recommended that you use a resolution of 1280 X 1024.

It is recommended that you use a refresh rate of 60 Hz. The image refresh rate is the number of times per second that the image is redrawn.

To find out which resolutions and refresh rates are supported by your monitor, see "Supported Video Modes" on page 21. To change the screen resolution, please refer to the manual that came with your computer or your operating system.

Your monitor has a Plug and Play capability (VESA DDC1, DDC2B, DDC2Bi standard) that enables it to identify itself to suitably equipped HP computers.

NOTE

LCD technology does not cause any flicker at low refresh rates.

1. The default password is 040990

Minimizing Energy Consumption

If your computer supports VESA monitor power management (available on many HP computers), you can minimize the power consumed by the monitor. There are two power saving modes:

- Suspend mode¹ (uses less than 5W).
- Sleep mode² (uses less than 5W).

When the monitor enters power saving mode the message **POWER SAVING MODE** is displayed for a few seconds before the screen blanks. In power saving mode the front panel indicator light is amber.

To set these power saving modes, refer to the manual that came with your computer.

Supported Video Modes

Your monitor has the preset modes shown in the table below.

| Screen Resolution | Image Refresh Rate |
|-------------------|---------------------|
| 640x350 | 70 Hz |
| 640x480 | 60 Hz, 75 Hz, 85 Hz |
| 720x400 | 70 Hz |
| 800x600 | 60 Hz, 75 Hz, 85 Hz |
| 832x624 | 75 Hz |
| 1024x768 | 60 Hz, 75 Hz, 85 Hz |
| 1152x870 | 75 Hz |
| 1152x900 | 66 Hz |
| 1280x1024 | 60 Hz, 75 Hz |

NOTE

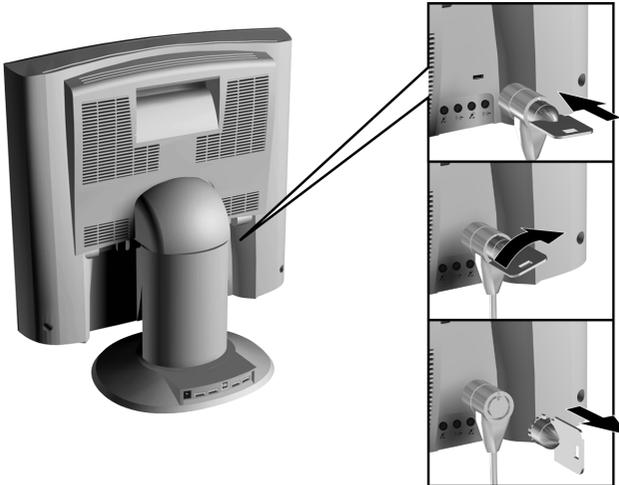
Selecting a combination of screen resolution/image refresh rate higher than 1280 x 1024 at 75 Hz can damage your monitor.

If you select a video mode not supported by your monitor the message **NON SUPPORTED VIDEO MODE** is displayed.

1. Suspend mode is activated when horizontal sync is cut by the video controller.
2. Sleep mode is activated when both vertical and horizontal sync are cut by the video controller.

Securing Your Monitor

The monitor can be secured to your desk, or any other fixed object, using a Kensington lock security cable. The cable can be attached to a slot located on the rear of the monitor.



- 1 Insert the lock in the slot located on the rear of the monitor.
- 2 Turn the key to lock the cable to the monitor.
- 3 Remove the key and store it in a safe place.

The Kensington lock is not an HP accessory. It cannot be ordered from HP. Contact your reseller for more information.

Troubleshooting

Before calling HP check the following:

There is no picture and **LED** Status Indicator is off:

- Check that the monitor is switched **on**.
- Check that the power cord is properly connected.
- Check the electrical outlet.
- Test and see if monitor works on another PC previously set to another monitor's supported resolution.

There is no picture and the **LED** Status Indicator is green:

- Check that the monitor is not in power saving mode. (When in power saving mode the **LED** is amber. When the monitor is **on** the **LED** is green).
- Adjust the **Contrast** and **Brightness** through OSD or control buttons.
- Check that the PC is switched on.
- Check that the video cable has no bent pins.
- Test that the monitor works on another PC previously set to another monitor's supported resolution.

The picture is fuzzy:

- Adjust your monitor, using the **Auto Adjustment** function (Refer to "Auto-Adjustment" on page 12.).
- If you are running a Windows 95/98/2000 Operating System then install the **INF** file - Plug and Play driver (Refer to "How To Install The Drivers" on page 8.).
- Change the resolution to the recommended resolution 1280 x 1024 at 60 Hz.

Pixels are missing:

- Refer to "LCD Monitor Quality and Pixel Policy" on page 24, or the web.

Colors are not pure:

- Check that the video cable has no bent pins and is firmly attached to both the PC and monitor Video Connectors.
- Adjust the **RGB** (Red, Green and Blue) colors to as required (Refer to "Color" on page 13.).

The picture is not centered:

- Adjust your monitor using the **Auto Adjustment** function (Refer to "Auto-Adjustment" on page 12.).

All documents are also available on HP Monitors support web site at:

www.hp.com/go/monitorsupport

LCD Monitor Quality and Pixel Policy

Your Hewlett-Packard TFT display uses high precision technology, manufactured according to HP standards, to guarantee trouble-free personal computing. Nevertheless, your display may have cosmetic imperfections that appear as small bright or dark spots. This is common to all LCD displays used in products supplied by all vendors and is not specific to the HP D5069 displays. These imperfections are caused by one or more defective pixels or sub-pixels.

A pixel consists of one red, one green and one blue sub-pixel.

Defective sub-pixels are less visible than defective whole pixels. Defective sub-pixels are small and only visible on a specific background.

Defective means either the pixel or sub-pixel is stuck always ON, a bright spot on a dark background, or it is stuck always OFF, a dark spot on a bright background. The first is the more visible of the two.

A dot defect is a stuck sub-pixel.

Your HP D5069 will not have more than:

- 10 total dot defects
- 8 stuck full pixels
- 8 stuck red sub-pixels
- 5 stuck green sub-pixels (green is most visible)
- 8 stuck blue sub-pixels
- No more than two **adjacent** pixels may be stuck
Adjacent is defined as less than 15mm edge to edge
- No more than two pairs of two-adjacent stuck pixels per display.

To locate defective pixels, the unit should be viewed under normal operating conditions and in normal operating mode at a supported resolution and refresh rate, from a distance of approximately 50cm (16 in.).

HP expects that over time, the industry will continue to improve its ability to produce displays with fewer cosmetic imperfections and HP will adjust our guidelines as improvements are made.

Technical Specifications

| | | |
|---|--|--|
| LIQUID CRYSTAL MONITOR | Size | 18.1-inch diagonal and viewable image |
| | Type | TFT liquid crystal display |
| | Pixel pitch | SXGA 1280 × 1024 pixels (R,G,B) |
| INPUT SIGNAL | Video | 0.7 Vp p analog RGB |
| | Synchronization | Separated H/V (TTL level) |
| INTERFACE | Input Connector | 15-pin mini D-SUB |
| SCANNING FREQUENCY | Horizontal | 25 to 82kHz |
| | Vertical | 54 to 88Hz |
| MAX. RESOLUTION (H × V) RECOMMENDED RESOLUTION | 1280 1024 (75 Hz) | |
| | 1280 × 1024 at 75Hz | |
| IMAGE SIZE | 359(H) × 287(V) mm | |
| POWER SOURCE | AC/DC ADAPTER | Input Rating: 100-240V ~, 2.0-1.0A, Output: 12V 5.8A Frequency: 50/60 Hz |
| | | Power Consumption: less than 60W in Operating Mode; less than 70W with USB |
| OPERATING ENVIRONMENT | Temperature | 10 °C to 35°C (operating) |
| | Humidity | 20% RH through 80% RH (without condensation) |
| STORAGE ENVIRONMENT | Temperature | - 10 °C to +60 °C (storage) |
| | Humidity | 5% RH through 95% RH (without condensation) |
| DIMENSIONS | Cabinet: 385(H) × 436(W) × 84(D) Footprint: 312.5(W) × 245(D) | |
| CABINET WEIGHT | Less Than: 12kg (24.25 lbs) | |
| TILT/SWIVEL STAND | Tilt Angle | - 5° to +25° |
| | Swivel Angle | ±30° |

Care and Cleaning

To maximize the screen life-span of this product and prevent damage to the liquid crystal display, it is recommended that you:

- Do not let liquid get on or into the monitor.
- Do not store or use the monitor in locations exposed to heat, direct sunlight, or extreme cold.
- Do not store or use the monitor in locations exposed to high humidity or in a dusty environment.
- Do not press sharp or pointed objects against the monitor.
- Avoid touching or pressing the screen of the monitor.
- Avoid setting contrast and brightness to their maximum levels for prolonged periods.
- Switch the monitor off when it is not in use. You can use the timer control to switch your monitor on and off automatically (see "Setting the Timer" on page 14).

Your monitor has an anti-glare, anti-static screen coating. To prevent damage to the monitor screen's coating, use a regular household glass cleaner when cleaning the screen.

To clean the screen:

- 1 Switch the monitor off and remove the power plug (pull the plug, not the cable).
- 2 Soak a soft gauze cloth with isopropyl alcohol or ethyl alcohol and gently wipe the surface of the monitor. Avoid dusting it or wiping it with a cloth dampened with water.
- 3 Dry with a clean, soft cotton cloth.

CAUTION

Do not use cleaning solutions containing fluoride, acids, or alkalis. Do not use ketone substances such as acetone or solvents such as xylene or toluene to clean the monitor. Do not use benzene, thinner, ammonia, or any volatile substance to clean the monitor's screen or cabinet. These chemicals may damage the monitor. Never use water to clean an LCD screen.

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. 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.

Warranty

PART I - HP General Hardware Warranty

General

This HP Monitor Hardware Warranty Statement gives you, the customer, express warranty rights from HP, the manufacturer.

FOR CONSUMER TRANSACTIONS IN AUSTRALIA AND NEW ZEALAND: THE WARRANTY TERMS CONTAINED IN THIS STATEMENT, EXCEPT TO THE EXTENT LAWFULLY PERMITTED, DO NOT EXCLUDE, RESTRICT OR MODIFY AND ARE IN ADDITION TO THE MANDATORY STATUTORY RIGHTS APPLICABLE TO THE SALE OF THIS PRODUCT TO YOU.

THE LAWS OF YOUR COUNTRY MAY PROVIDE FOR DIFFERENT WARRANTY RIGHTS. IF SO, YOUR AUTHORIZED HP DEALER OR HP SALES AND SERVICE OFFICE CAN PROVIDE YOU WITH DETAILS.

Warranty repair or replacement

| Model | Warranty Period | Service Provided | |
|-------|---|---|---|
| D5069 | 3 years - unless original end-user customer has otherwise agreed to a shorter period of warranty at the time of purchase. | Rest of World: On-site service for first year and return to HP or repair-authorized service center for the following two years. | A |
| | | US and Canada only: Return to HP or a repair-authorized service center for three years. | B |
| | | Europe only: 3 Year Next Business Day On-site Exchange (swap-out). | E |
| | 1 year | Japan: return to HP or a repair-authorized service center for one year. | D |

Hewlett-Packard (HP) warrants this monitor hardware product, or accessory against defects in materials and workmanship for the applicable warranty period stated above, commencing from the date of delivery of the product to the end-user customer.

HP does not warrant that the HP hardware will operate uninterrupted or error free.

If, during the product warranty period, HP is unable, within a reasonable time, to repair or replace your product to the condition as warranted, you will be entitled to a refund (in the amount of the product purchase price) upon prompt return of the product to your authorized HP dealer or other HP designate. Unless otherwise stated or agreed upon in writing with HP, all hardware components must be returned for refund with the entire system process unit.

HP software is covered by the HP Software Product Limited Warranty located in your HP product manual.

Unless otherwise stated, and to the extent permitted by local law, hardware products may contain remanufactured parts (equivalent to new in performance) or parts which may have been subject to prior incidental use. HP may repair or replace hardware products (i) with products which are equivalent in performance to the products being repaired or replaced but which may have been subject to prior use, or (ii) with products which may contain remanufactured parts equivalent to new in performance or parts which may have been subject to prior incidental use.

Proof of Purchase and Warranty Period

In order to receive service or support for your hardware product for the warranty period, proof of the original purchase date of the product may be required in order to establish the delivery date of your product. If the delivery date is not available, either the purchase date or the manufacturer's date (located on the product) becomes the beginning of the warranty period.

Limitation of Warranty

Warranty does not apply to defects resulting from: (a) improper or inadequate maintenance or calibration; (b) software, interfacing, parts or supplies not supplied by HP; (c) unauthorized repair, maintenance, modification or misuse; (d) operation outside of the published operating specifications for the product; (e) improper site preparation or maintenance; or (f) such other exclusions as may be expressly set forth in this Warranty Statement.

HP MAKES NO OTHER EXPRESS WARRANTY, WHETHER WRITTEN OR ORAL, WITH RESPECT TO THIS PRODUCT.

TO THE EXTENT ALLOWED BY APPLICABLE LOCAL LAW, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS LIMITED TO THE DURATION OF THE EXPRESS WARRANTY SET FORTH ABOVE.

Limitation of Liability and Remedies

TO THE EXTENT ALLOWED BY APPLICABLE LOCAL LAW, THE REMEDIES IN THIS WARRANTY STATEMENT ARE YOUR SOLE AND EXCLUSIVE REMEDIES. IN NO EVENT SHALL HP BE LIABLE FOR LOSS OF DATA OR FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGE, WHETHER BASED ON WARRANTY CONTRACT, TORT, OR ANY OTHER LEGAL THEORY.

The foregoing limitation of liability shall not apply in the event that any HP product sold hereunder is determined by a court of competent jurisdiction to be defective and to have directly caused bodily injury, death, or property damage. To the extent allowed by applicable local law, HP's liability for property damage does not exceed the greater of \$50,000 or the purchase price of the specific product that caused such damage.

LCD Monitor Quality and Pixel Policy

Your Hewlett-Packard TFT monitor uses high precision technology, manufactured according to HP standards, to guarantee trouble-free personal computing.

Nevertheless, your monitor may have cosmetic imperfections which could appear as small bright or dark spots. This is common to all TFT monitors used in products supplied by all vendors and is not specific to the HP D5069 Series monitor.

Please refer to the HP electronic services for more and detailed information on the pixel policy for the HP D5069 Series monitor.

HP expects that, over time, the industry will continue to improve their ability to produce monitors with fewer cosmetic imperfections and will adjust the HP guidelines as improvements are made.

HP Software Product License Agreement and Software Product Limited Warranty

PART II - General

HP may provide one or more software programs for this monitor on a separate media. Please read the Software License Agreement before proceeding.

CAREFULLY READ THIS LICENSE AGREEMENT AND LIMITED WARRANTY STATEMENT BEFORE PROCEEDING TO OPERATE THE USE OF THE SOFTWARE. RIGHTS IN THE SOFTWARE ARE OFFERED ONLY ON THE CONDITION THAT THE CUSTOMER AGREES TO ALL TERMS AND CONDITIONS OF THE LICENSE AGREEMENT. PROCEEDING TO USE OF THIS SOFTWARE INDICATES YOUR ACCEPTANCE OF THESE TERMS AND CONDITIONS. IF YOU DO NOT AGREE WITH THE TERMS OF THE LICENSE AGREEMENT, YOU MUST NOW RETURN THE COMPLETE MONITOR AND SOFTWARE FOR A FULL REFUND.

PROCEEDING WITH CONFIGURATION SIGNIFIES YOUR ACCEPTANCE OF THE LICENSE TERMS.

HP Software Product License Agreement

UNLESS OTHERWISE STATED BELOW, THIS HP SOFTWARE PRODUCT LICENSE AGREEMENT SHALL GOVERN THE USE OF ALL SOFTWARE THAT IS PROVIDED TO YOU, THE CUSTOMER, AS PART OF THE HP MONITOR PRODUCT. IT SHALL SUPERSEDE ANY NON-HP SOFTWARE LICENSE TERMS THAT MAY BE FOUND ONLINE, OR IN ANY DOCUMENTATION OR OTHER MATERIALS CONTAINED IN THE MONITOR PRODUCT PACKAGING.

The following License Terms govern the use of the software:

USE

Customer may use the software on any one computer. Customer may not network the software or otherwise use it on more than one computer. Customer may not reverse assemble or decompile the software unless authorized by law.

COPIES AND ADAPTATIONS

Customer may make copies or adaptations of the software (a) for archival purposes or (b) when copying or adaptation is an essential step in the use of the software with a computer so long as the copies and adaptations are used in no other manner.

OWNERSHIP

The software is owned and copyrighted by HP or its third party suppliers. Customer agrees that he/she does not have any title or ownership of the software, other than ownership of the physical media. Customer acknowledges and agrees that the software is copyrighted and protected under the copyright laws. Customer acknowledges and agrees that the software may have been developed by a third party software supplier named in the copyright notices included with the software, who shall be authorized to hold the Customer responsible for any copyright infringement or violation of this Agreement.

TRANSFER OF RIGHTS IN SOFTWARE

Customer may transfer rights in the software to a third party only as part of the transfer of all rights and only if Customer obtains the prior agreement of the third party to be bound by the terms of this License Agreement. Upon such a transfer, Customer agrees that his/her rights in the software are terminated and that he/she will either destroy his/her copies and adaptations or deliver them to the third party.

SUBLICENSING AND DISTRIBUTION

Customer may not lease, sublicense the software or distribute copies or adaptations of the software to the public in physical media or by telecommunication without the prior written consent of Hewlett - Packard.

TERMINATION Hewlett-Packard may terminate this software license for failure to comply with any of these terms provided Hewlett-Packard has requested Customer to cure the failure and Customer has failed to do so within thirty (30) days of such notice.

UPDATES AND UPGRADES Customer agrees that the software does not include updates and upgrades which may be available from Hewlett-Packard under a separate support agreement.

EXPORT CLAUSE Customer agrees not to export or re-export the software or any copy or adaptation in violation of the U.S. Export Administration regulations or other applicable regulation.

U.S. GOVERNMENT RESTRICTED RIGHTS Use, duplication, or disclosure by the U.S. Government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause in DFARS 252.227-7013. Hewlett-Packard Company, 3000 Hanover Street, Palo Alto, CA 94304 U.S.A. Rights for non-DOD U.S. Government Departments and Agencies are as set forth in FAR 52.227-19(c)(1,2).

HP Software Product Limited Warranty

THIS HP SOFTWARE PRODUCT LIMITED WARRANTY SHALL COVER ALL SOFTWARE THAT IS PROVIDED TO YOU, THE CUSTOMER, AS PART OF THE HP MONITOR PRODUCT. IT SHALL SUPERSEDE ANY NON-HP WARRANTY TERMS THAT MAY BE FOUND ONLINE, OR IN ANY DOCUMENTATION OR OTHER MATERIALS CONTAINED IN THE MONITOR PRODUCT PACKAGING.

Ninety-Day Limited Software Warranty.

HP warrants for a period of NINETY (90) DAYS from the date of the purchase that the software product will execute its programming instructions when all files are properly installed. HP does not warrant that the software will be uninterrupted or error free. In the event that this software product fails to execute its programming instructions during the warranty period, Customer's remedy shall be a refund or repair. Should HP be unable to replace the media within a reasonable amount of time, Customer's alternate remedy shall be a refund of the purchase price upon return of the product and all copies.

Removable Media (If supplied)

HP warrants the removable media, if supplied, upon which this product is recorded to be free from defects in materials and workmanship under normal use for a period of NINETY (90) DAYS from the date of purchase. In the event the media proves to be defective during the warranty period, Customer's remedy shall be to return the media to HP for replacement. Should HP be unable to replace the media within a reasonable amount of time, Customer's alternate remedy shall be a refund of the purchase price upon return of the product and destruction of all other non-removable media copies of the software product.

NOTICE OF WARRANTY CLAIMS

Customer must notify HP in writing of any warranty claim not later than thirty (30) days after the expiration of the warranty period.

LIMITATION OF WARRANTY

HP makes no other express warranty, whether written or oral with respect to this product. Any implied warranty of merchantability or fitness for a particular purpose is limited to the 90-day duration of this written warranty. Some states or provinces do not allow limitations on how long an implied warranty lasts, so the above limitation or exclusion may not apply to you. This warranty gives specific legal rights, and you may also have other rights which vary from state to state, or province to province.

LIMITATION OF LIABILITY AND REMEDIES

THE REMEDIES PROVIDED ABOVE ARE CUSTOMER'S SOLE AND EXCLUSIVE REMEDIES. IN NO EVENT SHALL HP BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFIT) WHETHER BASED ON WARRANTY, CONTRACT, TORT OR ANY OTHER LEGAL THEORY. Some states or provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

OBTAINING WARRANTY SERVICE

Warranty service may be obtained from the nearest HP sales office or other location indicated in the owner's manual or service booklet.

FOR CONSUMER TRANSACTIONS IN AUSTRALIA AND NEW ZEALAND: THE WARRANTY TERMS CONTAINED IN THIS STATEMENT, EXCEPT TO THE EXTENT LAWFULLY PERMITTED, DO NOT EXCLUDE, RESTRICT, OR MODIFY BUT ARE IN ADDITION TO THE MANDATORY STATUTORY RIGHTS APPLICABLE TO THE SALE OF THIS PRODUCT TO YOU.

PART III - Year 2000 Warranty

Subject to all of the terms and limitations of the HP Limited Warranty Statement provided with this HP Product, HP warrants that this HP Product will be able to accurately process date data (including, but not limited to, calculating, comparing, and sequencing) from, into, and between the twentieth and twenty-first centuries, and the years 1999 and 2000, including leap year calculations, when used in accordance with the Product documentation provided by HP (including any instructions for installing patches or upgrades), provided that all other products (e.g. hardware, software, firmware) used in combination with such HP Product(s) properly exchange date data with it. The duration of the Year 2000 warranty extends through January 31, 2001.

DECLARATION OF CONFORMITY

According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014

Manufacturer's name: HEWLETT-PACKARD France
Manufacturer's address: 5 Avenue Raymond Chanas-Eybens
38053 GRENOBLE Cedex 09 - FRANCE

Declares that the product(s):

Product Name: HP 18" LCD Color Monitor

Model Number: D5069** (where * can be any alphanumerical character including blank)

Conform(s) to the following Product Specifications:

SAFETY

- International: IEC 60950:1991 +A1 +A2 +A3 +A4 / GB4943- 1995.
- Europe: EN 60950:1992 +A1 +A2 +A3 +A4 + A11

ELECTROMAGNETIC COMPATABILITY

- CISPR 22:1993 +A1 +A2 / EN 55022:1994 +A1 +A2 Class B ¹⁾
- EN 50082-1:1992
IEC 801-2:1991 / prEN 55024-2:1992 -4kV CD, 8kV AD
IEC 801-3:1984
IEC 801-4:1998 / prEN 55024-4:1993 -1kV Power Lines
- IEC 61000-3-3:1994 / EN 61000-3-3:1995
- FCC Title 47 CFR, Part 15 Class B
- ICES-003, Issue 3
- VCCI-B
- AS/NZ 3548:1995

Products bearing the CE marking ⁽²⁾ also comply with:

IEC 61000-3-2:1995 / EN 61000-3-2:1995.

Those products comply with the requirements of the following Directives and carry the CE-marking accordingly: EMC Directive 89/336/EEC and Low Voltage Directive 73/23/EEC, both amended by the Directive 93/68/EEC. The product complies with the R&TTE Directive 1999/5/EC.

1) 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

2) All products sold in the European Economic Area (EEA) bear the CE marking



Grenoble

15th November 2000

Didier CABARET
Quality Manager

For Compliance Information ONLY:

USA contact: Hewlett Packard Company, Corporate Product Regulations Manager, 3000 Hanover Street, Palo Alto, CA 94304. (Phone (+1) (650) 857-1051)

Notice for the USA: FCC Statement Class B Frequency Interference Statement Warning:

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 correct the interference by one or more of the following measures:

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

Hewlett-Packard's FCC Compliance Tests were conducted using HP-supported peripheral devices and HP shielded cables, such as those you receive with your system. Changes or modifications not expressly approved by Hewlett-Packard could void the user's authority to operate the equipment.

WARNING

Hewlett-Packard's system certification tests were conducted with HP-supported peripheral devices and HP shielded cables, such as those you received with your system. Changes or modifications not expressly approved by Hewlett-Packard could void the user's authority to operate the equipment

For compliance information ONLY, USA contact: Hewlett-Packard Company, Corporate Product Regulations Manager, 3000 Hanover Street, Palo Alto, CA 94304. Phone (650) 857-1501).

Changes or modifications not expressly approved by Hewlett-Packard could void the user's authority to operate the equipment.

Notice for Canada

This Class "B" digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la Classe B est conforme à la norme NMB-003 du Canada.

General Notice

The HP D5069 Series 18.1-inch LCD Color Monitor has been tested according to MPR 1990:8 for Emission properties and meets the guidelines as given by MPR 1990:10 (2.01 - 2.04).

Notice for Japan

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。

『当社は国際エネルギースタープログラムの参加事業者として、本製品が国際エネルギースタープログラムの基準に適合していると判断します。』

"As an ENERGY STAR Partner, Hewlett-Packard has determined that this product meets the ENERGY STAR guidelines for energy efficiency."



TCO 99 - Ecology Energy Emissions Ergonomics

Congratulations! You have just purchased a TCO'99 approved and labelled product! Your choice has provided you with a product developed for professional use. Your purchase has also contributed to reducing the burden on the environment and also to the further development of environmentally adapted electronics products.

Why do we have environmentally labelled computers?

In many countries, environmental labelling has become an established method for encouraging the adaptation of goods and services to the environment. The main problem, as far as computers and other electronics equipment are concerned, is that environmentally harmful substances are used both in the products and during their manufacture. Since it is not so far possible to satisfactorily recycle the majority of electronics equipment, most of these potentially damaging substances sooner or later enter nature.

There are also other characteristics of a computer, such as energy consumption levels, that are important from the viewpoints of both the work (internal) and natural (external) environments. Since all methods of electricity generation have a negative effect on the environment (e.g. acidic and climate-influencing emissions, radioactive waste), it is vital to save energy. Electronics equipment in offices is often left running continuously and thereby consumes a lot of energy.

What does labelling involve?

This product meets the requirements for the TCO'99 scheme which provides for international and environmental labelling of personal computers. The labelling scheme was developed as a joint effort by the TCO (The Swedish Confederation of Professional Employees), Svenska Naturskyddsforeningen (The Swedish Society for Nature Conservation) and Statens Energimyndighet (The Swedish National Energy Administration).

Approval requirements cover a wide range of issues: environment, ergonomics, usability, emission of electric and magnetic fields, energy consumption and electrical and fire safety.

The environmental demands impose restrictions on the presence and use of heavy metals, brominated and chlorinated flame retardants, CFCs (freons) and chlorinated solvents, among other things. The product must be prepared for recycling and the manufacturer is obliged to have an environmental policy which must be adhered to in each country where the company implements its operational policy.

The energy requirements include a demand that the computer and/or monitor, after a certain period of inactivity, shall reduce its power consumption to a lower level in one or more stages. The length of time to reactivate the computer shall be reasonable for the user.

Labelled products must meet strict environmental demands, for example, in respect of the reduction of electric and magnetic fields, physical and visual ergonomics and good usability.

Below you will find a brief summary of the environmental requirements met by this product. The complete environmental criteria document may be ordered from:

TCO Development
SE-114 94 Stockholm, Sweden
Fax: +46 8 782 92 07
Email (Internet): development@tco.se

Current information regarding TCO'99 approved and labelled products may also be obtained via the Internet, using the address:

<http://www.tco-info.com/>

Environmental requirements

Flame retardants

Flame retardants are present in printed circuit boards, cables, wires, casings and housings. Their purpose is to prevent, or at least to delay the spread of fire. Up to 30% of the plastic in a computer casing can consist of flame retardant substances. Most flame retardants contain bromine or chloride, and those flame retardants are chemically related to another group of environmental toxins, PCBs. Both the flame retardants containing bromine or chloride and the PCBs are suspected of giving rise to severe health effects, including reproductive damage in fish-eating birds and mammals, due to the bio-accumulative¹ processes. Flame retardants have been found in human blood and researchers fear that disturbances in foetus development may occur.

The relevant TCO'99 demand requires that plastic components weighing more than 25 grams must not contain flame retardants with organically bound bromine or chlorine. Flame retardants are allowed in the printed circuit boards since no substitutes are available.

Cadmium²

Cadmium is present in rechargeable batteries and in the colour-generating layers of certain computer monitors. Cadmium damages the nervous system and is toxic in high doses. The relevant TCO'99 requirement states that batteries, the colour-generating layers of monitor screens and the electrical or electronics components must not contain any cadmium.

Mercury³

Mercury is sometimes found in batteries, relays and switches. It damages the nervous system and is toxic in high doses. The relevant TCO'99 requirement states that batteries may not contain any mercury. It also demands that mercury is not present in any of the electrical or electronics components associated with the labelled unit.

CFCs (freons)

The relevant TCO'99 requirement states that neither CFCs nor HCFCs may be used during the manufacture and assembly of the product. CFCs (freons) are sometimes used for washing printed circuit boards. CFCs break down ozone and thereby damage the ozone layer in the stratosphere, causing increased reception on earth of ultraviolet light with e.g. increased risks of skin cancer (malignant melanoma) as a consequence.

Lead⁴

Lead can be found in picture tubes, monitor screens, solders and capacitors. Lead damages the nervous system and in higher doses, causes lead poisoning. The relevant TCO 99 requirement permits the inclusion of lead since no replacement has yet been developed.

1. Bio-accumulative is defined as substances which accommodate within living organisms.
2. Lead, Cadmium and Mercury are heavy metals which are Bio-accumulative