HP TFT7210R User Guide



Part Number 349953-002 August 2007 (Second Edition) © Copyright 2003, 2007 Hewlett-Packard Development Company, L.P.

The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Contents

Component identification	
Front Panel LEDs and Buttons	5
Installation	
Installation Checklist	
Kit contents	6
Installing the HP TFT7210R	6
Operational overview	
Powering On and Off the HP TFT7210R	
Accessing the OSD main menu	
Exiting the OSD Main Menu	
Sleep Mode	
Input signal out of range	
OSD main menu functions	
Auto Setup	
Brightness	
Contrast	
Image Adjust	
Horizontal Position	
Vertical Position	
Image Enhancement	
OSD Settings	
OSD Denings	
OSD Size	
OSD Timeout	
Restore Factory Presets	
Information	
Maintenance	20
Maintenance quidelines	20
Cleaning the HP TFT7210R	
Storing the HP TFT7210R	
Moving a rack with the HP TFT7210R installed	
Specifications	23
Physical Specifications	
Environmental Specifications	
Removing the rails	24
Removing the HP 1U Adjustable Toolless Rails	
Technical support	25
⊓r contact information Before you contact HP	Z۵ ۵۶

Regulatory compliance notices	
Regulatory compliance identification numbers	
Federal Communications Commission notice	
FCC rating label	
Class A equipment	
Class B equipment	
Declaration of conformity for products marked with the FCC logo, United States only	
Modifications	
Cables	
Canadian notice (Avis Canadien)	
European Union regulatory notice	
Japanese notice	
BSMI notice	
Korean notice	
Disposal of waste equipment by users in private households in the European Union	
Material disposal	
Power cord requirements	
Introduction to power cord requirements	
General requirements	
Power cord set requirements by country	
Electrostatic discharae	33
Preventing electrostatic discharge	
Grounding methods to prevent electrostatic discharge	
Acronyms and abbreviations	
Index	35

Component identification

Front Panel LEDs and Buttons

3

4

5

Plus (+) button

Minus (-) button

Menu Select button

ltem	Description	Function
1	Power On/Off button	Powers the monitor on and off.
2	Power Indicator LED	Indicates the power states of the HP
		IFI/2TOR.
		Green—full power

Range (on page 11)

adjusts the functions.

adjusts the functions.

and OSD.

Scrolls up in the OSD menus and

Scrolls down in the OSD menus and

Launches the first and second level OSD menus and exits the menus

Installation

Installation Checklist

Before installation, refer to the following list to be sure that all of the listed components were received.

Kit contents

- HP TFT7210R
- HP 1U Adjustable Toolless Rails
- Brace rail assembly
 - o Brace rail
 - Cable management arm
- Lock plates
- M6 screws
- 6-32 screws
- High-voltage power cord (10 ft), C13-C14

This kit might contain extra hardware for your convenience.

Installing the HP TFT7210R

- 1. Align the lower edge of the rack template with the top of the previous rack component, and push the tabs in to hold the rack template in place. Mark the rack to indicate where the HP 1U Adjustable Toolless Rails are to be located.
- 2. Align the HP 1U Adjustable Toolless Rails with the holes marked with the rack template, and snap them into place.
 - a. Snap one end of the HP 1U Adjustable Toolless Rails into the Retma rails.
 - **b.** Extend the other half of the HP 1U Adjustable Toolless Rails to meet the appropriate rack depth, and snap them into place.

NOTE: If the HP 1U Adjustable Toolless Rails do not snap into place, be sure that they align with the holes marked with the rack template. The holes marked with the rack template must be in the same location for the front and rear of the rack.



- 3. Extend the inner slides until they lock into place.
- 4. Align the HP TFT7210R with the extended inner slides, and pull the release mechanisms toward you while inserting the HP TFT7210R into the rack.
 - MARNING: To reduce the risk of personal injury, release the release mechanisms after pushing the HP TFT7210R slightly forward.



5. Slide the brace rail assembly into the HP 1U Adjustable Toolless Rails from the rear of the rack, ensuring that the cable access hole faces the left side of the rack.

NOTE: The cable access hole must be positioned on the left side of the rack to enable appropriate routing of the cables.



6. Align the screw holes on the brace rail with the screw holes on the HP 1U Adjustable Toolless Rails.

7. Secure the brace rail to the HP 1U Adjustable Toolless Rails by inserting three screws and tightening them.



- 8. Attach the cable management arm to the rear of the HP TFT7210R with two screws.

9. Route the cables and plug in the HP TFT7210R.



Operational overview

Powering On and Off the HP TFT7210R

Press the **Power On/Off** button.

Accessing the OSD main menu

- 1. Press the **Menu Select** button on the front panel ("Front Panel LEDs and Buttons" on page 5). The OSD Main menu appears and the default settings are shown when first accessing this menu.
- 2. Scroll down by pressing the Minus (-) button, or scroll up by pressing Plus (+) button.
- 3. Press the Menu Select button to activate the highlighted menu item.

If the Menu Select, Minus (-), or Plus (+) buttons remain untouched for the time duration that has been set by the OSD Timeout (on page 18) function, any new settings that have not been saved will be discarded and the previously saved settings are restored.

Exiting the OSD Main Menu

From the OSD Main menu, highlight **Exit**, and then press the **Menu Select** button to exit and close the OSD Main menu.

Sleep Mode

After losing video signal, for supported video resolutions, a "Check Cable" message appears and is stationary for two seconds. The display then goes blank, the monitor powers off, and the LED is amber.

For unsupported video modes that exceed 1280 X 1024 at 76 Hz, the display has a black background, the LED is amber, and a "Selected resolution is not within recommended range of operation" message appears for 20 seconds. After losing video signal, the message disappears.

Input signal out of range

An input signal that is outside the normal range of operation defined by the capabilities of the HP TFT7210R, causes a "Selected resolution is not within recommended range of operation" message to appear for 30 seconds.

OSD main menu functions

Auto Setup

When selected, the Auto Setup menu activates the Image Control process and performs four functions automatically:

- Auto Level—Automatically adjusts the black and white levels of the display
- Auto Position—Automatically adjusts the position of the display
- Auto Phase—Automatically adjusts the phase
- Auto Clock-Adjusts the output clock per line to match input

Brightness

When selected, the Brightness menu activates the Brightness Adjustment screen. A slider bar appears to allow the adjustment of the back light brightness.

- Plus (+) increases the current value.
- Minus (-) decreases the current value.
- Menu Select accepts the current value and exits the slider bar.

Contrast

When selected, the Contrast menu activates the Contrast Adjustment screen. A slider bar appears to allow the adjustment of the display contrast. Contrast adjustments are more discernible when the display background is white. Contrast launches Auto Level (on page 12) if the color values are out of range.

- Plus (+) increases the current value.
- Minus (-) decreases the current value.
- Menu Select accepts the current value and exits the slider bar.

Image Adjust

The Image Adjust menu contains the following sub-menus:

- Horizontal Position (on page 13)
- Vertical Position (on page 13)
- Image Enhancement (on page 13)
- Color (on page 13)
- Advanced (on page 15)

• Exit

Within the menu:

- Plus (+) moves up a selection.
- Minus (-) moves down a selection.
- Menu Select activates one of the actions.

Horizontal Position

When selected, a slider bar appears to allow the adjustment of the display horizontal position.

- Plus (+) moves window to the right.
- Minus (-) moves the window to the left.
- Menu Select accepts the location and exits back to the sub-menu.

Vertical Position

When selected, a slider bar appears to allow the adjustment of the display vertical position.

- Plus (+) moves the window up.
- Minus (-) moves the window down.
- Menu Select accepts the location and exits back to sub-menu.

Image Enhancement

The Image Enhancement contains the following choices:

- Context Sensitive—Allows text to be sharpened and graphic images smoothed on a per-pixel basis
- Text (sharp)—Allows sharper text by using a high sharpening filter
- Video (smooth)—Allows sharper graphics by using a low sharpening filter

Within the menu:

- Plus (+) moves up a selection and activates that choice.
- Minus (-) moves down a selection and activates that choice.
- Menu Select exits, leaving the last selection as the new default.

Color

The Color menu contains the following sub-menus:

- Color Temp (on page 14)
- RGB Adjust (on page 14)
- Black Level Adjust (on page 15)
- Exit

Within the menu:

- Plus (+) moves up a selection.
- Minus (-) moves down a selection.
- Menu Select activates one of the actions.

Color Temp

The Color Temp menu contains the following choices:

- Cool—A Gamma table for Cool temperatures loads all three-color channels
- Neutral—A Gamma table for Neutral temperatures loads all three-color channels
- Warm—A Gamma table for Warm temperatures loads all three-color channels
- Exit

Within the menu:

- Plus (+) moves up a selection and activates that choice.
- Minus (-) moves down a selection and activates that choice.
- Menu Select exits, leaving the last selection as the new default.

RGB Adjust

The RGB Adjust menu contains the following sub-menus:

- RGB Adjust Red (on page 14)
- RGB Adjust Green (on page 14)
- RGB Adjust Blue (on page 15)
- Exit

Within the menu:

- Plus (+) moves up a selection.
- Minus (-) moves down a selection.
- Menu Select activates one of the actions.

RGB Adjust Red

When selected, a slider bar appears to allow the adjustment of the Red color in the display.

- Plus (+) increases the current value.
- Minus (-) decreases the current value.
- Menu Select accepts the current value and exits the slider bar.

RGB Adjust Green

When selected, a slider bar appears to allow the adjustment of the Green color in the display.

- Plus (+) increases the current value.
- Minus (-) decreases the current value.
- Menu Select accepts the current value and exits the slider bar.

RGB Adjust Blue

When selected, a slider bar appears to allow the adjustment of the Blue color in the display.

- Plus (+) increases the current value.
- Minus (-) decreases the current value.
- Menu Select accepts the current value and exits the slider bar.

Black Level Adjust

The Black Level Adjust menu contains the following sub-menus:

- Black Level Adjust Red (on page 15)
- Black Level Adjust Green (on page 15)
- Black Level Adjust Blue (on page 15)
- Exit

Within the menu:

- Plus (+) moves up a selection.
- Minus (-) moves down a selection.
- Menu Select activates one of the actions.

Black Level Adjust Red

When selected, a slider bar appears to allow the adjustment of the Black level for Red in the display.

- Plus (+) increases the current value.
- Minus (-) decreases the current value.
- Menu Select accepts the current value and exits the slider bar.

Black Level Adjust Green

When selected, a slider bar appears to allow the adjustment of the Black level for Green in the display.

- Plus (+) increases the current value.
- Minus (-) decreases the current value.
- Menu Select accepts the current value and exits the slider bar.

Black Level Adjust Blue

When selected, a slider bar appears to allow the adjustment of the Black level for Blue in the display.

- Plus (+) increases the current value.
- Minus (-) decreases the current value.
- Menu Select accepts the current value and exits the slider bar.

Advanced

The Advanced menu contains the following sub-menus:

- Phase Adjust (on page 16)
- Clock Adjust (on page 16)
- Exit

Within the menu:

- Plus (+) moves up a selection.
- Minus (-) moves down a selection.
- Menu Select activates one of the actions.

Phase Adjust

When selected, a slider bar appears to allow the adjustment of the analog phase signal.

- Plus (+) increases the current value.
- Minus (-) decreases the current value.
- Menu Select accepts the current value and exits the slider bar.

Clock Adjust

When selected, a slider bar appears to allow the adjustment of the horizontal clock signal.

- Plus (+) increases the current value.
- Minus (-) decreases the current value.
- Menu Select accepts the current value and exits the slider bar.

Languages

The Languages menu contains the following languages:

- English
- Dutch
- French
- German
- Italian
- Japanese
- Portuguese
- Simple Chinese
- Spanish
- Swedish

Within the menu:

- Plus (+) moves up a selection.
- Minus (-) moves down a selection.
- Menu Select activates one of the actions.

OSD Settings

The OSD Settings menu contains the following sub-menus:

- OSD Position (on page 17)
- OSD Size (on page 18)
- OSD Timeout (on page 18)
- Exit

Within the menu:

- Plus (+) moves up a selection.
- Minus (-) moves down a selection.
- Menu Select activates one of the actions.

OSD Position

The OSD Position menu contains the following sub-menus:

- OSD Horizontal Position (on page 17)
- OSD Vertical Position (on page 17)
- Exit

Within the menu:

- Plus (+) moves up a selection.
- Minus (-) moves down a selection.
- Menu Select activates one of the actions.

OSD Horizontal Position

When selected, the OSD Horizontal Position menu allows the location of the OSD to move horizontally on the display.

- Plus (+) moves the OSD window to the right.
- Minus (-) moves the OSD window to the left.
- Menu Select accepts the location and exits back to the sub-menu.

OSD Vertical Position

When selected, the OSD Vertical Position allows the location of the OSD to move vertically on the display.

- Plus (+) moves the OSD window up.
- Minus (-) moves the OSD window down.
- Menu Select accepts the location and exits back to sub-menu.

OSD Size

The OSD Size menu contains the following choices:

- OSD Size Normal—Sets the character to normal size
- OSD Size Double—Sets the character to double size

Within the menu:

- Plus (+) moves up a selection and activates that choice.
- Minus (-) moves down a selection and activates that choice.
- Menu Select exits, leaving the last selection as the new default.

OSD Timeout

The OSD Timeout menu allows the adjustment of the OSD Timeout feature. The timeout ranges from 5 to 55 seconds with 5-second intervals.

- Plus (+) increases the time the OSD appears.
- Minus (-) decreases the time the OSD appears.
- Menu Select accepts the current value and exits the slider bar.

Restore Factory Presets

When selected, the OSD Main menu activates the factory presets reset and exits the OSD Main menu. The following settings are restored:

- Auto Level (on page 12)
- Brightness (on page 12)
- Contrast (on page 12)
- Horizontal Position (on page 13)
- Vertical Position (on page 13)
- Color Temp (on page 14)
- RGB Adjust (on page 14)
- Black Level Adjust (on page 15)
- OSD Horizontal Position (on page 17)
- OSD Vertical Position (on page 17)
- OSD Size (on page 18)
- OSD Timeout (on page 18)

Information

When selected, the following unit information appears:

• Model number

- Micro Code Version
- Exit

Maintenance

Maintenance guidelines

To protect the HP TFT7210R from overheating and other types of damage:

- Use only a power source and connection appropriate for the HP TFT7210R, as indicated on the agency label.
- If an extension cord or power strip is used, be sure that the cord or strip is rated for the product. Also, be sure 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 label.
- 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 HP TFT7210R near an outlet that you can reach easily. Disconnect the product by grasping the plug firmly and pulling it from the outlet. Never disconnect it by pulling the cord.
- Unplug the HP TFT7210R from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners.
- Slots and openings in the monitor are provided for ventilation. These openings must not be blocked or covered. Never push objects of any kind into these slots or openings.
- Do not drop the HP TFT7210R 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 original packing material and box in a storage area in case you need them later.
- Keep the HP TFT7210R 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 attempt to service this product yourself. Adjust only those controls that are covered by the operating instructions. If the HP TFT7210R is not operating properly or has been dropped or damaged, contact your HP authorized dealer, reseller, or service provider.

Cleaning the HP TFT7210R

- 1. Power off the HP TFT7210R ("Powering On and Off the HP TFT7210R" on page 11).
- 2. Wipe the screen with a soft, clean cloth.

If the screen requires additional cleaning, use any anti-static CRT screen cleaner.

CAUTION: Do not use benzene, thinner, ammonia, or any volatile substance to clean the screen or cabinet. These chemicals can damage the screen. Never use water to clean a screen.

Storing the HP TFT7210R

- 1. Pull the release mechanism toward you with your index fingers to unlock the inner slides.
- 2. In the same motion, release the release mechanism and move the HP TFT7210R forward into the stored position.
 - **WARNING:** To reduce the risk of personal injury, release the release mechanisms after pushing the HP TFT7210R slightly forward.



Moving a rack with the HP TFT7210R installed

When moving the HP TFT7210R installed in a rack, HP recommends installing the lock plates.

- 1. Fully extend the HP TFT7210R until the slides lock into place.
- 2. Place a lock plate behind the corner of the front plastic bezel, being sure that the top and bottom holes are aligned with the front plastic bezel pins.
- **3.** From behind the corner of the front plastic bezel, insert a 6-32 screw into the middle hole on the lock plate, securing it to the HP TFT7210R.
- 4. Repeat steps 2 and 3 to install the other lock plate.
- 5. Push the HP TFT7210R back into the rack.
- 6. Insert an M6 screw into the only visible lock plate hole, securing the HP TFT7210R to the rail.

7. Repeat step 6 for the other lock plate.

Specifications

Physical Specifications

Parameter	Specification
Monitor height	34.29 cm (13.5 in)
Monitor depth	4.25 cm (1.67 in)
Monitor width	39.6 cm (15.59 in)
Unit weight	6.12 kg (13.5 lb)

Environmental Specifications

Feature	Specification
Operating temperature (independent of altitude)	5 to 35°C (41 to 95°F)
Nonoperating temperature (independent of altitude)	-20 to 60°C (-4 to 140°F)
Relative humidity	20 to 80%; noncondensing
Operating altitude	0 to 3,658 m (12,000 ft)
Nonoperating altitude	0 to 12,192 m (40,000 ft)

Removing the rails

Removing the HP 1U Adjustable Toolless Rails

- 1. Remove the HP TFT7210R.
- 2. Remove the brace rail assembly.
- 3. Locate the spring release.
- 4. Place your hand on the outside of the HP 1U Adjustable Toolless Rail so that you can move the spring release.
- 5. Gently move the spring release toward the inside of the rack (1) while moving the HP 1U Adjustable Toolless Rail out toward you and away from the rack (2).

NOTE: If you cannot gain access to the spring release from the outside of the HP 1U Adjustable Toolless Rail, a tool might be required to unlock the spring release from the unit side of the HP 1U Adjustable Toolless Rail.



6. Repeat the previous steps for the other HP 1U Adjustable Toolless Rail.

Technical support

HP contact information

For the name of the nearest HP authorized reseller:

- In the United States, see the HP US service locator webpage (<u>http://www.hp.com/service_locator</u>).
- In other locations, see the Contact HP worldwide (in English) webpage (<u>http://welcome.hp.com/country/us/en/wwcontact.html</u>).

For HP technical support:

- In the United States, for contact options see the Contact HP United States webpage (<u>http://welcome.hp.com/country/us/en/contact_us.html</u>). To contact HP by phone:
 - Call 1-800-HP-INVENT (1-800-474-6836). This service is available 24 hours a day, 7 days a week. For continuous quality improvement, calls may be recorded or monitored.
 - If you have purchased a Care Pack (service upgrade), call 1-800-633-3600. For more information about Care Packs, refer to the HP website (<u>http://www.hp.com</u>).
- In other locations, see the Contact HP worldwide (in English) webpage (<u>http://welcome.hp.com/country/us/en/wwcontact.html</u>).

Before you contact HP

Be sure to have the following information available before you call HP:

- Technical support registration number (if applicable)
- Product serial number
- Product model name and number
- Product identification number
- Applicable error messages
- Add-on boards or hardware
- Third-party hardware or software
- Operating system type and revision level

Regulatory compliance notices

Regulatory compliance identification numbers

For the purpose of regulatory compliance certifications and identification, this product has been assigned a unique regulatory model number. The regulatory model number can be found on the product nameplate label, along with all required approval markings and information. When requesting compliance information for this product, always refer to this regulatory model number. The regulatory model number is not the marketing name or model number of the product.

Federal Communications Commission notice

Part 15 of the Federal Communications Commission (FCC) Rules and Regulations has established Radio Frequency (RF) emission limits to provide an interference-free radio frequency spectrum. Many electronic devices, including computers, generate RF energy incidental to their intended function and are, therefore, covered by these rules. These rules place computers and related peripheral devices into two classes, A and B, depending upon their intended installation. Class A devices are those that may reasonably be expected to be installed in a business or commercial environment. Class B devices are those that may reasonably be expected to be installed in a residential environment (for example, personal computers). The FCC requires devices in both classes to bear a label indicating the interference potential of the device as well as additional operating instructions for the user.

FCC rating label

The FCC rating label on the device shows the classification (A or B) of the equipment. Class B devices have an FCC logo or ID on the label. Class A devices do not have an FCC logo or ID on the label. After you determine the class of the device, refer to the corresponding statement.

Class A equipment

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. 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. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at personal expense.

Class B equipment

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

Declaration of conformity for products marked with the 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 product, contact us by mail or telephone:

- Hewlett-Packard Company
 P. O. Box 692000, Mail Stop 530113
 Houston, Texas 77269-2000
- 1-800-HP-INVENT (1-800-474-6836). (For continuous quality improvement, calls may be recorded or monitored.)

For questions regarding this FCC declaration, contact us by mail or telephone:

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

To identify this product, refer to the part, series, or model number found on the product.

Modifications

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

Cables

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

Canadian notice (Avis Canadien)

Class A equipment

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

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

Class B equipment

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

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

European Union regulatory notice

This product complies with the following EU Directives:

- Low Voltage Directive 2006/95/EC
- EMC Directive 2004/108/EC
- Machinery Directive 98/37/EEC

Compliance with these directives implies conformity to applicable harmonized European standards (European Norms) which are listed on the EU Declaration of Conformity issued by Hewlett-Packard for this product or product family.

This compliance is indicated by the following conformity marking placed on the product:

CE

This marking is valid for non-Telecom products and EU harmonized Telecom products (e.g. Bluetooth).

(€(xxxx∗)①

This marking is valid for EU non-harmonized Telecom products.

*Notified body number (used only if applicable—refer to the product label)

Hewlett-Packard GmbH, HQ-TRE, Herrenberger Strasse 140, 71034 Boeblingen, Germany

Japanese notice

ご使用になっている装置にVCCIマークが付いていましたら、次の説明文を お読み下さい。

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。 取扱説明書に従って正しい取り扱いをして下さい。

VCCIマークが付いていない場合には、次の点にご注意下さい。

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A情報技術装置です この装置を家庭環境で使用すると電波 妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ず るよう要求されることがあります。

BSMI notice

警告使用者:

這是甲類的資訊產品,在居住的 環境中使用時,可能會造成射頻 干擾,在這種情況下,使用者會 被要求採取某些適當的對策。

Korean notice

Class A equipment

A급 기기 (업무용 정보통신기기) 이 기기는 업무용으로 전자파적합등록을 한 기기이오니 판매자 또는 사용자는 이 점을 주의하시기 바라며, 만약 잘못판매 또는 구입하였을 때에는 가정용으로 교환하시기 바랍니다.

Class B equipment

B급 기기 (가정용 정보통신기기) 이 기기는 가정용으로 전자파적합등록을 한 기기로서 주거지역에서는 물론 모든지역에서 사용할 수 있습니다.

Disposal of waste equipment by users in private households in the European Union



This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

Material disposal

This HP product contains the following material that might require special handling at end-of-life:

Mercury in the fluorescent lamp in the display LCD.

Disposal of mercury might be regulated because of environmental considerations. For disposal or recycling information, contact your local authorities or the Electronic Industries Alliance (EIA) (http://www.eiae.org).

Power cord requirements

Introduction to power cord requirements

The power cord set meets the requirements for use in the country where you purchased the equipment. The voltage selection switch allows you to select the appropriate line voltage for the server.

Power cord sets for use in other countries must meet the requirements of the country where you use the server. For more information on power cord set requirements, contact your HP authorized dealer.

General requirements

The requirements listed below are applicable to all countries:

- The length of the power cord must be at least 1.8 m (6.0 feet) and a maximum of 3.7 m (12 feet).
- The power cord set must be approved by an acceptable accredited agency responsible for evaluation in the country where the power cord will be used.
- The power cord set must have a minimum current capacity and nominal voltage rating of 10A/125 volts AC, or 10A/250 volts AC, as required by the power system of each country.
- The appliance coupler must meet the mechanical configuration of an EN60320/IEC 320 Standard Sheet C13 Connector, for mating with the appliance outlet on the computer.

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	SETI	1
France	UTE	1
Germany	VDE	1
Italy	IMQ	1
Japan	JIS	3
Norway	NEMKO	1
Sweden	ѕемко	1
Switzerland	SEV	1

Use this table to identify the appropriate accredited agency in your country.

Country	Accredited agency	Applicable note numbers
United Kingdom	BSI	1
United States	UL	2

NOTE: Flexible cord must be <HAR> Type HO5VV-F, 3-conductor, 1.0 mm2 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.

NOTE: Flexible cord must be Type SVT or equivalent, No. 18 AWG, 3-conductor. Wall plug must be a two-pole grounding type with a NEMA 5-15P (15 A, 125 V).

3

2

1

NOTE: Appliance coupler, flexible cord, and wall plug must bear a T mark and registration number in accordance with the Japanese Dentori Law. Flexible cord must be Type VCT or VCTF, 3-conductor, 1.0 mm2 conductor size. Wall plug must be a two-pole grounding type with a Japanese Industrial Standard C8303 (7A, 125V) configuration.

Electrostatic discharge

Preventing electrostatic discharge

To prevent damaging the system, be aware of the precautions you need to follow when setting up the system or handling parts. A discharge of static electricity from a finger or other conductor may damage system boards or other static-sensitive devices. This type of damage may reduce the life expectancy of the device.

To prevent electrostatic damage:

- Avoid hand contact by transporting and storing products in static-safe containers.
- Keep electrostatic-sensitive parts in their containers until they arrive at static-free workstations.
- Place parts on a grounded surface before removing them from their containers.
- Avoid touching pins, leads, or circuitry.
- Always be properly grounded when touching a static-sensitive component or assembly.

Grounding methods to prevent electrostatic discharge

Several methods are used for grounding. Use one or more of the following methods when handling or installing electrostatic-sensitive parts:

- Use a wrist strap connected by a ground cord to a grounded workstation or computer chassis. Wrist straps are flexible straps with a minimum of 1 megohm ±10 percent resistance in the ground cords. To provide proper ground, wear the strap snug against the skin.
- Use heel straps, toe straps, or boot straps at standing workstations. Wear the straps on both feet when standing on conductive floors or dissipating floor mats.
- Use conductive field service tools.
- Use a portable field service kit with a folding static-dissipating work mat.

If you do not have any of the suggested equipment for proper grounding, have an authorized reseller install the part.

For more information on static electricity or assistance with product installation, contact an authorized reseller.

Acronyms and abbreviations

CRT

cathode-ray tube

LED

light-emitting diode

OSD

on-screen display

RGB

red green blue

Index

A

Auto Setup 12

B

Black Level Adjust 15 Brightness 12 BSMI notice 29

С

cables, FCC compliance 27 class A equipment 26 class B equipment 26 cleaning the unit 20 Clock Adjust 16 color 13 components 5 contact information 25 Contrast 12

D

Declaration of Conformity 27

E

electrostatic discharge 33 environmental specifications 23

F

factory default settings 18 Federal Communications Commission (FCC) notice 26, 27 front panel LEDs 5

Η

Horizontal Position 13

I

Image adjust 12 Image Enhancement 13 Input Signal Out of Range 11 installation 6 installation checklist 6

J

Japanese notice 29

Κ

kit contents 6 Korean notices 29

L

languages 16

Μ

maintenance 20 material disposal 30 modifications, FCC notice 27

0

operational overview 11 OSD Horizontal Position 17 OSD position 17 OSD settings 17 OSD Size 18 OSD Timeout 11, 18 OSD Vertical Position 17

P

Phase adjust 16 physical specifications 23 power cord 31 Power On/Standby button 11

R

rails, removing 24 regulatory compliance identification numbers 26 regulatory compliance notices 26, 30 RGB Adjust 14

S

Sleep Mode 11 specifications 23 storing the unit 21

T

technical support 25

V

Vertical Position 13