

Safety and Regulatory Information

Desktops, Thin Clients, and Personal Workstations



© Copyright 2006–2009 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.

This document contains proprietary
information that is protected by copyright. No
part of this document may be photocopied,
reproduced, or translated to another
language without the prior written consent of
Hewlett-Packard Company.

Safety and Regulatory Information

Desktops, Thin Clients, and Personal
Workstations

Ninth Edition (August 2009)

Eighth Edition (March 2009)

Seventh Edition (September 2008)

Sixth Edition (July 2008)

Fifth Edition (June 2008)

Fourth Edition (December 2007)

Third Edition (September 2007)

Second Edition (July 2007)

First Edition (August 2006)

Document Part Number: 418213-009

About This Book

This guide provides safety and regulatory information that is compliant with U.S., Canadian, and International regulations for Desktops, Thin Clients, and Personal Workstations.

-
- ⚠ **WARNING!** Text set off in this manner indicates that failure to follow directions could result in bodily harm or loss of life.
 - ⚠ **CAUTION:** Text set off in this manner indicates that failure to follow directions could result in damage to equipment or loss of information.
 - 📝 **NOTE:** Text set off in this manner provides important supplemental information.
-

Table of contents

1 Safety Notices

Important Safety Information	1
Installation Conditions	2
Battery Replacement Notice	2
Headset and Earphone Volume Level Notice	3
German Ergonomics Notice	3
Laser Safety	3
CDRH Regulations	3
Compliance with International Regulations	4
Laser Product Label	4
Laser Information	4
Power Supply and Power Cord Set Requirements	4
Power Supply Class I Grounding Requirements	4
Denmark	4
Norway	4
Sweden	5
Power Supply Requirements	5
For Use in Norway	5
Power Cord Set Requirements	5
Japanese Power Cord Requirements	5
Pinch Hazard	6

2 Regulatory Agency Notices

Regulatory Compliance Identification Numbers	7
Modem Notices	7
Telecommunications Device Approvals	7
U.S. Modem Statements	8
Canadian Modem Statements	9
Japanese Modem Statements	9
New Zealand Modem Statements	9
Voice Support	10
TV Antenna Connectors Protection	11
External Television Antenna Grounding	11
Lightning Protection	11

Note to CATV System Installer	12
Electromagnetic Compatibility Notices	12
Federal Communications Commission Notice	12
Modifications	12
Cables	12
Declaration of Conformity for Products Marked with the FCC Logo (United States only)	13
Products with Wireless LAN Devices	13
Australia Telecom Statement	13
Brazilian Notice	14
Canadian Notice	14
Avis Canadien	15
European Union Regulatory Notice	16
Products with 2.4-GHz Wireless LAN Devices	17
France	17
European Telephone Network Declaration (European Union Only)	17
European Network Compatibility Declarations (European Union Only)	17
India Telegraph Act Notice	17
Japanese Notice	18
Wireless LAN 802.11b devices	18
Wireless LAN 802.11g devices	18
Korean Notice	18
NCC Notice	19
Environmental Agency Notices	19
Disposal of Waste Equipment by Users in Private Household in the European Union	19
ENERGY STAR Qualification (select models only)	20
Chemical Substances	21
Mercury Statement	21
Perchlorate Material—special handling may apply	21
Chinese Restriction of Hazardous Substances (RoHS)	22
Chinese Safety Notices	24
Japanese Restriction of Hazardous Substances (RoHS)	24
Turkey EEE Regulation	24
German Acoustics Notice	25

1 Safety Notices

Important Safety Information

⚠ WARNING! To reduce the risk of serious injury, read the *Safety & Comfort Guide*. It describes proper workstation setup, posture, and health and work habits for computer users, and provides important electrical and mechanical safety information. This guide is located on the Web at www.hp.com/ergo and on the Documentation CD that is included with the product.

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 in a grounded (earthed) outlet that is easily accessible at all times.
- Disconnect power from the thin client by unplugging the power cord from the electrical outlet.

The computer may be heavy; be sure to use ergonomically correct lifting procedures when moving it.

Install the computer near an AC outlet. The AC power cord is your computer's main AC disconnecting device and must be easily accessible at all times. For your safety, the power cord provided with your computer has a grounded plug. Always use the power cord with a properly grounded wall outlet, to avoid the risk of electrical shock.

To reduce the possibility of an electric shock from the telephone network, plug your computer into the AC outlet before connecting it to the telephone line. Also, disconnect the telephone line before unplugging your computer from the AC power outlet.

Always disconnect the modem cord from the telephone system before installing or removing your computer cover.

Do not operate the computer with the cover removed.

For your safety, always unplug the computer from its power source and from any telecommunications systems (such as telephone lines), networks, or modems before performing any service procedures. Failure to do so may result in personal injury or equipment damage. Hazardous voltage levels are inside the power supply and modem of this product.

⚠ CAUTION: If your computer is provided with a voltage select switch for use in a 115 or 230 Vv power system, the voltage select switch has been pre-set to the correct voltage setting for use in the particular country/region where it was initially sold. Changing the voltage select switch to the incorrect position can damage your computer and void any implied warranty.

This product has not been evaluated for connection to an "IT" power system (an AC distribution system with no direct connection to earth, according to IEC 60950).

Installation Conditions

See installation instructions before connecting this equipment to the input supply.

⚠️ WARNING! The equipment must be provided with a proper AC protective earth (PE) ground connection.

Energized and moving parts may be inside the computer. Disconnect power to the equipment before removing the enclosure. Replace and secure the enclosure before re-energizing the equipment.

Battery Replacement Notice

⚠️ WARNING! The product may contain an internal lithium manganese dioxide, vanadium pentoxide, or alkaline battery or battery pack. There is risk of fire and burns if the battery pack is not handled properly. To reduce the risk of personal injury:

- Do not attempt to recharge the battery.
- Do not expose to temperatures higher than 60° C (140° F).
- Do not disassemble, crush, puncture, short external contacts, or dispose of in fire or water.
- Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.
- Replace only with the HP spare designated for this product.

For information about removing a battery, refer to your computer documentation.

HP encourages customers to recycle used electronic hardware, HP original print cartridges, and rechargeable batteries. For more information about recycling programs, go to <http://www.hp.com/recycle>.



Batteries, battery packs, and accumulators should not be disposed of together with the general household waste. In order to forward them to recycling or proper disposal, please use the public collection system or return them to HP, an authorized HP partner, or their agents.



廢電池請回收

The Taiwan EPA requires dry battery manufacturing or importing firms, in accordance with Article 15 of the Waste Disposal Act, to indicate the recovery marks on the batteries used in sales, giveaways, or promotions. Contact a qualified Taiwanese recycler for proper battery disposal.

Headset and Earphone Volume Level Notice

⚠️ WARNING! Listening to music at high volume levels and for extended durations can damage one's hearing. To reduce the risk of hearing damage, lower the volume to a safe, comfortable level and reduce the amount of time listening at high levels.

For your own safety, before using headsets or earphones, always reset the volume. Some headphones are louder than other headphones, even if the volume control setting is the same.

Changing the default audio or equalizer settings might lead to higher volume and should only be done with caution.

For your own safety, headsets or earphones used with this product should comply with the headphone limits in EN 50332-2.

If the computer includes a headset or earphones, this combination is in compliance to EN 50332-1.

German Ergonomics Notice

HP products which bear the "GS" approval mark, when forming part of a system comprising HP brand products, keyboards and monitors that bear the "GS" approval mark, meet the applicable ergonomic requirements. The installation guides included with the product provide configuration information.

Laser Safety

For products equipped with optical drives or fiber optic transceivers.

This product may be provided with an optical storage device (i.e., CD or DVD drive) and/or fiber optic transceiver. Each of these devices contains a laser that is classified as a Class 1 Laser Product in accordance with US FDA regulations and the IEC 60825-1. The product does not emit hazardous laser radiation.

Each laser product complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated May 27, 2001; and with IEC 60825-1:1993/A2:2001.

⚠️ WARNING! Use of controls or adjustments or performance of procedures other than those specified herein or in the laser product's installation guide may result in hazardous radiation exposure. To reduce the risk of exposure to hazardous radiation:

- Do not try to open the module enclosure. There are no user-serviceable components inside.
- Do not operate controls, make adjustments, or perform procedures to the laser device other than those specified herein.
- Allow only HP Authorized Service technicians to repair the unit.

CDRH Regulations

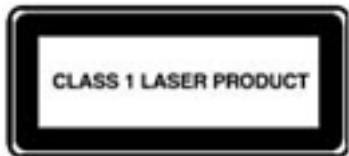
The Center for Devices and Radiological Health (CDRH) of the U.S. Food and Drug Administration implemented regulations for laser products on August 2, 1976. These regulations apply to laser products manufactured from August 1, 1976. Compliance is mandatory for products marketed in the United States.

Compliance with International Regulations

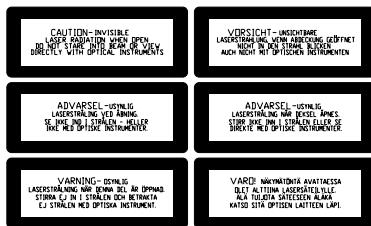
All systems equipped with CD-ROM drives comply with appropriate safety standards including IEC 825.

Laser Product Label

The following label or equivalent is located on the surface of laser products:



This label indicates that the product is classified as a CLASS 1 LASER PRODUCT. This label appears on a laser device installed in the product.



If you have an LS-120 drive or an LS-260 drive, this label is located next to the Class 1 Laser Product label on the system.

Laser Information

- Laser Type: Semiconductor GaAlAs
- Wave Length: 780 +/- 35 nm
- Divergence Angle: 53.5 Degrees +/- 0.5 degrees
- Output Power: Less than 0.2 mW or 10,869 W·m⁻² sr⁻¹
- Polarization: Circular 0.25
- Numerical Aperture: 0.45 +/- 0.04

Power Supply and Power Cord Set Requirements

Power Supply Class I Grounding Requirements

For protection from fault currents, the equipment shall be connected to a grounding terminal. Plug the system power cord into an AC outlet that provides a grounded outlet. Substitute cords may not provide adequate fault protection. Only use the power cord supplied with this product or a Hewlett-Packard authorized replacement.

Denmark

For tilslutning af de øvrige ledere, se medfølgende installationsvejledning.

Norway

Apparatet må kun tilkoples jordet stikkontakt.

Sweden

Apparaten skall anslutas till jordat uttag, när den ansluts till ett nätverk.

Power Supply Requirements

The power supplies on some products have external power switches. The voltage select switch feature on the product permits it to operate from any line voltage between 100-127 or 200-240 volts AC. Power supplies on those products that do not have external power switches are equipped with internal circuits that sense the incoming voltage and automatically switch to the proper voltage.

For safety reasons, use only the AC adapter provided with the unit or an authorized replacement adapter from Hewlett-Packard. Replacement part numbers may be found at <http://www.hp.com/cgi-bin/hpsupport/index.pl>.

For Use in Norway

This product is also designed for an IT power system with phase-to-phase voltage 230V.

Power Cord Set Requirements

The power cord set received with the product meets the requirements for use in the country where you purchased the equipment. Use only the power cord provided with the unit or an authorized replacement power cord from Hewlett-Packard or an approved HP source. Replacement part numbers may be found at <http://www.hp.com/cgi-bin/hpsupport/index.pl>.

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

⚠ WARNING! Do not use power cords from other products.

Mismatched power cords may result in a shock and fire hazard.

The requirements listed below are applicable to all countries:

1. The power cord must be approved by an acceptable accredited agency responsible for evaluation in the country where the power cord set will be installed.
2. The length of the power cord must be between 1.8 m (6 feet) and 3.6 m (12 feet). For a power cord 2.0 m (6.56 feet) or less, the diameter of the wire must be a minimum of 0.75 mm² or 18AWG. If the power cord is longer than 2.0 m (6.56 feet), the diameter of the wire must be a minimum of 1.0 mm² or 16AWG.

The power cord should be routed so that it is not likely to be walked on or pinched by items placed upon it or against it. Particular attention should be paid to the plug, electrical outlet, and the point where the cord exits from the product.

⚠ WARNING! Do not operate this product with a damaged power cord set. If the power cord set is damaged in any manner, replace it immediately. Damaged cords may result in user exposure to hazards.

Japanese Power Cord Requirements

For use in Japan, use only the power cord received with this product.

⚠ CAUTION: Do not use the power cord received with this product on any other products.

Pinch Hazard

 **WARNING!** Observe pinch hazard areas. Keep fingers away from closing parts.

2 Regulatory Agency Notices

Regulatory Compliance Identification Numbers

For the purpose of regulatory compliance certifications and identification, your product has been assigned a unique HP Regulatory Model Number (RMN). The RMN 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 RMN. The RMN should not be confused with the marketing name or model number of the product.

Modem Notices

⚠️ WARNING! To reduce the risk of fire, electric shock, and injury to persons when using this device, always follow basic safety precautions, including the following:

Do not use this product near water—for example, near a bathtub, wash bowl, kitchen sink or laundry tub, in a wet basement, or near a swimming pool.

Avoid using this product during an electrical storm. There is a remote risk of electric shock from lightning.

Do not use this product to report a gas leak while in the vicinity of the leak.

Always disconnect the modem cable before opening the equipment enclosure or touching an uninsulated modem cable, jack, or internal component.

If this product was not provided with a telephone line cord, use only No. 26 AWG or larger telecommunication line cord.

Do not plug a modem or telephone cable into the RJ-45 (network) jack.

SAVE THESE INSTRUCTIONS

Telecommunications Device Approvals

The telecommunications device in the computer is approved for connection to the telephone network in the countries and regions whose approval markings are indicated on the product label located on the bottom of the computer or on the modem.

Refer to the user guide included with the product to ensure that the product is configured for the country or region in which the product is located. Selecting a country or region other than the one in which it is located may cause the modem to be configured in a way that violates the telecommunication regulations/laws of that country or region. In addition, the modem may not function properly if the correct country or region selection is not made. If, when you select a country or region, a message appears that states that the country or region is not supported, this means that the modem has not been approved for use in this country or region and thus should not be used.

U.S. Modem Statements

This equipment complies with Part 68 of the FCC Rules and the requirements adopted by the ACTA. On the bottom of the computer or on the modem is a label that contains, among other information, a product identifier in the format US:AAAEQ##TXXXX. Provide this information to the telephone company if you are requested to do so.

Applicable certification jack USOC = RJ11C. A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA. A compliant telephone cord and modular plug is provided with this product. It is designed to be connected to a compatible modular jack that is also compliant. See installation instructions for details.

The REN is used to determine the number of devices that may be connected to a telephone line. Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call. In most but not all locations, the sum of RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local telephone company. For products approved after July 23, 2001, the REN for this product is part of the product identifier that has the format US:AAAEQ##TXXXX. The digits represented by ## are the REN without a decimal point (e.g., 03 is a REN of 0.3). For earlier products, the REN is separately shown on the label.

If this HP equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But, if advance notice isn't practical, the telephone company will notify you as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes to its facilities, equipment, operations, or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted telephone service.

If trouble is experienced with this equipment, call technical support. If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved. You should perform repairs only to the equipment specifically discussed in the "Troubleshooting" section of the user guide, if one is provided.

Connection to party line service is subject to state tariffs. Contact the state public utility commission, public service commission, or corporation commission for information.

If your home has specially wired alarm equipment connected to the telephone line, ensure that the installation of this HP equipment does not disable your alarm equipment. If you have questions about what will disable alarm equipment, consult your telephone company or a qualified installer.

The Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device, including a fax machine, to send any message unless such message clearly contains in a margin at the top or bottom of each transmitted page, or on the first page of the transmission, the date and time it is sent and an identification of the business, other entity, or other individual sending the message, and the telephone number of the sending machine or such business, other entity, or individual. (The telephone number provided may not be a 900 number or any other number for which charges exceed local or long-distance transmission charges).

In order to program this information into your fax machine, you should complete the steps outlined in the faxing software instructions.

Canadian Modem Statements

This equipment meets the applicable Industry Canada technical specifications.

The Ringer Equivalence Number, REN, is an indication of the maximum number of devices allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices, subject only to the requirement that the sum of the RENs of all devices does not exceed 5. The REN for this terminal equipment is 1.0.

Japanese Modem Statements

If the computer does not have the Japanese certification mark on the bottom of the computer, refer to the appropriate certification marking below.

The Japanese certification mark for the Agere Systems PCI-SV92PP Soft modem is below:



The Japanese certification mark for the Agere Systems PCI-SV92EX Soft modem is below:



The Japanese certification mark for the Agere Systems AC'97 modem is below:



New Zealand Modem Statements

The grant of a Telepermit for any item of terminal equipment indicates only that Telecom has accepted that the item complies with minimum conditions for connection to its network. It indicates no endorsement of the product by Telecom, nor does it provide any sort of warranty. Above all, it provides no assurance that any item will work correctly in all respects with another item of Telepermitted equipment of a different make or model, nor does it imply that any product is compatible with all of Telecom's network services.

This equipment is not capable, under all operating conditions, of correct operation at the higher speeds for which it is designed. Telecom will accept no responsibility should difficulties arise in such circumstances.

If this device is equipped with pulse dialing, note that there is no guarantee that Telecom lines will always continue to support pulse dialing.

Use of pulse dialing, when this equipment is connected to the same line as other equipment, may give rise to bell tinkle or noise and may also cause a false answer condition. Should such problems occur, the user should *not* contact the Telecom Faults Service.

Some parameters required for compliance with Telecom's Telepermit requirements are dependent on the equipment (PC) associated with this device. The associated equipment shall be set to operate within the following limits for compliance with Telecom's Specifications:

- a. There shall be no more than 10 call attempts to the same number within any 30-minute period for any single manual call initiation.
- b. The equipment shall go on-hook for a period of not less than 30 seconds between the end of one attempt and the beginning of the next attempt.
- c. Where automatic calls are made to different numbers, the equipment shall be set to go on-hook for a period of not less than 5 seconds between the end of one attempt and the beginning of the next attempt.
- d. The equipment shall be set to ensure that calls are answered between 3 and 30 seconds of receipt of ringing (So set between 2 and 10).

Voice Support

All persons using this device for recording telephone conversations shall comply with New Zealand law. This requires that at least one party to the conversation is aware that it is being recorded. In addition, the Principles enumerated in the Privacy Act 1993 shall be complied with in respect to the nature of the personal information collected, the purpose for its collection, how it is to be used, and what is disclosed to any other party.

This equipment shall not be set to make automatic calls to the Telecom '111' Emergency Service.

TV Antenna Connectors Protection

External Television Antenna Grounding

If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is electrically grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper electrical grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna-discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

Lightning Protection

For added protection of any product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug the product from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product from lightning and power line surges.

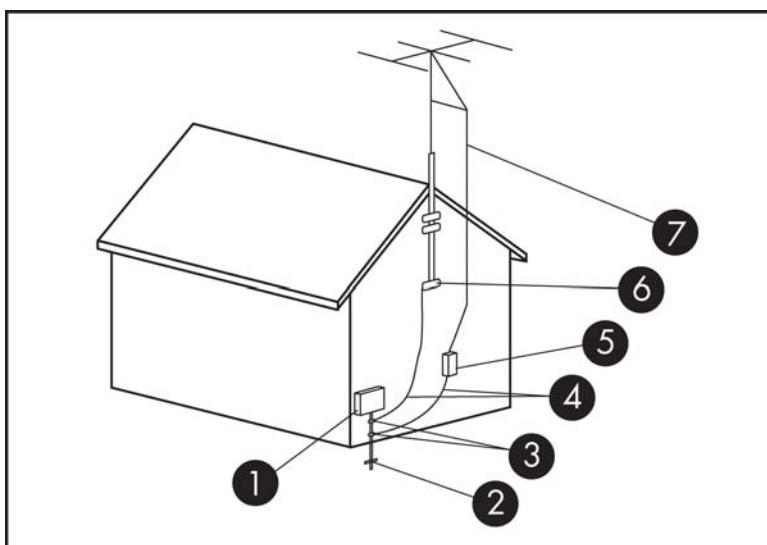


Table 2-1 Antenna Grounding

Reference	Grounding Component
1	Electric Service Equipment
2	Power Service Grounding Electrode System (NEC Art 250, Part H)
3	Ground Clamps
4	Grounding Conductors (NEC Section 810-21)
5	Antenna Discharge Unit (NEC Section 810-20)
6	Ground Clamp
7	Antenna Lead-in Wire

Note to CATV System Installer

This reminder is provided to call the CATV systems installer's attention to section 820-93 of the National Electric Code, which provides guidelines for proper grounding and in particular, specify that the Coaxial cable shield shall be connected to grounding system of the building, as close to the point of cable entry as practical.

Electromagnetic Compatibility Notices

This guide provides country- and region-specific nonwireless and wireless regulatory notices and compliance information for the computer product. Some of these notices may not apply to your product.

One or more integrated wireless devices may be installed. In some environments, the use of wireless devices may be restricted. Such restrictions may apply onboard airplanes, in hospitals, near explosives, in hazardous locations, and so on. If you are uncertain of the policy that applies to the use of this product, ask for authorization to use it before you turn it on.

Federal Communications Commission Notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio or television technician for help.

Modifications

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by 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.

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 the product, contact:

Hewlett-Packard Company P.O. Box 692000, Mail Stop 530113 Houston, Texas 77269-2000

Or, call 1-800-HP-INVENT (1-800-474-6836).

For questions regarding this FCC declaration, contact:

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

Or, call (281) 514-3333.

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

Products with Wireless LAN Devices

This product may be equipped with a wireless LAN device. This device must not be co-located or operating in conjunction with any other antenna or transmitter.

⚠ **WARNING! Exposure to Radio Frequency Radiation** The radiated output power of this device is below the FCC radio frequency exposure limits. Nevertheless, the device should be used in such a manner that the potential for human contact is minimized during normal operation.

During normal operation: To avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antennae should not be less than 20 cm (8 inches), including when the computer display is closed, if integrated into the unit. To identify the location of the wireless antennae, refer to the documentation included with the computer.

⚠ **CAUTION:** When using IEEE 802.11a wireless LAN, this product is restricted to indoor use, due to its operation in the 5.15- to 5.25-GHz frequency range. The FCC requires this product to be used indoors for the frequency range of 5.15 GHz to 5.25 GHz to reduce the potential for harmful interference to cochannel mobile satellite systems. High-power radar is allocated as the primary user of the 5.25- to 5.35-GHz and 5.65- to 5.85-GHz bands. These radar stations can cause interference with and/or damage to this device.

Australia Telecom Statement

The computer must be connected to the Telecommunication Network through a line cord that meets the requirements of ACA Technical Standard TS008.

⚠ **WARNING!** Modems without integral RJ-11 that are shipped with this computer must be installed only in devices displaying the A-tick.

Brazilian Notice

Este equipamento opera em caráter secundário, isto é, não tem direito a proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário.



- △ **CAUTION:** A alimentação de energia é predefinida para 220/230Vv. Se você possuir tomada elétrica de 110/115Vv, por favor, altere a chave na parte traseira do seu computador para a tensão correta.

Canadian Notice

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations. Wireless operation is subject to 2 conditions. The first is that the wireless device may not cause interference. The second is that the wireless device must accept any interference, including interference that may cause undesired operation of the device.

- △ **CAUTION:** When using IEEE 802.11a wireless LAN, this product is restricted to indoor use, due to its operation in the 5.15- to 5.25-GHz frequency range. Industry Canada requires this product to be used indoors for the frequency range of 5.15 GHz to 5.25 GHz to reduce the potential for harmful interference to co-channel mobile satellite systems. High-power radar is allocated as the primary user of the 5.25- to 5.35-GHz and 5.65- to 5.85-GHz bands. These radar stations can cause interference with and/or damage to this device.

The antenna for this device is not replaceable. Any attempt at user modification may damage your computer. For the Belkin Dual-Band Wireless A+G Desktop Card the maximum antenna gain permitted as specified by the Canadian e.i.r.p. limit is 2 dBi. For the Intel 802.11 a/b/g/n WLAN mini-card the maximum antenna gain permitted as specified by the Canadian e.i.r.p. limit is 6 dBi. For the Ralink 802.11 b/g/n WLAN PCIe 1x card the maximum antenna gain permitted as specified by the Canadian e.i.r.p. limit is 3 dBi.

Avis Canadien

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada. Le fonctionnement des périphériques sans fil est soumis à deux conditions. La première est que le périphérique sans fil ne doit pas causer d'interférence. La seconde est que le périphérique sans fil doit supporter toutes les interférences reçues, y compris les interférences qui pourraient entraîner un mauvais fonctionnement.

△ **CAUTION:** Si vous utilisez un réseau local sans fil IEEE 802.11a, l'appareil ne doit être utilisé qu'à l'intérieur d'un bâtiment, car il fonctionne dans une bande de fréquences allant de 5,15 à 5,25 GHz. Il s'agit d'une réglementation d'Industrie Canada visant à réduire le risque d'interférences nuisibles aux systèmes mobiles par satellite utilisant les mêmes canaux. Les bandes de fréquences allant de 5,25 à 5,35 GHz et de 5,65 à 5,85 GHz sont réservées aux stations radars très puissantes. Celles-ci peuvent causer des interférences et/ou endommager l'appareil.

L'antenne de l'appareil ne peut pas être remplacée. Vous risquez d'endommager votre ordinateur si vous essayez de modifier les paramètres par défaut. Le gain d'antenne maximal autorisé pour la carte réseau sans fil bibande A+G Belkin pour ordinateur de bureau est de 2 dBi, conformément à la valeur d'EIRP (puissance isotrope rayonnée équivalente) maximale canadienne. Le gain d'antenne maximal autorisé pour la mini-carte réseau local sans fil Intel 802.11 a/b/g/n est de 6 dBi, conformément à la valeur d'EIRP (puissance isotrope rayonnée équivalente). Le gain d'antenne maximal autorisé pour la carte PCIe 1x réseau local sans fil Ralink 802.11 b/g/n est de 3 dBi, conformément à la valeur d'EIRP (puissance isotrope rayonnée équivalente) maximale canadienne.

European Union Regulatory Notice

Products bearing the CE marking comply with the following EU Directives:

- Low Voltage Directive 2006/95/EC
- EMC Directive 2004/108/EC
- EuP Directive 2005/32/EC where applicable

CE compliance of this product is valid only if powered with the correct CE-marked AC adapter provided by HP.

If this product has telecommunications functionality, it also complies with the essential requirements of the following EU Directive:

- R&TTE Directive 1999/5/EC

Compliance with these directives implies conformity to harmonized European standards (European Norms) that are listed in the EU Declaration of Conformity issued by HP for this product or product family. This compliance is indicated by one of the following conformity markings placed on the product.

- The following CE marking is valid for non-telecommunications products and for EU harmonized telecommunications products, such as Bluetooth®.



- The following CE marking is valid for EU non-harmonized telecommunications products.



*If applicable, a notified body number is used. Refer to the regulatory label provided on this product.

The telecommunications functionality of this product may be used in the following EU and EFTA countries:

Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, and United Kingdom.

The official EU CE declaration of conformity for this device may be found at <http://www.hp.com/go/certificates>.

The point of contact for regulatory matters is Hewlett-Packard GmbH, HQ-TRE, Herrenberger Strasse 140, 71034 Boeblingen, Germany.

Products with 2.4-GHz Wireless LAN Devices

France

For 2.4 GHz Wireless LAN operation of this product certain restrictions apply: This product may be used indoors for the entire 2400-2483.5 MHz frequency band (channels 1-13). For outdoor use, only 2400-2454 MHz frequency band (channels 1-9) may be used. For the latest requirements, see <http://www.arcep.fr>.

L'utilisation de cet équipement (réseau local sans fil 2,4 GHz) est soumise à certaines restrictions : cet équipement peut être utilisé à l'intérieur d'un bâtiment en utilisant toutes les fréquences de 2400 à 2483,5 MHz (Chaînes 1-13). Pour une utilisation à l'extérieur, seules les fréquences de 2400 à 2454 MHz (Chaînes 1-9) peuvent être utilisées. Pour les dernières restrictions, voir <http://www.arcep.fr>.

European Telephone Network Declaration (European Union Only)

The product herewith complies with the requirements of the R&TTE Directive 1999/5/EC (Annex II) and carries the CE marking accordingly. However, due to differences between the individual PSTNs provided in different countries/regions, the approval does not, of itself, give an unconditional assurance of successful operation on every PSTN network termination point. In the event of problems, you should contact your equipment supplier in the first instance.

European Network Compatibility Declarations (European Union Only)

This equipment has been designed to work with analogue DTMF Networks (TBR-21 compliant).

This equipment may have internetworking difficulties in PSTN networks that only support Pulse Dialing. Please consult with your network operator for further assistance.

India Telegraph Act Notice

The India Telegraph Act of 1885 requires that an IEEE 802.11a wireless LAN end user obtain a license. To obtain this license, please contact The Wireless Planning & Coordination Wing, Ministry of Communications, Sanchar Bhavan New Delhi.

Japanese Notice

この装置は、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-B

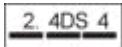
この機器の使用周波数帯では、電子レンジ等の産業・科学・医療用機器のほか工場の製造ライン等で使用されている移動体識別用の構内無線局（免許を要する無線局）及び特定小電力無線局（免許を要しない無線局）が運用されています。

- 1 この機器を使用する前に、近くで移動体識別用の構内無線局及び特定小電力無線局が運用されていないことを確認して下さい。
- 2 万一、この機器から移動体識別用の構内無線局に対して電波干渉の事例が発生した場合には、速やかに使用周波数を変更するか又は電波の発射を停止した上、下記連絡先にご連絡頂き、混信回避のための処置等（例えば、パーティションの設置など）についてご相談して下さい。
- 3 その他、この機器から移動体識別用の特定小電力無線局に対して電波干渉の事例が発生した場合など何かお困りのことが起きたときは、次の連絡先へお問い合わせ下さい。

連絡先：日本ヒューレット・パッカード株式会社 TEL：0120-014121

5 GHz帯を使用する特定無線設備（802.11a相当）は屋内使用に限られています。この機器を屋外で使用することは電波法で禁じられています。

Wireless LAN 802.11b devices



Wireless LAN 802.11g devices



Korean Notice

신청자: 라이트온 테크놀로지

제조자: 동광 지-컴 컴퓨터

제조국: 중국

B급 기기 (가정용 방송통신기기)	이 기기는 가정용(B급)으로 전자파적합등록을 한 기기로서 주로 가정에서 사용하는 것을 목적으로 하며, 모든 지역에서 사용할 수 있습니다.
-----------------------	--

NCC Notice

低功率電波輻射性電機管理辦法

第十二條經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率，加大功率或變更原設計之特性及功能。

第十四條低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。

前項合法通信，指依電信規定作業之無線電信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

在5.25G ~5.35G頻帶內操作之無線資訊傳輸設備僅適於室內使用

Environmental Agency Notices

Disposal of Waste Equipment by Users in Private Household 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.

ENERGY STAR Qualification (select models only)

 **NOTE:** This section applies only to products bearing the Energy Star logo.

HP computers marked with the ENERGY STAR logo follow the applicable U.S. Environmental Protection Agency (EPA) ENERGY STAR specifications for computers. The EPA ENERGY STAR logo does not imply endorsement by the EPA. As an ENERGY STAR Partner, Hewlett-Packard Company has determined the products marked with the ENERGY STAR logo are ENERGY STAR-qualified per the applicable ENERGY STAR guidelines for energy efficiency. The following logo appears on all ENERGY STAR-qualified computers.



The ENERGY STAR Computers Program was created by the EPA to promote energy efficiency and reduce air pollution through more energy-efficient equipment in homes, offices, and factories. One way products achieve this energy efficiency is by reducing power consumption when not being used through the Microsoft Windows Power Management feature.

The Power Management feature enables the computer to enter a low-power (or "sleep") mode after a period of inactivity. When used with an external monitor that is ENERGY STAR-qualified, this feature also supports the similar power management features of the external monitor.

To take advantage of this energy savings, the Power Management feature has been preset to power down the computer and monitor after the following specified periods of inactivity:

	Operating System	Computer	Monitor
Business Desktops	XP	15 minutes	15 minutes
	Vista	15 minutes	15 minutes
	Windows 7	30 minutes	10 minutes
Consumer Desktops		15 minutes	10 minutes
Thin Clients		Not applicable	15 minutes
Workstations		30 minutes	15 minutes

Both the computer and monitor can be woken from sleep mode through user interaction with any of the computer input devices (mouse, keyboard, and so on). When configured with Wake On LAN (WOL) enabled, the computer can also be woken by a network signal.

See the EPA ENERGY STAR Power Management Web site for more information about the energy and financial savings potential of the Power Management Feature: <http://www.energystar.gov/powermanagement>.

See the EPA ENERGY STAR Web site for more information about the ENERGY STAR program and its environmental benefits: <http://www.energystar.gov>.

 **CAUTION:** Using the Energy Save Monitor feature with monitors that are not ENERGY STAR-qualified can cause video distortion when an Energy Save timeout occurs.



NOTE: ENERGY STAR is not supported on Linux or FreeDOS Desktop PCs.

ENERGY STAR is not supported on Linux workstations.

If it is necessary to restore the operating system, you must also reset the ENERGY STAR settings (if applicable) after the restore.

To verify the factory default power settings for your computer, select **Start > Control Panel**, and then double-click **Power Options**.

Chemical Substances

HP is committed to providing our customers with information about the chemical substances in our products as needed to comply with legal requirements such as REACH (Regulation EC No. 1907/2006 of the European Parliament and the Council). A chemical information report for this product can be found at <http://www.hp.com/go/reach>.

Mercury Statement

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

- Mercury in the fluorescent lamp in the display LCD

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

Perchlorate Material—special handling may apply

The computer's real-time clock battery may contain perchlorate and may require special handling when recycled or disposed of in California. See <http://www.dtsc.ca.gov/hazardouswaste/perchlorate/>.

Chinese Restriction of Hazardous Substances (RoHS)

有毒有害物质和元素及其含量表 根据中国的《电子信息产品污染控制管理办法》

部件名称	有毒有害物质和元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
主板 处理器和散热器	X	○	○	○	○	○
内存条	X	○	○	○	○	○
I/O PCAs	X	○	○	○	○	○
电源	X	○	○	○	○	○
键盘	X	○	○	○	○	○
鼠标	X	○	○	○	○	○
机箱/其他	X	○	○	○	○	○
风扇	X	○	○	○	○	○
内部/外部媒体阅读设备	X	○	○	○	○	○
外部控制设备	X	○	○	○	○	○
电缆	X	○	○	○	○	○
硬盘驱动器	X	○	○	○	○	○
显示屏	X	X	○	○	○	○

O: 表示该有毒有害物质在该部件所有均质材料中的含量均在SJ/T11363-2006标准规定的限量要求以下。

X: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T11363-2006 标准规定的限量要求。

表中标有“X”的所有部件都符合欧盟RoHS法规，“欧洲议会和欧盟理事会2003年1月27日关于电子电器设备中限制使用某些有害物质的2002/95/EC号指令”。

注：环保使用期限的参考标识取决于产品正常工作的温度和湿度等条件。

The Table of Toxic and Hazardous Substances/Elements and their Content as required by China's Management Methods for Controlling Pollution by Electronic Information Products

Table 2-2 Toxic and Hazardous Substances and Elements

Part Name	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr(VI))	Polybromi- nated biphenyls (PBB)	Polybromi- nated diphenyl ethers (PBDE)
Motherboard, processor and heat sink	X	O	O	O	O	O
Memory	X	O	O	O	O	O
I/O PCAs	X	O	O	O	O	O
Power supply	X	O	O	O	O	O
Keyboard	X	O	O	O	O	O
Mouse	X	O	O	O	O	O
Chassis/Other	X	O	O	O	O	O
Fans	X	O	O	O	O	O
Internal/External Media Reading Devices	X	O	O	O	O	O
External Control Devices	X	O	O	O	O	O
Cable	X	O	O	O	O	O
Hard Disk Drive	X	O	O	O	O	O
Display	X	X	O	O	O	O

O: Indicates that this toxic or hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement in SJ/T11363-2006.

X: Indicates that this toxic or hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement in SJ/T11363-2006.

All parts named in this table with an "X" are in compliance with the European Union's RoHS Legislation – "Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment".

 **NOTE:** The referenced Environmental Protection Use Period Marking was determined according to normal operating use conditions of the product such as temperature and humidity.

Chinese Safety Notices

HP 工作站使用安全手册

使用须知

欢迎使用惠普工作站，为了您及仪器的安全，请您务必注意如下事项：

1. 仪器要和地线相接，要使用有正确接地插头的电源线，使用中国国家规定的 220V 电源。
2. 避免高温和尘土多的地方，否则易引起仪器内部部件的损坏。
3. 避免接近高温，避免接近直接热源，如直射太阳光、暖气等其它发热体。
4. 不要有异物或液体落入机内，以免部件短路。
5. 不要将磁体放置于仪器附近。

警告

为防止火灾或触电事故，请不要将该机放置于淋雨或潮湿处

如果您按照以上步骤操作时遇到了困难，或想了解其它产品性能，请在以下网页上寻找相关信息：<http://www.hp.com.cn>

或联系我们

中国惠普有限公司

地址：北京朝阳区建国路112号中国惠普大厦

电话： 010-65643888

Japanese Restriction of Hazardous Substances (RoHS)

2008 年、日本における製品含有表示方法、JISC0950 が公示されました。製造事業者は、2006 年 7 月 1 日 以降に販売される電気・電子機器の特定化学物質の含有に付きまして情報提供を義務付けられました。製品の部材表示に付きましては、

www.hp.com/go/jisc0950 を参照してください

A Japanese regulatory requirement, defined by specification JIS C 0950, 2008, mandates that manufacturers provide Material Content Declarations for certain categories of electronic products offered for sale after July 1, 2006.

To view the JIS C 0950 material declaration for this product, visit www.hp.com/go/jisc0950.

Turkey EEE Regulation

Türkiye Cumhuriyeti: EEE Yönetmeliğine Uygundur

German Acoustics Notice

LpA is < 70dB(A)

Schalldruckpegel LpA = kleiner 70 dB(A)

Am Arbeitsplatz (operator position)

Normaler Betrieb (normal operation)

Nach ISO 7779:1999 (Typprüfung)