

# **regulatory and safety notices**

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In addition to governmental agency information, this guide provides instructions for preventing damage from electrostatic discharge.

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Regulatory and Safety Notices

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# Regulatory Notices

## Federal Communications Commission Notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and 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 HP may void the user's authority to operate the equipment.

## Cables

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

## Declaration of Conformity for Products Marked with 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.
2. This device must accept any interference received, including interference that may cause undesired operation.

If you have questions about your product that are *not* related to this declaration, refer to the printed *Worldwide Telephone Numbers* booklet included with your product for customer support information. Or write to:

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

For questions regarding this FCC declaration, write to:

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

Or call HP at 281-514-3333.

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

## Canadian Notice

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

## Avis Canadien

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

## Japanese Notice

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、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。

## Airline Travel Notice

Use of electronic equipment aboard commercial aircraft is at the discretion of the airline.

## Power Cords Notice

If you were not provided with a power cord for your notebook or for an external power accessory intended for use with your notebook, you should purchase a power cord that is approved for use in your country.

The power cord must be rated for the product and for the voltage and current marked on the product's electrical ratings label. The voltage and current rating of the cord should be greater than the voltage and current rating marked on the product. In addition, the diameter of the wire must be a minimum of 0.75 mm<sup>2</sup>/18AWG, and the length of the cord must be between 5 feet (1.5 m) and 6½ feet (2 m). If you have questions about the type of power cord to use, contact your HP authorized service provider.

A 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.

Only an AC adapter provided with the notebook, a replacement AC adapter provided by HP, or an AC adapter purchased as an option from HP should be used with the notebook.



## Battery Notice



**WARNING:** To reduce the risk of fire or burns, do not disassemble, crush, puncture, short the external contacts on, or dispose of a notebook battery pack in fire or water. Replace only with the HP battery pack for this notebook.

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In North America, dispose of nickel metal hydride or lithium ion batteries by taking advantage of the notebook battery recycling program. This program provides you with a postage-paid battery pack mailer preaddressed to a reclamation facility where the metals are recycled. For more information, visit the recycling program Web site at <https://www.orderz.com/recycle>.

In Europe, do not dispose of batteries with general household waste. Dispose of or recycle them by using the public collection system or returning them to HP, your authorized HP partners, or their agents.

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### CAUTION

RISK OF EXPLOSION IF BATTERY IS REPLACED

BY AN INCORRECT TYPE.

DISPOSE OF USED BATTERIES ACCORDING

TO THE INSTRUCTIONS.

## Energy Star Compliance

This notebook is compliant with the U.S. Environmental Protection Agency (EPA) Energy Star Computers Program 3.0. The EPA Energy Star logo does not imply endorsement by the EPA. As an Energy Star Partner, HP has determined that the product meets the Energy Star guidelines for energy efficiency.

## German Ergonomics Notice

HP notebooks bearing the “GS” approval mark meet the applicable ergonomic requirements when used in conjunction with docking bases, keyboards, and monitors that bear the “GS” approval mark. HP notebooks in a stand-alone mode are not intended for continuous use in an office environment.

## Laser Safety Notices

All HP systems equipped with laser products comply with appropriate safety standards, including IEC 825. With specific regard to the laser, the equipment complies with laser product performance standards set by government agencies for Class 1 laser products. It does not emit hazardous light; the beam is totally enclosed during all modes of customer operation and maintenance.

## 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.



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**WARNING:** Use of controls or adjustments or performance of procedures other than those specified herein or in the laser product installation guide may result in hazardous radiation exposure.

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This system is classified as a Class 1 laser product. This label appears on the laser product.

## Laser Information

Laser Type: Semiconductor GaAlAs

Wave Length:  $780 \pm 35$  nm

Divergence Angle:  $53.5^\circ \pm 1.5^\circ$

Output Power: Less than 0.2mW or  $10,869 \text{ W}\cdot\text{m}^{-2}\text{sr}^{-1}$

Polarization: Circular

Numerical Aperture:  $0.45 \pm 0.04$

Only authorized technicians trained by HP should attempt to repair this equipment. All troubleshooting and repair procedures are detailed to allow only subassembly/module level repair. Because of the complexity of the individual boards and subassemblies, no one should attempt to make repairs at the component level or to make modifications to any printed wiring board. Improper repairs can create a safety hazard.

## Modem Notices

### Important Safety Instructions



**WARNING:** When using this device, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, 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 may be a remote risk of electric shock from lightning.
- Do not use this product to report a gas leak 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 in order to reduce the risk of fire.
- Do not plug a modem or telephone cable into the network (RJ-45) jack.

SAVE THESE INSTRUCTIONS

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## Telecommunications Device Approvals

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

Refer to the documentation included with the product to ensure the product is configured for the country in which it is located. Selecting a country other than the one in which it is located may cause your modem to be configured in a way that violates the telecommunication regulations/laws of that country. In addition, your modem may not function properly if the correct country selection is not made. If, when selecting a country, a message appears that states that the country is not supported, this means that the modem has not been approved for use in this country 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. If requested, this information must be provided to the telephone company.

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 areas, 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 the customer as soon as possible. Also, you will also 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 HP equipment, refer to the printed *Worldwide Telephone Numbers* booklet included with your notebook for information about obtaining customer 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 only perform repairs 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 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 fax machines, 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 5.0. The REN for this terminal equipment is 1.0.

## 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.

This equipment may not provide for the effective hand-over of a call to another device connected to the same line.

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.

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.

The equipment shall be set to ensure that calls are answered between 3 and 30 seconds of receipt of ringing (S0 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 part to the conversation is to be 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.

## **Wireless Device Notices**

In some environments, the use of wireless devices may be restricted. Such restrictions may apply aboard airplanes, in hospitals, near explosives, in hazardous locations, etc. If you are uncertain of the policy that applies to the use of this device, please ask for authorization to use it prior to turning it on.

## **U.S. Wireless Notice**

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.



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



**WARNING:** The radiated output power of this device is far below the FCC radio frequency exposure limits. Nevertheless, the device should be used in such a manner that the potential for human contact during normal operation is minimized. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna should not be less than 0.2 inch (0.5 cm) during normal operation.

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## Canadian Wireless Notice

Operation is subject to the following 2 conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

## European Union Notice



Products bearing the CE marking comply with the R&TTE Directive (1999/5/EC), EMC Directive (89/336/EEC) and the Low Voltage Directive (73/23/EEC) issued by the Commission of the European Community.

Compliance with these directives implies conformity to the following European Norms (in parentheses are the equivalent international standards and regulations):

- EN 55022 (CISPR 22)—Electromagnetic Interference
- EN 55024 (IEC61000-4-2, 3, 4, 5, 6, 8, 11)—  
Electromagnetic Immunity
- EN 61000-3-2 (IEC61000-3-2)—Power Line Harmonics
- EN 61000-3-3 (IEC61000-3-3)—Power Line Flicker

- EN 60950 (IEC 60950)—Product Safety
- EN 300 328-2—Technical requirements for radio equipment
- EN 301 489-1, -17—General EMC requirements for radio equipment

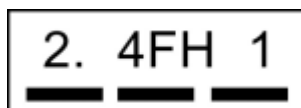
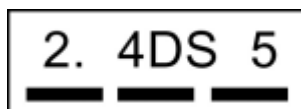
This product may be used in the following EU and EFTA countries: Austria, Belgium, Denmark, Finland, Germany, Greece, Iceland, Ireland, Italy, Liechtenstein, Luxembourg, Netherlands, Norway, Portugal, Sweden, Switzerland and United Kingdom. For normal wireless LAN operation of this product, only a limited band is available in France (Channels 10, 11, 12 and 13 only). L'Autorité de régulation des télécommunications (ART) has special regulations for hot spots allowing other channels too; please check with ART on this for local rulings and for authorization.

## Japanese Wireless Notice

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：コンパックコンピュータ株式会社 TEL：0120-101589



## **Brazilian Wireless 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.

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# Electrostatic Discharge

A discharge of static electricity from fingers or other electrostatic conductors may damage electronic components. Before handling electrostatic-sensitive components, discharge static electricity by using one of the methods described in this chapter.

## Preventing Electrostatic Discharge

### Handling Drives

Before handling a drive, discharge static electricity by touching an exterior unpainted metal surface of a device that is connected to an electrical outlet by a grounding plug.

Do not touch the connector pins on a drive or the notebook.

### Handling Internal Components

When you are removing or installing internal components, use the following precautions:

- Keep components in their electrostatic-safe containers until you are ready to install them.
- Have everything needed for the installation within reach so that you do not need to leave the area after beginning the procedure.
- Use nonmagnetic tools.

- Before touching an electronic component, discharge static electricity by using one of the grounding methods described later in this chapter. If you must leave the area during the procedure, remember to reground yourself before resuming the procedure.
- Avoid touching pins, leads, and circuitry. Handle electronic components as little as possible.
- If you remove a component, place it in an electrostatic-safe container.

## Grounding Methods

If removal or installation instructions direct you to unplug the notebook, unplug it *after* being properly grounded and *before* removing a cover. Use one or both of the following grounding methods:

- Touch an exterior unpainted metal surface of a device that is connected to an electrical outlet by a grounding plug.
- Use a wrist strap connected by a ground cord to the notebook chassis. Wrist straps are flexible grounding straps with a minimum of one megohm  $\pm 10$  percent resistance in the ground cords. To provide proper ground, wear the strap snugly against the skin.

If you need more information about static electricity or assistance with component removal or installation, refer to the *Worldwide Telephone Numbers* booklet included with your product for customer support information.