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Hewlett-Packard Company

P.O. Box 4010

Cupertino, CA 95015-4010

USA

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1 Getting information

Type of information	Where to find
Set up your computer.	Quick Setup (this Guide)
 Use the computer. Connect to the Internet.	Quick Setup (this Guide)
Recover factory settings.	Troubleshooting and Maintenance Guide on your computer. At the bottom of your screen, click on Start , then click HP Help and Support and HP User Manuals .
See how-to videos about using the features of your computer.	Visit http://www.hp.com/supportvideos (English only)
 Learn how to use the Microsoft Windows 7 operating system. Find Windows 7 password information. Find links to driver updates. Read frequently asked questions. 	Help and Support Click Start, and then click Help and Support or visit http://www.hp.com/go/win7 . Windows 7 troubleshooting tools 1. Click Start, click Control Panel, and then click System and Security. 2. Under Action Center, click Find and fix problems (troubleshooting).
Troubleshoot the most common computer hardware and software issues.	Troubleshooting and Maintenance Guide on your computer. At the bottom of your screen, click on Start , then click HP Help and Support and HP User Manuals .
Find electronic user guides and specifications for your computer model.	HP Support website: http://www.hp.com/go/contactHP
 Order parts and find additional troubleshooting help. 	
Upgrade or replace components of your computer.	Upgrading and Servicing Guide HP Support website: http://www.hp.com/go/contactHP

Type of information	Where to find	
Find computer warranty information.	Limited Warranty and Support Guide or the Warranty and Support Information included with your computer.	
Get technical support.	Or	
	Click Start, click All Programs, and then click HP User Manuals.	
Get up-to-date information and help from the Windows community.	http://www.hp.com/support/consumer-forum	
• Connect to a TV.	Watching and Recording TV	
	Click Start, click All Programs, and then click HP User Manuals.	
	If the guide is not available there, visit http://www.hp.com/go/contactHP	
Get special utilities for	PC Help & Tools folder	
computer owners.	Click Start, click All Programs, and then click PC Help & Tools.	
Maintain your computer.	HP Support Assistant — Maintains your computer performance and resolve problems faster by using automated updates, on-board diagnostics, and guided assistance.	
	Click Start, click All Programs, click HP, and then click HP Support Assistant.	
	Troubleshooting and Maintenance Guide	
	Click Start, click HP Help and Support, and then click HP User Manuals.	
	Maintaining Your Computer (this Guide)	
Find safety and regulatory	Safety & Regulatory Information	
notices.	Click Start , click HP Help and Support , and then click HP User Manuals or visit https://www.hp.com/go/contactHP .	
Find ergonomic information.	Safety & Comfort Guide	
	Click Start , click HP Help and Support , and then click HP User Manuals or visit https://www.hp.com/ergo .	

2 Setting up your computer

WARNING! To reduce the risk of electrical shock or damage to your equipment:

- Place the computer in a location away from water, dust, moisture, and soot. These can increase the inside temperature, or can cause fire or electrocution.
- 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 equipment by unplugging the power cord from the electrical outlet. To prevent direct exposure to laser beam, do not try to open the enclosure of the CD or DVD drives.
- The power supply is preset for the country/region in which you purchased your computer. If you move, check the voltage requirements for your new location before plugging the computer into an AC power outlet.

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

To reduce the risk of serious injury read the *Safety & Comfort Guide*. The guide is located on the web at http://www.hp.com/ergo.

- Place the computer so that all ventilation openings are unobstructed and cabling is not in a walkway or where it can be stepped on or damaged by placing furniture on it.
- 2. Connect all power cords from the monitor, computer, and accessories to a power surge protection device that is specifically labeled as having surge protection, an uninterruptible power supply (UPS), or a similar device. If the computer has a television tuner, or a modem or telephone connection, protect the computer by using surge protection with these signal inputs as well. Connect the television cable or the telephone line cord to the surge protection device, and then connect the device to the computer.
- 3. Download and install operating system updates.
 - Find out what operating system and version your computer is currently running.
 - (Click **Start** > **Control Panel** and double-click **System**. The operating system and version are shown under Windows edition.)
 - **b.** Open your internet browser and go to http://www.hp.com/go/contactHP.
 - Select your country and language, if necessary, and click Support & Drivers

- d. Select Download drivers and software (and firmware), type your computer model name and number in the product field, and press Enter.
- If necessary, select your computer model from **Product search** results
- f. Select your computer operating system.
- Click **Download** next to each update you wish to download.
- Follow the on-screen instructions to install each downloaded update.
- 4. Look in the computer box for additional printed details or updates.
- 5. Read the Safety and Regulatory Information document in the HP User Manuals folder
- Read the Safety & Comfort Guide for proper workstation setup, posture, 6. health and work habits, and electrical and mechanical safety information. Click Start, click All Programs, and then click HP User Manuals or visit http://www.hp.com/ergo.

After you complete the initial computer setup, you might want to install additional software programs or hardware devices. Check the operating system, memory, and other requirements listed before purchasing new software or hardware for your computer. Follow the software manufacturer's directions to install the new software.



NOTE: Use only licensed original software. Installing copied software could result in an unstable installation, infect the computer with a virus, or be illegal.

Security solutions can deter theft, mishandling, and software attacks, but cannot prevent them.

Connecting to the Internet

Steps to connect to the Internet:

- 1. Connect the hardware as shown on the setup view.
- 2. Get Internet service.
 - Sign up with an Internet Service Provider (ISP). If you already have an account with an ISP, skip this step and follow the instructions provided by the ISP.
 - If you did not set up the computer for Internet service during the initial setup, do so now by using Online Services:
 - Click Start, click All Programs, click Online Services, and then click Get Online.
 - b. Follow the on-screen instructions to select an ISP and set up Internet service.

- MOTE: Online Services provides a list of ISPs; however, you might choose another ISP or transfer an existing account to this computer. To transfer existing accounts, follow the instructions provided by the ISP.
- Using your Internet connection through your ISP, open a web browser and browse the Internet.

NOTE: If you have issues connecting to the Internet, see <u>Internet access</u> on page 14.

3 Setting up additional features

Using Beats Audio™ (select models only)

Your HP TouchSmart PC features audio connectors (headphone and Audio Out) that are optimized for Beats Audio™ headphones and external audio systems (purchased separately). Select HP TouchSmart PC models also include four Beats-optimized internal speakers and a Beats toggle button ● on the keyboard.

Your computer comes ready for you to experience music with Beats enabled. To disable Beats, press the Beats toggle button; the Beats-off icon appears on the screen. To turn Beats on, press the Beats toggle button again. If your keyboard does not contain the Beats toggle button, press Fn+B to enable and disable Beats. Tap the **Beats** icon on the system tray to view the Beats user interface.

All you need to do is plug the Beats Audio headphones into the side headphone connector to experience crisp and clear sound separation. To experience the full capability of BEATS audio using the internal speakers, HP recommends connecting a matching HP subwoofer to the Sub connector on the back panel. If you are using an external audio system, plug it into the Audio Out connector on the back panel.

Using the HDMI port controls (select models only)

The right side of your computer may contain an HDMI port and volume control buttons. Unless a device is plugged into the HDMI port, the volume controls have no functionality. The HDMI controls are only intended to control the settings of the device plugged into that port, and do not control any other media devices on the system.

To use the HDMI port controls, plug a device into the HDMI port. Press the menu button (the top button displayed). A new on-screen menu displays. Using the +/-buttons, select brightness, volume, contrast, or color balance.



When a device is plugged into the HDMI port, the volume on the computer is muted. Pressing the +/- buttons on the side panel does not change the volume of the computer.

4 Maintaining your computer

Cleaning procedures

Keeping your computer system free of dust, dirt, and heat will prolong its life.

- Dust, pet hair, and other particles can build up, creating a blanket effect; as a result, components can
 overheat or, in the case of the keyboard and mouse, not work smoothly and effectively.
- Check your system once a month for visible signs of dust and debris, and clean it about once every three
 months.
- Visit www.hp.com/go/contactHP for additional cleaning instructions.

Cleaning the computer vents

Air vents keep the computer cool. Keep these vents clean by using a small, battery-powered vacuum cleaner. (A battery-powered vacuum cleaner eliminates the risk of electric shock.)

- 1. Vacuum the vents on the computer case.
- Remove any debris that has accumulated in and around the computer connectors (for example, the Ethernet and USB connectors).

Cleaning the keyboard and mouse

When cleaning the keyboard keys, use a low setting on a battery-powered vacuum cleaner, to avoid removing key caps and springs.

- 1. Vacuum between the keys of the keyboard and along the grooves.
- Use a clean, dry cloth and isopropyl (rubbing) alcohol to clean buildup on the keyboard keys and along its edges.
- 3. Wipe the body of the mouse and the mouse cord by using cleaning wipes.

If you have a roller-ball mouse, clean the ball and rollers inside:

- Turn the mouse upside down, and rotate the ball-cover ring counterclockwise to remove the ring and release the roller ball.
- 2. Rinse the roller ball with soap and warm water.
- Clean the rollers inside the mouse with a cotton swab dampened with isopropyl (rubbing) alcohol.
- After the roller ball and rollers are completely dry, replace the ball and ballcover ring.

Cleaning the touch screen (AiO models only)

Follow these steps to clean the touch screen:

- 1. Turn off the computer. Tap the Start button, and then tap Shut Down.
- 2. Disconnect the power cord from the wall.
- 3. Spray a small amount of mild glass cleaner on a soft cloth to clean the touch screen
- 4. Wipe the surface and left and right side of the touch screen to remove any dirt, fingerprints, or other debris that could hinder the touch recognition of the screen.

CAUTION: Do not spray or place the cleaner directly on the screen; spray the cleaner into the cloth, and then wipe the sides and surface of the touch screen.

Do not use an abrasive cleaner or cloth when cleaning the sides or the surface of the screen, because this could cause damage to the touch screen.

5 Troubleshooting

Refer to the documentation provided by the product manufacturer for information about peripheral-specific problems, such as issues with a monitor or a printer. The following tables present some issues you might encounter while installing, starting up, or using your computer and possible solutions.

For more information or for additional troubleshooting options, see <u>Getting information on page 1</u>.

Computer does not start

Symptom	Possible solution	
Error message: Hard disk drive error.	 Restart the computer. Press the Ctrl+Alt+Delete keys on the keyboard simultaneously. Click the Arrow button next to the red Shut Down button, and then click Restart. Or, press and hold the Power button on the computer for 5 or more seconds to turn off the computer, and then press the Power button to restart the computer. If Windows opens, immediately back up all important data to a backup hard disk drive. 	
	4. Contact Support, whether it was possible or not to start up Windows. Either the hard disk drive or the system board may need to be replaced.	
Computer will not turn on or start.	Ensure that the cables connecting the computer to the external power source are plugged in properly. When the cables connecting the computer to the external power source are plugged in properly, and the wall outlet is functioning, the green power supply light on the back of the computer should be on; if it is not, contact Support.	
	Test the wall outlet by connecting a different electrical device to it.	

Symptom	Possible solution	
Computer seems to be locked up	Use the Windows Task Manager to close any programs not responding, or restart the computer:	
and is not	1. Press the Ctrl+Alt+Delete keys on the keyboard simultaneously.	
responding.	2. Click Start Task Manager.	
	3. Select the program that is not responding, and then click End Task .	
	If closing programs does not work, restart the computer:	
	1. Press the Ctrl+Alt+Delete keys on the keyboard simultaneously.	
	2. Click the Arrow button next to the red Shut Down button, and then click Restart.	
	Or, press and hold the Power button on the computer for 5 or more seconds to turn off the computer, and then press the Power button to restart the computer.	
Error message: Invalid system disk or Non- System disk or Disk error.	When drive activity stops, remove the disc and press the spacebar on the keyboard. The computer should start up.	

Power

Symptom	Possible solution	
Computer does not turn off when the Power button is pressed.		
Computer shuts down automatically.	 The computer might be in an exceedingly hot environment. Let it cool down. Ensure that computer air vents are not blocked and that the internal fan is running — see: Cleaning procedures on page 7. (Your computer might not have an internal fan.) 	

Display (monitor)

Symptom	Possible solution	
Screen is blank.	Press the space bar on the keyboard or move the mouse to make the screen display visible again.	
	Press the Sleep button (select models only), or Esc on the keyboard, to resume from Sleep mode.	
	Press the Power button to turn on the computer.	

Keyboard and mouse (general)

Symptom	Possible solution	
Keyboard commands and typing are not recognized by the computer.	e the mouse to turn off the computer, unplug and reconnect the keyboard to the back of ur computer, and then restart your computer.	
Mouse (with cable)	Unplug and reconnect the mouse cable to your computer.	
does not work or is not detected.	If the mouse is still not detected, turn off the computer, unplug and reconnect the mouse cable, and then restart the computer.	
Cursor does not move using the arrow keys on the number keypad.	Press Num Lock on the keyboard to turn off Num Lock, so that the arrow keys on the number keypad can be used.	
Cursor does not	Use the keyboard to save changes in all open programs, and then restart your computer:	
respond to mouse	1. Press the Alt+Tab keys simultaneously to navigate to an open program.	
movement.	2. Press Ctrl+S simultaneously to save your changes in the selected program (Ctrl+S is the keyboard shortcut for Save on most—not all—programs).	
	3. Repeat step 1 and step 2 to save changes in all open programs.	
	4. After saving changes in all open programs, press the Ctrl+Esc keys on the keyboard simultaneously to display the Windows Start menu.	
	5. Use the arrow keys to select the Arrow button that is next to Shut Down. Select Shut Down, and then press Enter.	
	6. After the shutdown is complete, unplug and reconnect the mouse connector to the back of your computer, and then restart your computer.	

Keyboard and mouse (wireless)

Symptom

Possible solution

Wireless keyboard or mouse does not work or is not detected.

- Ensure that you are using the wireless keyboard or wireless mouse within range of the
 receiver, approximately 10 meters (32 feet) for normal use, and within 30 cm (12
 inches) during initial setup or for re-synchronization.
- Ensure that the mouse is not in Suspend mode, which occurs after 20 minutes of inactivity. Click the left mouse button to reactivate it.
- Replace the batteries in the keyboard and mouse.
- Re-synchronize the keyboard and mouse to the receiver using the following steps.

The receiver, wireless keyboard, and wireless mouse shown in the following illustrations are examples; your models might vary. **IMPORTANT:** During these steps, place the wireless keyboard and wireless mouse on the same level as the receiver, within 30 cm (12 inches) of the receiver, and away from interference from other devices.

Unplug the receiver from a USB connector on the computer, and then reconnect it.
Your computer model might have a connector dedicated to the receiver. If you have a
choice, use a USB connector on the front of the computer.



2. Check that the mouse is on (A), and push and hold the Connect button (B) on the underside of the mouse for 5 to 10 seconds until the LED on the receiver lights or stops flashing. The receiver connection session times out after 60 seconds. To ensure that the connection was established, and that the receiver did not time out instead, move the mouse and check for response on the screen.



- After the mouse connection is established, continue by using the steps that follow to repeat the procedure for the keyboard.
- Push and hold the Connect button (C) on the underside of the keyboard for 5 to 10 seconds until the LED on the receiver lights or stops flashing.



Speakers and sound

Symptom	Possible solution	
No sound is	For Windows 7:	
produced.	 Click Start, click Control Panel, click Action Center, and then click Troubleshooting. 	
	2. Under Hardware and Sound, click Troubleshoot and audio playback.	
	If you are using built-in monitor speakers, use the monitor front-panel Volume button to adjust volume. Use the front-panel buttons to enter the on-screen display (OSD) and ensure that audio is enabled and that the volume is set appropriately.	
	Ensure that you connected powered (active) speakers and that they are turned on.	
	Turn off your computer, and then unplug and reconnect the speakers. Ensure that the speakers are connected to an audio connector, not a Line In or headphone connector.	
	To resume from Sleep mode, press the Sleep button (select models only), or press Esc.	
	Unplug headphones if they are connected to your computer (or speaker system).	
Volume is very low or unsatisfactory.	Ensure that you connected the speakers to the Audio Out (lime green) connector on the back of the computer. (Additional audio connectors are used for multiple-channel speakers.) Detached non-powered speakers (speakers without a separate power source, such as batteries or a power cord) do not produce satisfactory sound. Replace the non-powered speakers with powered speakers.	

Internet access

Symptom	Possible solution	
Internet programs do not start automatically.	Log in to your ISP, and start the desired program.	

Symptom

Possible solution

I cannot connect to the Internet.

For Windows 7:

- Click Start, click Control Panel, click Action Center, and then click Troubleshooting.
- Under Network and Internet, click Connect to the Internet.

Verify that you are using the proper cables for your Internet connection type. Your computer might have a dial-up modem and an Ethernet network adapter (also called a network interface card, or NIC). A modem uses a standard telephone cable, whereas the network adapter uses a network cable, to connect to a local area network (LAN). Do not connect a telephone cable to the network adapter, and do not plug a network cable into a telephone service line; doing so might damage the network adapter.

Run the wireless setup wizard:

- Click Start, click Control Panel, click Network and Internet, and then click Network and Sharing Center.
- In the Network and Sharing Center window, click Set up a connection or network to open the wizard, and then follow the on-screen instructions.

If your system has an external antenna, try to move the antenna to a better position. If the antenna is internal, try to move the computer.

Try to connect again later, or contact your Internet service provider (ISP) for assistance.

Software troubleshooting

To repair software problems, try these methods:

- Turn the computer off completely and then turn it on again. This is the easiest (and sometimes the best) way.
- Update the drivers (see Updating device drivers, following).
- Use Microsoft System Restore Software program and hardware driver reinstallation (see Microsoft System Restore, later in this table). — Restores your computer to a configuration that was in use before the software was installed.
- Reinstall the software program or hardware driver (see Software program and hardware driver reinstallation, later in this table). — Restores the software (if it came with the product) or hardware driver to factory defaults.
- System Recovery (see Troubleshooting and Maintenance Guide on your computer. At the
 bottom of your screen, click on Start, then click HP Help and Support and HP User
 Manuals.) Erase and reformat the hard disk drive, and then reinstall the operating
 system, programs, and drivers. This erases all data files you have created.

Updating device drivers

Complete the following procedure to update a driver, or to revert to an earlier version of the driver if the new one does not solve your problem:

- 1. Click Start
- Type Device Manager into the Start Search box, and then click Device Manager to open the Device Manager window.
- Click the plus sign (+) to expand the type of device you want to update or rollback. (For example, DVD/CD-ROM drives).
- 4. Double-click the specific item (for example, HP DVD Writer 640b).
- 5. Click the Driver tab.
- 6. To update a driver, click **Update Driver**, and then follow the on-screen instructions.
 Or, to revert to an earlier version of a driver, click **Rollback Driver**, and then follow the on-screen instructions.

Microsoft System Restore

If you have a problem that might be due to software that was installed on your computer, use System Restore to return the computer to a previous restore point. You can also set restore points manually.

NOTE: Always use this System Restore procedure before you use the System Recovery program.

To start a **System Restore**:

- 1. Close all open programs.
- 2. Click Start, right-click Computer, and then click Properties.
- Click System protection, System Restore, click Next, and then follow the onscreen instructions.

To add restore points manually:

- 1. Close all open programs.
- 2. Click Start, right-click Computer, click Properties, and then click System protection.
- 3. Under Protection Settings, select the disk for which you want to create a restore point.
- 4. Click Create, and then follow the on-screen instructions.

Software program and hardware driver reinstallation If any of your factory-installed software programs or hardware drivers are damaged, you can reinstall it by using the Recovery Manager program (select models only).

NOTE: Do not use the Recovery Manager program to reinstall software programs that came on CDs or DVDs included in the computer box. Reinstall these programs directly from the CDs or DVDs.

Before you uninstall a program, be sure you have a way to reinstall it. Check to be sure that it is still available from where you initially installed it (for example, discs or the Internet). Or check to be sure that the program is in the list of programs you can reinstall from the Recovery Manager.

To check the list of installable programs in the Recovery Manager:

- Click Start, All Programs, Recovery Manager, and then click Recovery Manager. If prompted, click Yes to allow the program to continue.
- 2. Under I need help immediately, click Software Program Reinstallation.
- Click Next at the Welcome screen. A list of programs opens. Check whether your program is there.

To reinstall a program using the **Recovery Manager**:

- Click Start, click All Programs, click Recovery Manager. and then click Recovery Manager.
- Click Software Program Reinstallation, and then click Next at the Welcome screen.
- Choose the program you want to install, click Next, and follow the on-screen instructions.
- 4. When you have finished reinstalling, restart the computer. Do not skip this last step. You must restart the computer after recovering software programs or hardware drivers.

To uninstall a program:

- 1. Close all software programs and folders.
- 2. Click Start, and then click Control Panel.
- Under Programs, click Uninstall a program.
- Select the program you want to remove, and then click Uninstall.

6 Support information

Ways to get help

Easy to reach. Easy to use. Award-winning HP Customer Support is our promise to help you get the most from your computer. Whether with tools located on your computer, from information on the web, by phone, or through your local retailer, you'll find what you need.

Before contacting the HP Customer Care Center, it's important to have the following information handy.

- Model number
- System (product) number
- Serial number
- Software build number
- Operating system
- Purchase date

Please take a moment to write down your product information for future reference.

The first four items on the list (model number, product number, serial number, and software build number) can be viewed by pressing the Ctrl+Alt+S keys on the keyboard at the same time.

Don't forget to register!

Go to: http://www.hp.com/apac/register.

Where to get help

- Use the Help and Support Center for help with hardware and software questions. Click Start, and then click Help and Support. The Help and Support Center provides useful troubleshooting information and includes the following:
 - E-mail support
 - HP Real Time Chat with qualified support specialists
 - Support phone numbers
- If you think you have a hardware issue, before calling the Customer Care Center, run the hardware diagnostic tools that are preinstalled on your computer. Click Start, All Programs, PC Help & Tools, and then click Hardware Diagnostic Tools.
- **3.** For help online, go to the HP Customer Care Center website at http://www.hp.com/go/contactHP.

Phone assistance to get you up and running is covered for thirty (30) days from the time you purchased your computer. After thirty (30) days, there may be a charge, but the helpful support is still available.

Customer support for repairs

If your computer needs to be repaired or to have parts replaced, you have two choices:

- You can easily replace many of your computer parts that are considered consumer replaceable. This is the fastest method of repair, as many times we can send the part directly to your home or business in a few days.
- If a repair is necessary, the HP Customer Care Center will make arrangements to fix your computer.

These services are covered during the warranty period.

There are a few limitations and exclusions to the warranty (as well as some important details), which are described in the *Hardware Limited Warranty* section of the *Limited Warranty and Support Guide*.

Before upgrading your hardware

Any hardware upgrades that you intend to do should only be done after you have completely set up your new computer. Refer to the setup poster included with your system for help with setting up. If you have any problems setting up your system and turning it on, immediately contact the HP Customer Care Center listed earlier in this guide, and a HP Customer Representative will assist you. This must be done first before attempting to upgrade your system.

By breaking the security seal on the back of the computer, you are confirming that the computer was working properly before you attempted to upgrade your system. Once the security seal has been broken, your computer is then, to the extent allowed by local law, covered under the terms and conditions listed in the Hardware Limited Warranty section of the Limited Warranty and Support Guide.

The power to make a change

Thank you for your purchase. HP is dedicated to producing the highest quality, best performing, and easiest to use computers in the world. HP also designed this product with the environment in mind.

But to reduce its impact even further, we need your help.

Let's work together to make a change.

How you can help	What we do
Recycle your old computer.	We design with the environment in mind.
Disposing of electronic waste responsibly has been an HP priority for more than 20 years. If this computer is a replacement for an older computer you no longer need, go to www.hp.com/go/recycle to find out if HP can help you dispose of your old computer with minimum impact on the planet.	While we want you to enjoy this computer for many years to come, we recognize that you will eventually dispose of it. We have designed it so it can be easily dismantled and recycled as much as possible. The packaging that came with your computer is also designed for maximum recyclability.
Don't use a screen saver.	We design to be more energy efficient.
Screen savers can prevent your HP computer from going to sleep and thereby waste power. Screen savers can also reduce the life of your monitor by increasing the number of hours the LCD backlight is on.	This computer has HP Power Management Technology, which can reduce computer energy use up to 45% compared to computers without power management. HP computers keep energy needs to a minimum, saving you money and reducing your carbon footprint.
Don't disable the power settings. The power management tools on this computer are	We design our products to use better and fewer materials.
set to minimize energy use without impacting performance. Please do not disable them.	Ensuring the health of you, your family, and our planet is a key priority at HP. We are committed to using the safest materials in the production of this and all our other products.

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671406-002