



hp e-pc

user's guide



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Important Ergonomic Information

Improper and prolonged use of keyboards and input devices are among those tasks associated with repetitive strain injury (RSI) to soft tissues in the hands and arms. If you do experience discomfort or pains while using any computing equipment, discontinue use immediately and consult your physician as soon as possible.

Your comfort and safety are our primary concern. Consequently, we strongly recommend that you read HP's ergonomic information before using your e-pc. For detailed information, refer to HP's online version of "Working in Comfort" which is preloaded on your e-pc's hard disk or visit HP's Working in Comfort Web site at: www.hp.com/ergo/. A summary is provided in the Comfort and Safety Checklist on page 8.

HP e-pc information roadmap

User's guide



The *e-pc User's Guide* (this manual) will help you:

- Set up and begin using your e-pc for the first time
- Troubleshoot your e-pc
- Find out where to get more information.

Information on the HP e-pc Support Web Site



Refer to the HP e-pc support web site

(www.hp.com/go/e-pcsupport) for a wide range of information, including:

- Downloadable documentation
- Service and support options
- The latest versions of drivers and utilities
- BIOS updates
- Answers to Frequently Asked Questions.

CD-ROMs provided with your e-pc



Used for a full system recovery or alternative OS installation. Includes instructions on how to recover your preloaded software including operating system, drivers and utilities. For more information, refer to “CD-ROMs provided with your e-pc” on page 31.

HP Information CD-ROM



The *HP Information CD-ROM* (ordered separately) contains complete information about your e-pc:

- Product Overview
- Setting Up the e-pc
- Using the e-pc
- Troubleshooting the e-pc
- Servicing the e-pc
- Warranty and Support Service

You can order your *HP Information CD-ROM* from HP's e-pc web site at www.hp.com/go/e-pcsupport or fill out the order form on page iii and fax it to the number on the form.

Important Safety Information

For your safety, never remove the e-pc's cover without first removing the power cord and any connection to a telecommunications network. Always replace the cover before switching the e-pc on again.

For your safety, always use the AC adapter that came with your product.

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

To avoid electrical shock, do not open the power supply. There are no user-serviceable parts inside.

There is a danger of explosion if the battery is incorrectly installed. For your safety, never attempt to recharge, disassemble or burn an old battery. Only replace the battery with the same or equivalent type, as recommended by the manufacturer. The battery in this e-pc is a lithium battery that does not contain any heavy metals. Nevertheless, in order to protect the environment, do not dispose of batteries in household waste. Please return used batteries either to the shop from which you bought them, or to the dealer from whom you purchased your e-pc, or to HP, so that they can either be recycled or disposed of in the correct way. Returned used batteries will be accepted free of charge.

Do not attempt to connect this product to the phone line during a lightning storm. Never install telephone jacks in wet locations unless the telephone line has been disconnected at the network interface. Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface. Use caution when installing or modifying telephone lines. Avoid using a telephone (other than a cordless type) during a lightning storm. There may be a risk from lightning. Do not use the telephone to report a gas leak in the vicinity of the leak. Never touch or remove the communications board without first removing the connection to the telephone network.

Use minimum N° 26 AWG wire for telephone cable.

Choosing a Comfortable Workspace

Choose a workspace for your e-pc near a grounded electrical wall socket. If your monitor has a tilt-swivel base, attach it to the monitor as described in the monitor manual. Position the monitor on your desk. Position the e-pc to allow proper ventilation and access to the cables.

WARNING

If you are in doubt that you can lift the equipment safely, do not try to move it without help.

PRODUCT ORDER FORM

Title:	Information CD-ROM for Vectra VL400, VL600 & e-pc
Part Number:	5011-8109

Do you want an *HP Information CD-ROM*?

To order your *HP Information CD-ROM* from the web:

- 1 Go to www.hp.com/go/e-pcsupport, then select **Manuals**
- 2 Select **your product**, then select **HP Information CD-ROM**

To order your *HP Information CD-ROM* by fax, fill out the order form below and fax it to the following number.

Worldwide Fax Number:	+33 320 699 877
------------------------------	-----------------

PRODUCT INFORMATION:

	Europe <i>Euro</i>			USA / Latin America/Asia <i>U.S.\$</i>		
	1	5	20	1	5	20
Number of Kits:						
Worldwide Price						
<i>Standard Post</i>	12.00	29.00	76.00	12.00	30.00	80.00
<i>Express Mail</i>	38.00	67.00	167.00	40.00	70.00	175.00

Above prices do not include sales taxes (if applicable): transport is included



PRODUCT ORDER FORM

Title:	Information CD-ROM for Vectra VL400, VL600 & e-pc
Part Number:	5011-8109

A) ORDERING INFORMATION:

1) Number of *Information CD-ROMs*: 1 5 20

2) Mail: *Express* *Standard*

3) Currency: U.S\$ EURO

TOTAL AMOUNT=

B) CUSTOMER INFORMATION:

4) Name:

5) Company:

6) Address:

7) Postal Code:

8) City: 9) State: Country:

10) Fax: 11) Tel:

C) PAYMENT

Other **Visa** **Mastercard** **AMEX**

Credit Card Number: Expiry Date:

Signature:

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Getting started

This chapter describes how to set up and start using your e-pc.

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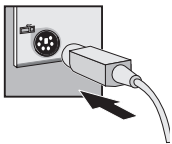
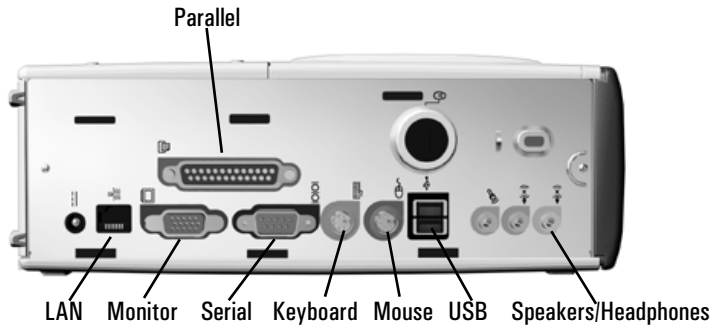
Connecting devices

Note It is recommended that you keep the box and packaging that comes with your e-pc.

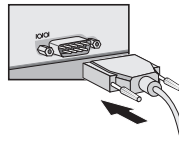
If you want to install the port control system, refer to “Securing your e-pc” on page 5 before connecting any devices.

Before starting up the e-pc, connect devices and power cords to the rear of the e-pc as shown below.

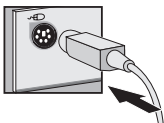
The connectors are color-coded for easy matching. Match the colors. The connectors are shaped to go in one way only.



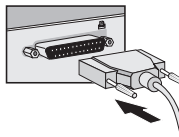
 **Keyboard**
(purple)




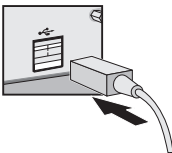
 **One 9-pin Serial Connector** (turquoise)




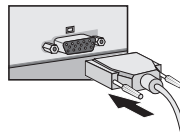
 **Mouse** (green)




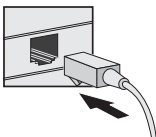
 **25-pin Parallel Connector** (burgundy)
To connect a printer to your e-pc, refer to the manual that came with the printer



 **Two USB Connectors** (black)
USB is supported by:
- Windows 98
- Windows 2000



 **Monitor** (blue)
To connect a monitor to your e-pc, refer to the manual that came with the monitor



 **LAN**

WARNING Always turn the volume down before connecting headphones or speakers to avoid discomfort from unexpected noise or static. Listening to loud sounds for prolonged periods of time may permanently damage your hearing. Before putting on headphones, place them around your neck and turn the volume down. When you put the headphones on, slowly increase the volume until you find a comfortable listening level. When you are able to hear comfortably and clearly, without distortion, leave the volume in that position.

If you have a modem

You must ensure the country setting for your modem is correct. The country is set to match the country you select when configuring your operating system. In some cases, however, the modem may not correctly identify a corresponding country profile. In such cases, reselection may be required to match your exact location.

Checking country settings for the modem

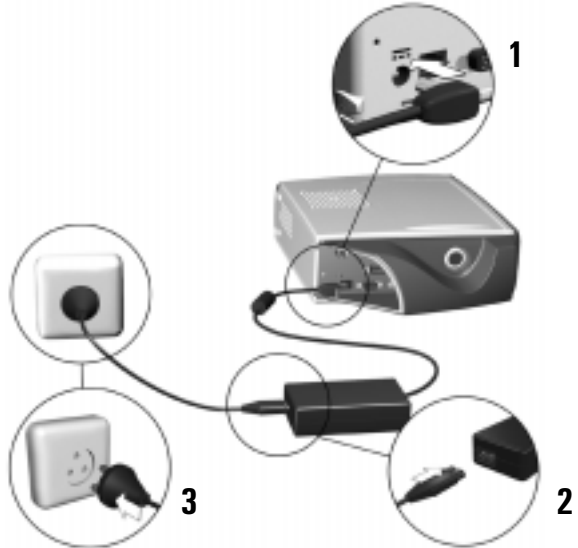
To check the current settings:

- 1 From the Windows taskbar, click **Start** ⇒ **Settings** ⇒ **Control Panel**.
- 2 Double-click on the **Modem Country Select** icon.
- 3 Change the country setting if necessary.

Connecting the external power supply

WARNING For your safety always use the AC adapter that came with your product. This equipment can be disconnected by removing the power cord of the adapter from the power outlet. This means the equipment must be located close to an easily accessible power outlet.

Connect the AC adapter to the rear of the e-pc, then plug in the AC adapter.



It is recommended that you install the port control system to prevent the AC adapter from being unplugged. Refer to “Securing your e-pc” on page 5.

Securing your e-pc

Attaching the port control system

The HP port control system has been designed to secure your e-pc. When it is fitted and locked, no devices or cables can be disconnected from the rear of the e-pc. To attach the port control system:

- 1 Connect the AC adapter, mouse, keyboard, and monitor to the rear of the e-pc. In addition, connect any serial or parallel device that you intend to use.
- 2 Attach the port control system.

Step 1



Step 2



- 3 Lock the port control system (with the key).

Step 3

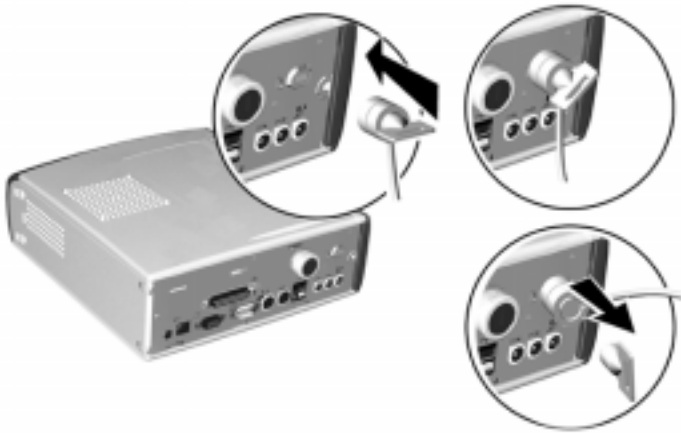


Your e-pc is now ready for use. If you want to attach the footstand then refer to “Attaching the footstand” on page 7.

Installing a security cable

You can secure the e-pc to your desk, or any other fixed object using a Kensington™ security cable. The e-pc has a slot at the rear for securing the cable. Note that you can install the port control system on top.

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



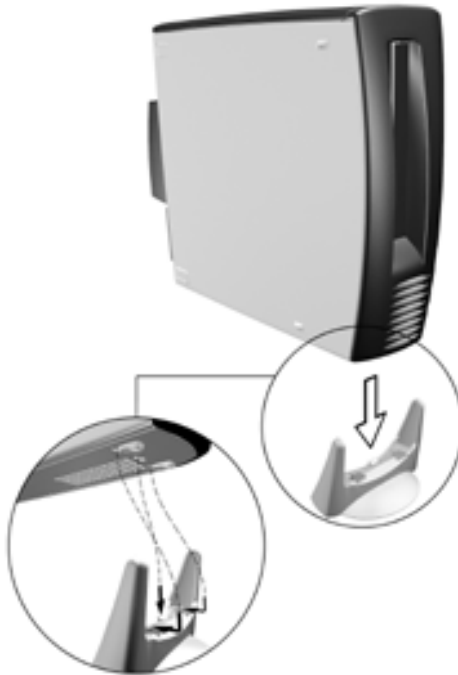
Positioning the e-pc

Always position the e-pc to ensure that it has sufficient ventilation — never obstruct or cover the ventilation holes.



Attaching the footstand

- 1 Position the footstand on the desk.
- 2 Lower the front underside of the e-pc onto the stand.
- 3 Click the stand into place.

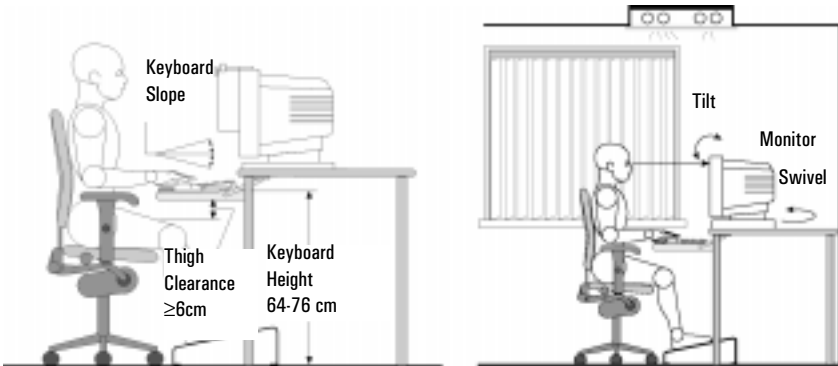


Comfort and safety checklist

Before using your new e-pc, ensure that your working environment is correct.

Preparing your work environment

When using HP computing equipment, it is important that your work environment contributes to your comfort and productivity:



- *Work Surface Height* - Your work surface should be height adjustable. To ensure that your worksurface is at the correct height, first adjust the height of your chair so that your feet are firmly on the floor, then adjust the work surface height until your forearms are parallel to the floor when you have your fingers on the keyboard or other input devices.
- *Chair* - Your chair should provide a comfortable sitting position including features such as a height and tilt adjustment feature, curved seat edge, a stable base (for example, five legs and castors, adjustable back support, a freely rotating swivel, fully adjustable padded arm rests).
- *Monitor* - Place your monitor so that the top of the screen is at, or slightly below, eye level (up to 15 degrees).
- *Work Surface Arrangement* - Make sure that all elements of your HP e-pc system for example, monitor, document holder, keyboard, mice and other input devices, and headphones and speakers- are optimally arranged and adjusted to meet your personal requirements. For example, if you are primarily using the keyboard, place it directly in front of you, not to the side. If your work involves extensive use of a mouse or other pointing device, place that device directly in front of

your left or right arm. If you are using both a mouse and keyboard, place them both at the same work surface height and close together. If a palm rest is used, the height should be flush with the front edge of the keyboard. Other items, such as your telephone or notepad, should also be considered.

Caution Various aspects of using mice, keyboards and other input devices may increase your risk of discomfort or injury. Optimize your comfort and safety by positioning these devices properly.

Your work posture

Sitting in one position for long periods can be uncomfortable. To minimize the potential risk for physical discomfort or injury, it's important that you maintain a proper posture:

- *Head* - When viewing your monitor, your head should not be tilted more than 15 degrees forward, and do not turn your head toward either side.
- *Back* - While sitting at your work surface, make sure your back is supported by the chair's backrest in an erect position or angled slightly backwards.
- *Arms* - Make sure your arms and elbows are relaxed and loose, with your upper arms perpendicular to the floor or tilted downward not more than 15 degrees. Keep your forearms and hands approximately parallel with the floor with elbows bent between 70 and 115 degrees. Keep your elbows close to your sides (less than 20 degrees away from your body).
- *Hands, Wrists, Forearms* - Try to keep your hands wrists and forearms in a relaxed neutral position when using your mouse keyboard or other input devices. For example, while using your keyboard and mouse, rest your forearms (flat) on your desktop.
- *Legs* - Your thighs should be horizontal or angled slightly downward. Your lower legs should be near a right angle to your thighs. Make sure there is sufficient room under the work surface for your legs.
- *Feet* - If after adjusting your chair you cannot rest your feet comfortably on the floor, use a footrest, preferably one that can be adjusted in height and angle.

General

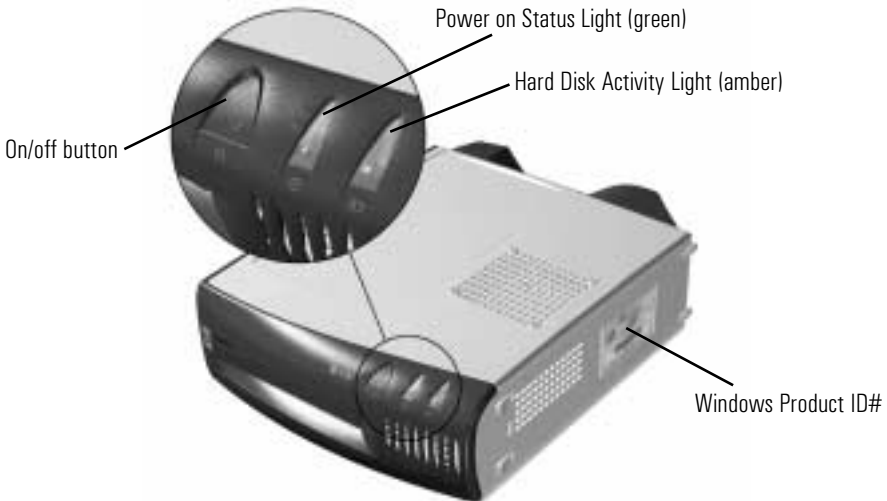
- Look away from the screen from time-to-time to help reduce eyestrain. Focus on distant objects briefly, and blink periodically to lubricate your eyes. You also should have your eyes checked on a regular basis and ensure your eyeglass prescription is suitable for working on a computer monitor.

Comfort and safety checklist

- Remember to occasionally shift position and move your body. Keeping your body in one position for long periods is unnatural and stressful. When prolonged work is required, take frequent short breaks. As a rule of thumb, a five or ten minute break every hour is a good idea. Short frequent breaks are more beneficial than longer less frequent breaks. Data show that people who work for long periods of time without a break may be more prone to ergonomic injury.
- Changing tasks frequently will help prevent muscle stiffness. Examples: alternating between keyboarding, reading, writing, filing, and moving around in your work environment, helps you maintain a relaxed posture. Occasionally stretch the muscles in your hands, arms, shoulders, neck and back. You should stretch at least as often as you take brief task breaks—at least once every hour.
- Discomfort may be alleviated by using alternative ergonomic designs and accessories such as ergonomically personalized chairs, palm rests, keyboard trays, alternative input devices, prescription eyeglasses, anti-glare screens, and more. Seek additional information from the sources available to you, including your employer, doctor, local office supply store, and the *Information Sources* listed in the online version of *Working in Comfort*, preloaded on the hard disk of your HP computing equipment or available on the HP web site: www.hp.com/ergo.

Using your e-pc

To start the e-pc for the first time, press the On/Off button.



Caution Do not cover ventilation holes as this can cause overheating.

Starting the e-pc for the first time

Do not switch off the e-pc while the software is being initialized as this could cause unexpected results.

- 1 Turn on the monitor first, and then the e-pc.
- 2 The software initialization routine starts. During this time, you will be asked to carry out various tasks including entering the Windows product ID# and selecting the regional settings to be used on your e-pc.
- 3 After the initialization routine has finished, click on **OK** and the e-pc will restart.

Waking your e-pc from a sleep state


After a period of inactivity, your e-pc can go into one of a series of sleep states. These are indicated by blinking of the power-on status light on the e-pc's front panel. To wake the e-pc, try hitting a key on your keyboard or, if this does not work, press the On/Off button. The e-pc can only be woken in this way when it is in the deepest sleep state.

Stopping your e-pc

To stop the e-pc, exit all applications and then use your operating system's **Shut down** command in the **Start** menu (for Windows 98, Windows 2000 and Windows NT 4.0). If you want to force your e-pc to shut down, for example, if your operating system does not respond, press and hold the power button for approximately 5 seconds.

e-pc help

Your e-pc has information preloaded on the hard drive that could help you with using or troubleshooting your e-pc. This information varies depending on the model of e-pc you have. You can either:

- access the **HP Information Center** by double-clicking on the **HP Information Center** shortcut  on your e-pc's desktop, or
 - access e-pc help by selecting **Programs** ⇨ **HP Info** ⇨ **e-pc** in the **Start** menu.
-

Finding information on the web

Once you have set up your e-pc to connect to the Internet, click on **Programs** in the **Start** menu and select your browser. You then simply type in the URL (address) of the Web site you want to visit:



Setting passwords

You can protect your e-pc from unauthorized access by using a password. You can also protect your floppy drive, hard drive and CD-ROM drive from unauthorized use. For more information, refer to "HP Setup program" on page 38

— If you have a problem

This chapter describes how to avoid or solve problems with your e-pc.

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Audio (sound) problems	page 27
Frequently Asked Questions.....	page 29
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What to do first

Note HP strongly recommends you use e-DiagTools. It provides the most effective way of solving most hardware problems. It can also help you distinguish between a hardware and a software problem.


Don't panic! Most things that go wrong with computers can be fixed relatively easily — provided you do not rush into them. Use the following checklist to see where you can find help.


- | | | |
|--|---|---|
| <input type="checkbox"/> Is there really a problem with my e-pc or do I just not know how to do something? | ⇒ | Either <ul style="list-style-type: none">• Refer to chapter 1 in this manual, "Getting started" for basic advice on using your e-pc. |
| | ⇒ | Or <ul style="list-style-type: none">• Refer to your e-pc's online help (see page 12) |
| <input type="checkbox"/> I still haven't solved my problem and need to do some troubleshooting.
Does it seem to be a basic problem with Windows, or with one of your e-pc's components? | ⇒ | Yes <ul style="list-style-type: none">• Refer to your e-pc's online help (see page 12) |
| | ⇒ | No <ul style="list-style-type: none">• For more detailed help, refer to the troubleshooting sections starting on page 15. |
| <input type="checkbox"/> Need More Help? | ⇒ | <ul style="list-style-type: none">• Collect information on your e-pc (see page 36) then contact your authorized support provider. For Customer Care Center numbers, refer to page 50.• For a wide range of information and support, refer to the HP e-pc Web at: www.hp.com/go/e-pcsupport.• For information on your warranty, go to "Regulatory, warranty and support", starting on page 41. |

My e-pc doesn't start properly

The e-pc doesn't power on

Have you checked that...

The e-pc's AC adapter is correctly connected 

If your e-pc's AC adapter has a voltage switch, that it is correctly set 

The AC adapter is working properly 

How

Connect the AC adapter to a working power outlet, then connect the AC adapter to the rear of the e-pc


- 1 Disconnect the AC adapter.
- 2 Select the correct setting on the voltage switch (if applicable).
- 3 Reconnect the AC adapter.
- 4 Start the e-pc.


- 1 When you power on the e-pc, check that the light on the On/Off button comes on.
- 2 If nothing happens, contact your authorized support provider. The original AC adapter may have to be replaced.

If the problem persists, contact your authorized support provider

The e-pc hangs during start-up

Have you checked that ...

Your memory modules are of the correct type 

That you have not made any changes to the e-pc's *Setup* program that may be causing the problem 

How

- 1 Disconnect the e-pc's AC adapter.
- 2 Remove the e-pc's main cover.
- 3 Replace the memory module with a known working memory module.
- 4 Reconnect the e-pc's AC adapter and start up the e-pc.


- 1 Enter the *Setup* program by pressing **F2** when prompted during start-up. Refer to page 38.
- 2 Reload the default *Setup* values by pressing **F9**.
- 3 Press **F10** to exit *Setup* saving changes.

If the problem persists, contact your authorized support provider

The power-on self test detects an error

An on-screen error message during the POST means that your e-pc has a configuration problem.

Have you checked...






The part of your configuration with which the Power-On Self Test has detected an error 

How

- 1 For more specific troubleshooting information, see "General problems" beginning on page 20.
- 2 If you still have a problem, run HP e-DiagTools (refer to page 30).



Serial or parallel port test error

Note: such an error may occur when your e-pc starts up and performs a Power-On Self Test (POST)

<i>Have you checked that...</i>	<i>How</i>
<input type="checkbox"/> The port is correctly configured in the e-pc's <i>Setup</i> program	 <ol style="list-style-type: none">1 Switch the e-pc OFF then ON.2 When the message Press F2 to Enter Setup appears, press the F2 key. Refer to page 38.3 Check the port is enabled and the correct setting is selected under I/O Device Configuration.
<input type="checkbox"/> The device is connected correctly and is switched on	 <ol style="list-style-type: none">1 Switch off the e-pc.2 Plug the cables into the correct connectors on the back of the e-pc.3 Switch on the e-pc and the external devices.
<input type="checkbox"/> The correct device drivers are installed	 Refer to the documentation for your serial or parallel device.
<input type="checkbox"/> There is not a hardware problem	 Run e-DiagTools. Refer to page 30.
<input type="checkbox"/> The e-pc has the latest BIOS version	 Download the latest BIOS and instructions for its installation from HP's Web at: www.hp.com/go/e-pcsupport

If the problem persists, contact your authorized support provider

You get a "non-system disk" or "operating system not found" message

<i>Have you checked that ...</i>	<i>How</i>
<input type="checkbox"/> There's not a non-bootable floppy disk in an external floppy drive when you started the e-pc	 <ol style="list-style-type: none">1 Remove the floppy disk if there is one in the drive.2 Restart the e-pc.
<input type="checkbox"/> The device boot order is correct in the <i>Setup</i> program	 <ol style="list-style-type: none">1 Enter the <i>Setup</i> program by pressing F2 when prompted during start-up. Refer to page 38.2 Reload the default <i>Setup</i> values by pressing F9.3 Press F10 to exit <i>Setup</i> saving changes.

CMOS test error

Note: such an error may occur when your e-pc starts up and performs a Power-On Self Test (POST)

Have you checked that...

You are using the latest BIOS for your e-pc



You don't need to restore the default configuration settings



The CMOS is not corrupted



How

Download the latest BIOS and instructions for its installation from HP's Web at:
www.hp.com/go/e-pcsupport

- 1 Switch the e-pc OFF then ON.
- 2 When the message **Press F2 to Enter Setup** appears, press the **F2** key.
- 3 Press **F9** to restore default values.
- 4 Press **F10** to exit the *Setup* program saving changes.

- Clear your e-pc's CMOS in the e-pc's *Setup* program (the recommended method) if you have access to this option. Refer to page 38.
- Clear your e-pc's CMOS manually. Refer to page 39.

If the problem persists, contact your authorized support provider

My e-pc isn't working properly

The e-pc is stuck in sleep mode

Have you checked that...

- The e-pc is really stuck



How

- 1 Move the mouse and press any key on the keyboard. Wait a minute to see if the e-pc wakes.
- 2 If the power LED is blinking and the e-pc is not making any noise, the e-pc is in a deep sleep state for power saving. Press the power button briefly and wait for a minute to see if the e-pc wakes up.
- 3 If the e-pc still does not respond, press the power button for 5 seconds. The e-pc will shut down and any unsaved data will be lost.
- 4 Unplug the power cord from your e-pc, wait for a few seconds and then plug it in again. Your e-pc will restart automatically.

The e-pc freezes suddenly

Have you checked that...

- One of your applications has not crashed



How

- 1 Try pressing the **CTRL + ALT + DEL** keys simultaneously. A window appears showing the applications currently running. One of these may be marked as **not responding**.
- 2 Select the application and click on **End Task**.
- 3 Restart the program to see if it is working OK.
- 4 If it does not work normally, restart the e-pc and try again.

- There is a hardware problem



Run HP e-DiagTools (refer to page 30)

- You have installed enough memory in your e-pc. It is recommended that you install at least 64MB of RAM to run Windows 2000 or NT 4.0 on your e-pc. Installing less than this may cause problems running applications.



- 1 Restart your e-pc.
- 2 Display the e-pc's Summary Screen by pressing **Esc** during start-up. The amount of RAM (main memory) will be displayed.

I can't shut down my e-pc

Have you checked that...

- The e-pc did not hang when you tried to shut it down



How

- If you can't shut down and restart the e-pc normally, press in the power button for 5 seconds. The e-pc will shut down. Note that any unsaved data will be lost.

My e-pc has become slow

Have you checked that...

You are not running too many applications at the same time



You have not filled your hard drive with too much data



You are not storing large numbers of unnecessary temporary files on your e-pc



The slowness is not coming from the network (if applicable)



How

- Close any unused applications and check whether the e-pc's performance improves

- 1 Click on the letter corresponding to your e-pc's hard drive in **Windows Explorer**. The amount of free space on the disk is displayed at the bottom of the Explorer window.
- 2 Remove or back up any unwanted files.
- 3 Compress any files you do not often have to access with a file compression utility.

- Windows 98/Windows 2000: Select **Programs** ⇨ **Accessories** ⇨ **System Tools** ⇨ **Disk Cleanup** from the **Start** menu. This will check your system for files you can safely delete.
- Windows 95/Windows NT4: Look for Windows temporary folders and delete any files you are absolutely sure you do not require.

- Contact your network administrator for assistance

General problems

This section provides information on how to solve various problems that may occur with your e-pc. Possible sources of problems covered include the keyboard, monitor, hard drive, CD-ROM drive or modem.

WARNING

Be sure to disconnect the power cord of the AC adapter and any telecommunication cables from your computer before you remove the cover to check the cable connections or jumper settings.

To avoid electrical shock and harm to your eyes by laser light, do not open the laser module of the CD-ROM. The laser module should only be serviced by service personnel. Do not attempt to make any adjustment to the laser unit. Refer to the label on the CD-ROM for power requirements and wavelength. This PC is a class 1 laser product.

The keyboard doesn't work properly

<i>Have you checked that...</i>		<i>How</i>
<input type="checkbox"/> The keyboard cable is correctly connected	⇒	Plug the cable into the correct connector on the back of the e-pc. Color coding is used for easy matching.
<input type="checkbox"/> The keyboard is clean and no keys are stuck down	⇒	Check all keys are at the same height, and none are stuck
<input type="checkbox"/> The keyboard itself is not defective	⇒	Either replace the keyboard by a known working unit or try the keyboard with another e-pc
<input type="checkbox"/> The keyboard settings are not causing a problem	⇒	Select Settings ⇒ Control Panel ⇒ Keyboard from the Start menu to view your keyboard settings
<input type="checkbox"/> You are using the correct driver. This driver is provided with all Windows NT 4.0, Windows 98 and Windows 2000 preloaded systems. For other operating systems, refer to your operating system's documentation.	⇒	Download the latest driver from HP's Web at: www.hp.com/go/e-pcsupport
<input type="checkbox"/> You are using the latest BIOS for your e-pc	⇒	Download the latest BIOS and instructions for its installation from HP's Web at: www.hp.com/go/e-pcsupport
<input type="checkbox"/> You didn't spill anything on the keyboard	⇒	Clean the keyboard with a damp cloth. Do not wet it.

The monitor doesn't work properly

The e-pc's power indicator light works but the monitor remains blank

Have you checked that...

- The monitor is switched ON (LED is on)
- The monitor's power cord is correctly connected
- The monitor (video) cable is correctly connected
- The monitor's brightness and contrast settings are correctly set



How

Refer to the monitor manual for an explanation of the LED signals (green, orange, or blinking)



Connect the power cord – ensure it is plugged into a working grounded power outlet and into the monitor



Connect the monitor (video) cable – ensure it is properly connected to both the e-pc and the monitor



Check the settings using the monitor's OSD (on-screen display) or using controls on the front of the monitor

There is an image during boot but then the screen goes blank

Have you checked that...

- The monitor settings in your e-pc are compatible with your monitor



How

- Windows 98 & Windows 2000: Restart the e-pc. The HP opening screen is displayed.

For Windows 98, when you hear a beep, press **F8** and then start the e-pc in safe mode.

For Windows 2000, when prompted, press **F8** and then start the e-pc in VGA mode. When the e-pc has started, double-click on the **Display** icon in your e-pc's **Control Panel**, then click on the **Settings** button. Use the sliding control to reset the resolution.

- Windows NT: Restart the e-pc and enter VGA mode when prompted during startup.

For other operating systems, refer to your operating system's documentation.

The picture breaks up, rolls, shudders or blinks

Have you checked that...

- The monitor is correctly connected or set up
- All your hardware is working properly



How

- Check the video cable connections to the e-pc
- Check that there is not interference from a fluorescent light or fan



Run HP e-DiagTools (refer to page 30)

There's a problem with the hard disk

Have you checked that...

- You have not received a S.M.A.R.T. alert indicating that your hard disk drive is defective
- The disk is not damaged in some way
- You have not disabled the option to boot your e-pc from the hard drive in the *Setup* program
- The hard disk drive has been detected



How

Such alerts can appear on your screen at start-up or while the e-pc is running. If you receive such an alert, carry out an immediate data backup, then contact HP support at www.hp.com/go/e-pcsupport to ask for a replacement hard drive.

- Run e-DiagTools to see if it detects a problem with the drive (refer to page 30).
- Run ScanDisk and Disk Defragmenter to see if they detect a problem with the hard disk drive. To access these utilities, select **Programs ⇒ Accessories ⇒ System Tools** from the **Start** menu.

Enter the *Setup* program by pressing **F2** at start-up, then check the configuration of the **Boot device** menu item.

Enter the Summary Screen by pressing **Esc** at startup. You should see a hard disk drive declared under **IDE Devices**.

Advanced Troubleshooting

Have you checked that...

- The hard drive's internal connections are correctly connected
- The jumpers on the hard drive are set correctly



How

Check that the drive's power and data cables are correctly connected.

Check that the jumpers on the hard drive are in CS (cable select) mode

There's a problem with the CD-ROM, CD-RW or DVD drive

Have you checked that...

There is a disc inserted in the drive



How

- Click on the drive letter assigned to your drive in Windows Explorer. If you receive a message such as **D:\ is not accessible/device is not ready**, this means there is no disc in the drive.
- Open the drive and check whether there is a disc inside.

The *Setup* program is correctly configured for your drive



Enter the *Setup* program by pressing **F2** at start-up, then make sure that the **CD-ROM** item is enabled.

The drive has been detected



Enter the Summary Screen by pressing **Esc** at startup. You should see a drive declared under **IDE Devices**.

The device boot order is set correctly in the *Setup* program



Enter the *Setup* program by pressing **F2** at start-up, then go to the **Boot device** menu item. If you intend to boot from the CD-ROM drive, you should place **CD-ROM** before **HDD**.

The hardware is working properly



Run e-DiagTools to see if it detects a problem with the drive (refer to page 30).

Advanced Troubleshooting

Have you checked that...

All cables have been properly connected.



How

Open the e-pc's hard drive compartment cover and check that the drive's power and data cables are correctly connected.

For more information on using and troubleshooting your DVD drive, refer to the e-pc's online HP Information Center if available

The DVD drive doesn't play DVD video

Have you checked that...

- The DVD disc you are trying to play and your DVD drive have the same regional code setting. Your DVD drive's regional code setting is set by the first DVD disc you insert in the drive. After several uses the regional drive becomes fixed and cannot subsequently be changed.
- You have installed a DVD player application on your system
- You have either a hardware or a software MPEG decoder installed on your system
- You are using the latest drivers. These can be downloaded from the e-pc support Web site at: www.hp.com/go/e-pcsupport.
- You have enabled DMA mode on the Secondary IDE channel in the *Setup* program, accessed by pressing F2 during start-up.

The CD-ROM, CD-RW or DVD drive doesn't open

What to Do...

- 1 If you have difficulty removing a disc from the drive (during a power failure for example), you can use the manual eject button.

With a thin, solid rod, such as the end of a paper clip, push the drive's manual eject button



- 2 The drive door will be released, opening slightly. Carefully pull it open fully and retrieve the disc.
- 3 To close the drive door, push it gently closed without forcing it. The drive door may not close completely until it is fully functional (for example, when the power comes back on).

A device connected to the e-pc is not recognized

Have you checked that...

- The device is connected properly
- The device is switched on



How

- Check any connections to external devices for bent pins or poor connection
- Press the device's power button if there is one, and check that the power cable is correctly connected

The modem doesn't work

Have you checked that...

- Your e-pc has the correct modem country setting



How

Refer to "If you have a modem" on page 3

The date and time are wrong

Have you checked that...

- The battery has not become discharged. This may happen when the e-pc has been unplugged for too long.



How

Change the date and time, by selecting **Settings** ⇒ **Control Panel** ⇒ **Date/Time** from the **Start** menu or use the *Setup* program (see page 38).

You get the message "some necessary system files are corrupted"

Have you checked that...

- You didn't delete any system files



How

Reinstall the operating system or return the e-pc to its factory configuration by using the CD-ROMs provided with your e-pc. Refer to page 31 for more information.

Forgotten your e-pc's BIOS password

- You have forgotten the password that has been set in the *Setup* program to prevent unauthorized users from starting your e-pc



- 1 Ask your system administrator, if you have one, to remind you of the password.
- 2 If you cannot find out the password, clear passwords (see page 38). This will allow the e-pc to start without a password.

Problems using the Euro symbol

Have you checked that...

- Your operating system and applications support this feature
- The font you are using supports the Euro symbol
- Your keyboard has a Euro symbol. If not, you can configure the keyboard.



How

- Only the latest operating systems such as Windows 98 and Windows 2000, provide integrated support for the Euro symbol (in certain languages only).
- Only certain versions of Windows NT 4.0 provide support for the Euro symbol.

For more information on how to enable support of the Euro symbol, refer to Microsoft's Web site at: www.microsoft.com/windows/euro.asp.

If the symbol is supported by a particular font, you will see it in the Character Map, accessible by selecting **Programs** ⇒ **Accessories** ⇒ **System Tools** ⇒ **Character Map**.

Select **Settings** ⇒ **Control Panel** in the Windows **Start** menu, then double-click on **Keyboard** and select the **Language** or **Input Locales** tab in the **Keyboard Properties** Window. Click on **Add** and select the country that corresponds to your keyboard, and click **OK** to exit the Control Panel.

Other configuration problems

If the POST produces an error not covered in this section...

Have you checked that...

- The *Setup* program settings are correct
- You are using the latest BIOS for your e-pc



How

- 1 Turn on or restart the e-pc.
- 2 When the message **Press F2 to Enter Setup** appears, press the **F2** key. Refer to page 38 for more information.

Download the latest BIOS and instructions for its installation from the e-pc Web at: www.hp.com/go/e-pcsupport

Audio (sound) problems

No Sound When Running Applications

Have you checked that...

- The volume, mute, and balance settings are correct



How

- Right-click on the speaker icon on the taskbar, then select **Open Volume Control** and adjust the settings if required
- Refer to the operating system documentation for more information

Advanced Troubleshooting

Have you checked that...

- The problem is not caused by a hardware conflict. Hardware conflicts occur when two or more peripheral devices compete for the same signal lines or channels. Conflicts between your audio interface and a peripheral device might be due to the settings of the I/O addresses, IRQ or DMA channel.



How

Check the settings of the audio interface and other accessories in your system.

There is a humming noise

Have you checked that...

- The power grounding of your audio components is adequate



How

Plug all devices into adjacent power outlets (outlets within 5 cm / 2 inches of each other), or use line filters

No sound when playing a multimedia or audio CD

Have you checked that...

- If you are using headphones or speakers:
- they are correctly connected
 - the operating system volume controls are correctly set.



How

- Refer to page 2 for information on connecting speakers and headphones
- Double-click on the speaker icon on the taskbar, then set the required volume with the volume slider

The e-pc hangs while recording

Have you checked that...

- You are not filling up your hard disk with uncompressed digital audio. For example, one minute of stereo sound recorded at a resolution of 44 kHz will occupy about 10.5 MB.



How

- Before recording, check that there is enough free space on your hard disk.
- Data compression can reduce the space required. The A-law and m-law hardware compression used by the audio interface enables the sampling of sound at a resolution of 16-bits, but it generates the same quantity of data as an 8-bit sample.

No output from 8 or 16 bit digitized sounds

Have you checked that...

- You do not have an interrupt conflict or that you have not selected the wrong DMA channel



How

Use your operating system's audio control software to change the audio interface's DMA channel or IRQ setting

Audio input from microphone too low

Have you checked that...

- The microphone specifications meet the requirements of the 16-bit sound components. The microphone should be a 600-ohm electret type.



How

Check the documentation that came with your microphone

Frequently Asked Questions

FAQs

- | | | |
|--|---|---|
| <input type="checkbox"/> How can I reinstall my e-pc's operating system? | ⇒ | Use the CD-ROMs provided with your e-pc. Refer to page 31. |
| <input type="checkbox"/> Why is my e-pc running slowly/producing strange messages? | ⇒ | <ul style="list-style-type: none"> • If you are connected to a network, the slowness of your e-pc may be caused by the network. • Your e-pc's hard drive may be too full • Your e-pc may be infected by a virus. Use an antivirus utility to erase any viruses. |
| <input type="checkbox"/> I've been experiencing problems with my e-pc ever since I installed some new software. What can I do? | ⇒ | <p>Or, update your e-pc's BIOS. You can download the BIOS and updating instructions from www.hp.com/go/e-pcsupport.</p> <p>Uninstall the software to see whether this solves the problem. If the problem continues, contact the software manufacturer for help or information on known compatibility problems.</p> |
| <input type="checkbox"/> Can I use USB hardware devices with the operating system preloaded on my e-pc? | ⇒ | Yes, if your e-pc is running Windows 98 or Windows 2000. No if you are running Windows NT 4.0. |
| <input type="checkbox"/> How can I find out what hardware and BIOS version are used in my e-pc? | ⇒ | Restart the e-pc and press ESC during the Power-On-Self-Test (POST). The BIOS version will be displayed at the top of the screen. |
| <input type="checkbox"/> Where can I get information about the latest HP drivers? | ⇒ | From HP's web site:
www.hp.com/go/e-pcsupport |

HP hardware diagnostics (e-DiagTools)

Note HP strongly recommends you use e-DiagTools. It provides the most effective way of solving most hardware problems. It can also help you distinguish between a hardware and a software problem.

What is e-DiagTools for?

- To check your e-pc's configuration and see whether it is functioning correctly
- To diagnose hardware-related problems
- To provide precise information to support personnel so that they can solve your problems quickly and efficiently.

How do I run e-DiagTools?

- From your e-pc's hard drive, by pressing **F10** at start-up.
-

Note This method will only work if the diagnostics partition on your hard disk drive is intact.

- From one of the CD-ROMs provided with your e-pc. Refer to “CD-ROMs provided with your e-pc” on page 31 for more information.

CD-ROMs provided with your e-pc

Your e-pc comes with a set of CD-ROMs to enable you to change or recover your system, reinstall drivers or utilities. The CDs you receive depend on your e-pc model. You may have either:

- *HP Assist CD-ROMs*
- *HP Image Creation and Recovery CD-ROM / HP Image Library and Diagnostics CD-ROM.*

HP Assist CD-ROMs

Some e-pc models come with two *HP Assist CD-ROMs* (Windows 98 version) or three (Windows 2000 version):

HP Assist CD-ROM - System Recovery

One or two CDs. Use this (these) CD-ROM(s) to:

- perform a full system recovery

HP Assist CD-ROM - Drivers & Utilities

One CD-ROM. Use this CD-ROM to:

- reinstall individual device drivers or utilities
- run e-DiagTools hardware diagnostics.

Using the HP Assist CD-ROMs

To use the HP Assist CD-ROMs, you must either:

- boot the e-pc from the CD-ROM
- browse the CD-ROM while the e-pc is running.

Performing a full system recovery or alternative OS installation

You can use the *HP Assist CD-ROM - System Recovery* to recover an e-pc's factory supplied configuration by restoring the operating system (OS), drivers and HP supplied applications. This will return the e-pc's software configuration to a state similar to when the e-pc was originally shipped.

Note Restoring the original factory configuration or downgrading will completely erase the main hard drive partition. It is highly recommended to (a) back up all your data before proceeding, (b) remove all devices you have added, (c) update your e-pc's BIOS (refer to page 33) and (d) have driver software to hand for any add-on hardware. The whole process normally takes about half an hour.

Manually reinstalling drivers

- 1 Insert the *HP Assist CD-ROM - Drivers & Utilities* in the CD-ROM drive while your operating system is running.
- 2 Using Windows Explorer, select the driver(s) you need to reinstall.
- 3 Follow the installation instructions contained in the **README** file accompanying the driver.

Other HP CD-ROMs

HP Image Creation and Recovery CD-ROM

Use this CD-ROM to:

- recover your original operating system
- restore a complete software image for your e-pc
- install an alternative operating system (when available). For example, replacing Windows 2000 with Windows NT 4.0.
- customize your hard disk partitions' size and type
- provide access to operating system master files (required for installing certain drivers).

HP Image Library and Diagnostics CD-ROM

Use this CD-ROM to:

- reinstall original drivers and utilities
- run e-DiagTools hardware diagnostics

Documentation on these processes

All of these processes are fully documented on the *Image Creation and Recovery CD-ROM*. This documentation is displayed when you insert the CD-ROM.

Your e-pc's BIOS

The BIOS (Basic Input Output System) in your e-pc has the following roles:

- It tests and configures your e-pc's hardware components during the POST (Power On Self-Test).
- It lets you configure your e-pc by using the *Setup* program. See "HP Setup program" on page 38.
- It provides the link between the software running on your e-pc and your e-pc's hardware.

The BIOS is stored in a chip on the system board. An e-pc's BIOS is specific to that e-pc.

Updating your e-pc's BIOS

Many problems with your e-pc can be solved by updating (flashing) the e-pc's BIOS.

Updating (flashing) your BIOS is a simple procedure that involves booting your e-pc from a floppy disk containing the new BIOS.

The latest BIOS for your e-pc along with instructions on updating can be downloaded from HP's e-pc Support Web site at:

www.hp.com/go/e-pcsupport.

Returning your e-pc for repair

Your hard disk drive has been designed to be easily removed. In the event of system failure, HP Support may advise you to remove your hard disk and return the system unit for repair or replacement.

Removing the hard disk drive

Note Always place the drive on a soft surface. Protect the hard disk drive from static electricity by leaving it in its anti-static bag until you are ready to reinstall it. Before handling the drive, touch any unpainted metal surface to discharge static electricity. When you remove the hard disk drive from its antistatic bag, handle it only by the frame. **DO NOT TOUCH** the electrical components. Place drive on the anti-static bag whenever you set it down. Hard disk drives are delicate and sensitive to shock vibration. When removing or installing a hard disk accessory, be careful not to drop or knock the drive. Any shock may damage the drive and prevent it from functioning correctly.

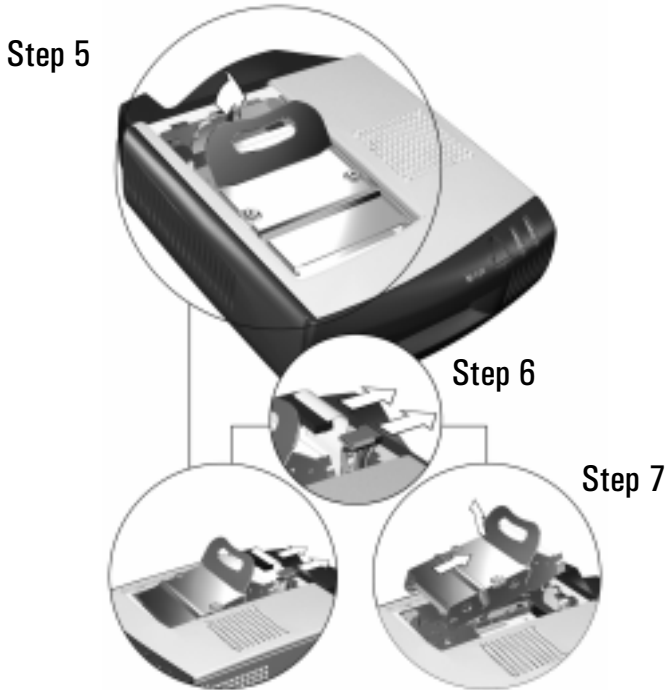
- 1 Switch off the monitor and e-pc. Unplug the AC adapter from the wall socket.
- 2 Using the key, unlock the port control system (if installed) and hard drive compartment cover at the rear of the e-pc. Remove the port control system.
- 3 Disconnect the power cord and any telecommunication cables.
- 4 Slide back and then lift off the compartment cover.

Step 4



- 5 Lift the rear of the hard drive tray clear of the e-pc using the handle. This is to gain access to the data and power connectors.
- 6 Remove the data and power connectors.

- Using the handle, lift the hard drive tray out of the e-pc.



- Place the hard disk drive tray in an antistatic bag and store it in a safe place. Do not remove the hard disk drive from the drive tray.

Replacing the hard disk

- Insert the protruding pins on the front of the hard disk drive tray in the guiding grooves inside the hard disk drive compartment, then slide the drive tray into position.
- Lift the handle on the drive tray until the drives rear connectors are accessible, then, reconnect the power and data cables.
- Lower the rear of the hard disk drive tray into the drive compartment, then click the handle back into position.
- Ensure that all the drive cables are safely inside the compartment (not trapped or snagging on anything).
- Replace the compartment cover and slide it back into position.
- Reconnect the cables and port control system (refer to “Securing your e-pc” on page 5).

Support and information services

You can learn more about HP service and support from the support Web site: www.hp.com/go/e-pcsupport.

Information on your Warranty and Customer Care Centers

Details about the warranty that comes with your HP e-pc and how to contact HP Customer Care Centers are available at the rear of this manual and on page 50 respectively.

Collecting information on your e-pc before contacting hp support

Take a piece of paper and note down some of the information mentioned below. This will help HP support deal with your problem quickly and efficiently:

e-pc description	
Model number	See label on the right side of your e-pc (when in horizontal position)
Serial number	See label on the right side of your e-pc (when in horizontal position)
RAM <ul style="list-style-type: none"> Number of megabytes installed 	<ul style="list-style-type: none"> The amount of RAM is displayed on the Summary Screen, accessed by pressing Esc during startup
Question or Problem	
Write down a brief description of the problem	
Frequency	How often has the problem occurred?
Run OK?	How long has the e-pc been running normally?
Recent changes to the e-pc	Have there been any recent changes made to the e-pc?
Any e-DiagTools errors?	Run e-DiagTools. Refer to page 30.
Hardware	
Which BIOS version is used?	The BIOS version is displayed on the Summary Screen, accessed by pressing Esc during startup
Any BIOS parameter changes?	Did the problem occur after changes were made to the BIOS using the Setup program?
Operating System	
Are you using the original operating system software that came preloaded on your e-pc?	What is the operating system version?
If no, what is the operating system version?	Select Settings ⇄ Control Panel from the Start menu, then click on the System icon. The operating system version is displayed under System
Any operating system-generated error messages	Please note down exact text of error message
Any errors during boot (Power-On Self Test). This test checks all installed components.	Any POST errors will be displayed on your monitor screen or signalled by beep codes. If you hear any beep codes, you should count them.

— Technical information

This chapter provides technical information on your e-pc. For more detailed information, refer to the e-pc's datasheet in the library on HP's web site: www.hp.com/desktops.

HP Setup program	page 38
Clearing your e-pc's CMOS (BIOS) settings	page 38
Technical characteristics	page 40

HP Setup program

The HP *Setup* program allows you to view and change the configuration of your HP e-pc. Sometimes you may also need to enter the *Setup* program to reconfigure your e-pc after installing new hardware components. The *Setup* program has online help to guide you through any changes you have to make.

Entering the Setup program

To enter the *Setup* program, press **F2** when the HP logo appears on screen at startup.

Setup program menus

Your e-pc's simple one-screen *Setup* program contains a series of menu items, which are selected with the up and down arrow keys.

Setting system defaults

The *Setup* program changes system behavior by modifying the power-on initialization parameters. Setting incorrect values may cause system boot failure. If this occurs, press the **F9** key while you are in the *Setup* program to load the *Setup* program's default values or select **Load default values** in the **Exit** menu of the *Setup* program.

Note If a Supervisor password is set, you need to enter the password to set system defaults. HP strongly recommends you make a note of any changes you make while in the *Setup* program.

Clearing your e-pc's CMOS (BIOS) settings

CMOS is a chip that keeps a record of installed components when your e-pc is turned off. Clearing CMOS settings may help you resolve some common problems. For example:

- when your e-pc cannot detect a device
- when you are having problems booting the e-pc
- when the e-pc is infected by a virus.

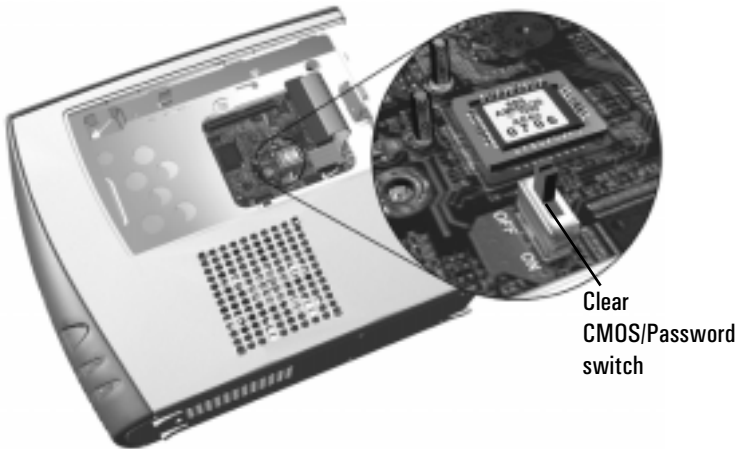
You can clear CMOS settings:

- by using your e-pc's *Setup* program (recommended method). Enter *Setup* by pressing **F2** at startup and then press **F9**.
- by opening your e-pc and clearing CMOS manually (recommended if you cannot solve the problem by using *Setup*, or if you want to clear the CMOS thoroughly, for example, when experiencing virus problems).

Manually clearing CMOS and passwords

To clear CMOS and Passwords manually:

- 1 Disconnect the AC adapter from the e-pc, remove the hard drive compartment cover then the hard drive. Refer to “Removing the hard disk drive” on page 34.
- 2 Set the Clear CMOS/Password switch to ON.



- 3 Replace the hard disk drive cover and the hard disk drive (refer to “Replacing the hard disk” on page 35) then reconnect the AC adapter.
- 4 Turn on the e-pc. This will erase the CMOS memory. Wait until the e-pc has restarted. A message will be displayed saying that the configuration has been cleared.
- 5 Turn off the e-pc, disconnect the AC adapter, then remove the hard disk drive cover and hard disk drive.
- 6 Set the clear CMOS/Password switch to OFF to re-enable the configuration.
- 7 Replace the hard disk drive and hard disk drive cover, then reconnect the AC adapter.
- 8 Switch on the e-pc. The e-pc will start more slowly than usual because it will load the default configuration values.
- 9 Press **F2** to enter the HP *Setup* program. Update the necessary fields, such as date and time, passwords, and Security settings, then save and exit the *Setup* program. The e-pc will restart with the new configuration.

Technical characteristics

As an ENERGY STAR partner, HP has determined that this product meets the ENERGY STAR guidelines for energy efficiency (Windows 98 and Windows 2000 only). To check power consumption figures, refer to the following table.

Characteristics	hp e-pc, e-Vectra
Weight (configuration with 1 CD-ROM drive, excluding keyboard and display)	3.5 kilograms (7.7 pounds)
Dimensions	Width: 8.9 cm (3.5 inches) Height: 24.0 cm (9.4 inches) Depth: 27.2 cm (10.7 inches)
Footprint	Vertical position (without stand): 0.021 m ² (0.23 sq ft) Horizontal position: 0.065 m ² (0.69 sq ft)
Acoustic noise emission (ISO 7779)	Sound Power: LwA ≤ 33 dBA Sound Pressure: LpA ≤ 30 dBA
● Operating (idle):	
Power source (AC/DC adapter)	Input Rating: 100-240V ~, 1 500mA, 50/60 Hz Output Rating: 19V — —, 3 160 mA
Power consumption	Nominal: 40W Windows 98 Suspend: 20W
Storage Humidity	8% – 85% (relative), non-condensing at 40° C (104° F)
Operating Temperature	5° C to 35° C (41° F to 95° F)

Note

Operating temperature and humidity ranges may vary depending on the mass storage devices installed. High humidity levels can cause improper operation of disk drives. Low humidity ranges can aggravate static electricity problems and cause excessive wear of the disk surface.

The power consumption and acoustics figures given in the tables above are valid for the standard configuration as shipped. For more information, refer to the product's data sheet at HP's web site: www.hp.com/desktops.

When the computer is turned off with the power button on the front panel, the power consumption falls below 3W, but it is not zero. The special on/off method used by these computers considerably extends the lifetime of the power supply. To reach zero power consumption in "off" mode, either unplug the power outlet or use a power block with a switch.

Regulatory, warranty and support

This chapter describes the warranty and support conditions for your e-pc, and how to contact support.

Note that you should read chapter 2, “If you have a problem” before asking for assistance from your authorized support provider.

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Regulatory information

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

Manufacturer's Name: Hewlett-Packard France
Manufacturer's Address: 5, avenue Raymond Chanas - Eybens - 38053 Grenoble Cedex 09 - FRANCE

Declares that the product:
Product Name: Personal Computer
Model Number: hp e-pc, e-vectra
conforms to the following Product Specifications:

Safety:

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

Electromagnetic Compatibility:

CISPR 22:1993 + A1 + A2 / EN 55022:1994 + A1 + A2 Class B ¹⁾
EN 50082-1:1992
IEC 801-2:1991 / prEN 55024-2:1992 - 4kV CD, 8kV AD
IEC 801-3:1984 / prEN55024-3:1991 - 3V/m
IEC 801-4:1988 / prEN 55024-4:1993 - 0.5 kV Signal Lines, 1 kV Power Lines

IEC 555-2:1982 + A1:1985 / EN 60555-2:1987
IEC 61000-3-3:1994 / EN 61000-3-3:1995
IEC 61000-3-2:1995 / EN 61000-3-2:1995

GB9254-1998
FCC Title 47 CFR, Part 15 Class B ²⁾
ICES-003, Issue 3
VCCI-B
AS/NZ 3548:1995

Supplementary information: The product herewith complies with the requirements of the following Directives and carries the CE-marking accordingly:
EMC Directive 89/336/EEC and Low Voltage Directive 73/23/EEC, both amended by the Directive 93/68/EEC.

¹⁾The product was tested in a typical configuration with Hewlett-Packard Personal Computer Systems.

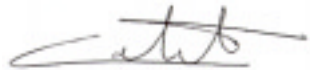
²⁾This Device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Grenoble, August 2000:

For Compliance Information ONLY, contact:
USA Contact: Hewlett-Packard Company,
Corporate Product Regulations Manager,
3000 Hanover Street, Palo Alto, CA 94304.
Phone: (415) 857-1501()

Didier CABARET
Quality Manager



FCC Class B (for USA only)

Federal Communications Commission Radio Frequency Interference Statement

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 installation manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to correct the interference by one or more of the following measures:

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

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

Notice for Canada

This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Notice for the Netherlands



Bij dit apparaat zijn batterijen geleverd. Wanneer deze leeg zijn, moet U ze niet weggooien maar inleveren als KCA.

Hinweis für Deutschland: Geräuschemission

Lärmangabe nach Maschinenlärmmverordnung - 3 GSGV (Deutschland):
LpA < 70 dB am Arbeitsplatz bei normalem Betrieb nach EN27779:11.92.

Notice for Japan

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。
取り扱い説明書に従って正しい取り扱いをして下さい。

This equipment is in the Class B category information technology equipment based on the rules of the Voluntary Control Council For Interference by Information Technology Equipment (VCCI). Although aimed for residential area operation, radio interference may be caused when used near a radio or TV receiver. Read the instructions for correct operation.

Notice for Korea

사용자 수(대략 100명) 기준

이 기기는 대한민국 전자파안전협회(KEPCO)의 규격에
기반하여, 국가시험을 통과한 제품입니다. 사용설명서
를 꼭 읽어주세요.

TELECOM REGULATORY STATEMENTS

PART 68 FCC Compliance Statement (USA)

This equipment complies with Part 68 of the FCC Rules. A label is attached to the equipment that contains, among other information, its FCC registration number and ringer equivalence number (REN). If requested, this information must be provided to the telephone company.

An FCC compliant telephone cord and modular plug is provided with this equipment. This equipment is designed to be connected to the telephone network or premises wiring using a compatible modular jack, which is FCC part 68 compliant.

Connection to the telephone network should be made by using standard modular telephone jack of type RJ11.

The REN is useful to determine the quantity of devices that may be connected to the telephone line and still have all of those devices ring when your telephone number is called. In most, but not all areas, the sum of the RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to the line, as determined by the total RENs, contact the telephone company to determine the maximum REN for the calling area.

If this equipment causes harm to the telephone network, the telephone company may discontinue your service temporarily. If advance notice is not practical, the telephone company will notify the customer 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 in 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 the necessary modifications in order to maintain uninterrupted service.

In the event this equipment should fail to operate properly, disconnect the unit from the telephone line. Try using another FCC approved telephone in the same telephone jack. If the trouble persists, call the telephone company repair service bureau. If the trouble does not persist and appears to be with this unit, disconnect the unit from the telephone line and discontinue use of the unit until it is repaired. Please note that the telephone company may ask that you disconnect the equipment from the telephone network until the problem has been corrected or until you are sure that the equipment is not malfunctioning.

The user must use the accessories and cables supplied by the manufacturer to get optimum performance from the product.

No repairs may be done by the customer.

If trouble is experienced with this equipment, please contact your authorized support provider for repair and warranty information. If the trouble is causing harm to the telephone network, the telephone company may request you remove the equipment from the network until the problem is resolved.

This equipment cannot be used on telephone company provided coin service. Connection to Party Line Service is subject to state tariffs.

When programming and/or making test calls to emergency numbers:

- Remain on the line and briefly explain to the dispatcher the reason for the call.
- Perform such activities in the off-peak hours such as early morning or late evenings.

The Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device to send any message via a telephone facsimile machine 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 individual sending the message and the telephone number of the sending machine of such business, other entity, or individual.

In order to program this information into your facsimile, refer to your communications software user manual.

Industry of Canada Notice

The Industry of Canada label identifies certified equipment. This certification means that the equipment meets certain telecommunications network prospective, operational and safety requirements. The department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, make sure you are permitted to connect it to the facilities of the local Telecommunications Company. You must install the equipment using an acceptable method of connection. In some cases you may also extend the company's inside wiring for single line individual service by means of certified

connector assembly (telephone extension cord). You should be aware, however, that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designed by the supplier. Any repairs or alterations made by a user to this equipment or equipment malfunctions, may give the telephone communications company cause to request the user to disconnect the equipment.

For your own protection, make sure that the electrical ground connections of the power utility, telephone lines and internal metallic water pipes systems, if present, are connected together. This precaution may be particularly important in rural areas.

Caution: Do not attempt to make electrical ground connections yourself, contact the appropriate electric inspection authority or an electrician.

The Ringer Equivalence Number (REN) assigned to each terminal device provides an indication of the maximum number of terminals 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 Ringer Equivalence Numbers of all devices does not exceed 5.

PAN European Regulatory Note

The equipment has been approved under CTR21. For such products, the following statement is required:

This equipment has been designed to work with all countries' telephone networks in Europe. Network compatibility is dependent on internal software settings. Contact your vendor if it is necessary to use the equipment on a different telephone network or for further product support contact your authorized support provider on the phone numbers provided in the support and warranty documentation provided with the PC.

This equipment has been approved in accordance with Council Decision 98/482/EC for Pan European single terminal connection to the Public Switched Telephone Network (PSTN). However, due to differences between individual PSTNs provided in different countries 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.

Dieses Geraet wurde gemaess der Entscheidung 98/482/EG des Rates europaweit zur Anschaltung als einzelne Endeinrichtung an das oeffentliche Fernsprechnetzzugelassen. Aufgrund der zwischen den oeffentlichen Fernsprechnetzen verschiedener Staaten bestehenden Unterschiede stellt diese Zulassung an sich jedoch keine unbedingte Gewaehr fuer einen erfolgreichen Betrieb des Geraets an jedem Netzabschlusspunkt dar. Falls beim Betrieb Probleme auftreten, sollten Sie sich zunaechst an ihren Fachhaendler wenden.

Cet équipement a reçu l'agrément, conformément à la décision 98/482/CE du Conseil, concernant la connexion paneuropéenne de terminal unique aux Réseaux Téléphoniques Publics Commutés (RTPC). Toutefois, comme il existe des différences d'un pays à l'autre entre les RTPC, l'agrément en soi ne constitue pas une garantie absolue de fonctionnement optimal à chaque point de terminaison du réseau RTPC.

En cas de problème, vous devez contacter en premier lieu votre fournisseur.

La presente apparecchiatura terminale è stata approvata in conformità della decisione 98/482/CE del Consiglio per la connessione paneuropea come terminale singolo ad una rete analogica PSTN. A causa delle differenze tra le reti dei differenti paesi, l'approvazione non garantisce però di per sé il funzionamento corretto in tutti i punti di terminazione di rete PSTN.

In caso di problemi contattare in primo luogo il fornitore del prodotto.

Este equipo ha sido homologado de conformidad con la Decisión 98/482/CE del Consejo para la conexión paneuropea de un terminal simple a la red telefónica pública conmutada (RTPC). No obstante, a la vista de la diferencias que existen entre las RTPC que se ofrecen en diferentes países, la homologación no constituye por sí sola una garantía in condicional de funcionamiento satisfactorio en todos los puntos de terminación de la red de una RTPC.

En caso de surgir algún problema, procede ponerse en contacto en primer lugar al proveedor de equipo.

Dit apparaat is goedgekeurd volgens Beschikking 98/482/EG van de Raad voor de pan-europese aansluiting van enkelvoudige eindapparatuur op het openbare geschakelde telefoonnetwerk (PSTN). Gezien de verschillen tussen de

Regulatory information

individuele PSTN's in de verschillende landen, biedt deze goedkeuring op zichzelf geen onvoorwaardelijke garantie voor een succesvolle werking op elk PSTN-netwerkaansluitpunt.

Neem bij problemen in eerste instantie contact op met de leverancier van het apparaat.

Network Compatibility Declaration

This product is designed to interwork with the Public Switched Telecommunication Networks in UK, Ireland, Netherlands, Sweden, Denmark, Finland, Switzerland, Luxembourg, Belgium, France, Germany, Spain, Portugal, Iceland, Greece, Italy, Norway and Austria.

NEW ZEALAND TELECOM WARNINGS

General

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 does not fully meet Telecom's impedance requirements. Performance limitations may occur when used in conjunction with some parts of the network. Telecom will accept no responsibility should difficulties arise in such circumstances.

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

If a charge for local calls is unacceptable, the 'Dial' button should NOT be used for local calls. Only the 7-digits of the local number should be dialled from your telephone. DO NOT dial the area code digit or the '0' prefix.

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

Important Notice

Under power failure conditions, this telephone may not operate. Please ensure that a separate telephone, not dependent on local power, is available for emergency use.

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 Specification:-

1. (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, and
(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.
2. Where automatic calls are made to different numbers, the equipment shall go on-line for a period of not less than 5 seconds between the end of one attempt and the beginning of the next attempt.
3. The equipment shall be set to ensure that calls are answered between 3 and 30 seconds of receipt of ringing.

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 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 used and what is disclosed to any other party.

HP Hardware Warranty

Important

Before claiming warranty assistance, you should (a) read thoroughly the troubleshooting information in this manual, (b) **check your precise warranty entitlement by looking at the warranty entitlement label on the rear cover of this manual** and (c) check your product receipt to ensure you are still within the product warranty period.

General

This HP Hardware Warranty statement gives you, the customer, express warranty rights from HP, the Manufacturer. Please refer to HP's web site for an extensive description of your warranty entitlements. In addition, you may also have other legal rights under applicable local law or special written agreement with HP.

FOR CONSUMER TRANSACTIONS IN AUSTRALIA AND NEW ZEALAND, THE WARRANTY TERMS CONTAINED IN THIS STATEMENT, EXCEPT TO THE EXTENT LAWFULLY PERMITTED, DO NOT EXCLUDE, RESTRICT, OR MODIFY BUT ARE IN ADDITION TO THE MANDATORY STATUTORY RIGHTS APPLICABLE TO THE SALE OF THIS PRODUCT TO YOU. THE LAWS OF YOUR COUNTRY MAY PROVIDE FOR DIFFERENT WARRANTY RIGHTS. IF SO, YOUR HP AUTHORIZED SUPPORT PROVIDER OR HP SALES AND SERVICE OFFICE CAN PROVIDE YOU WITH DETAILS.

Warranty Repair or Replacement

HP Hardware

During the applicable warranty period, HP warrants that your HP Hardware, Accessory or Supply will be free from defects in materials and workmanship. Except as indicated above, however, HP does not warrant that any HP Hardware, Accessory or Supply will operate uninterrupted or error-free.

During the product warranty period, HP will, within a reasonable time, repair your product or if unable to repair, refund (in the amount of the product purchase price) upon prompt return of the product to your HP Authorized Support Provider or other HP designate. Unless otherwise stated or agreed upon in writing with HP, all hardware components must be returned for refund with the entire central processor unit. The central processor unit (CPU), keyboard, mouse, and Hewlett-Packard accessories inside the system unit at time of purchase—such as video adapters, mass storage devices, and interface controllers—are covered by this warranty.

HP products external to the system unit—such as external storage subsystems, monitors, printers, and other peripherals and accessories added at a later stage—are covered by the applicable warranties for those products.

HP does NOT provide support for this product configured as a network server.

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

Non-HP Hardware

All *non-HP* products or peripherals external to the central processor unit—such as external storage subsystems, monitors, printers, and other peripherals—are covered by the applicable vendor warranties for those products.

Proof of Purchase and Warranty Period

In order to receive support for your hardware and software product for the applicable warranty period, proof of the original purchase date may be required, otherwise the manufacturer's date (located on the product) becomes the beginning of the warranty period.

Exclusions

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

Limitation of Implied Warranties

TO THE EXTENT ALLOWED BY APPLICABLE LOCAL LAW, ANY IMPLIED WARRANTY BY THE MANUFACTURER OF MERCHANTABILITY FOR FITNESS FOR A PARTICULAR PURPOSE OR OTHER IMPLIED WARRANTIES ARE HEREBY LIMITED TO THE DURATION OF THE APPLICABLE WARRANTY.

Exclusive Remedy

TO THE EXTENT ALLOWED BY APPLICABLE LOCAL LAW, THE REMEDIES IN THIS WARRANTY STATEMENT ARE YOUR SOLE AND EXCLUSIVE REMEDIES. EXCEPT AS INDICATED ABOVE, IN NO EVENT WILL HP BE LIABLE FOR LOSS OF DATA OR FOR DIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFIT) OR OTHER DAMAGE, WHETHER BASED IN CONTRACT, TORT OR OTHERWISE.

HP Hardware Warranty Options

THESE HP HARDWARE WARRANTY OPTIONS ARE SPECIFIC TO THIS HP HARDWARE PRODUCT. THEY COMPLEMENT THE GENERAL HARDWARE AND SOFTWARE WARRANTY STATEMENTS FOUND ON HP'S WEB SITE AND SUPERSEDE ANY WARRANTY TERMS THAT MAY BE FOUND ONLINE, OR IN ANY DOCUMENTATION OR MATERIALS CONTAINED IN THE e-PC PRODUCT PACKAGING.

Warranty Entitlements
3-Year Limited Hardware Warranty: 3-Year On-Site Service
3-Year Limited Hardware Warranty: 3-Year Return for Repair Service
30-Day Limited Hardware Warranty: 30-Day Free Parts Exchange or Product Return Service

HP warrants this hardware product against defects in materials and workmanship, for one (1) of the *Warranty Entitlements* above, from the date of purchase. Please refer to the **Warranty Entitlement Information** provided on the back cover of this guide.

Other warranties are available through HP Support Packs, see your HP Sales and Service Office or your reseller for details.

Note

Neither HP nor any of its designates guarantee that all of the above Warranty Entitlements will be available in your country. Please consult your local HP Sales and Service Office or HP Authorized Support Provider.

HP Validation and Service Options

If HP receives notice of a defect in your HP hardware product during the hardware product's warranty period, HP or its designate may, at its option and depending on warranty entitlement:

- 1) Repair the parts which prove to be defective OR,
- 2) Replace the parts which prove to be defective OR,
- 3) Provide the customer, with the appropriate part(s) required for repair. In this event, HP may:
 - Provide you with written instructions for replacing the defective part(s).
 - Provide free telephone assistance for installation of the replacement component.
 - Prepay shipping charges, duties, and taxes for replacement parts sent to you as well as for any parts that HP asks to be returned. You will be billed for any defective part(s) not returned as requested by HP.

Note

HP reserves the right to validate any claims of defective products or components before repairing or replacing such products or components. Run HP e-DiagTools (HP Diagnostics Utility) before contacting HP for warranty service. This is to obtain information that will be requested by a support agent.

Before Contacting HP for Warranty Service

- Run the diagnostic software HP e-DiagTools (refer to page 30) to diagnose your product and to obtain information that will be requested by a support agent.
- Troubleshoot your system using support information provided on the HP Worldwide Web support site at: www.hp.com/go/e-pcsupport.
- Locate your proof of purchase date, indicated on your receipt, invoice, etc.
- Have immediate access to the defective product for potential online or telephone troubleshooting by an HP service agent.

Warranty Entitlement Description and Conditions

Depending on countries these warranty services will be provided by your HP sales and Service Centers or by a participating HP Authorized Provider.

3 Year Limited Hardware Warranty



3 Year on Site Service

On-site service for the Central Processing Unit including free parts exchange and labor, during the three year warranty period. HP reserves the right to ship to Customer replaceable units. Free parts exchange service during the three year warranty period for the keyboard, mouse, power supply and hard disk drive. This will also apply to the USB e-modem when purchased as a standard configuration.

On-Site Service visits are subject to the following condition:

- You must verify that the latest version of the BIOS is installed on your product. You may be asked to install the latest version of the BIOS before an HP Sales and Service Center representative or HP Authorized Support Provider representative is dispatched to your site.

Free Parts Exchange service is subject to the following conditions:

- HP is not responsible for nor warrants your replacement parts of hardware product against damage resulting from improper installation of replacement parts or repair of your defective product by you or your designate.
- You will be billed for any additional replacement parts required as a result of improper installation of original replacement part by your or your designate.

3 Year Limited Hardware Warranty



3 Year Return to Bench Service

Return to bench service for the Central Processing Unit, including free parts exchange and labor during the three year product warranty period.

Your product will not be accepted for repair unless you have at first contacted your HP Customer Care Center who will provide instructions on how to return your product for repair. The Customer shall prepay all shipping charges, duty and taxes for products returned to HP for warranty Service. Once the products have been repaired, it will be returned free of charge to the address you designate, except for products returned to Customer in another country. You may be asked for proof of purchase.

Return to Bench Service is subject to the following conditions:

- Running the HP diagnostic software provided with your product before returning your product for repair service is recommended.
- You are required to return the complete product in an acceptable and repairable condition.
- Return to bench service is limited to the repair of hardware failures only.
- Returned product failures caused by non-HP products - whether internal or external to the system processor unit - are subject to standard per-incident repair charges.
- If a hardware failure is not found, you will be billed for the service provided.
- You may be required to provide proof of the purchase date of your product before warranty service will be provided.

Free Parts Exchange service is subject to the following conditions:

- HP is not responsible for nor warrants your replacement parts of hardware product against damage resulting from improper installation of replacement parts or repair of your defective product by you or your designate.
- You will be billed for any additional replacement parts required as a result of improper installation of original replacement part by your or your designate.

30 Day Limited Hardware Warranty



30 Day Free Parts Exchange or Product Return Service

- Free parts exchange service or return of the entire product, including keyboard, mouse and power supply within 30 days of product purchase, to the HP Authorized Support Provider from where the product was purchased. You may be asked for proof of purchase.

HP Customer Care Center phone numbers



HP Customer Care Centers can help you solve hardware issues related to HP products and, if necessary, initiate appropriate service procedures. In the U.S.A, telephone support is available 24 hours a day, 7 days a week. Elsewhere, it is available during normal office hours.

North & Latin America

Argentina	(541) 778 8380
Brazil	(011) 3747 7799 (Sao Paulo) 0800 157751 (other Locations)
Canada	905-206-4663
Chile	800 360 999
Mexico	800 427 6684
United States	(970) 635-1000
Venezuela	800 47 888 (Caracas 207 8488)

Europe, Middle East & Africa

Austria	(+ 43) 0711 420 10 80
Belgium	Dutch (+ 32) 02 626 88 06 French (+ 32) 02 626 88 07
Denmark	(+ 45) 39 29 40 99
English International	(+ 44) 0171 512 52 02
Finland	(+ 358) 0203 472 88
France	(+ 33) 01 43 62 34 34
Germany	(+ 49) 0180 525 81 43 (24PF/min)
Israel	Tel. (+ 972) 9-9524848 Fax. (+ 972) 0 9 9524849
Italy	(+ 39) 02-264 10350
Netherlands	(+ 31) 020 606 87 51
Norway	(+ 47) 22 11 62 99
Poland	Tel. (+ 48) 22 519 0600; Fax. (+ 48) 22 519 0601
Portugal	+(351) 21 317 6333
Russian Federation	(+ 7) 095 797 3520 (Moscow) (+ 7) 812 346 7997(St-Peter) Fax. (+ 7) 095 916 98 35
South Africa	(+ 27) 11 258 9301 (outside RSA) 086 000 1030 (inside RSA)
Spain	(+ 34) 902 32 11 23
Sweden	(+ 46) 08 619 21 70
Switzerland	(+ 41) 084 880 11 11
Turkey	(+ 90) 212-221 6969
United Kingdom	(+ 44)0870 842 2339

Asia Pacific

Australia	(+ 61-3) 8877-8000
China	+ 86 (0) 10 6564 5959 (800) 810-5959
Hong Kong	(+ 852) 800-96-7729
India	(+ 91-11) 682-6035
Indonesia	(+ 62-21) 350-3408
Japan	(+ 81-3) 3335-8333
Korea, Republic of	(+ 82-2) 3270-0700 080 999 0700 (outside Seoul only)
Malaysia	(+ 60-3) 295-2566
Penang	1 300 88 00 28
New Zealand	(+ 64-9) 356-6640
Philippines	(+ 63-2) 867-3551
Singapore	(+ 65) 272-5300
Taiwan	(+ 886) 2- 2717-0055
Thailand	(+ 66-2) 661-4000
Viet Nam	(+ 84-8) 823-4530

Note: for the most up-to-date list of customer care center numbers, go to: www.hp.com/go/e-pcsupport and select "Assistance".

International Warranty

This warranty is extended worldwide under certain conditions to products which are reshipped by the original purchaser either for his own use or provided as an incidental part of systems integrated by the original purchaser. When available in the country of use, service is provided in the same manner as if the product was purchased in that country and can only be provided in countries where the product is designed to operate. Also, standard warranty service response time is subject to change due to local parts availability. *If the product is not normally sold by HP in the country of use, it may need to be returned to the country of purchase for service.* Please check with your local HP Sales and Service Office or HP Authorized Support Provider for more information.

HP Software Limited Warranty

THIS HP SOFTWARE LIMITED WARRANTY SHALL COVER ALL SOFTWARE, INCLUDING OPERATING SYSTEM SOFTWARE, THAT IS PROVIDED TO YOU AS PART OF THE HP PRODUCT. IT SHALL SUPERSEDE ANY OTHER SOFTWARE WARRANTY STATEMENT THAT MAY BE INCLUDED IN THIS HP PRODUCT OR MAY BE FOUND ONLINE.

HP Software

Ninety-Day Limited Software Warranty

HP warrants for a period of NINETY (90) DAYS from the date of the purchase that all pre-installed HP software will execute their programming instructions when all files are properly installed. HP does not warrant that the software will be uninterrupted or error free. In case of software failure to execute its programming instructions during the warranty period, customer's remedy will be the replacement of software provided by HP or a refund upon return of the product and all copies of software, installation instructions and assistance.

Removable Media (if supplied)

HP warrants the removable media, if supplied, upon which this product is recorded to be free from defects in materials and workmanship under normal use for a period of NINETY (90) DAYS from the date of purchase. Customer's remedy in case of defect will be the replacement of media provided by HP or a refund upon return of the product and destruction of all other non-removable media copies of the software.

Other Software (if supplied)

All other software is warranted by the software vendor and is *not* warranted by HP.

Operating System (if supplied)

HP warrants for a one (1) year period from the date of the purchase the installation and configuration of the pre-installed version of the operating system. HP does not warrant that the software will be uninterrupted or error free. In the event of software failure to execute its programming instructions during the warranty period, HP will provide the Customer with non-defective software along with re-installation instructions or assistance.

HP Service Procedures

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HP has a strong commitment toward the environment. Your HP e-pc has been designed to respect the environment as much as possible. HP can also take your old e-pc back for recycling when it reaches the end of its useful life. HP has a product take-back program in several countries. The collected equipment is sent to one of HP's recycling facilities in Europe or the USA. As many parts as possible are reused. The remainder is recycled. Special care is taken for batteries and other potentially toxic substances, which are reduced into non-harmful components through a special chemical process. If you require more details about HP's product take-back program, contact your local dealer or your nearest HP Sales Office.

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Warranty Entitlement Information

(affix label here for other warranty options)

3-year return to bench

*3-year return to bench for the central processing unit
3-year free parts exchange service for all external components: keyboard, mouse,
power supply, extractable hard disk drive, USB e-modem (if any and when
purchased as part of a standard configuration)*

**For instructions on how to return your product for repair,
contact your HP Customer Care Center or your HP
Authorized Support Provider. Customer Care Center
numbers are provided in this manual.**

If You Have a Problem:

- Check the troubleshooting information in this manual
- Check you have your product receipt
- Run HP e-DiagTools (see inside manual)
- Check your Warranty Entitlement (see above)
- Contact your local Customer Care Center (see above) or your HP Authorized Service Provider

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