

If you don't know what to do, click one of the items below:

- [What To Do First >](#)
- [Diagnose Your Hardware >](#)
- [Frequently Asked Questions >](#)

If you can identify the problem area, click one of the items below:

- [Problems Starting the PC >](#)
- [Problems Using the PC >](#)
- [Problems with Software >](#)
- [Problems with Audio \(Sound\) >](#)
- [Problems with Hardware >](#)
- [The PC Detects and Error during Startup >](#)

If you still can't fix the problem, contact your support provider. But first, go to:

- [Collecting Information Before Contacting Support >](#)

This information can be useful when fixing a problem:

- [Recovering Hard Disk Contents >](#)
- [Clearing the BIOS \(CMOS\) Settings >](#)
- [Updating the BIOS >](#)
- [Recovering from a BIOS Update Failure or BIOS Corruption >](#)
- [System Board Connectors >](#)



What To Do First

2 of 2

- Get the Latest Updates  Connect to HP's Support web site for your PC. Here you can get the latest BIOS, driver and software updates for your PC. If you have not done so already, you can also use HP e-DiagTools to download and install the latest BIOS from the web (refer to [HP e-DiagTools](#)).

- If your problem cannot be resolved  Record the details of the problem so that you can describe it accurately. See [Collecting Information Before Contacting Support](#). Contact your HP dealer, or contact your authorized support provider outside of peak times (mid-morning and early evening). This should ensure your problem is dealt with as quickly as possible.



Solving general problems:

- | | | |
|--|---|--|
| <input type="checkbox"/> How can I reinstall my PC's operating system? | ⇒ | Use the CDs provided with your PC. |
| <input type="checkbox"/> Why is my PC running slowly/producing strange messages? | ⇒ | If you are connected to a network, the slowness of your PC may be caused by the network. Your PC may be infected by a virus. Use an antivirus utility to erase any viruses. Or, update your PC's BIOS. You can download the latest BIOS and instructions from HP's support web site. |
| <input type="checkbox"/> I've been experiencing problems with my PC ever since I installed some new software. What can I do? | ⇒ | 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. |
| <input type="checkbox"/> Can I use USB hardware devices with the operating system preloaded on my PC? | ⇒ | Yes. USB is supported by both Windows 98 and Windows 2000. |
| <input type="checkbox"/> How can I find out what hardware and BIOS version are used in my PC? | ⇒ | Restart the 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 support web site. |



- When I boot my PC under Windows 98, a message indicates there is a registry error and that Windows will fix the registry. What should I do?  This bug is documented at: <http://support.intel.com/support/chipsets/storagedrivers/ultraATA>
To fix this problem, install the latest IDE driver on HP's web site (version 6.01.007 or later). Ensure that you install the chipset driver before the IDE driver. Models purchased after November 1st 2000 are supplied with the correct driver.
- My PC runs scandisk when I boot under Windows 98 SE even if the previous shutdown appeared to finish normally. Why?  Sometimes your PC may appear to shutdown successfully when it has not. In these cases the operating system thinks that Windows has been shutdown incorrectly and runs scandisk.
A patch for this problem can be found at:
<http://support.microsoft.com/support/kb/articles/Q273/0/17.ASP>
- Why doesn't my PC start when using a console switch?  This only applies to switches that internally connect both power lines of the PS/2 mouse and keyboard. To solve the problem, use one mouse for each PC connected to the console switch.
- Why does my PC emit a long series of beeps during the boot process when my screen remains blank?  The beeps are created by the HP e-DiagTools Pre-boot Diagnostics utility. For an explanation of the beep codes, [refer to page 56](#).
- When I started my pc the first time, the mouse scrolling wheel did not work. Is there a problem?  This only affects some Windows 95 users. If the machine is rebooted, the scrolling wheel will function correctly and the problem will not show up again.



How can I use the LEDs on the front panel to troubleshoot my PC?



The LEDs on the front panel indicate the various states your PC is in.

The On/Off LED indicates the power modes status of your PC. The three states are: green (PC is on), blinking green (PC is suspended) and off (PC is off).

The Lock LED indicates whether your PC is locked or not. The two states are: orange (PC is locked) and off (PC is not locked).

I have an event log which says that the RPC hung. What can I do?



This is because Windows NT SP6a uses 99% of the CPU. This bug has been acknowledged in the Microsoft knowledge base (Ref Q266208 available on: <http://support.microsoft.com/support/kb/articles/Q266/2/08.ASP?LN=EN-US&SD=SO&FR=0>)

The problem does not occur with SP5, this is why the hp VL400 comes pre-installed with SP5.

Why are the beep codes from the e-DiagTools pre-boot diagnostics feature reporting a null serial number and PCID on my VL400?



If the PC is unplugged and then plugged in again, both the serial number and PCID are lost (reset to zero). If, subsequently, a pre-boot failure occurs before the BIOS has been able to boot the PC (and refresh the serial number and PCID in the micro-controller), you will see a null serial number and PCID in the Virtual Call Assistant.

The suggested workaround to this issue is to communicate the serial number and model information over the telephone.



Problems with power management:

- My PC hangs when coming back from suspend under Windows 98. What should I do?  Occasionally, under Windows 98 SE, the PC does not wake from standby mode. To solve the problem, open the power management window by clicking Start > Settings > Control Panel > Power Management
In the System Standby field, enter a value that is smaller than the value in the Turn Off Monitor field.
- My parallel port did not work after waking up from standby mode S1 under Windows 98  This is a known bug of Windows 98 ACPI. See <http://support.microsoft.com/support/kb/articles/Q242/9/39.ASP?LNG=ENG&SA=AL>
- Hitting a key on my keyboard does not always wake up the PC. Why?  Your PC may be in a “deep sleep” mode. Normally, you can wake the PC by pressing any key or the On/Off button. However, the operating system can disable the keyboard.
To enable the keyboard, right-click My Computer and select Properties > Hardware > Device Manager.
Right-click on Keyboard, select Properties and check the “Allow this device to bring the computer out of standby” checkbox.
- I have a SCSI hard disk but my PC has a problem with power management under Windows 98. How can I solve this problem?  Disable “Suspend to RAM” in your PC’s BIOS settings.



Problems with audio (sound):

I cannot hear music when I play an audio CD under Windows 95 SR2.1. What should I do?



To solve this problem, select:

Control Panel > System Properties > Device Manager > CDROM > Properties > Settings

And uncheck the DMA checkbox.

Why do I get a blue screen under NT4 when installing the sound drivers or upgrading my machine from NT4 to Windows 2000?



This problem can be solved in several ways:

- If a previous version of the driver was already installed it must be uninstalled before the new driver is installed. Try to use the latest installer: PS4026 or more recent.
- If the PnP OS field is set to Yes, change it to No

Why do I get a blue screen under NT4 when playing multimedia files?



Download the the driver 4.02.4028 (or later) from:

www.support.vectra.hp.com/vectrasupport/level4/901vfa109en/901vfa109en.html



Problem with recovery CD-ROMs:

Why does my Image Creation and Recovery CD not create the utility partition correctly?



This feature cannot work independently. First, create the HP utility Partition. Then, create your main partition and install your preferred operating system. Your HP Utility Partition should now be ready for use.

Note: This problem only affects HP Image Creation and Recovery CDs with the part numbers 5970-0170-xx and 5970-0190-xx.

When using the Image Creation and Recovery CD-ROM, the PC stops. Why?



When the BIOS setup field "State after power failure" is set to "Off" the PC stops and does not reboot correctly. To solve the problem, manually power on the PC and continue the recovery process.

Why is my PC not booting from the CD-ROM?



It is likely that some BIOS-level settings (boot device order, security settings etc.) do not have correct values. Restart your PC and enter the Setup program by pressing the appropriate function key (F2 on most HP PC models, or F1 on others). Change the incorrect settings, then try booting from the CD-ROM again.

It is also possible that the CD-ROM drive is not connected properly.



Problems with LANs:

- I get an error message in Windows 98 when changing the name of the workgroup. What can I do?
- When my PC wakes up from suspend mode, the LAN does not work. Why?



After changing the Workgroup Name in the Network Properties window your computer will prompt you to reboot. After rebooting, reboot a second time to fix the problem.



This problem affects users with Windows 95 who have Advanced Power Management enabled and a HP/Intel Pro 100+ Management Adapter LAN card.

There are two possible ways to fix this problem.

- Disable Advanced Power Management.
To do this, go to Settings > Control Panel > Power and disable the Allow Windows to manage power use on this computer option
- Disable the LAN card's BootROM
To do this, use the BROW utility which is available on the HP Web site.

- How can I use the LEDs on my LAN to check if my network is active?



| LED | Description | Flashing | Steady | Off |
|-------------------|--|-------------------------|--|-----------------------------------|
| <i>10/100 LNK</i> | Green: Link integrity 10 Yellow: Link integrity 100 | Reversed polarity | Good 10BASE-T connection between NIC and hub | No connection between NIC and hub |
| <i>ACT</i> | Yellow: Port traffic for either speed | Network traffic present | Heavy network traffic | No traffic |



Problems with anti-virus software:

Why do I get an error message when installing Norton Anti-Virus Symantec 2000 from the Image Library CD-ROM under Windows 95 and Windows 98?



Complete the following procedure:

- 1 When prompted to restart your computer, do nothing for approximately 20 seconds or until the Remove Programs From Your Computer window appears.
- 2 In the Remove Programs From Your Computer window, click on the Cancel button. When prompted to restart your computer, click Yes.

Why does my PC hang when installing Norton Anti-Virus Symantec 2000 from the Image Library CD-ROM under the Hungarian version of Windows 95?



Complete the following procedure:

- 1 Press Ctrl + Alt + Del to display the Task Manager window.
- 2 From the Task Manager list, select 401comup and click the End task button. The installation should continue.

Is there an Anti-Virus application supplied with my VL400?



A copy of Norton Anti-Virus 2000 v.6.0 can be found on the Image Library CD-ROM.



Problems with storage devices:

I have a problem when I try to boot on my ZIP device. What can I do?



Your Zip device must be installed on the secondary IDE channel as 'master' and your CD driver as 'slave'. In addition, in the BIOS setup, it must be placed before the floppy drive in the boot order.

The ZIP device attached to the parallel port of my PC doesn't work under Windows 98. What should I do?



This is due to an incompatibility problem between the IOMEGA driver and a patch released by Microsoft for another problem.

If you experience this problem, you need to uninstall the Microsoft patch by typing the following command at a DOS command prompt:

Start -> Programs -> MS-Dos prompt

```
%windir%\rundll.exe %windir%\system\setupx.dll,InstallHinf  
SectionDefaultInstall 132 %windir%\inf\qfe\win98.se\242939un.inf
```



Problems with video:

Why, when I boot my VL400 under Windows 2000, does a message report that Direct X is not installed?



To solve this problem you can disable the Matrix Diagnostics or install the driver no. 5.14.033 (or later).

I have a Matrox card but my PC hangs when waking from a sleep state. What can I do?



Windows 2000

Install the driver no. 5.15.037 (or later). You can also enable Suspend to RAM in your PC's BIOS setup.

Windows 98

If you have a 3COM LAN driver installed, disable the integrated LAN in your PC's BIOS setup.

Windows 98

Ensure you are using an Open GL screen saver or install the driver no. 6.08.035 (package QMA0305).

I use Matrox G450 graphics card under Windows 2000 but it seems that I cannot use different resolutions on my two monitors. Why?



This is a limitation of Window 2000. If you use two monitors on a Matrox dual head, it is not possible to use different resolutions.

I have a Matrox video card and an HP CD-RW drive but the CD-RW drive does not work under NT4. What can I do?



This issue is fixed by driver 4. 54.031 (package QMA0303). Later drivers can also be used to fix this problem.



I have a Matrox graphics card but the quality of the videos I play on my DVD drive under NT 4.0 is not good. What can I do?



This is a compatibility issue between the Matrox driver and Mediamatics DVD software provided with HP DVD drives.

A patch is available on HP support web to fix this issue. It needs to be installed after the Mediamatics software has been installed.

I have a Matrox G450 dual head graphics card but I cannot play a DVD movie across two monitors. Why?



The G450 does not support overlay on the second monitor connector. This is because there is no BES (Back-end scaler) support on the second monitor connector.

I have installed a PCI graphics card in my v1400 that does not work under Windows 98 or Windows 2000. What should I do?



To fix this problem, you should download and install the latest Intel graphics driver (revision 5.10 or more recent) available on the Intel web site.



If you have a problem starting the PC, click one of the items below:

[The PC Doesn't Power On >](#)

[The PC Beeps During Startup but the Screen Remains Blank >](#)

[You Get a "non-system disk" or "operating system not found" Message >](#)

[The PC Detects and Error during Startup >](#)



If you have a problem using the PC, click one of the items below:

[The PC is Stuck in Sleep Mode >](#)

[The PC Freezes All of a Sudden >](#)

[I Can't Shut Down My PC >](#)

[My PC Has Become Slow >](#)

[Forgotten Your PC's BIOS Password >](#)

[Problems Using the Euro Symbol >](#)



If you have a problem using software, click one of the items below:

[The Power Light Is On But My Software Won't Run >](#)

[You Get the Message "Some necessary system files are corrupted" >](#)

[Problems Using the Euro Symbol >](#)



If you have a problem using audio (sound), click one of the items below:

- [No Sound When Running Applications >](#)
- [No Sound When Playing a Multimedia or Audio CD >](#)
- [A New Add-On Sound Card Does Not Work >](#)
- [There Is a Humming Noise >](#)
- [The PC Hangs While Recording >](#)
- [No Output From 8 or 16 Bit Digitized Sounds >](#)
- [Audio Input From Microphone Too Low >](#)



If you have a hardware problem, click one of the items below:

- [The Keyboard Doesn't Work Properly >](#)
- [The Monitor Doesn't Work Properly >](#)
- [There's a Problem with the Hard Disk >](#)
- [There's a Problem with the Floppy Drive >](#)
- [The CD-ROM, CD-RW or DVD Drive Doesn't Open >](#)
- [The DVD Drive Doesn't Play DVD Video >](#)
- [The CD-ROM, CD-RW or DVD Drive Doesn't Open >](#)
- [The Printer Doesn't Work >](#)
- [A Newly Installed Device Is Not Recognized >](#)



If you get a beeping sound or an error message during startup, click one of the items below:

- [About Errors at Startup >](#)
- [Memory Test Error >](#)
- [Keyboard Test Error >](#)
- [Floppy Drive Test Error >](#)
- [Hard Disk, DVD or CD-ROM Drive Test Error >](#)
- [CMOS Test Error >](#)
- [Serial or Parallel Port Test Error >](#)
- [Other Configuration Problems >](#)





HP e-DiagTools

NOTE

Run e-DiagTools before contacting HP for warranty service. This is to obtain information that will be requested by a support agent.

HP e-DiagTools, the hardware diagnostics utility can help you diagnose hardware-related problems on your HP PC. For more information about this utility, refer to the *e-Diagtools User's Guide*.

[e-DiagTools User's Guide](#) >

Where Can I Get e-DiagTools?

There are three ways to access e-DiagTools:-

- from the Utility Partition on your hard disk drive (recommended)
- from one of the CD-ROMS that came with your PC: the *HP Image Library and Diagnostics System CD-ROM*
- from the *HP e-DiagTools CD*. You can order this CD-ROM from HP's Support web site.



How to Run e-DiagTools

Starting e-DiagTools from the Utility Partition on your Hard Disk Drive

NOTE

This method will only work if the Utility Partition on your hard disk drive is intact.

- 1 Restart your PC and press the function key **F10** when you see the message "Press F10 to enter HP Utility Partition or any other key to proceed..."
- 2 In the menu, select the option to run e-DiagTools hardware diagnostics.

Starting e-DiagTools from the CD-ROM that came with your PC

To start e-DiagTools from the CD-ROM that came with your PC:

- 1 Insert the CD-ROM in the CD-ROM drive.
- 2 Restart the PC.
- 3 After a moment, you should see the DiagTools welcome screen.

If you are unable to boot from your CD-ROM drive:

- Restart your PC and press **F2** to enter HP's Setup program. Check the **Boot device** settings to ensure that your PC can boot from the CD-ROM.

OR

- Restart your PC and press **F10** to enter the Boot menu, then choose to boot from the CD-ROM.



Have you checked that...

- The PC's power cord is correctly connected 
- You did not hear a series of beeps when you turned the PC on 
- The PC's power outlet is working 
- The PC's voltage switch is correctly set 
- The PC's power-on LED lights when you press the On/Off switch 

How

- Connect the power cord to a grounded power outlet and to the PC
- If you hear a series of beeps when you turn the PC on, [refer to page 57](#)
- Plug another device into the power outlet and check that it works
- 1 Disconnect the power cord.
 - 2 Select the correct setting on the voltage switch located beside the power connector in the rear of the PC.
 - 3 Reconnect the power cord.
 - 4 Start the PC.
- If the LED does not light, check that the status panel connector is connected correctly to the system board ([refer to page 74](#)).



Advanced Troubleshooting

Have you checked that...

The problem is not being caused by an internal device 

How

- 1 Disconnect the PC's power cord.
- 2 Remove internal connectors from any accessory devices you have added and disconnect any add-on accessory boards.
- 3 Reconnect the devices one by one, booting the PC each time to see if it works correctly.
- 4 If you are still unable to localize the fault, contact your authorized support provider.

The power supply is working properly 

- 1 When you power on the PC, check that the light on the On/Off button comes on and that you hear the power supply fan.
- 2 If nothing happens, contact your authorized support provider. The original power supply unit may have to be replaced.

If the problem persists, contact your authorized support provider



The PC Beeps During Startup but the Screen Remains Blank

1 of 1

These beeps indicate errors in the very early stages of the boot sequence ([refer to page 56](#))

| | <i>Have you checked that...</i> | | <i>How</i> |
|--------------------------|---|---|--|
| <input type="checkbox"/> | Your memory modules are of the correct type | ⇒ | <ol style="list-style-type: none">1 Disconnect the PC's power cord.2 Remove the PC's cover.3 Replace the memory module with a known working memory module.4 Reconnect the PC's power cord and start up the PC. |
| <input type="checkbox"/> | The accessory board you have installed is compatible | ⇒ | <ol style="list-style-type: none">1 Disconnect the PC's power cord.2 Remove the PC's cover.3 Remove the accessory board.4 Reconnect the PC's power cord and start up the PC. |
| <input type="checkbox"/> | That you have not made any changes to the PC's <i>Setup</i> program that may be causing the problem | ⇒ | <ol style="list-style-type: none">1 Enter the <i>Setup</i> program by pressing F2 when prompted during startup.2 Reload the default <i>Setup</i> values by pressing F9.3 Press F10 to exit <i>Setup</i> saving changes. |

If the problem persists, contact your authorized support provider



You Get a “non-system disk” or “operating system not found” Message

1 of 1

Have you checked that ...

- You didn't leave a non-bootable floppy disk in your floppy drive when you started the PC
- The device boot order is correct in the *Setup* program



How

- 1 Check for a non-bootable floppy disk in the floppy drive.
 - 2 Remove the floppy disk if there is one in the drive.
 - 3 Restart the PC.
-
- 1 Enter the *Setup* program by pressing **F2** when prompted during startup.
 - 2 Reload the default *Setup* values by pressing **F9**.
 - 3 Press **F10** to exit *Setup* saving changes.



Have you checked that...

- The PC is really stuck



How

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



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 the End Task button.
- 3 Restart the program to see if it is working normally.
- 4 If it does not work normally, restart the PC and try again.

There is a hardware problem 

- 1 Run e-DiagTools ([refer to page 21](#)).
- 2 If the problem persists, try removing any added memory or accessory boards.

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

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

The processor in your PC has not overheated (processors with heatsink fans only) 

- 1 Disconnect the PC's power cord.
- 2 Remove the PC's cover.
- 3 Make sure the heatsink fan connector is properly ([refer to page 74](#)).
- 4 Restart your PC and check whether the PC displays an error with the heatsink fan when it boots.



Have you checked that...

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



How

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



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 PC
- Your PC's hard disk needs defragmenting



How

Close any unused applications and check whether the PC's performance improves.

- 1 Click on the letter corresponding to your 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.

Select **Programs** ⇒ **Accessories** ⇒ **System Tools** ⇒ **Disk Cleanup** from the **Start** menu. This will check your system for files you can safely delete.

Select **Programs** ⇒ **Accessories** ⇒ **System Tools** ⇒ **Disk Defragmenter** from the **Start** menu. This will allow you to defragment your PC's hard disk.



Have you checked that...

- The keyboard cable is correctly connected
- The keyboard is clean and no keys are stuck down
- The keyboard itself is not defective
- The keyboard settings are not causing a problem
- 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.
- You are using the latest BIOS for your PC
- You didn't spill anything on the keyboard



How

- Plug the cable into the correct connector on the back of the PC. Color coding is used for easy matching.
- Check all keys are at the same height, and none are stuck
- Either replace the keyboard by a known working unit or try the keyboard with another PC
- Select **Settings** ⇒ **Control Panel** ⇒ **Keyboard** from the **Start** menu to view your keyboard settings
- Download the latest driver from HP's support web site.
- Download the latest BIOS and instructions for its installation from HP's support web site.
- Clean the keyboard with a damp cloth. Do not wet it.



The Monitor Doesn't Work Properly

1 of 2

The 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



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 PC and the monitor.

If the PC has an AGP graphics card, you must use the graphic card's connector, and not the integrated graphics connector. This is because the integrated graphics connector is disabled when an AGP card is installed.

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

If the PC has an AGP graphics card, you **cannot** use the integrated graphics connector for a second monitor. Only one AGP graphics system can be used at a time. To use dual monitors with an AGP card installed, the AGP card itself must have two connectors and support dual monitors.

If the PC has a PCI graphics card, you can use the integrated graphics connector for a second monitor. To do this, you must set the **Multidisplay** field to **Enabled** in the **Advanced - Video Options** menu of the PC's *Setup* program.

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



The Monitor Doesn't Work Properly

2 of 2

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

Have you checked that...

- The monitor settings in your PC are compatible with your monitor



How

- Windows 98 & Windows 2000: Restart the PC. The Vectra opening screen is displayed.

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

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

- Windows NT: Restart the PC and enter VGA mode when prompted during start-up.
- 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



How

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

- All your hardware is working properly



Run HP e-DiagTools ([refer to page 21](#))

Have you checked that...

- You have not received a S.M.A.R.T. alert from the HP TopTools Agent 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 PC from the hard drive in the **Boot** menu of the *Setup* program 
- The hard disk drive has been detected 
- The hard disk drive is properly configured in the *Setup* program 

How

- Such alerts can appear on your screen at startup or while the PC is running. If you receive such an alert, carry out an immediate data backup, then contact HP support at www.hp.com/go/vectrasupport to ask for a replacement hard drive.
- 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 startup, then go to the **Boot** menu.
- Enter the *Setup* program by pressing **F2** at startup, then go to the **Main** menu. You should see a hard disk drive declared in the **Primary Master** field.
- Enter the *Setup* program by pressing **F2** at startup. Make sure you have enabled the **On-chip Primary IDE** and the **On-chip Secondary IDE** fields under **Hardware Protection** in the **Boot** menu.



Advanced Troubleshooting

Have you checked that...

- All the hard drive's internal connections and both ends of the status panel 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 at both ends (hard drive and system board).



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



Have you checked that...

- If you have only a few files on the disk, the disk head may be moving across the disk face
- If the operating system swap disk is too small, the disk may be moving files from memory to disk



How

Run Disk Defragmenter to optimize the placement of files on your hard disk. To access this utility, select **Programs** ⇒ **Accessories** ⇒ **System Tools** ⇒ **Disk Defragmenter** from the **Start** menu.



Increase the size of the swap file. Refer to your Operating System documentation for more details.



Have you checked that...

- You are using a formatted diskette and it is inserted correctly
- The floppy is clean
- The *Setup* program is correctly configured for your floppy drive
- The hardware is working properly



How

You will receive an on-screen error if the diskette is not properly formatted

Use a diskette cleaning kit (see your PC dealer)

Enter the *Setup* program by pressing **F2** at startup, then:

- Go to the **Advanced** menu. Make sure you have enabled **Floppy Disk Controller**.
- Go to the **Main** menu. You should see **1.44 M, 3.5 in.** in the **Legacy Diskette A** field.

Run e-DiagTools to see if it detects a problem with the floppy drive ([refer to page 21](#))



Advanced Troubleshooting

Have you checked that...

- The drive's power and data cables are correctly connected



How

Check that the drive's power and data cables are correctly connected at both ends (floppy drive and system board).

There's a Problem with the CD-ROM, CD-RW or DVD Drive

1 of 2

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 startup, then:

- Make sure you have enabled the **On-chip Primary IDE** and the **On-chip Secondary IDE** fields under **Hardware Protection** in the **Boot** menu.
- Go to the **Main** menu. You should see a CD-ROM, CD-RW or DVD-ROM drive declared in the **Secondary Master** or **Secondary Slave** field or in the **IDE Secondary Master** or **IDE Secondary Slave** field (BA600 models).

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



Enter the *Setup* program by pressing **F2** at startup, then go to the **Boot** menu. If you intend to boot from the CD-ROM drive, you should place **CD-ROM** before **HDD** in the **Boot** ⇒ **Boot Device Priority** submenu.

The hardware is working properly



Run e-DiagTools to see if it detects a problem with the drive ([refer to page 21](#)).



There's a Problem with the CD-ROM, CD-RW or DVD Drive

2 of 2

Advanced Troubleshooting

Have you checked that...

- All cables (data, power and audio) have been properly connected both to the drive and to the system board. 
- The jumpers on the drive are set correctly 

How

Check that the drive's power and data cables are correctly connected at both ends (drive and system board).

Check that the jumpers on the hard drive are in CS (cable select) mode. If the drive has a manual, check the manual for more information.



Have you checked that...

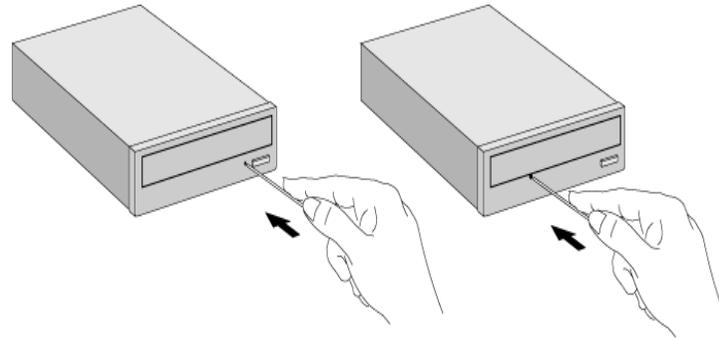
- The DVD disc you are trying to play and your DVD drive have the same regional code setting. Your DVD drive's regional code setting is set by the first DVD disc you insert in the drive. After several uses the regional drive becomes fixed and cannot subsequently be changed.
- You have either a hardware or a software MPEG decoder installed on your system
- Your PC's hardware and software configuration supports the playing of DVDs. The following configuration is recommended:
 - At least an Intel Celeron/Pentium processor with a minimum clock speed of 400 MHz.
 - 64MB of memory (Windows 2000, Windows 98)
 - Display settings of 800 x 600 pixels, High Color (16-bit).
- You are using the latest drivers. These can be downloaded from the HP support Web site.
- You have enabled DMA mode on the Secondary IDE channel in the *Setup* program, accessed by pressing **F2** during startup.



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).



The Printer Will Not Print

Have you checked that...

- The printer is on
- There is paper in the printer
- You didn't plug in the printer's parallel data cable (where applicable) when the PC was already on
- The correct printer driver is installed
- The printer is configured correctly
- The parallel port is configured correctly in the PC's *Setup* program



How

Check the power and data cables are correctly connected and press the printer's power button.

Check the printer's paper tray

- 1 Shut the PC down, then restart it.
- 2 Try to print again.

Check that the correct printer driver is installed on your PC by clicking on the **Start** menu, then selecting **Settings** ⇒ **Printers**. Your printer's driver should be displayed in the Printers window.

- Click on the **Start** menu, then select **Settings** ⇒ **Printers**. Right-click on the icon for the printer you want to use and ensure that **Set as default** is selected and that the printer is set to work online.
- If the printer is on your network, you can set it up by browsing for it in **Network Neighborhood**, clicking on the printer's icon, then clicking on **Install** in the **File** menu.
- Print out a test page to test the printer

- 1 Switch the PC OFF then ON.
- 2 When the message **Press F2 to Enter Setup** appears, press the **F2** key. Check that **Integrated I/O Ports** ⇒ **Parallel Port** is not disabled in the **Advanced** menu.
- 3 This setting should be **Auto**.



The Printer Prints Garbled Information

Have you checked that...

The correct printer driver is installed



How

Check that the correct driver is installed on your PC by clicking on the **Start** menu, then selecting **Settings** → **Printers**. The driver for your printer should be displayed in the Printers window that appears.

The printer's data cables are connected properly



Check the cables and, if it still does not work, check the product documentation



A Newly Installed Device Is Not Recognized

1 of 1

Have you checked that...

The device is installed or connected properly



How

- **Accessory boards:**
Check that accessory boards are properly seated in their slots
- **Internal devices:**
Check any internal cables for bent pins and poor connection
- **External devices:**
Check any connections to external devices for bent pins or poor connection

If it is an external device, that it is switched on



Press the device's power button if there is one, and check that the power cable is correctly connected



The Power Light Is On But My Software Won't Run

1 of 1

Have you checked that...

There is no information about what is going on in the accompanying documentation



The software has been correctly installed



How

Refer to the application software documentation and/or the operating system documentation for guidance

- 1 Check for any error messages when you try to run the software.
- 2 Remove and then reinstall the software.
- 3 If the problem continues, contact the software manufacturer's support services.



You Get the Message “Some necessary system files are corrupted”

1 of 1

Have you checked that...

- You didn't delete any system files



How

Reinstall the operating system or return the PC to its factory configuration by using the CD-ROMs that came with your PC. Refer to [page 67](#) for more information.



Forgotten Your PC's BIOS Password

1 of 1

- You have forgotten the password that has been set in the *Setup* program to prevent unauthorized users from starting your 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 ([refer to page 68](#)). This will allow the PC to start without a password.



Have you checked that...

- Your operating system and applications support this feature



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.

- The font you are using supports the Euro symbol



If the symbol is supported by a particular font, you will see it in the Character Map, accessible by selecting **Programs** ⇒ **Accessories** ⇒ **Charmap** in the Windows **Start** menu (Windows 98) or **Programs** ⇒ **Accessories Programs** ⇒ **System Tools** ⇒ **Character Map** (Windows 2000).

- Your keyboard has a Euro symbol. If not, you can configure the keyboard.



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.



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.



No Sound When Playing a Multimedia or Audio CD

1 of 1

Have you checked that...

- The volume control on the CD-ROM drive is correctly set ⇒
- If you are using headphones or speakers:
 - they are correctly connected
 - the operating system volume controls are correctly set.⇒
- The audio cable for the CD-ROM drive is correctly connected to the connector on the system board. ⇒

How

- Turn up the volume dial on the front of the drive
- Double-click on the speaker icon on the taskbar, then set the required volume with the volume slider
- Refer to [page 73](#).



A New Add-On Sound Card Does Not Work

1 of 1

Have you checked that...

- You have disabled the integrated sound features on your PC as required



How

To disable integrated sound, enter **F2** during startup then check that **Integrated Audio Interface** is disabled in the **Advanced** menu.



There Is a Humming Noise

1 of 1

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



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

1 of 1

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



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



When your PC starts up, its BIOS performs a Power-on Self Test (POST) to test your hardware configuration for any problems. If a problem is detected during the POST, an error is displayed on your PC's monitor.

e-Buzzer

If, however, your PC is unable to display an error message (for example, when you graphics controller has failed), it will emit a buzzing sound. This is the e-Buzzer. Immediately after the buzzing sound, a series of beeps is emitted.

If you hear a series of beeps, you should count them as this will help you detect the cause of the problem.

| Number of Beeps | Meaning |
|-----------------|--|
| 0 | System OK |
| 1 | Processor absent, not correctly connected or ZIP socket not closed |
| 2 | Power supply is in protected mode |
| 3 | No memory, bad memory modules, incompatible memory module |
| 4 | Graphics card problem |
| 5 | PnP/PCI initialization problem |
| 6 | Corrupted BIOS. You need to activate crisis recovery procedure (refer to page 71). |
| 7 | Defective system board |

Please note that for Memory (code 3), Video Card (code 4), and PnP/PCI (code 5) errors, e-Buzzer will only detect them after a 15-second timeout.

If you miss the beep code, turn off the PC by pressing the on/off power button for five seconds or more, then listen for the signal again.

The e-Buzzer, as well as emitting a beep sequence, also encodes troubleshooting information (such as the PC models, serial number, and failing component) into a coded audio signal. During a support call, this coded signal can then be decoded by the HP Service Provider to provide immediate and effective assistance.



Note: this error is indicated by a series of beeps while the screen remains blank

Have you checked that...

- The PC's memory modules are installed correctly



How

- 1 Disconnect the power cord.
- 2 Remove the PC's cover.
- 3 Check the memory modules are correctly installed, of the correct type and in the correct sockets.
- 4 Close the PC, reconnect the power cord and check that the PC boots (starts).

- The PC's memory modules are working



- 1 Disconnect the power cord.
- 2 Remove the PC's cover.
- 3 Replace the memory modules by known working memory modules from the same model of PC.
- 4 Close the PC, reconnect the power cord and check that the PC boots (starts).



Advanced Troubleshooting

Have you checked that...

- You are using the latest BIOS for your PC



How

- Download the latest BIOS and instructions for its installation from HP's support web site.

If the problem persists, contact your authorized support provider

Have you checked that...

The keyboard cable is correctly connected



How

- 1 Switch off the PC.
- 2 Plug the cables into the correct connectors on the back of the PC (you may have problems if you connect the mouse to the keyboard connector).

The keyboard is clean and keys are not stuck down



Check all keys are at the same height, and none are stuck (keyboard)

The keyboard is working



- 1 Switch off the PC.
- 2 Replace the keyboard by a known working unit.
- 3 Switch on the PC, and check it works.



Run e-DiagTools ([refer to page 21](#)).

The keyboard port is working



- 1 Disconnect the keyboard from the PC.
- 2 Attach the keyboard to another PC of the same model.
- 3 If the keyboard works you may need a new system board. Contact your authorized support provider.

You are using the latest BIOS for your PC



Download the latest BIOS and instructions for its installation from HP's support web site.



If the problem persists, contact your authorized support provider

Have you checked that...

- The drive is correctly configured in the PC's *Setup* program.
- The floppy drive is working
- You are using the latest BIOS for your PC



How

- 1 Switch the PC OFF then ON.
 - 2 When the message **Press F2 to Enter Setup** appears, press the **F2** key.
 - 3 Check the floppy disk drive is enabled and that the correct type is selected.
- Insert a known working floppy disk and see if it works
- Run e-DiagTools ([refer to page 21](#)).
- Download the latest BIOS and instructions for its installation from HP's support web site.



Advanced Troubleshooting

Have you checked that...

The drive cables are correctly connected ⇒

How

- 1 Disconnect the power cord.
- 2 Remove the PC's cover.
- 3 Check the floppy drive's power and data cables are correctly connected.
- 4 Close the PC then switch it on and check it works.

The drive cable is working ⇒

- 1 Disconnect the power cord.
- 2 Remove the PC's cover.
- 3 Replace the floppy drive cable by a known working cable from the same model of PC, if possible.
- 4 Close the PC then switch it on and check it works.

The drive itself has not failed ⇒

- 1 Disconnect the power cord.
- 2 Remove the PC's cover.
- 3 Replace the floppy drive by a known working drive from the same model of PC, if possible.
- 4 Close the PC then switch it on and check it works.
- 5 If the drive works, replace the defective drive.



Refer to [page 37](#) for more information on troubleshooting floppy drives. If the problem persists, contact your authorized support provider

Have you checked that...

- You have not received a S.M.A.R.T. alert from the HP TopTools Agent indicating that your hard disk drive is defective 
- The drive is correctly configured in the PC's *Setup* program 
- The hard disk, DVD or CD-ROM drive is working 
- You are using the latest BIOS for your PC 

How

Important: Carry out an immediate data backup, then contact your local Customer Care Center (refer to the Warranty and Support Service section).

- 1 Switch the PC OFF then ON.
- 2 When the message **Press F2 to Enter Setup** appears, press the **F2** key.
- 3 Check the drive is enabled and the correct type is selected.

Run e-DiagTools from the Brio Assist CD-ROM (Drivers & Utilities) to test your hard drive. To test your DVD or CD-ROM drive, run e-DiagTools from the Utility Partition on your hard drive ([refer to page 21](#)).

Download the latest BIOS and instructions for its installation from HP's support web site.



Advanced Troubleshooting

Have you checked that...

The drive cables are correctly connected ⇒

How

- 1 Disconnect the power cord.
- 2 Remove the PC's cover.
- 3 Check the drive's power and data cables are correctly connected.
- 4 Close the PC then switch it on and check it works.

The drive cable is working ⇒

- 1 Disconnect the power cord.
- 2 Remove the PC's cover.
- 3 Replace the drive cable by a known working cable from the same model of PC, if possible.
- 4 Close the PC then switch it on and check it works.

The drive itself has not failed ⇒

- 1 Disconnect the power cord.
- 2 Remove the PC's cover.
- 3 Replace the drive by a known working drive from the same model of PC, if possible.
- 4 Close the PC then switch it on and check it works.

Refer to the section starting on [page 34](#) for more information on troubleshooting drives. If the problem persists, contact your authorized support provider



Have you checked that...

The internal battery is working



How

- 1 Set the PC to the correct time (refer to the operating system manual).
- 2 Switch off and unplug the PC for an hour.
- 3 Restart the PC and check the time is correct.
- 4 If the time is incorrect, replace the PC's battery by a new one.

You are using the latest BIOS for your PC



Download the latest BIOS and instructions for its installation from HP's support web site.

The CMOS is not corrupted



- Clear your PC's CMOS in the PC's *Setup* program (the recommended method) if you have access to this option. Refer to [page 68](#).
- Clear your PC's CMOS manually. Refer to [page 68](#).



Advanced Troubleshooting

Have you checked that...

- Power is correctly connected to the system board

- You don't need to restore the default configuration settings



How

- 1 Disconnect the power cord.
 - 2 Remove the PC's cover.
 - 3 Check the power connector is correctly attached to the system board ([refer to page 73](#)).
 - 4 Close the PC, reconnect the power cord and check that the PC boots (starts).
-
- 1 Switch the 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.



If the problem persists, contact your authorized support provider

Have you checked that...

- The port is correctly configured in the PC's *Setup* program
- You have not connected a device incorrectly or forgotten to switch it on
- You have installed the correct device drivers
- There is not a hardware problem
- You are using the latest BIOS for your PC



How

- 1 Switch the PC OFF then ON.
 - 2 When the message **Press F2 to Enter Setup** appears, press the **F2** key.
 - 3 Check the port is enabled and the correct setting is selected under **I/O Device Configuration** in the **Advanced** menu.
- 1 Switch off the PC.
 - 2 Plug the cables into the correct connectors on the back of the PC.
 - 3 Switch on the PC and the external devices.
- Refer to the documentation for your serial or parallel device.
- Run e-DiagTools ([refer to page 21](#)).
- Download the latest BIOS and instructions for its installation from HP's support web site.



If the problem persists, contact your authorized support provider

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

Have you checked that...

The *Setup* program settings are correct



How

- 1 Turn on or restart the PC.
- 2 When the message **Press F2 to Enter Setup** appears, press the **F2** key.

You are using the latest BIOS for your PC



Download the latest BIOS and instructions for its installation from HP's support web site.



To recover the full contents of your hard drive you need:

- the HP Image Library and Diagnostics CD-ROM
- the HP Image Creation and Recovery CD-ROM

HP Image Creation and Recovery CD-ROM

This enables you to:

- Recover your original operating system
- Restore a complete software image for your HP PC
- Install an alternative Operating system (when available).
- Customize your hard disk partitions' size and type
- Provides access to operating system master files (required for installing certain drivers).

HP Image Library and Diagnostics CD-ROM

(if provided)

This enables you to:

- Re-install original drivers and utilities
- Reinstall device drivers
- Run e-DiagTools hardware diagnostics

Documentation for the Recovery Process

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

When Should I Use the HP Image Library and Diagnostics CD-ROM?

- To run e-DiagTools if you cannot run diagnostics from the hard disk partition
- To reinstall a driver if you cannot access HP's support Web site

When Should I Use the HP Image Creation and Recovery CD?

- To reinstall the PC's original operating system if you suspect an unstable software environment
- To deal with a virus infection. The recovery process will clean up the hard drive.

Changing the Hard Disk Drive

If the hard disk drive is corrupted and you can no longer use it, you should replace it with a new hard disk drive.

If the replacement hard disk drive is brand new, you will need to partition and format the drive. The *HP Image Creation & Recovery CD-ROM* contains utilities to guide you through this process.



CMOS is a chip that keeps a record of installed components when your PC is turned off. Clearing CMOS settings may help you resolve problems such as:

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

You can clear CMOS settings:

- by using your PC's *Setup* program (recommended method)
- by opening your 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).

Clearing CMOS Using the Setup Program

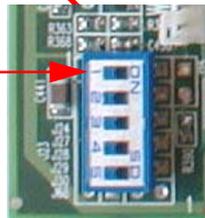
If you are able to gain access to your PC's Setup program, use the following simple method to clear CMOS settings:

- 1 Enter *Setup*, by restarting the PC and pressing **F2** when the Vectra logo appears on screen.
- 2 Press **F9** to load *Setup* defaults.
- 3 Exit *Setup*, saving changes.



Manually Clearing CMOS

- 1 Disconnect the PC and remove the cover.
- 2 Set the Clear CMOS/Password Switch 1 to ON.



Clear CMOS/
Password
switch

- 3 Replace the cover then reconnect the power cord.

- 4 Turn on the PC. This will erase the CMOS memory. Wait until the PC has restarted. A message will be displayed saying that the configuration has been cleared.
- 5 Turn off the PC, disconnect the power cord, 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 power cord.
- 8 Switch on the PC. The 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 PC will restart with the new configuration.



You can update your PC's BIOS with the latest available version. There are two ways to do this.

Update Using a Floppy Disk

Download the latest BIOS version and update instructions from HP's support web site.

Follow the downloaded instructions to create a floppy disk and update the PC's BIOS.

Update Using e-DiagTools

You can also use e-DiagTools to automatically download and install the latest BIOS. To use this feature, your PC must be correctly set up, as described in the e-DiagTools *User's Guide*. This guide is available on HP's support web site.

Once set up correctly:

- 1 Restart your PC
- 2 When the "**Press <F10> to enter HP Utility Partition...**" message is displayed, press **F10**.
- 3 Select **BIOS Update**

For complete instructions, refer to the e-DiagTools *User's Guide*.



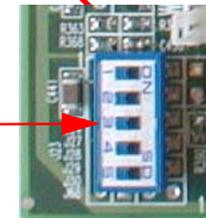
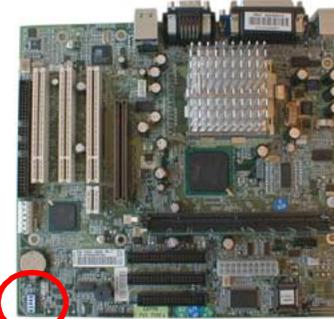
Although the BIOS update (flashing) process is very well protected, there is always the possibility of a failure. This may occur, for example, if there is a power failure while the BIOS is being updated.

To avoid having to replace the system board due to corrupted EEPROM, follow this recovery procedure to restore the contents of EEPROM.

If you don't already have the latest BIOS for your PC, you can obtain it from HP's support web site.

- 1 Create a bootable floppy disk in MS-DOS by typing `format a: /s`.
- 2 Copy the BIOS image you require (for example, `IP xx yy .FUL`, where xx yy corresponds to the BIOS revision number), and `phlash.exe` and `platform.bin` onto the bootable floppy disk.
- 3 Add the following line to the floppy's `AUTOEXEC.BAT` file:
`phlash IP xx yy .FUL /c /mode=3 .`

- 4 Remove the PC's cover and set system board switch 3 (BIOS Block Recovery) to ON.



Bios Block Recovery

- 5 Replace the PC's cover and insert the floppy disk into the floppy drive.
- 6 Power on the PC to flash the BIOS. There will be many beeps during the process. When this process is complete, you will hear a long beep.



NOTE

The power button is protected in BIOS update mode, and will appear inactive even after the update procedure has finished.

To power off the system after the update, press and hold the power button for at least 5 seconds.

- 7 Power off the PC and remove the PC's cover.
- 8 Reset system board switch 3 (BIOS Block Recovery) to OFF and replace the PC's cover.



You can learn more about HP service and support from the HP Support web site.

Collecting Information Before Contacting 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:

| PC Description | |
|---|--|
| Model number | See label on the right side of your PC (when in horizontal position) |
| Serial number | See label on the right side of your PC (when in horizontal position) |
| RAM • 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 start-up. |
| Question or Problem | |
| Write down a brief description of the problem | |
| Frequency | How often has the problem occurred? |
| Run OK? | How long has the PC been running normally? |
| Recent changes to the PC | Have there been any recent changes made to the PC? |

| Hardware Configuration | |
|---|---|
| Which BIOS version is used? | The BIOS version is displayed on the Summary Screen, accessed by pressing Esc during start-up. |
| 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 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. |



