

PC Card

The computer has a built-in CardBus PC Card slot that can accommodate one type II PC Card. Please consult your dealer for PC Card options available that you can purchase for your computer.

PC Card slot

The type II CardBus PC Card slot found on the left panel of the computer accepts credit-card-sized cards that enhance the usability and expandability of the computer.

PC Cards (formerly PCMCIA) are add-on cards for portable computers, giving you expansion possibilities long afforded by desktop PCs. Popular type II cards include flash memory, SRAM, fax/data modem, LAN and SCSI cards. CardBus improves on the 16-bit PC card technology by expanding the data path to 32 bits.



Note: Refer to your card's manual for details on how to install and use the card and its functions.

Inserting a card

Insert the card into the slot and make the proper connections (e.g., network cable), if necessary. See your card manual for details.

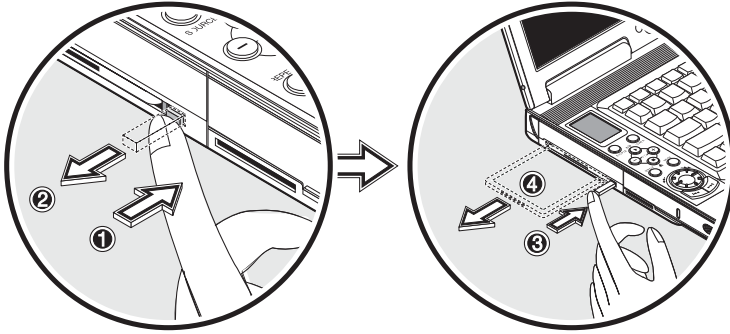


Ejecting a card

Before ejecting a PC Card:

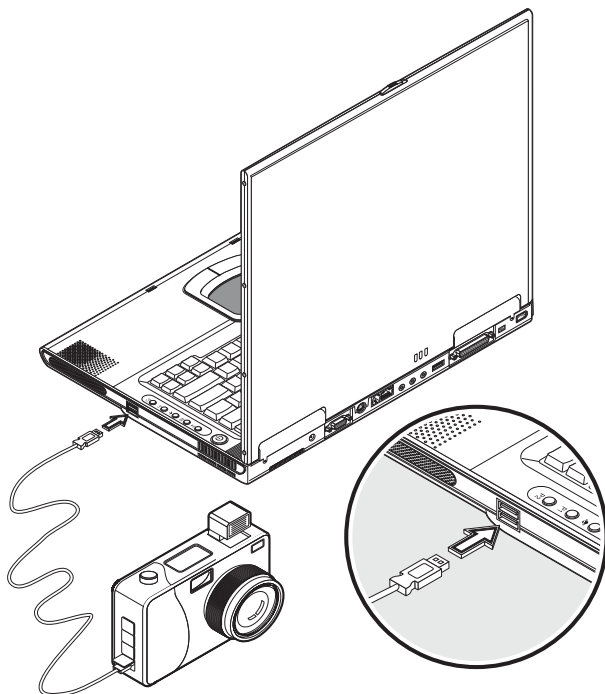
- Exit the application using the card.
- Left-click on the PC Card icon on the taskbar and stop the card operation.

Press the slot eject button once to pop it out; then press it again to eject the PC Card.



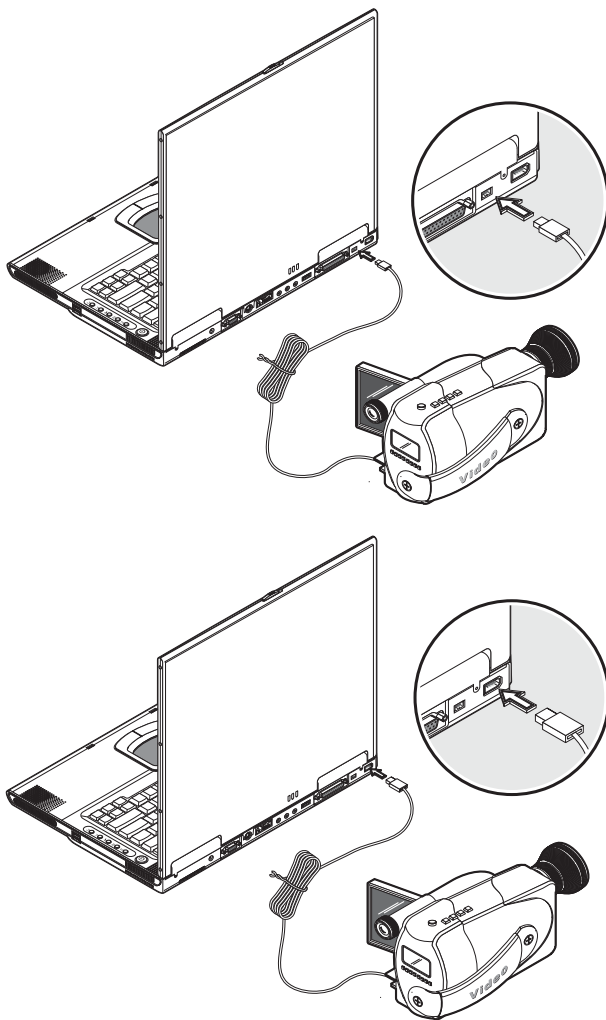
USB devices

The computer has two USB (Universal Serial Bus) (2.0) ports that allow you to connect peripherals without occupying too many resources. Common USB devices include a mouse, keyboard, and digital camera.



IEEE 1394 devices

The computer's fast IEEE 1394 port allows you to connect IEEE 1394 supported devices like a digital video camera or optical drive. The computer comes with 2 kind of IEEE 1394 ports, 4-pin and 6-pin for more flexibility.



See your peripheral's documentation for details.

Miscellaneous options

Additional power packs

You can order an AC adapter and spare batteries.

Battery pack

It is a good practice to have a spare battery around, especially when you travel.

The Li-ion battery, coupled with the power management features of your computer, supplies you with more power on-the-go.

You can also purchase a secondary battery pack to install in the module bay.

AC adapter

The compact AC adapter charges your battery pack and supplies power to your computer. You can order a spare AC adapter so you do not need to carry it from the office to your home or destination.

Key component upgrades

Your computer delivers superior power and performance. However, some users and the applications they use may demand more. This computer allows you to upgrade key components when you need increased performance.



.....
Note: Contact your authorized dealer if you decide to perform a key component upgrade.

Memory upgrade

This notebook computer comes with two DDR-266 SoDIMM (Small Outline Dual Inline Memory Module) sockets that accepts 128/256/512 MB Synchronous Dynamic Random Access Memory (SDRAM) module. Please consult your dealer if you need to add more memory.

Hard disk upgrade

It is possible to upgrade your hard disk with a higher capacity drive when you need more storage space. The computer uses a 9.5mm 2.5-inch Enhanced-IDE hard disk. Please consult your dealer if you need to upgrade your hard disk.

4 Moving with your computer

This chapter gives you tips and hints on things to consider when moving around or traveling with your computer.

Disconnecting from the desktop

Follow these steps to disconnect your computer from external accessories:

1. Save your work in progress.
2. Shut down the operating system.
3. Turn off the computer.
4. Disconnect the cord from the AC adapter.
5. Disconnect the keyboard, pointing device, printer, external monitor, and other external devices.
6. Disconnect the Kensington lock if you are using one to secure the computer.

Moving around

when you are just moving within short distances, for example, from your office desk to a meeting room

Preparing the computer

Before moving the computer, close and latch the display cover to place it in Standby mode. You can now safely take the computer anywhere you go within the building.

To bring the computer out of Standby mode, open the display.

What to bring to short meetings

A fully charged battery runs the computer for 4.5 hours under most circumstances. If your meeting is shorter than that, you probably do not need to bring anything with you other than the computer.

What to bring to long meetings

If your meeting will last longer than 4.5 hours or if your battery is not fully charged, you may want to bring the AC adapter with you to plug in your computer in the meeting room.

If the meeting room does not have an electrical outlet, reduce the drain on the battery by putting the computer in sleep mode. Press Fn-F2 or close the display cover whenever you are not actively using the computer. Then tap any key or open the display to resume.

Taking the computer home

when you are moving from your office to your home or vice versa

Preparing the computer

After disconnecting the computer from your desktop, follow these steps to prepare the computer for the trip home:

1. Remove all media from the drives. Failure to remove the media can damage the drive head.
2. Pack the computer in a protective case that can prevent the computer from sliding around and cushion it if it should fall.



Caution: Avoid packing items next to the top cover of the computer. Pressure against the top cover could damage the screen.

What to bring with you

Unless you already have some items at home, bring the following items with you:

- AC adapter and power cord
- The printed user's manual

Special considerations

Follow these guidelines to protect your computer while traveling to and from work:

- Minimize the effect of temperature changes by keeping the computer with you.
- If you need to stop for an extended period of time and cannot bring the computer with you, leave the computer in the trunk of the car to avoid exposing the computer to excessive heat.
- Changes in temperature and humidity can cause condensation. Allow the computer to return to room temperature, and inspect the screen for condensation before turning on the computer. If the temperature change is greater than 18°F (10°C), allow the computer to come to room temperature slowly. If possible, leave the computer for 30 minutes in an environment with a temperature between outside and room temperature.

Setting up a home office

If you frequently work on your computer at home, it may be worthwhile to purchase a second AC adapter for use at home. With a second AC adapter, you can avoid transporting the extra weight to and from home.

If you use your computer at home for significant periods of time, you might also want to add an external keyboard, monitor, or mouse.

Traveling with the computer

when you are moving within a larger distance, for instance, from your office building to a client's office building or traveling locally

Preparing the computer

Prepare the computer as if you were taking it home. Be sure the battery in the computer is charged. Airport security may require you to turn on your computer when bringing it into the gate area.

What to bring with you

Bring the following items with you:

- AC adapter
- Spare, fully charged battery packs
- Additional printer driver files if you plan to use another printer

Special considerations

In addition to the guidelines for taking the computer home, follow these guidelines to protect your computer while traveling:

- Always take the computer as carry-on luggage.
- If possible, have the computer inspected by hand. The computer can safely pass through security X-ray machines, but never expose the computer to a metal detector.
- Avoid exposing floppy disks to hand-held metal detectors.

Traveling internationally with the computer

when you are moving from country to country

Preparing the computer

Prepare the computer as you would normally prepare it for traveling.

What to bring with you

Bring the following items with you.

- AC adapter
- Power cords that are appropriate to the country to which you are traveling
- Spare, fully charged battery packs
- Additional printer driver files if you plan to use another printer

Special considerations

Follow the same special considerations as when traveling with the computer. In addition, these tips are useful when traveling internationally.

- When traveling in another country, check that the local AC voltage and the AC adapter power cord specifications are compatible. If not, purchase a power cord that is compatible with the local AC voltage (e.g., power rating). Do not use converter kits sold for appliances to power the computer.
- If you are using the modem, check if the modem and connector is compatible with the telecommunication system of the country you are traveling in.

5 Software

This chapter discusses the important system utilities bundled with your computer.

System software

The computer comes preloaded with the following software:

- Windows operating system
- DMI (Desktop Management Interface)-compliant hardware BIOS utility
- System utilities, drivers and application software



.....

Note: To access Windows software applications, click on the Start button and select the application folder. Then click on the application icon to run the selected application. To learn about the software and utility, make use of the online help provided by the software.

Launch Manager

Launch Manager allows you to set the four launch keys and the wireless button located above the keyboard. See “Launch keys” on page 23 for the location of these keys.

You can access the Launch Manager by clicking on Start, Programs, and then Launch Manager to start the application.

BIOS Utility

The BIOS Utility is a hardware configuration program built into your computer’s BIOS (basic input/output system).

Your computer is already properly configured and optimized, and you do not need to run this utility. However, if you encounter configuration problems, you may need to run it. Please also refer to Chapter 6, Troubleshooting when a problem arises.

To activate the BIOS Utility, press **F2** during POST.

PhoenixBIOS Setup Utility					
Information	Main	Advanced	Security	Boot	Exit
CPU Type	Intel (R)Pentium(R) 4 Mobile CPU 1.40 GHz				
CPU Speed	1400 Mhz				
System Memory:	640 KB				
Extended Memory:	129535 KB				
HDD1 Serial Number	XXXXXXXXXXXX				
HDD2 Serial Number	None				
System BIOS Version	R01-A0e				
VGA BIOS Version	4.17.0.48.00				
KBC Version	05.03.02				
Serial Number	XXXXXXXXXXXXXXXXXX				
Asset Tag Number					
Product Name	AJ				
Manufacture Name	Wistron				
UUID Number	00000000-0000-0000-0000-000000000000				
F1 Help	↑ Select Item	-/+ Change Values		F9 Setup Defaults	
Esc Exit	↔ Select Menu	Enter Select > Sub-Menu		F10 Save and Exit	



Note: The screen above is for reference only. Actual values may differ.

Navigating the BIOS Utility

These are the menu options: Information, Main, Advanced, Security, Boot and Exit.

To enter a menu, highlight the item using the ← → keys.

Within a menu, navigate through the BIOS Utility by following these instructions:

- Press the cursor up/down keys (↑↓) to select item.
- Press the F5/F6 to change the value of a parameter.
- Press **Enter** to go to sub-menu.
- Press **Esc** while you are in any of the menu options to return to the main menu



Note: You can change the value of a parameter if it is enclosed in square brackets. Navigation keys for a particular menu are shown on the bottom of the screen.

When you select an item in the BIOS Utility, the function description will appear at the right side of the screen.



Caution: Some parameters in the BIOS Utility screens are for advanced users only. Typically, you do not need to change the values in the screen because these values are already optimized.

Security

The System Security screen contains parameters that help safeguard and protect your computer from unauthorized use.

PhoenixBIOS Setup Utility					
Information	Main	Advanced	Security	Boot	Exit
Set Supervisor Password			[Enter]	Item Specific Help	
Set User Password			[Enter]		
Password on boot:			[Disable]		
Set Primary Hard Disk Password			[Enter]		
Processor Serial Number			[Enabled]		
F1 Help	↑↓ Select Item	F5/F6 Change Values		F9 Setup Defaults	
Esc Exit	↔ Select Menu	Enter Select > Sub-Menu		F10 Save and Exit	

The table below describes the parameters in this screen. Settings in boldface are the default and suggested parameter settings.

Parameter	Description
Setup Supervisor Password	When set, this password protects the BIOS Utility from unauthorized entry, and protects critical BIOS parameters. Press Enter to set this password.
Set User Password	When set, this password protects the computer from unauthorized entry during boot-up or resume from Hibernation mode. Press Enter to set this password.
Password on Boot	When enabled, a password is requested when the system boots up. Options: Enabled or Disabled
Set Primary Hard Disk Password	When set, this password prevents the primary hard disk from unauthorized access. It consists of 8 alphanumeric characters. Press Enter to set this password.
Processor Serial Number	Controls detection of processor serial number. Options: Enabled or Disabled



Note: Don't forget your password. If you forget your password, you may have to return your notebook computer to your dealer to reset it.

Setting a password

Follow these steps:

1. Use the ↑ and ↓ keys to highlight a password parameter (Supervisor, User, Boot, or Hard Disk) and press the **Enter** key. The password box appears:

Set Password

Enter New Password []

Confirm New Password []

2. Type a password. The password may consist of up to eight alphanumeric characters (A-Z, a-z, 0-9). Press **Enter**.



Important: Be very careful when typing your password because the characters do not appear on the screen.

3. Retype the password to verify your first entry and press **Enter**.

After setting the password, the computer automatically sets the chosen password parameter to Present and a dialog box appears confirming the changes.

Setup Notice
Changes have been saved. [Continue]

4. Press **Esc** to return to the main menu.

Changing a password

To change a password, follow the steps in “Setting a password” on page 73. Enter the current password and then enter a new password.

Set Password	
Enter Current Password	[]
Enter New Password	[]
Confirm New Password	[]

Removing a password

To remove a password, follow the steps in “Setting a password” on page 73. Enter the current password and then leave the **Enter New Password** and **Confirm New Password** blank.

Exit

To exit the BIOS Utility, go the Exit screen and choose an item and press **Enter**. Press **Enter** again to confirm the selection.

PhoenixBIOS Setup Utility					
Information	Main	Advanced	Security	Boot	Exit
Exit Saving Changes Exit Discarding Changes Load Setup Defaults Discard Changes Save Changes				Item Specific Help	
F1 Help ↑↓ Select Item		F5/F6 Change Values		F9 Setup Defaults	
Esc Exit ← Select Menu		Enter Execute Command		F10 Save and Exit	

6 Troubleshooting

This chapter instructs you on how to deal with common system problems. Read it before calling a technician if a problem occurs. Solutions to more serious problems require opening up the computer. Do not attempt to open and service the computer by yourself. Contact your dealer or an authorized service center for assistance.

Frequently-asked questions

This is a list of possible situations that may arise during the use of your computer, and it gives easy answers and solutions to these questions.

I press the power switch, but the computer does not start or boot-up.

Look at the Power indicator:

- If it is not lit, no power is being applied to the computer. Check the following:
 - If you are running on battery power, it may be low and unable to power the computer. Connect the AC adapter to recharge the battery pack.
 - Make sure the AC adapter is plugged in properly to the computer and to the power outlet.
- If it is lit, check the following:
 - If the Standby indicator is lit, the computer is in Standby mode. Press any key or tap on the touchpad to resume.
 - Is a non-bootable (non-system) diskette in the floppy drive? Remove or replace it with a system diskette and press Ctrl-Alt-Del to restart the system.

The operating system files may be damaged or missing. Insert the startup disk you created during Windows setup into the floppy drive and press Ctrl-Alt-Del to restart the system. This will diagnose your system and make necessary fixes.

Nothing appears on the screen.

The computer's power management system automatically blanks the screen to save power. Press any key to turn the display back on.

If pressing a key does not turn the display back on, two things might be the cause:

- The brightness level might be too low. Press Fn← and Fn→ to adjust the brightness level.
- The display device might be set to an external monitor. Press the display toggle hot key Fn-F3 to toggle the display back to the computer.

Image is not full-screen.

Make sure the resolution is set to a resolution your system supports. Right-click on your Windows desktop and select Properties to bring up the Display Properties dialog box. Then click on the Settings tab to make sure the resolution is set to the appropriate resolution. Resolutions lower than the specified resolution are not full-screen on the computer or on an external monitor.

No audio from the computer.

Check the following:

- The volume may be muted. In Windows, look at the volume control icon on the taskbar. If it is crossed-out, click on the icon and deselect the Mute option.
- The speakers may be turned off. Press Fn-F5 to turn the speakers on (this hotkey also turns the speakers off).
- The volume level may be too low. In Windows, look at the volume control icon on the taskbar. Click on the icon and adjust the level.

If headphones, earphones or external speakers are connected to the line-out port on the computer's rear panel, the internal speakers automatically turn off.

External microphone does not work.

Check the following:

- Make sure the external microphone is connected to the microphone-in jack on the computer's rear panel.
- If you cannot hear playback, the speakers may be muted.

The keyboard does not respond.

Try attaching an external keyboard to the USB connector on the computer's rear. If it works, contact your dealer or an authorized service center as the internal keyboard cable may be loose.

The printer does not work.

Check the following:

- Make sure that the printer is connected to a power outlet and it is turned on.
- Make sure the printer cable is connected securely to the computer's port and the corresponding port on the printer.

I want to set up my location to use the internal modem.

To properly use your communications software (e.g., HyperTerminal), you need to set up your location:

1. Open the Windows Control Panel and double-click on the Modems icon.
2. Click on Dialing Properties and begin setting up your location.

Refer to the Windows manual.

Why can't I charge my battery to 100% charged when it is 99-95%

charged?

To preserve the life of the battery, the system only lets you charge the battery when its capacity falls below 95%. However, it is recommended that you bring an extra battery and let the battery in the system use up its power before charging it.

Error messages

The following is a list of the messages that the BIOS can display. Most of them occur during POST. Some of them display information about a hardware device, e.g., the amount of memory installed. Others may indicate a problem with a device, such as the way it has been configured. Following the list are explanations of the messages and remedies for reported problems.



Note: If your system displays one of the messages marked below with an asterisk (*), write down the message and contact your dealer. If your system fails after you have made the changes in the Setup menus, reset the computer, enter Setup and load the Setup defaults to correct the error.

Error Messages	Corrective Action
0200 Failure Fixed Disk	Fixed disk is not working or not configured properly. Check to see if fixed disk is attached properly. Run Setup. Find out if the fixed-disk type is correctly identified.
0210 Stuck key	Stuck key on keyboard.
0211 Keyboard error	Keyboard not working.
0212 Keyboard Controller Failed*	Keyboard controller failed test. May require replacing keyboard controller.
0213 Keyboard locked - Unlock key switch	Unlock the system to proceed.
0220 Monitor type does not match CMOS - Run SETUP	Monitor type not correctly identified in Setup
0230 Shadow Ram Failed at offset: <i>nnnn</i> *	Shadow RAM failed at offset <i>nnnn</i> of the 64k block at which the error was detected.
0231 System RAM Failed at offset: <i>nnnn</i> *	System RAM failed at offset <i>nnnn</i> of in the 64k block at which the error was detected.
0232 Extended RAM Failed at offset: <i>nnnn</i> *	Extended memory not working or not configured properly at offset <i>nnnn</i> .

Error Messages	Corrective Action
0250 System battery is dead - Replace and run SETUP	The CMOS clock battery indicator shows the battery is dead. Replace the battery and run Setup to reconfigure the system.
0251 System CMOS checksum bad - Default configuration used	System CMOS has been corrupted or modified incorrectly, perhaps by an application program that changes data stored in CMOS. The BIOS installed Default Setup Values. If you do not want these values, enter Setup and enter your own values. If the error persists, check the system battery or contact your dealer.
0260 System timer error*	The timer test failed. Requires repair of system board.
0270 Real time clock error*	Real-Time Clock fails BIOS hardware test. May require board repair.
0271 Check date and time settings	BIOS found date or time out of range and reset the Real-Time Clock. May require setting legal date (1991-2099).
0280 Previous boot incomplete - Default configuration used	Previous POST did not complete successfully. POST loads default values and offers to run Setup. If the failure was caused by incorrect values and they are not corrected, the next boot will likely fail. On systems with control of wait states, improper Setup settings can also terminate POST and cause this error on the next boot. Run Setup and verify that the wait-state configuration is correct. This error is cleared the next time the system is booted.
0281 Memory Size found by POST differed from CMOS	Memory size found by POST differed from CMOS.
02B0 Diskette drive A error 02B1 Diskette drive B error	Drive A: or B: is present but fails the BIOS POST diskette tests. Check to see that the drive is defined with the proper diskette type in Setup and that the diskette drive is attached correctly.
02B2 Incorrect Drive A type - run SETUP	Type of floppy drive A: not correctly identified in Setup.
02B3 Incorrect Drive B type - run SETUP	Type of floppy drive B: not correctly identified in Setup.

Error Messages	Corrective Action
02D0: System cache error - Cache disabled	RAM cache failed and BIOS disabled the cache. On older boards, check the cache jumpers. You may have to replace the cache. See your dealer. A disabled cache slows system performance considerably.
02F0: CPU ID:	CPU socket number for Multi-Processor error.
02F4: EISA CMOS not writeable*	ServerBIOS2 test error: Cannot write to EISA CMOS.
02F5: DMA Test Failed*	ServerBIOS2 test error: Cannot write to extended DMA (Direct Memory Access) registers.
02F6: Software NMI Failed*	ServerBIOS2 test error: Cannot generate software NMI (Non-Maskable Interrupt).
02F7: Fail-Safe Timer NMI Failed*	ServerBIOS2 test error: Fail-Safe Timer takes too long.
<i>device</i> Address Conflict	Address conflict for specified <i>device</i> .
Allocation Error for: <i>device</i>	Run ISA or EISA Configuration Utility to resolve resource conflict for the specified <i>device</i> .
Failing Bits: <i>nnnn</i> *	The hex number <i>nnnn</i> is a map of the bits at the RAM address which failed the memory test. Each 1 (one) in the map indicates a failed bit. See errors 230, 231, or 232 above for offset address of the failure in System, Extended, or Shadow memory.
Invalid System Configuration Data	Problem with NVRAM (CMOS) data.
I/O device IRQ conflict	I/O device IRQ conflict error.
One or more I2O Block Storage Devices were excluded from the Setup Boot Menu	There was not enough room in the IPL table to display all installed I2O block-storage devices.
Operating system not found	Operating system cannot be located on either drive A: or drive C:. Enter Setup and see if fixed disk and drive A: are properly identified.

Error Messages	Corrective Action
Parity Check 1 <i>nnnn</i> *	Parity error found in the system bus. BIOS attempts to locate the address and display it on the screen. If it cannot locate the address, it displays <i>nnnn</i> . Parity is a method for checking errors in binary data. A parity error indicates that some data has been corrupted.
Parity Check 2 <i>nnnn</i> *	Parity error found in the I/O bus. BIOS attempts to locate the address and display it on the screen. If it cannot locate the address, it displays <i>nnnn</i> .
Press <F1> to resume, <F2> to Setup, <F3> for previous	Displayed after any recoverable error message. Press <F1> to start the boot process or <F2> to enter Setup and change the settings. Press <F3> to display the previous screen (usually an initialization error of an Option ROM, i.e., an add-on card). Write down and follow the information shown on the screen.
Run the I2O Configuration Utility	One or more unclaimed block storage devices have the Configuration Request bit set in the LCT. Run an I2O Configuration Utility (e.g. the SAC utility).

If you still encounter problems after going through the corrective measures, please contact your dealer or an authorized service center for assistance. Some problems may be solved using the BIOS Setup Utility. See “BIOS Utility” on page 71.

A Specifications

This appendix lists the general specifications of your computer.

Microprocessor

- Mobile Intel® Pentium™ Processor-M with Enhanced Intel® SpeedStep™ technology

Memory

- Onboard memory upgradable to 2048 MB with 2 DDR-266/333 SoDIMM
- 1 MB (1024K) on-die L2 cache

Data storage

- One high-capacity, Enhanced-IDE hard disk
- Slot-loading DVD/CD-RW combo drive
- Secure Digital (SD) slot
- Optional second hard disk module

Display and video

- 15.4" 16:10 SXGA (Super eXtended Graphic Array) widescreen TFT LCD panel
- 1280x800 (SXGA) resolution, 16.7 million colors
- ATI® Mobility™ Radeon™ 9600 high-performance graphics chipset with 64MB frame buffer
- Simultaneous LCD and CRT display
- Dual display support
- LCD panel supports resolution up to 2048x1536
- VGA monitor supports resolution up to 2048x1536
- Embedded TV encoder supports resolution up to 1024x768

Audio

- Built-in speaker and microphone
- Sound Blaster Pro- and Windows Sound System-compatible
- Separate audio ports for line-in/microphone-in and line-out (S/PDIF) devices

Keyboard and pointing device

- 84-/85-/88-key Windows keyboard
- Ergonomically-centered touchpad pointing device

I/O ports

- One type II/I CardBus PC Card slot
- One RJ-11 phone jack (V.90) for modem
- One RJ-45 network jack (Ethernet 10/100)
- One DC-in jack
- One Printer port
- One external monitor port (DDC 2.0)
- One S-video output port
- One line-out jack (S/PDIF) (3.5mm mini-jack)
- One line-in (3.5mm mini-jack)
- One microphone-in jack (3.5mm mini-jack)
- USB (Universal Serial Bus) ports (2.0)
- 2 IEEE 1394 ports (one mini port and one regular port)
- One SD slot

Weight and dimensions

- 3.2 kg (7.1 lbs)
- 354 x 255 x 35 mm (13.93 x 10.04 x 1.38 in.)

Environment

- Temperature
 - Operating: 5°C ~ 35°C
 - Non-operating: -10°C ~ 65°C
- Humidity (non-condensing)
 - Operating: 20% ~ 80% RH
 - Non-operating: 20% ~ 80% RH

System

- Windows XP

Power

- Battery pack
 - 59.2-WattHour Li-Ion battery pack

- 2.5-hour rapid charge
- AC adapter
 - 70-Watt
 - Auto sensing 100~240Vac, 50~60Hz

Options

- 128/256/512 MB DDR 266 SoDIMM memory upgrade module
- Additional AC adapter
- Secondary hard disk module
- Subwoofer module
- Secondary battery
- Tray-type DVD drive
- Tray-type Combo drive (DVD/CD-RW)
- Slot-in DVD-Multi drive (Combo/DVD-RAM/DVD-RW)

B Notices

This appendix lists the general notices of your computer.

FCC notice

This device 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 device generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

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

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

Notice: shield cables

All connections to other computing devices must be made using shielded cables to maintain compliance with FCC regulations.

Notice: peripheral devices

Only peripherals (input/output devices, terminals, printers, etc.) certified to comply with the Class B limits may be attached to this equipment. Operation with non-certified peripherals is likely to result in interference to radio and TV reception.

Caution

Changes or modifications not expressly approved by the manufacturer could void the user's authority, which is granted by the Federal Communications Commission, to operate this computer.

Use conditions

This part 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.

Important Notice:

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Notice: Canadian users

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

Remarque à l'intention des utilisateurs canadiens

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

Modem notices

FCC

This equipment complies with Part 68 of the FCC Rules. Located on the bottom side of the modem is a label that contains, among other information, the FCC Registration Number and Ringer Equivalence Number (REN) for this equipment. Upon request, you must provide this information to your telephone company.

If your telephone equipment causes harm to the telephone network, the telephone company may discontinue your service temporarily. If possible, they will notify you in advance. But, if advance notice is not practical, you will be notified as soon as possible. You will also be informed of your right to file a complaint with the FCC.

Your telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the proper functioning of your equipment. If they do, you will be notified in advance to give you an opportunity to maintain uninterrupted telephone service.

If this equipment should fail to operate properly, disconnect the equipment from the phone line to determine if it is causing the problem. If the problem is with the equipment, discontinue use and contact your dealer or vendor.

TBR 21

This equipment has been approved to Council Decision 98/482/EC - "TBR 21" for pan-European single terminal connection to the Public Switched Telephone Network (PSTN). However, due to differences between the individual PSTNs provided in different countries, the approval does not, of itself, give an unconditional assurance of successful operation on every PSTN termination point. In the event of problems, you should contact your equipment supplier in the first instance.

Important safety instructions

1. Read these instructions carefully. Save these instructions for future reference.
2. Follow all warnings and instructions marked on the product.

3. Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
4. Do not use this product near water.
5. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.
6. Slots and openings in the cabinet and the back or bottom are provided for ventilation; to ensure reliable operation of the product and to protect it from overheating, these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register, or in a built-in installation unless proper ventilation is provided.
7. This product should be operated from the type of power indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
8. Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord.
9. If an extension cord is used with this product, make sure that the total ampere rating of the equipment plugged into the extension cord does not exceed the extension cord ampere rating. Also, make sure that the total rating of all products plugged into the wall outlet does not exceed the fuse rating.
10. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
11. Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage points or other risks. Refer all servicing to qualified service personnel.
12. Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - a. When the power cord or plug is damaged or frayed
 - b. If liquid has been spilled into the product
 - c. If the product has been exposed to rain or water
 - d. If the product does not operate normally when the operating instructions are followed. Adjust only those controls that are covered by the operating instructions since improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal condition.
 - e. If the product has been dropped or the cabinet has been damaged

- f. If the product exhibits a distinct change in performance, indicating a need for service.
- 13. Replace the battery with the same type as the product's battery we recommend. Use of another battery may present a risk of fire or explosion. Refer battery replacement to a qualified serviceman.
- 14. Warning! Batteries may explode if not handled properly. Do not disassemble or dispose of them in fire. Keep them away from children and dispose of used batteries promptly.
- 15. Use only the proper type of power supply cord set (provided in your accessories box) for this unit. It should be a detachable type: UL listed/CSA certified, type SPT-2, rated 7A 125V minimum, VDE approved or its equivalent. Maximum length is 15 feet (4.6 meters).

Laser compliance statement

The DVD/CD-RW drive in this computer is a laser product. The DVD/CD-RW drive's classification label (shown below) is located on the drive.

CLASS 1 LASER PRODUCT

CAUTION: VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM.

APPAREIL A LASER DE CLASSE 1 PRODUIT

LASERATTENTION: RADIATION DU FAISCEAU LASER VISIBLE ET INVISIBLE EN CAS D'OUVERTURE. EVITER TOUTE EXPOSITION AUX RAYONS.

LUOKAN 1 LASERLAITE LASER KLASSE 1

VORSICHT: SICHTBARE UND UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET NICHT DEM STRAHL AUSSETZEN

PRODUCTO LÁSER DE LA CLASE I

ADVERTENCIA: RADIACIÓN LÁSER VISIBLE Y INVISIBLE AL SER ABIERTO. EVITE EXPONERSE A LOS RAYOS.

LAG 1 LASER FABRIKAT

ADVARSEL: SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING. UNDGÅ UDS/ETTELSE FOR STRÅLEN.

VARO! LAVATTAESSA OLET ALTTINA LASERSÄTEILYLLE.

VARNING: LASERSTRÅLNING NÅR DENNA DEL ÅR ÖPPNAD ÅLÅ TUIJOTA SÄTEESEENSTIRRA EJ IN I STRÅLEN

VARNING: LASERSTRÅLNING NAR DENNA DEL ÅR ÖPPNADSTIRRA EJ IN I STRÅLEN

ADVARSEL: LASERSTRÅLING NAR DEKSEL ÅPNESSTIRR IKKE INN I STRÅLEN

Battery statement

CAUTION

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

ADVARSEL!

Lithiumbatteri - Eksplosionsfare ved fejlagtig håndtering. Udskiftning må kun ske med batteri af samme fabrikat og type. Léver det brugte batteri tilbage til leverandøren.

ADVARSEL

Eksplosjonsfare ved feilaktig skifte av batteri. Benytt samme batteritype eller en tilsvarende type anbefalt av apparatfabrikanten. Brukte batterier kasseres i henhold til fabrikantens instruksjoner.

VARNING

Explosionsfara vid felaktigt batteribyte. Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparattillverkaren. Kassera använt batteri enligt fabrikantens instruktion.

VAROITUS

Päristo voi räjähtää, jos se on virheellisesti asennettu. Vaihda paristo ainoastaan laitevalmistajan suosittelemaan tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.

VORSICHT!

Explosionsgefahr bei unsachgemäßen Austausch der Batterie Ersatz nur durch denselben oder einem vom Hersteller empfohlenem ähnlichen Typ. Entsorgung gebrauchter Batterien nach Angaben des Herstellers.

Macrovision copyright protection notice

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned

by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited. Apparatus Claims of U.S. Patent Nos. 4,631,603, 4,577,216, 4,819,098, and 4,907,093 licensed for limited viewing uses only.

LCD pixel statement

The LCD unit is produced with high-precision manufacturing techniques. Nevertheless, some pixels may occasionally misfire or appear as black or colored dots. This has no effect on the recorded image and does not constitute a malfunction.

Index

A

- AC adapter
 - caring for ix
 - connecting viii
- audio 32
 - connecting externally 54
 - troubleshooting 80

B

- battery
 - installing vii, 42
- battery bay 9
- battery pack
 - battery-low warning 45
 - caring for x
 - characteristics 41
 - charging 43
 - charging indicator 14
 - charging modes 43
 - checking charge level 44
 - installing 42
 - low conditions 45
 - optimizing 44
 - removing 43
 - using the first time 41
- battery release latch 9
- BIOS Utility 71–75
 - entering 71
 - exit menu 75
 - navigating 71
 - security menu 72
- bottom view 9
- brightness
 - hotkeys 19

C

- caps lock 15
 - on indicator 14
- care
 - AC adapter ix
 - battery pack x
 - computer ix
- charging
 - checking level 44

modes 43

cleaning

computer x

computer

- bringing to meetings 63
- caring for ix
- cleaning x
- connecting vii
- disconnecting 63
- features 10
- moving around 63
- on indicator 13
- security 37
- setting up a home office 64
- taking home 63
- traveling internationally 65
- traveling on local trips 65
- turning on viii

connections

- AC adapter viii
- audio 54
- computer vii
- keyboard, external 51
- monitor 49
- mouse 52
- printer 53
- USB 57

connectivity options 28

D

- dc-in jack 7
- display 12
 - hotkeys 18
 - opening and closing 12
 - power management 12
 - simultaneous 12
 - troubleshooting 79

E

- error messages 82
- ethernet connection 28

F

- FAQ. See frequently-asked questions
- frequently-asked questions 79
- front view 5

H

- hard disk

- upgrading 60
- Hibernation mode
 - hotkey 18
- hotkeys 18

I

- indicator lights 13
- inserting the disc 25

K

- keyboard 15
 - connecting externally 51
 - embedded numeric keypad 16
 - hotkeys 18
 - lock keys 15
 - troubleshooting 80
 - Windows keys 17

L

- launch keys 4, 23
- LEDs 13
- left view 6
- line-in jack 8

M

- media access
 - on indicator 14
- memory
 - upgrading 60
- messages
 - error 82
- microphone
 - troubleshooting 80
- modem 28
- monitor
 - connecting 49
- mouse
 - connecting externally 52

N

- notice
 - DVD copyright protection 99
- num lock 15
 - on indicator 14
- numeric keypad
 - embedded 16

O

- options
 - hard disk upgrade 60

- memory upgrade 60
- PC cards 55
- spare AC adapter 59
- spare battery 59

P

- palm rest 20
- password 37
 - changing in BIOS Utility 74
 - removing in BIOS Utility 74
 - setting in BIOS Utility 73
 - types 37
- PC Card
 - ejecting 56
 - inserting 55
- PC card 55
- pc card slots 6
- ports
 - IEEE1394 port 8
 - modem jack 8
 - network jack 8
 - usb port 7, 8
- power
 - turning on viii
- Power management 45
- printer
 - connecting 53
 - troubleshooting 80
- problems 79
 - audio 80
 - display 79
 - keyboard 80
 - printer 80
 - startup 79

Q

- questions
 - setting location for modem use 80

R

- rear view 7
- right view 7

S

- security
 - keylock 37
 - passwords 37
- service
 - when to call x

- simultaneous display 49
- software
 - bundled 69
- speakers
 - hotkey 18
 - troubleshooting 80
- Standby mode
 - status indicator 13
- status indicator 3
- status indicators 13
- storage 25
- s-video 50

T

- touchpad 4, 21

- using 21– 22
- travel
 - international flights 65
 - local trips 65

U

- USB
 - connecting 57
- utility
 - BIOS Setup 71– 75

W

- Windows keys 17

