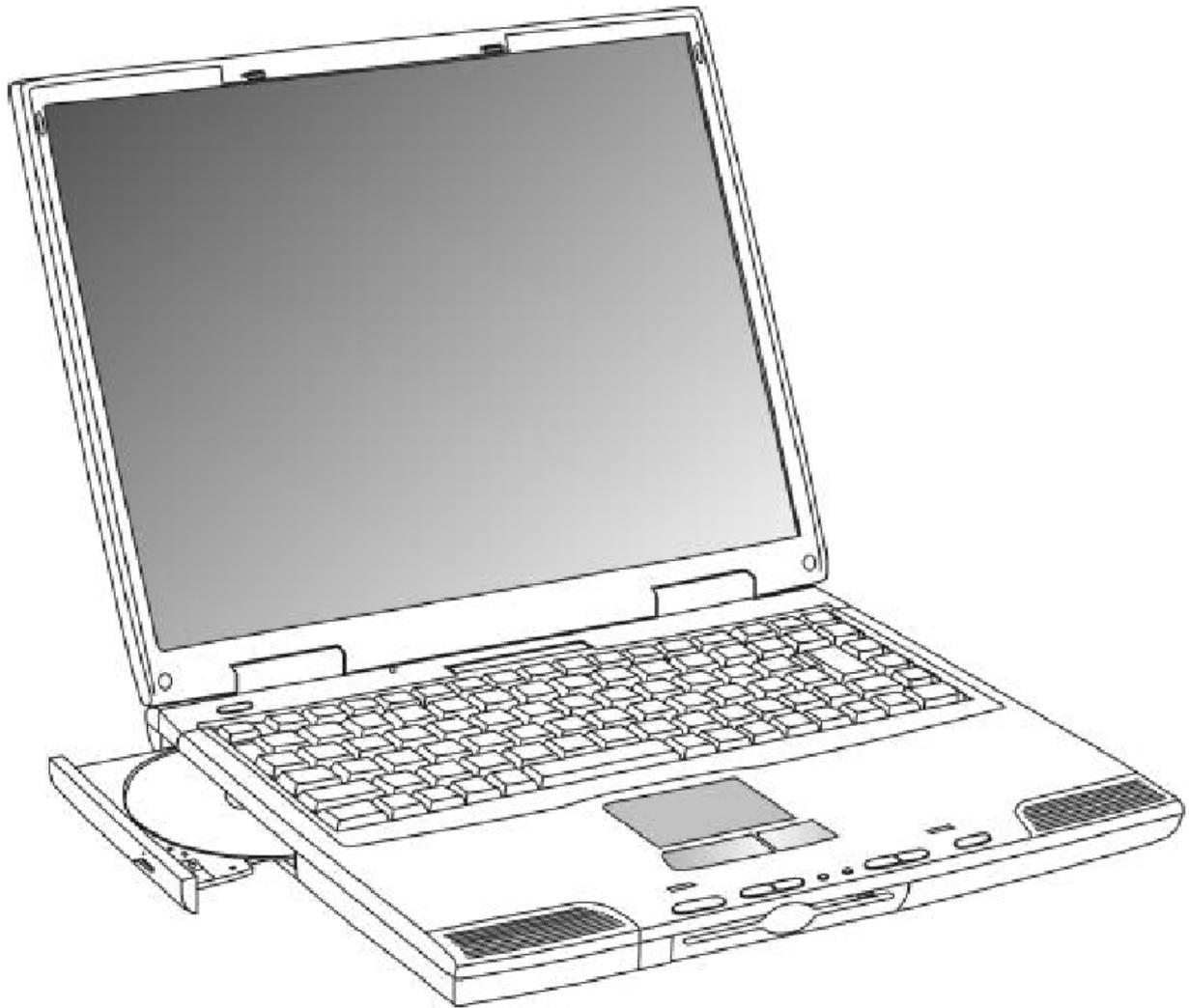


Notebook User's Manual



The FCC wants you to know...

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

Any changes or modifications made to this equipment may void the user's authority to operate this equipment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.
- All external cables connecting to this basic unit must be shielded. For cables connecting to PCMCIA cards, see the option manual or installation instructions.

Federal Communications Commission (FCC)

PART 68 Warning

This equipment complies with Part 68 of the FCC Rules. On the bottom of the computer is a label that contains, among other information, the FCC Registration Number and Ringer Equivalence Number (REN) for this equipment. You must, upon request, provide this information to your telephone company.

FCC Part 68 Registration Number: 6CTTAI – 25876 – FB – E

REN: 0.8B

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

If your MODEM causes harm to the telephone network, the local Telephone Company may discontinue your service temporarily. If possible, they will notify you in advance. However, if advanced notice isn't practical, you will be notified as soon as possible. You will 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.

CANADIAN DOC NOTICE

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the Radio Interference Regulation of the Canadian Department of Communications.

"Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la class B prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada"

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Dolby License of Notice

Manufactured under license from Dolby Laboratories.

Chapter 1

Front with the display closed

Right side

Left side

Back side

Underside

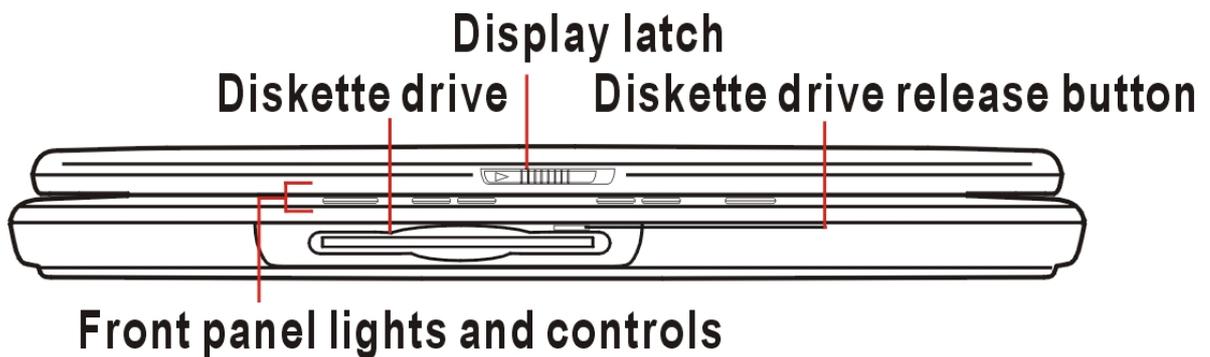
Front with the display open

System window and LED control

Finding Your Way Around

This chapter presents a "grand tour" of your computer with illustrations to guide you along your way. It serves as a reference when you need to locate specific parts of the computer.

Front with the display closed



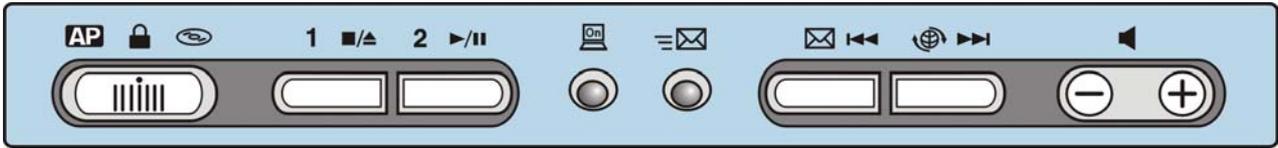
The **Diskette drive** allows you to use either high-density or double-density 3.5-inch diskettes.

The **Display latch** keeps the display panel closed and locked. To open the display panel, slide the latch to the right and raise the panel.

The **Diskette drive release button** ejects a diskette from the diskette drive.

The **Front panel lights** provide information about various system functions. The **front panel controls** perform several functions, depending on the position of the AP/Lock/Audio CD.

Front panel controls



AP/Lock/Audio CD

AP   The **AP/Lock/Audio CD** has three different positions:

- ❖ When the switch is in AP mode, the buttons act as hot keys and launch a predefined program of your choice.
- ❖ When the switch in Lock mode, the four front panel control buttons (stop/eject, play/pause, previous track, next track) are disabled.
- ❖ When the switch is in Audio CD mode, the front panel buttons can control playing the CD. For more information on using the front panel buttons to play a CD.



NOTE: You can play an Audio CD even when the computer is off by sliding the AP/Lock/Audio CD to CD mode. The front panel control buttons can be used to control playing the CD.

Power and battery indicator lights

	The on/off light glows green when the computer is on, or when the computer is off and the AP/Lock/Audio CD is set to CD.
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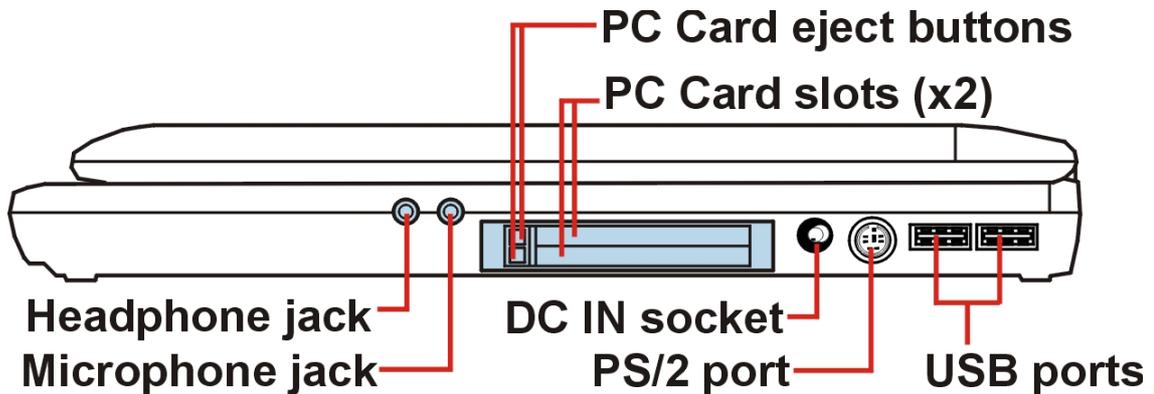
Mail button

	The link to New mail express.
	The link to mail express.
	The link to Internet express.

CD Player controls

	With the computer off or no, slide the AP/Lock/Audio CD to the right to enable the front panel CD player controls. In CD mode, the front panel control buttons have the following functions:
1 	The stop/eject button stops the disc if it is playing, or opens the CD-ROM driver tray.
2 	The play/pause button starts playing the current track in the CD-ROM driver, or pauses a track that is already playing.
	The previous track button returns to the beginning of the preceding track (for CDs) on the disc.
	The next track button skips to the beginning of the following track (for CDs) on the disc.
	The speaker volume control adjusts the stereo the speaker volume. Press and hold the left side to decrease the volume until the desired volume is reached. Press and hold the right side to increase the volume until the volume is reached.

Right side



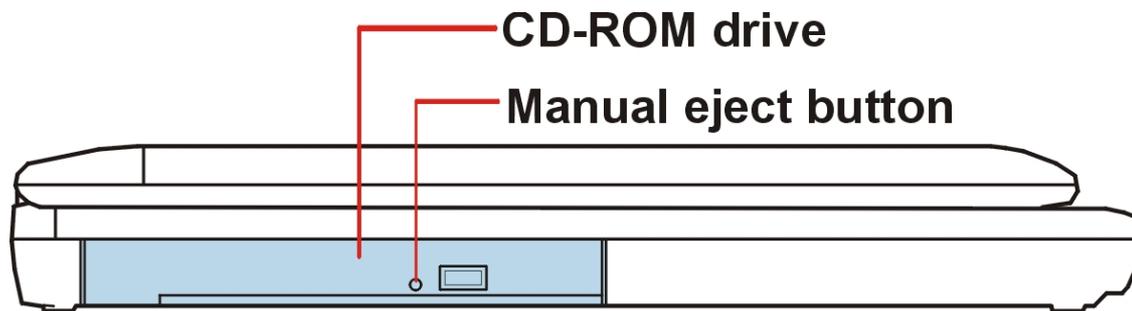
	<p>The 3.5 mm Headphone jack lets you connect stereo headphones or other audio-output device, such as external speakers. Connecting headphones or other devices to this jack automatically disables the internal speakers.</p>
	<p>The 3.5 mm Microphone jack lets you connect an external monaural microphone or other audio-input device.</p>
	<p>The PC Card eject buttons allow easy removal of PC Cards.</p>
	<p>The two-stacked CardBus-ready PCMCIA-compatible PC Card slots allow you to install additional devices. Each slot can accommodate a Type II PC Card. Both slots are able to install a Type III PC Card.</p>



CAUTION: Keep foreign objects out of the PC Card slots. A pin or similar object that accidentally put into a slot can damage the computer's circuitry.

	<p>The DC IN socket is where you plug in the AC adapter.</p>
	<p>The PS/2™ port allows you to connect an optional PS/2 compatible mouse or external keyboard..</p>
	<p>The USB (Universal Serial Bus) ports allow you to connect USB peripherals to your computer, such as a keyboard, pointing device or monitor.</p>

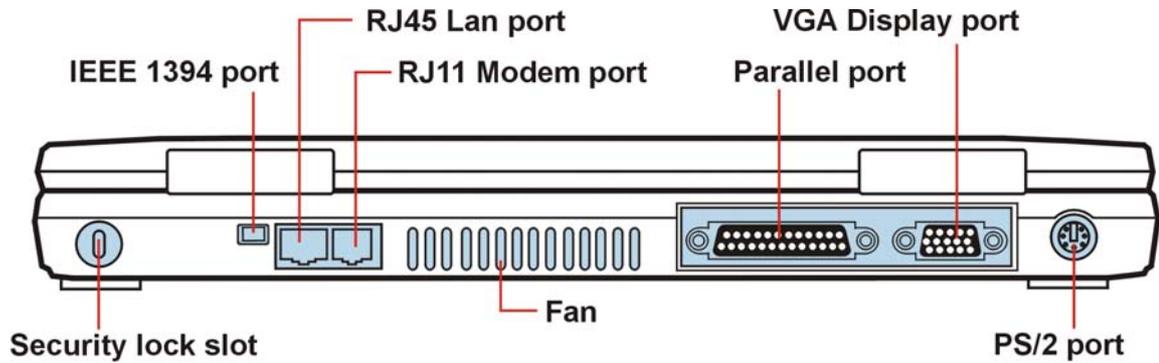
Left side



The **manual eject button** enables you to manually eject a disc from the CD-ROM drive.

The **CD-ROM drive** allows you to install and run programs from application CD-ROMs. You can also use it to play audio CDs.

Back side



	The Security lock slot allows you to attach an optional computer cable lock to secure the computer to a large, heavy object, such as your desk.
IEEE 1394	The IEEE 1394 port standard devices.



DEFINITION: USB is a peripheral expansion standard that supports a data-transfer rate of up to 12 Mbps. USB peripherals has a single standard for cables and connectors.

The USB standard allows you to install and remove USB devices while the computer is on. Switching devices without turning off the computer is called "hot swapping."

[Ether]	The RJ-45 LAN port (for LAN model), the jack lets you use a modular RJ-45 LAN cable to connect the internal built-in LAN card to a LAN system.
	The RJ-11 modem port , the jack lets you use a modular phone cable to connect the internal built-in modem to a standard telephone outlet.



CAUTION: Do not use a pencil press the Shutdown button. Pencil lead can break off inside the computer and damage it. Instead, use a slim object such as a straightened paper clip.



The **Parallel port** lets you connect a parallel printer, or other parallel device, including ECP- compatible devices.



The **VGA display port** allows you to connect an external monitor.

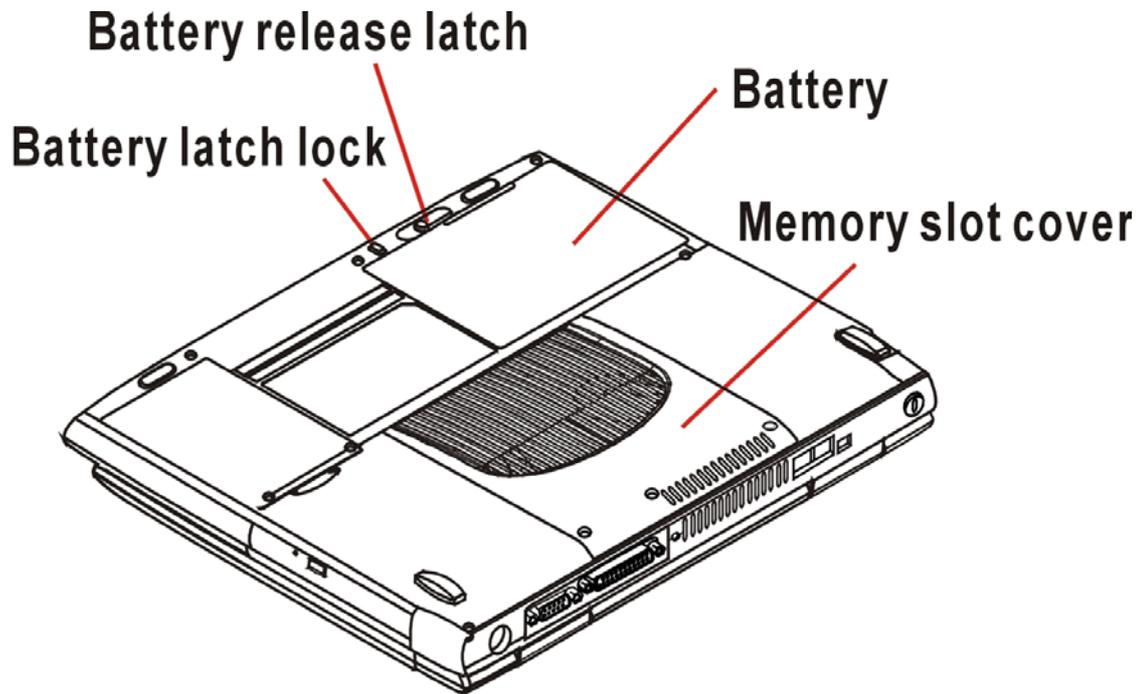


DEFINITION: ECP (Extended Capabilities Port) is a parallel port standard for PCs that support bi-directional communication between the PC and attached devices (such as a printer).



The **TV -out port** allows you to connect a Television set to this port to view the Notebook's display output on your TV.

Underside



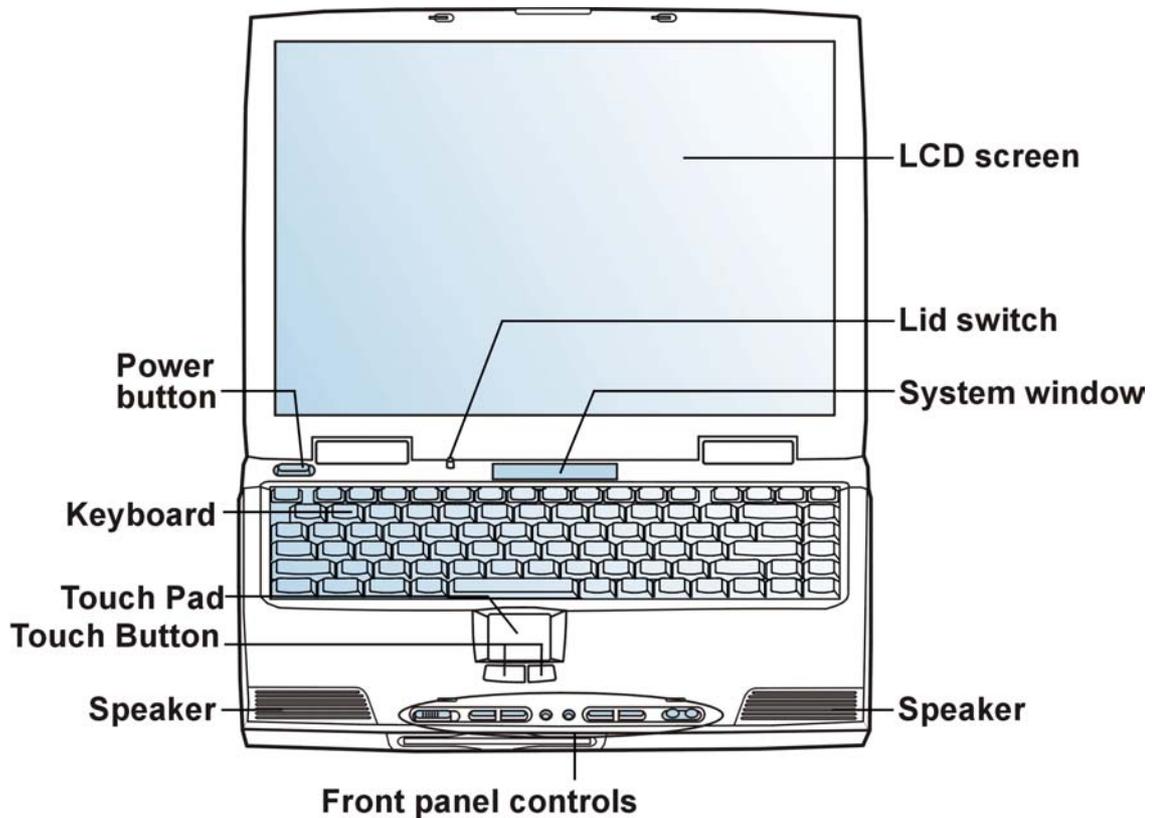
The **Memory slot cover** protects the extension memory module.

The **Battery** provides DC power to the computer.

The **Battery release latch** secures the battery to the computer and prevents it from falling out.

The **Battery latch lock** is the double lock for the battery. It prevents the battery release latch moving to undesired position cause battery falling out.

Front with the display open



LCD screen:

Your Notebook's VGA display is one of models

- 800 x 600 SVGA TFT color LCD, display area 12.1"
- 1024 x 768 XGA TFT color LCD, display area 13.3"
- 1024 x 768 XGA TFT color LCD, display area 14.1"
- 1024 x 768 XGA TFT color LCD, display area 15.0"
- 1400 x 1050 SXGA+ TFT color LCD, display area 15.0"



DEFINITION: TFT (Thin Film Transistor) is a type of LCD flat-panel display screen in which each pixel controlled by from one to four transistors. Screens with TFT technology (sometimes called active-matrix LCDs) provide the best resolution of all the flat-panel displays.

The **Power button** turns the computer on and off, or let system enter lower power mode (Standby, Hibernation) depends on power management setting in OS.

The **Lid switch** can be used to control LCD back light on/off or let system enter into suspend mode of lower power depends on power management setting in OS.

The **System window** informs you of the Notebook's current operating status at a glance.

The **Keyboard** provides all the functionality of a full-size keyboard.

The front panel provides a palm rest to assist you in maintaining proper posture while using the computer.

The function keys, when used with the Fn key, activate various system functions, such as LCD brightness control.

The **Touch Pad** is a pressure sensitive pointing device that provides all the features of a mouse. Although its operation differs from a mouse, its function is quite the same; to move the cursor around the screen.

The **Touch Pad buttons** have essentially the same function as mouse buttons.

The stereo **Speakers** let you hear the computer's audio output such as system alarms associated with your software and music from audio CDs.

The Front panel controls allow convenient use of the CD player, or can launch your favorite programs.

System window and LED control

Display icons on system window



- Caps Lock/Num Lock/Scroll Lock/Pad Lock: indicators for keyboard operation or key-lock mode
- CDROM+HDD/PCMCIA/FDD: indicators for activities of devices
- AC power/Charge/Full: indicators for status of AC power and battery charge status
- Battery status: indicates the status of battery pack and other specific definitions

Definition of icons

Icon	Definitation	System Windows Display
Caps lock	Caps Lock State of Keyboard	
Scroll Lock	Scroll Lock State of Keyboard	
Num Lock	Num Lock State of Keyboard	
Pad Lock	Pad Lock State of Keyboard, when Pad Lock is on, the embedded keypad will be active	
CD-ROM/HDD	Reflect the activity of CD-ROM or HDD	
FDD	Reflect the activity of internal FDD (External FDD will not support this function)	
PCMCIA	Reflect the activity of PCMCIA	

Definitions of battery status

Icon	Definitation	System Windows Display
AC power	Reflect the AC power state Icon is off: Power source is not existed. Icon is on: Power source is existed.	
Charge icon	Icon is blinking when battery installed and in charging. Blinking rate: turn on 0.5sec/turn off 0.5sec.	CHARGE
Full icon	Only turn on battery capacity is 100%. And Charge icon will turn off.	FULL
No any battery	No battery frame.	No any battery icon will be showed.
Bad cell	No battery frame.	No any battery icon will be showed.
Over temperature	Battery frame is solid, show right and left bar. Charge& Full icon turn off.	
Battery power is low	Battery frame is solid on. Show one bar.	
Battery power is critical low (0%~5%)	Only battery frame is blinking (once per second).	
Battery gas gauge	Battery frame is solid on One bar: capacity 6% to 30%	
	Battery frame is solid on Two bar: capacity 31% to 74%	
	Battery frame is solid on Three bar: capacity 75% to 100%	

Chapter 2

Making sure you have everything

Selecting a place to work

Setting up your computer

Connecting the AC adapter

Charging the Battery

Connecting a printer

Adding memory

Connecting a mouse

Using the computer for the first time

Turn on the computer

Adjusting brightness and contrast (Hot keys)

Using the Track point

Setting the date and time

Setting up your printer

Customizing the desktop

Registering your computer

Getting Started

This chapter provides tips for working comfortably, describes how to connect components, and explains what to do the first time you use your notebook computer.

Making sure you have everything

Before doing anything else, consult the Quick Start card to make sure you received everything. If any items are missing or damaged, notify your dealer immediately.

Selecting a place to work

Your computer is portable and designed to be used in a variety of circumstances and locations.

Creating a computer-friendly environment

Place the computer on a flat surface, which is large enough for the computer and any other items you need to use, such as a printer. Leave enough space around the computer and other equipment to provide adequate ventilation and prevent overheating.

To keep your computer in prime operating condition, protect your work area from:

- Dust, moisture, and direct sunlight.
- Liquids and corrosive chemicals.

Setting up your computer

Setting up your computer may include:

- Connecting the AC adapter
- Charging the battery
- Connecting a printer
- Upgrading your computer by installing more memory
- Connecting a mouse

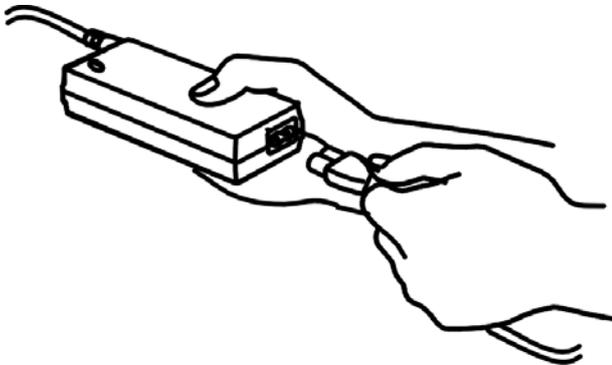
Connecting the AC adapter

Your computer contains a rechargeable battery pack, which needs to be charged before you can use it the first time.

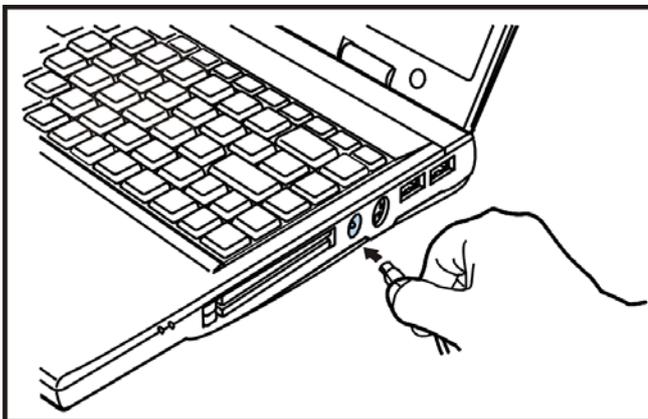
The AC adapter enables you to power the computer from an AC outlet and to charge the computer's batteries. A status light on the AC adapter glows when the device is in use.

To connect AC power to the computer:

1. Connect the power cable to the AC adapter.



2. Plug the AC adapter into the computer's DC IN socket.





*DANGER: To avoid electric shock, do not modify forcibly bend, damage, place heavy objects on top of, or apply heat to the power cable. If the power cable becomes damaged or the plug overheats, discontinue use.
Never remove the power plug from the outlet with wet hands.*

Charging the battery

Before you can use the battery to power the computer, you must charge it. Connect the computer to a live AC outlet using the AC adapter and power cable. The on/off light glows green and the green battery light flashes.

Once the computer is connected to a power outlet, you can charge the battery with the computer turned off or on. When the computer is turned off, the battery charges about 2.5 hours to full.

When the computer is turned on and is not consuming full power (under 18W), the battery charges about 4.5 hours to full.



CAUTION: Once the battery is charged for the first time, avoid leaving the computer plugged in and turned off for more than a few hours at a time. Continuing to charge a fully charged battery can damage the battery

Connecting a printer



CAUTION: Connecting the printer cable while the computer is on may damage the printer, the computer, or both.

Before connecting a printer, you need to know whether it requires a serial or a parallel interface. Check the printer's documentation. If the printer can be switched between serial and parallel mode, choose parallel because it is faster.

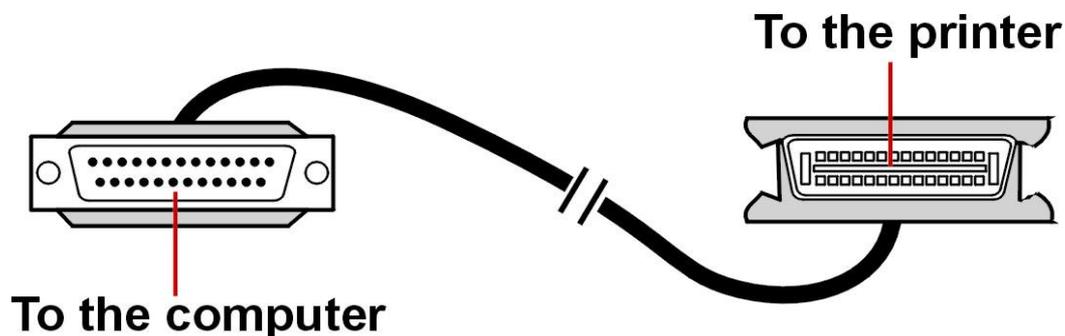
You also need a suitable printer cable- which may come with your printer. If not, you can purchase one from a computer or electronics store.



NOTE: If your printer is ECP-or IEEE-compliant, make sure your printer cable is an IKE 1284 cable.

The following instructions assume you have a parallel printer, which is the most common type of interface.

1. Turn off the computer.
2. Connect the printer cable to the printer and to the computer's parallel port.



3. Plug the printer's power cable into a live AC outlet.

Refer to your printer documentation for additional configuration steps.

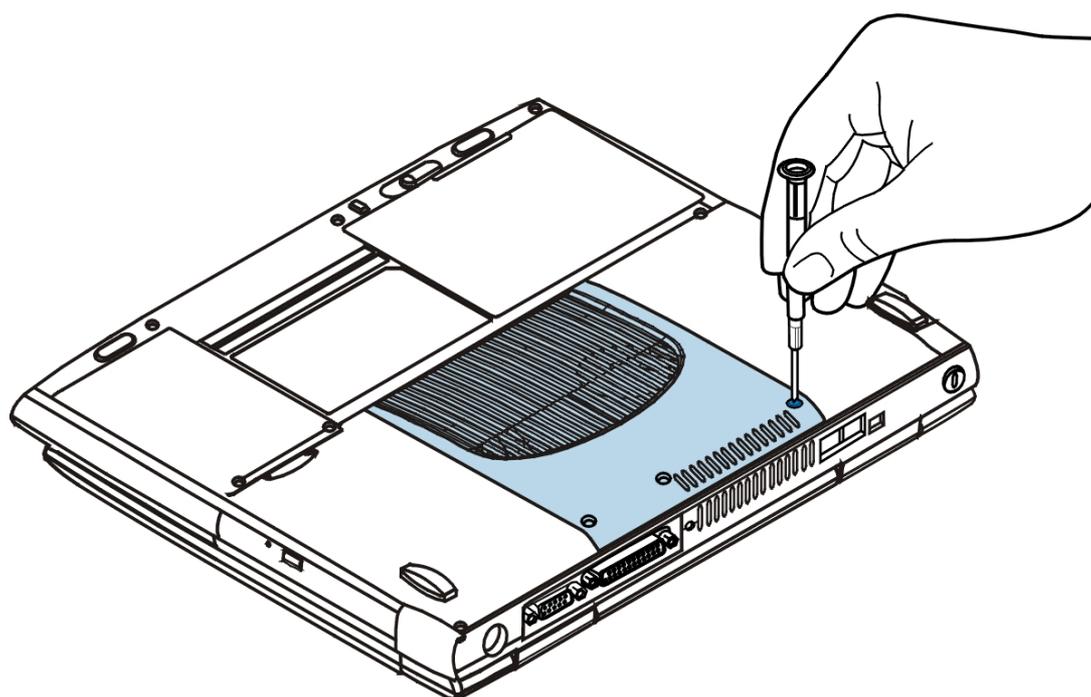
Adding memory (Optional memory module)

The Notebook is one SO-DIMM connector (64 MB on board), allow maximum of 96/128/192MB of system memory to be installed. This memory configuration is achieved by installing one 32MB, 64MB or 128MB 3.3V SDRAM 144-pin SO-DIMM memory module. Refer to the System Memory Expansion and Installing Memory Cards sections in Chapter 6 for detailed information on upgrading system memory. After reviewing the appropriate sections, if you are not completely confident that you have the skill to install memory modules by yourself, please consult your notebook dealer or technician.

Installing a memory module

If you are adding memory module after you have started to use the computer, begin at step 1. Otherwise skip to step 3.

1. If the computer is on, click **<Start>**.
2. In the Shut Down Windows dialog box, select **<Shut Down>**, then click **<OK>**.
Windows Millennium Edition shuts off the computer.
3. Remove all cables connected to the computer.
4. Close the display panel and turn the computer upside down.
5. Remove the Battery.
6. Remove one screw securing the expansion memory cover, then remove the cover.
7. Plug memory module into the SO-DIMM connector JP20.





CAUTION: Static electricity can damage the memory module. Before you handle the module, touch a grounded metal surface to discharge any static electricity you may have built up. Do not touch the connectors on the memory module or on the computer. Oil or dust on the connectors can cause memory access problems.

- 8.** Hold the memory module by its edges so that the gold connector bar faces left then slide the module into the socket.
- 9.** Gently push the module down until the latches on either side of the socket engage, securing the module in the socket.
- 10.** Position the memory module cover on the computer and secure it with one screw.
- 11.** Turn your computer right side up.
- 12.** Reconnect any cables you disconnected.
- 13.** Turn on the computer and verify that it correctly recognizes the amount of memory currently installed in the computer.

Removing a memory module

1. Perform steps 1 through 5 in "Installing a memory module" (see above), to access the computer's memory socket.
2. Release the memory module by gently pressing outward on the latches on either side of the memory socket. One edge of the module pops up.
3. Remove the memory module from the computer.



CAUTION: Avoid touching the connectors on the memory module or on the computer. Grease or dust on the connectors can cause memory access problems.

4. Position the memory module cover on the computer and secure it with one screw.
5. Turn the computer right side up.
6. Reconnect any cables you removed.
7. Turn on the computer and verify that it correctly recognizes the amount of memory installed in the computer.

Connecting a mouse

You may want to use a mouse or trackball instead of the computer's built-in Track point pointing device. Your computer supports PS/2-compatible pointing devices.

The Track point remains operable, even if you connect a millenary pointing device to the computer.

Using a PS/2 mouse

1. Turn off the computer.
2. Attach the PS/2 mouse cable to the PS/2 port, then turn on the computer.
3. Refer to your mouse documentation for configuration steps.



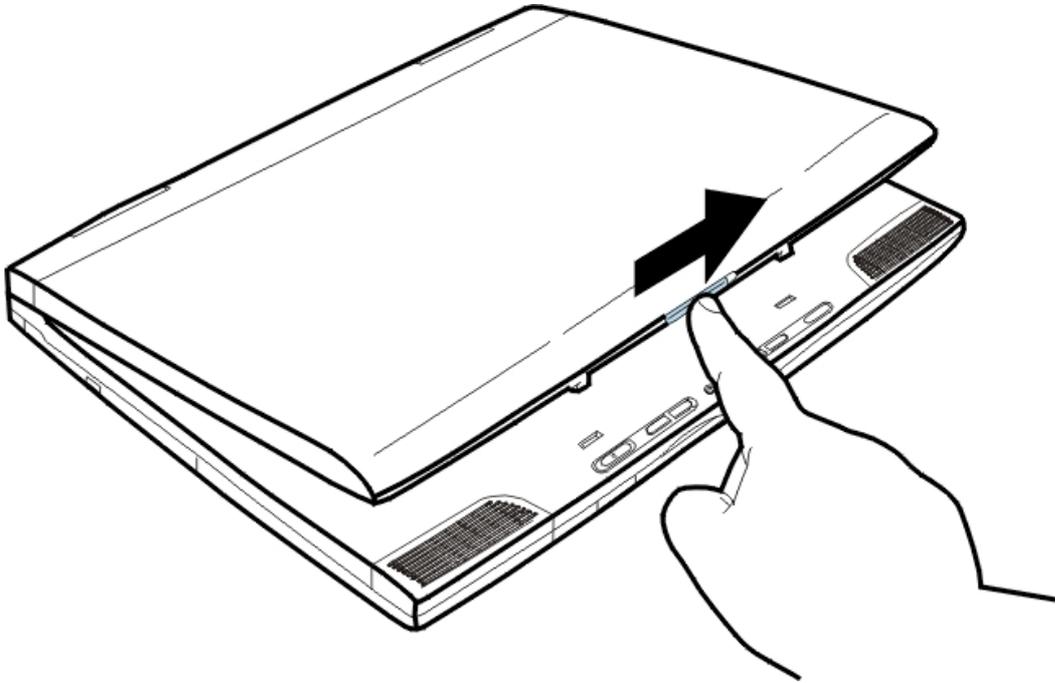
TECHNICAL NOTE: The system cannot detect a PS/2 mouse if you connect it after starting the computer. You can only connect one PS/2 device at a time, unless you purchase an optional Y-cable. Using a Y-cable allows you to connect a PS/2 mouse and a PS/2 keyboard simultaneously.



CAUTION: Make sure the computer is off before you attach the mouse. Connecting a PS/2 mouse with the computer's power on may damage the mouse, the computer, or both.

Using the computer for the first time

Slide the display panel latch to the right then lift the panel.



CAUTION: Don't force the display panel open beyond the point where it moves easily.

Never lift or move the computer by grasping the display panel.

Turning on the computer

1. Make sure that the diskette drive is empty.
2. If you have a printer connected to your computer, turn the printer on and wait until it indicates it is ready.
3. Turn on the computer by momentarily pressing then releasing the power button.



When you release the power button, the on/off light on the system indicator panel comes on.



NOTE: When turning on the computer for the first time. Don't turn it off until the operating system has loaded completely. Turning off the computer during its initial startup will cause an error the next time you start the computer.



The hard disk drive light flashes when the hard disk drive is accessed.



CAUTION: To avoid data loss, never turn off the computer while a drive is in use.

To help you get started, Windows guides you through several essential steps for setting up your computer.

Getting Started - Allows you to enter your name to personalize your copy of Windows Millennium Edition.



NOTE: To perform online operations, your computer must be connected to a voice-grade telephone line.

- Final Settings - Completes your Windows setup. During this step you will be prompted to set the current date and time. Press the ESC key on the keyboard to exit setup and display the Windows desktop.

Adjusting brightness and contrast

Use the following hot key combinations to adjust the screen brightness:

Hot keys

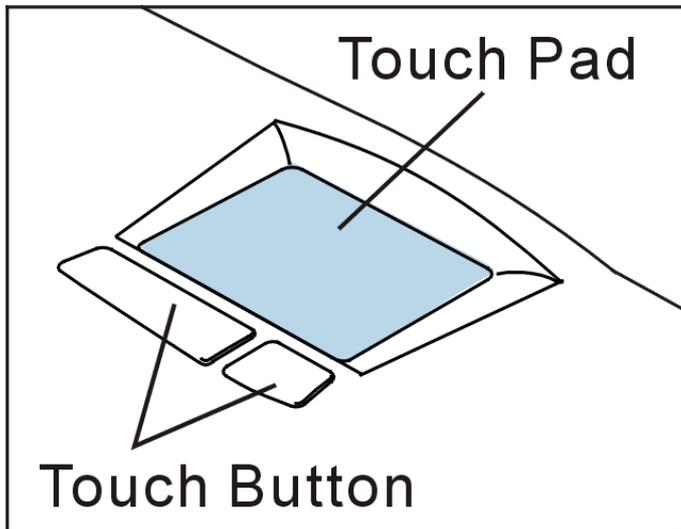
Fn + F5	Power on display. When pressing the hot key, the display device will switch among CRT only, LCD only and simultaneous display. It will not update the setting of option 'Power on Display' in system setup.
Fn + F10	Cursor keypad on/off. Pressing this hot key can enable/disable the embedded cursor keypad. Numeric lock state is logically disabled.
Fn + F11	Numeric keypad on/off. Pressing this hot key can enable/disable the embedded numeric keypad. Numeric lock state is logically enabled.
Fn + F12	Scroll Lock on/off.
Fn + ↑	Increase brightness
Fn + ↓	Decrease brightness

After rebooting, pad lock is set to off and Num lock is set to on. In this state, the embedded cursor keypad is not enabled on the notebook keyboard.

The function of the Fn key can be simulated by left-Ctrl + left-Alt of the external keyboard.

Using the Touch Pad

The Touch Pad is a touch-sensitive pointing device that provides all the features of a mouse.



Please refer to the following for instructions on how to operate the touch pad.

Place your fingers on the keyboard in the normal typing position.

The touch pad is easily accessible by moving either your left or right thumb off the space bar and on to the touch pad.

Gently move your thumb across the touch pad in the direction you want the cursor to move. The pad detects the change in pressure and moves the cursor in the corresponding direction.

With a conventional mouse, selections are usually made by double-clicking the mouse's left button. The touch pad also supports this feature. It is described in detail below. If you are familiar with the operations of a mouse you may only need to scan the information below as a review.

The touch pad buttons have essentially the same function as mouse buttons. Clicking these buttons makes selections, drags objects, or performs a variety of other functions depending on the software. To select an object, first move the pointer over the object you want to select, and then press the lower button one time and release it. The functionality of these buttons depends on your software. Refer to your software user's manuals for specific information on the touch pad (mouse) functions.

Double-clicking is a common technique for selecting objects or launching programs from icons. Move the pointer over the object you wish to select, then rapidly press the left button two times. This action is commonly referred to as "double-clicking on an object."

Double-tapping is another technique for selecting objects or executing applications from icons. For the most part double-tapping is very similar to the double-clicking

technique of a mouse. The difference is that instead of double-clicking on a mouse button, you double-tap on the pressure sensitive touch pad to make the selection. Once the cursor has been moved to the object you want to select, lightly double-tap the pressure sensitive touch pad itself. This double-tapping will select the desired item and prompt the software to perform the related operation.

Many of the functions within Windows 95 can also be launched by using Single-tapping. Once the cursor has been moved to the object you want to select, lightly single-tap on the pressure sensitive touch pad. This single-tapping will select the desired item and prompt the software to perform the related operation.

When working with programs that employ a graphical user interface (GUI), such as Windows, dragging objects from one point on the screen to another is a technique you will have to master. To drag an object, first move the pointer over the object, then press and hold down the left button. Now without releasing the button, move the object to a new location on the screen by moving your finger across the touch pad. Once the object is in the desired position, release the button to drop the object in place.

Setting the date and time

The Date/Time Properties dialog box contains a Time Zone tab and a Date and Time tab.

1. On the Time Zone tab, select your time zone by clicking the up and down arrow keys.
2. On the Date and Time tab, set the correct date and time, if necessary.
3. When you have finished, click <Close>. Setup displays the Add Printer Wizard.

Setting up your printer

If you started your computer with a printer connected and turned on, it may have been detected automatically (Plug and Play). If this is not the case, then you have to install the printer driver for the model printer that is connected to your computer, either following the instructions provided in your printer manual, or using the Windows Millennium Edition Add Printer Wizard.

To set up a printer using the Add Printer Wizard:

1. On the Windows desktop, click < **Start**>, <**Settings**>, <**Control Panel**>.
2. In the Control Panel window, double-click the <**Add Printer**> icon to launch the Add Printer Wizard. The Wizard will guide you through setting up your printer.
3. Select the manufacturer and the printer model, then click <**Next**>.

If your printer is not listed, use the printer driver that came with the printer to complete the setup process. Insert the CD/ diskette containing the printer driver into the appropriate drive, click <**Have Disk**>, then in the Install From Disk dialog box, click <**OK**>.

4. Set the printer port as follows:
 - ❖ If you have a parallel printer, set the port to LPT1.
 - ❖ If you have a serial printer, set the port to COM1.



HINT: If you are not sure which type of printer you have, refer to your printer manual.

5. Enter a name for your printer, or use the name supplied in the Printer name text box.
6. If you want to set the printer as the default printer for Windows-based programs, click **Yes**, then click **Next**.
7. If you want to print a test page, click **Yes (recommended)**, and then click **Finish**.



TECHNICAL NOTE: Some printers require a specific installation process. In this case, the Windows Millennium Edition Add Printer Wizard will display an error message. If this happens, refer to your printer installation guide for further Instructions.

Customizing the desktop

Set up your computer to suit your needs. If you do not like the colors or the fonts on the screen, you can change them by clicking a blank area of the desktop with the secondary button, then clicking Properties. This causes Windows Millennium Edition to open the Display Properties window. On the Appearance tab you can set the color scheme for the desktop.

Chapter 3

Precautions

Computing tips

Using the keyboard

Starting a program

Saving your work

Printing your work

Backing up your files

Using compact discs

Using PC Cards

Using your computer at the office

Using a computer lock

Setting up for communications

Connecting directly to a remote computer

Turning off the computer

Caring for your computer

Restoring the preinstalled software

Learning the Basics

This chapter covers precautions and computing tips that you should follow when using your computer. It also provides important information about the basic features of your system.

Precautions

- ❖ Don't spill liquids into the computer's keyboard.

If you did spill a liquid that gets into the keyboard, turn off the computer immediately. Leave the computer turned off overnight to let it dry out before you use it again.

- ❖ Don't turn off the computer if a drive light indicates a drive is active.

Turning off the computer while it is reading from or writing to a disk may damage the disk, the drive, or both.

- ❖ Keep the computer and disks away from objects that generate strong magnetic fields, such as large stereo speakers.

Information on disks is stored magnetically. Placing a magnet too close to a disk can erase important files.

- ❖ Scan all new files for viruses.

This precaution is especially important for files you receive via diskette, email, or download from the Internet. Occasionally, even new programs you buy from a supplier may contain a computer virus. You'll need a special program to check for viruses. Ask your dealer to help you.

Computing tips

- ❖ Save your work frequently.

Your work stays in the computer's temporary memory until you save it to the disk. You will lose all the work done since you last saved, if, for example, a system error occurs and you must restart your computer, or your battery runs out of charge while you are working.



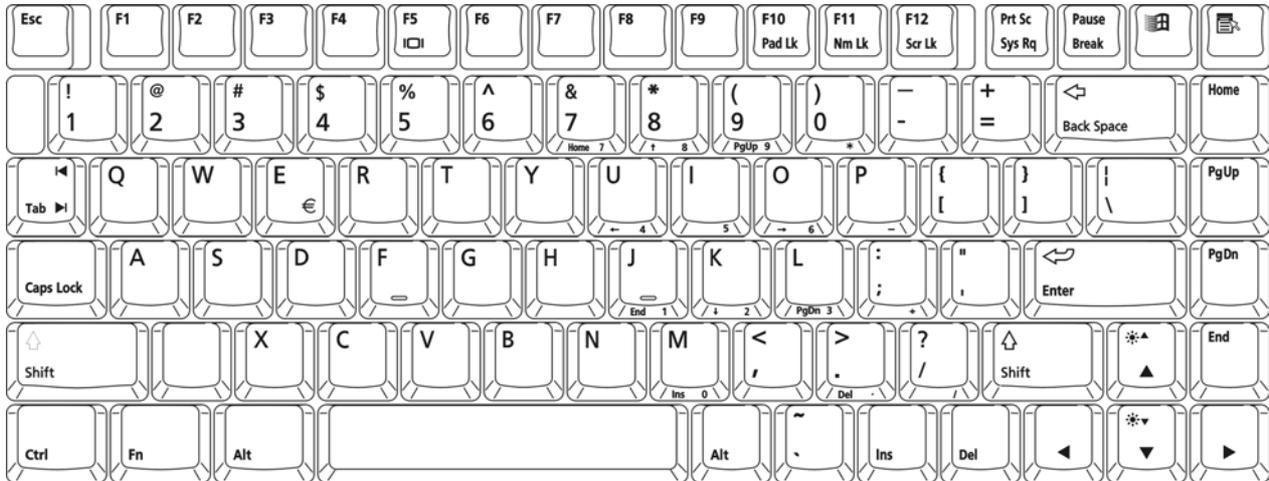
HINT: Some programs have an automatic save feature which you can turn on. This feature saves your file to the hard disk at preset intervals. See your software documentation for details.

- ❖ Back up your files to diskettes (or other removable media) on a regular basis. Label the backup copies clearly and store them in a safe place.

It is easy to put off backing up because it takes time. However, if your hard disk suddenly fails, you may lose all the data on it unless you have a separate backup copy.

- ❖ Use ScanDisk Disk Defragmenter, and the Maintenance Wizard regularly to conserve disk space and help your computer perform at its optimal level. Consult your Windows Millennium Edition documentation for more information on these and other utilities.
- ❖ Take frequent breaks to avoid repetitive-motion injuries and eyestrain.
- ❖ Before turning off the computer, always use the Shut Down command in Windows Millennium Edition.

Using the keyboard



85-key keyboard

Character keys

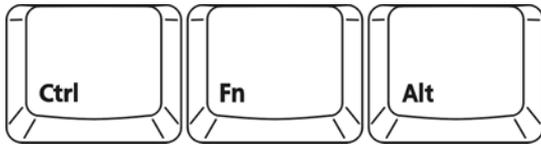
Typing with the character keys is very much like typing on a typewriter, except that:

- The spacebar creates a space character instead of just passing over an area of the page.
- The lowercase letter l and the number 1 are not interchangeable.
- The uppercase letter O and the number O are not interchangeable.



The Caps Lock key changes only the alphabet keys to upper case- the number and symbol keys are not affected. The caps lock light on the keyboard indicator panel illuminates when you press the Caps Lock key.

Ctrl, Fn, and Alt keys



The Ctrl, Fn, and Alt keys do different things depending on the program you are using. For more information, see your program documentation.

Function keys

The function keys (not to be confused with the Fn key) are the 12 keys at the top of the keyboard.



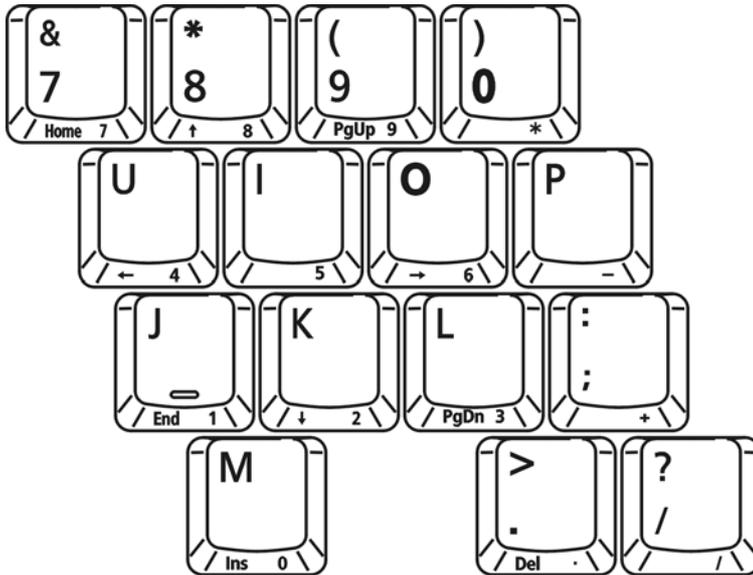
F1 through F12 are called function keys because they perform programmed functions when pressed. Used in combination with the Fn key, function keys marked with icons execute specific functions on the computer.

Windows special keys



The keyboard provides two keys that have special functions in Windows. The Windows logo key activates the Start menu. The Application key has the same function as the secondary mouse (or the Track point) button.

Overlay keys



The keys with numbers and symbols on the front of them form the numeric and cursor overlay. This overlay lets you enter numeric data or control the cursor as you would use the ten-key keypad on a desktop computer's keyboard.

Using the overlay to type numeric data



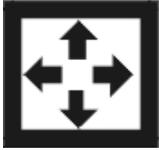
To turn the numeric overlay on and off, press **Fn** and **F11** simultaneously. The numeric mode light on the status panel glows when the numeric overlay is on.

You can still use the overlay keys to type alphabetic characters while the numeric overlay is on.

- ❖ For lowercase letters, hold down **Fn** while you type the letters.
- ❖ For uppercase letters, hold down both **Fn** and **Shift** while you type the letters.

To use the cursor control keys when the numeric overlay is on, press and hold down **Shift** while you use the cursor control keys. To return to the numeric overlay, release **Shift**.

Using the cursor control overlay



To turn the cursor control overlay on and off, press **Fn** and **F10** simultaneously. The cursor control light on the keyboard indicator panel glows when the cursor control overlay is on.

To type alphabetic characters while the overlay is on:

- ❖ For lowercase letters, hold down **Fn** while you type the letters.
- ❖ For uppercase letters, hold down both **Fn** and **Shift** while you type the letters.

To use the numeric overlay keys when the cursor control overlay is on, hold down **Shift** while you use the numeric overlay keys. To return to the cursor control overlay, release **Shift**.

Starting a program

In Windows Millennium Edition there are three ways to start a program- from the Start menu, from Windows Explorer, or from the Run menu on the taskbar.

Starting a program from the Start menu

1. Click **Start**, then point to **Programs**.

Windows Millennium Edition displays the Programs menu, which lists programs and program groups. If your program is listed, go to step 3; otherwise, continue with step 2.

2. Point to the program group containing the program that you want to start.

Windows Millennium Edition displays the associated program menu.

3. Click the program's icon to start the program.



To close the program, click the **Close** button at the upper-right corner of the program's window

Starting a program from Explorer

If a program is not in the Programs menu, you can start it from Windows Explorer. Windows Explorer gives you a view of your computer's contents as a hierarchy or "tree." You can easily see the contents of each drive and folder on your computer. To use this method, you need to know the name and location of the program's executable file (this file ends with .exe.)

1. Click **Start**, point to **Programs**, and then clicks **Windows Explorer**.



HINT: Another way to open Windows Explorer is to use the secondary Track point button to click the My Computer icon, then click Explore. To show or hide folders on the left side of the window, click the plus or minus sign beside the folder.

- ❖ The left side of the window displays the disk drives and folders on your computer.
 - ❖ The right side of the window displays the contents of the item you click on the left.
2. To open a document or start a program, double-click its icon in the right side of the window.

Starting a program from Run menu on the taskbar

You can start a program from the taskbar if you know its name and location.

1. Click **Start** on the taskbar.
2. Point to **Run**.
3. In the dialog box, type the command line.
4. Click **OK**.

Saving your work

Before you turn off the computer, save your work to the hard disk drive or a diskette. This is one of the most important rules of computing. You can never save your files too often.



NOTE: Save your data even when you are using Standby, in case the battery discharges before you return to work.

Many programs offer a feature that saves documents at regular intervals, such as every 15 minutes. Check your program's documentation to see whether they have an automatic save feature.

- ❖ To save a file you are updating, open the program's **File** menu and click **Save**.
- ❖ To save the current file with a new name, choose **Save As** from the File menu, type a name for the file and click **OK**.



HINT: To make another copy of the file you are currently working with, choose Save As from the File menu and give the new file a different name.

File names

Windows Millennium Edition supports file names of up to 255 characters. You may use all the letters and numbers on the keyboard plus the following characters: `_`, `^`, `$`, `~`, `!`, `#`, `%`, `&`, `{`, `}`, `(`, `)`, `@`, `[`, `]`, `+`, `-`, `;`, and `'`. The names can include spaces.

If you plan to share your files with a computer using MS-DOS[®] or a pre-Windows 95 version of Windows, the file name must be no more than eight characters followed by a period and a three character extension. An MS-DOS file name may not contain a space.

Most programs assign an extension that identifies the file as having a particular format. For example, Microsoft Word saves files with a `.doc` extension.

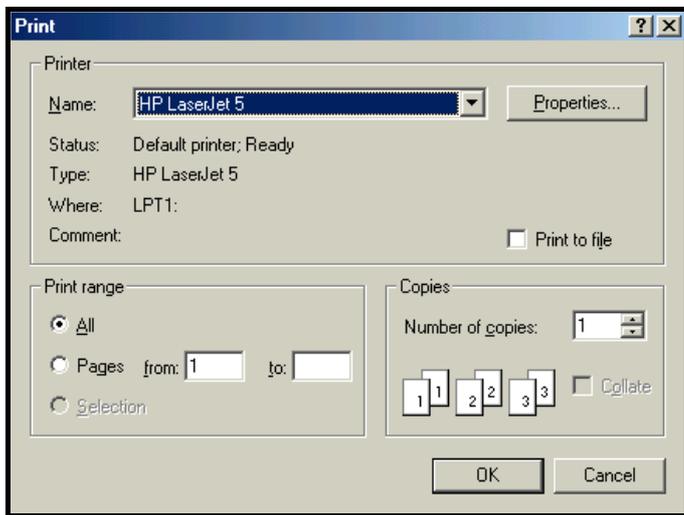
Printing your work

Make sure that Windows Millennium Edition is set up for your printer.



TECHNICAL NOTE: You only need to setup the printer the first time you connect it. If you use more than one printer or are changing printers, you will need to setup Windows Millennium Edition to run with the additional printer (s).

1. If your printer is not on, turns it on now.
2. In the File menu of your Windows program, click Print.



A sample Print dialog box

The program displays a Print dialog box similar to the one below.

3. Click OK to print.

Backing up your files

Backing up your files simply means copying individual files to a diskette or copying entire sections of your hard disk to another device, such as a tape drive.

Copying to a diskette

1. Insert a formatted diskette into the diskette drive.
2. Double-click the **My Computer** icon on the Windows desktop.
3. Double-click the drive that contains the file you want to copy.
4. Double-click the folder containing the file, then click the file you want to copy.



HINT: Use the Ctrl and Shift keys to select more than one file.

5. Click **File**, then click **Send To**.
6. Click the icon for the diskette drive (drive A:).



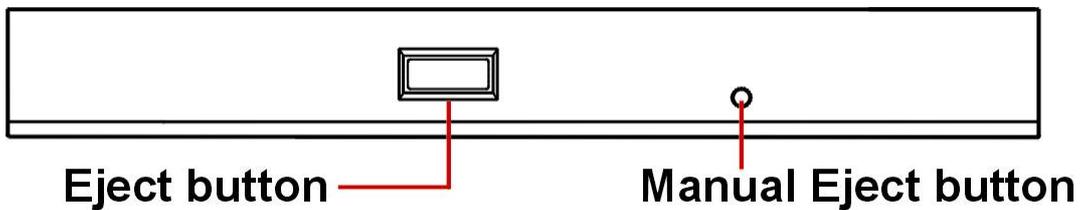
HINT: You can also back up a file to a diskette by clicking the file (or files) you want to backup with the secondary button, then pointing to Send To and clicking 3 1/2 Floppy (A:).

Using compact discs

The full-size, maximum 24X speed CD-ROM drive lets you run compact discs.



CAUTION: When inserting and removing CDs, be careful not to touch the lens on the disc tray or the area around it. Doing so could cause the drive to malfunction.



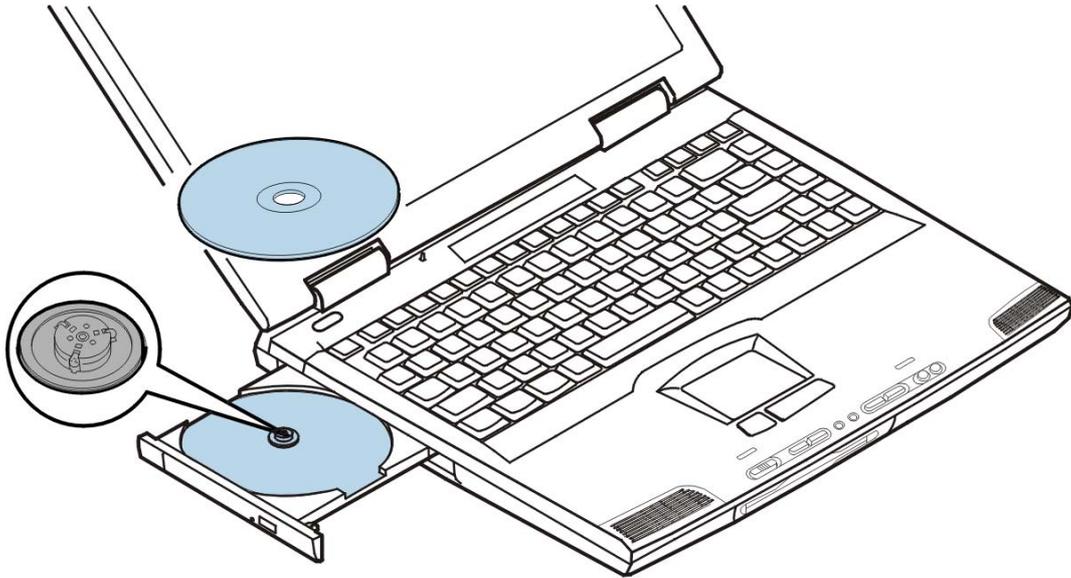
The CD-ROM drive

Press the eject button to open the disc tray. The eject button will not open the disc tray when the computer is off.

The manual eject button—accessed through the small hole just to the right of the eject button allows you to open the disc tray when the computer is off.

Inserting compact discs into the CD-ROM drive

1. With the computer turned on, press the eject button to open the disc tray.
2. Pull the disc tray until it is fully open.
3. Hold the CD by its edges, ensure it is dust-free, and place it carefully in the disc tray, with the label side up.



4. Press down on the CD until the disc locks on the spindle.
5. Close the disc tray.



CAUTION: *If the CD is not seated properly when you close the disc tray, the CD might be damaged and the tray may not open fully when you press the eject button.*

Removing a CD with the computer on

1. Press the eject button.



CAUTION: Do not press the eject button while the computer is accessing the CD-ROM drive. If the CD is still spinning when you open the disc tray wait for it to stop before you remove it.

2. Pull the disc tray until it is fully open, remove the CD, and place it in its protective cover.
3. Close the disc tray.

Removing a CD with the computer off

1. Insert a slender object, such as a straightened paper clip, into the manual eject hole.



CAUTION: Never use a pencil to press the manual eject button. Pencil lead can break off inside the computer and damage it.

2. Pull the disc tray until it is fully open, remove the CD, and place it in its protective cover.
3. Close the disc tray.

Caring for compact discs

- Store your CDs in their original containers to protect them from scratches and keep them clean.
- Don't bend a CD or place heavy objects on top of it.
- Don't apply a label to, or otherwise mar, the surface of a CD.
- Hold a CD by its outside edge. Fingerprints on the surface of a CD can prevent the CD-ROM drive from reading the data properly.
- Don't expose CDs to direct sunlight or extreme heat or cold.
- To clean a CD, wipe it with a clean, dry cloth—starting from the center of the CD and wiping toward the outward edge. Do not wipe using a circular motion. If necessary, moisten the cloth with water or a neutral cleaner (not benzene or rubbing alcohol). Let the CD dry completely before inserting it in the drive.

Using PC Cards

PC Cards expand your computer's capabilities and usefulness. You can purchase additional PC Cards from your dealer. Most PC Cards conform to the PCMCIA (Personal Computer Memory Card International Association) standard.

Your computer comes with two stacked PC Card slots and supports three types of PC Cards:

- Type II cards are typically used for fax/modems, memory storage, network cards, etc. You can install up to two of these cards, one in each slot.
- Type III cards are used for removable hard disks and other functions that require a larger card. You can install just one of these cards.

Check the documentation that came with the PC Card to see if it conforms to the PCMCIA 2.1 standard, or later. Other cards may work with your computer, but are likely to be much more difficult to set up and use.

Inserting PC Cards

PC Cards require Card and Socket Services software- a set of programs that acts as a translator between the PC Card and the computer, and that makes hot swapping (switching cards while the computer is on) possible.



TECHNICAL NOTE: Windows Millennium Edition provides the Card and Socket Services for your PC Card. Even if your PC Card comes with its own version of Card and Socket Services, you should use the files included in Windows Millennium Edition.

Some PC Cards do not support Hot swapping. Refer to your PC Card's manual for Definition.

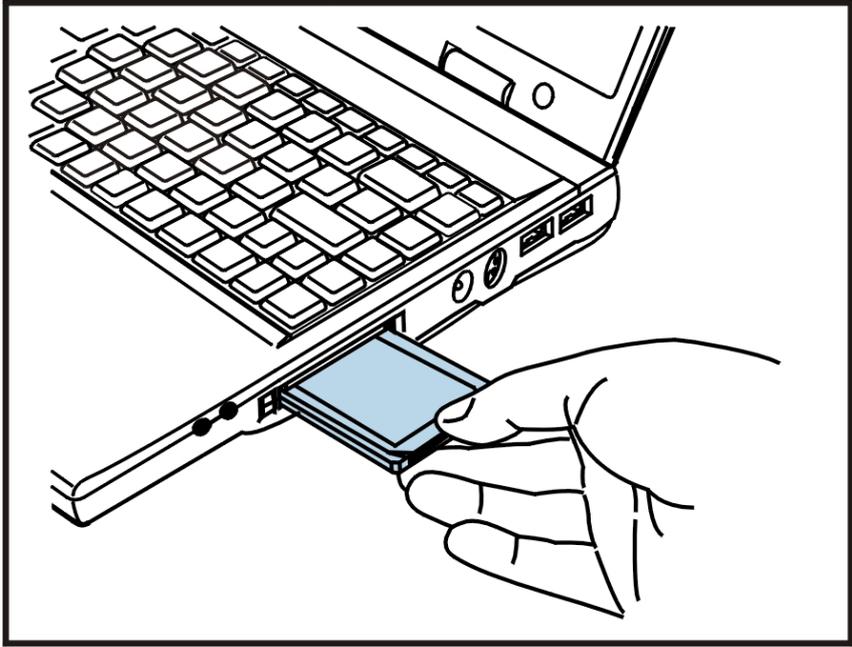
1. If your PC Card does not support hot swapping, save your data and turn off the computer before inserting the PC Card. For more information, see "Hot swapping".
2. Hold the PC Card with the arrow side up and the connector side toward the slot.
3. Align the card connectors with an available PC Card slot and carefully slide the card into the slot until it locks into place.

There are two eject buttons, one per slot. When the PC card is seated, the eject button for that slot pops out.

4. Press the eject button to put it in its retracted position.



NOTE: If you have a Type III card, insert the connector into the lower slot. If you have a Type II card, insert it into either the upper or the lower slot.



Inserting a PC Card into a PC Card slot



CAUTION: To avoid damaging the computer or the PC Card, don't force the card into the slot.

Removing PC Cards



CAUTION: If your PC Card supports hot swapping, you can remove it at any time. However, to avoid data loss, never remove a card while it is in use. For more information, see "Hot swapping".

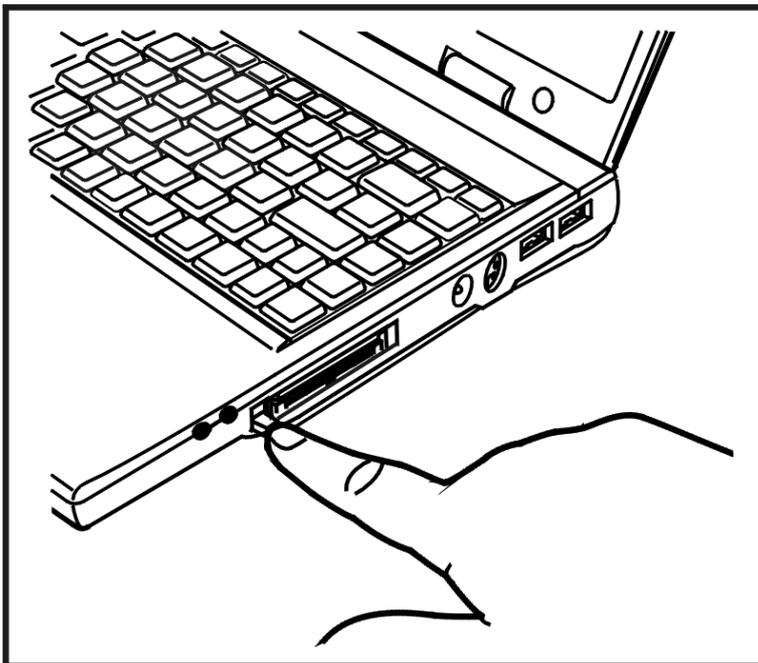
1. Click the PC Card button on the taskbar.
2. Click Stop xxxx where xxxx is the identifier for your PC Card.

Windows Millennium Edition advises you that you may safely remove the card.

3. To remove the PC Card, press the respective eject button once.

The eject button pops out.

4. Press the eject button again to eject the PC Card.



The upper eject button will eject Type II PC Card from the upper slot. The lower button will eject a Type II, or Type III card from the lower slot.

5. Remove the PC Card and store it properly.

Hot swapping

With PC Cards, you can replace one PC Card with another while the computer is on. This is called “hot swapping.”

Hot swapping precautions

Although you can insert a PC Card at any time, to avoid data loss do not remove a card while it is in use. Before removing a PC Card, stop it by clicking the PC Card (PCMCIA) icon on the taskbar. After the PC Card is stopped, it is safe to remove it.

- ❖ Don't remove a hard disk card while the system is accessing it.
- ❖ Don't remove a network card while you are connected to a network.
- ❖ Don't remove a SCSI card while any of the SCSI devices connected to it is operating.



DEFINITION: SCSI is an acronym for Small Computer Systems Interface. A single SCSI PC Card enables you to connect several SCSI devices, such as a scanner or digital camera to your computer.

Using your computer at the office

By connecting an external monitor, external full-size keyboard, and a mouse, you can work with your notebook as if it were a standard office computer.

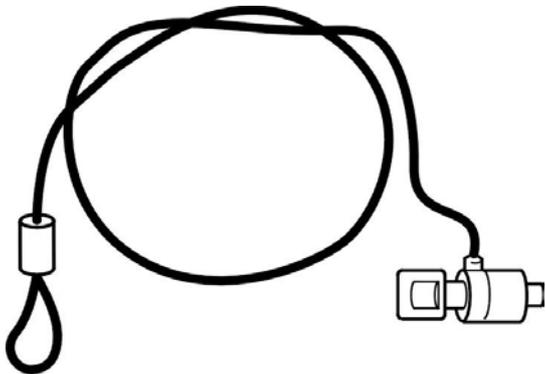
An external monitor connects to the monitor port.

An external PS/2-compatible keyboard or a PS/2 mouse connects to the PS/2 port. An optional Y-cable lets you connect both devices to the port simultaneously.

An USB device connects to the USB port

Using a computer lock

You may want to secure your computer to a heavy object such as your desk. The easiest way to do this is to purchase a computer cable lock.



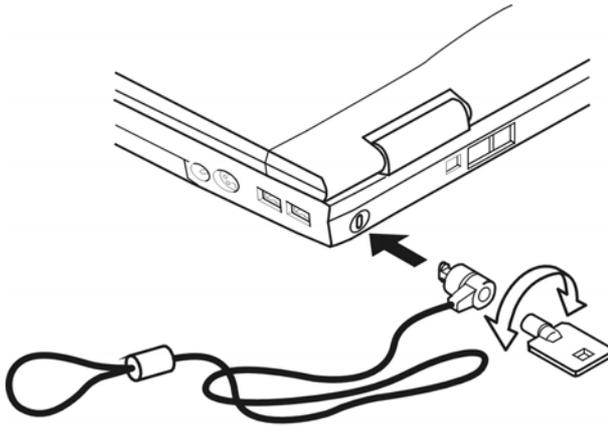
1. Loop the cable through or around some part of a heavy object.

Make sure there is no way for a potential thief to slip the cable off the object.

2. Pass the locking end through the loop.

3. Insert the cable's locking end into the security lock slot, then rotate the key a quarter turn and remove it;

The computer is now securely locked.



Locking the computer

Setting up for communications

To connect to the Internet, use an online service, or communicate across the telephone lines with another computer, you need:

- ❖ A modem (supplied with your notebook computer)
- ❖ A telephone line
- ❖ A browser or communications program
- ❖ An Internet Service Provider (ISP) or online service if you plan to use the Internet



CAUTION: Don't hook up digital line jack to the RJ-11 port. Otherwise, it could damage the modem card and need call service.

Connecting the modem to a telephone line

Before you can use the modem, you must connect it to a standard voice-grade telephone line.

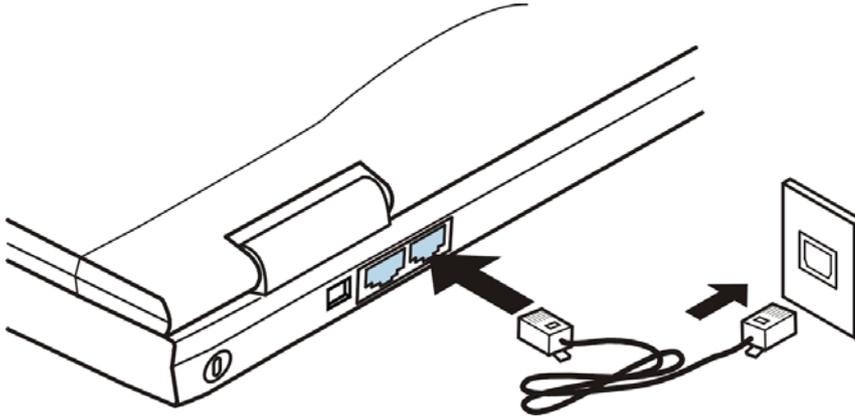


TECHNICAL NOTE: Disable Call Waiting before you connect through the modem. Call Waiting interrupts data transmission.



CAUTION: Never connector the Modular jack to a digital line. Digital line's high current can damage the modem.

1. Attach one end of a standard RJ-11 telephone cable to the modem port.



2. Attach the other end of the RJ-11 telephone cable into the modular jack of a standard voice-grade telephone line.



NOTE: The plug may be different in your country.

Connecting your computer to a network

To access a network:

❖ At the office, you need to install a network card in one of the PC Card slots. For specific information about connecting to the LAN or WAN, consult your network administrator.

❖ While you are at home or traveling, you need a dial-up connection. Ask your network administrator for the telephone number of the network.

To set up the connection, use the Dial-Up Networking Wizard:

1. Click **Start** and point to **Programs**.
2. Point to Accessories, then to **Communications**, and click **Dial-Up Networking**.



CAUTION: When you are connected to a network, disable the Windows Millennium Edition Standby command. The Standby command can disrupt your network connection.

Connecting directly to a remote computer

If you are connecting directly to a remote computer or a bulletin board service (BBS), you need a general-purpose communications program.

In addition, there are two things you need to know before you can connect to another computer:

- ❖ The communications parameters
- ❖ The file transfer protocol (only if you are downloading or uploading files)

Communications parameters

There are four communications parameters:

- ❖ Modem speed - The speed at which the modem transfers information. Speeds are measured in bits per second. Your modem manual documents the speed of your modem.
- ❖ Data bits - The number of bits in one character. This number is usually seven or eight.
- ❖ Stop bits - Indicate the end of a character. This number is usually one or two.
- ❖ Parity - An error-checking method, which will be set to even, odd, or none.

Communications parameters, except for the modem speed, are usually abbreviated and combined. Common examples are N81 (no parity, eight data bits and one stop bit) and E72 (even parity, seven data bits and two stop bits).

You set each of these parameters in your communications program. Each parameter must be set the same on both computers or you will not be able to connect.

File transfer protocols

File transfer protocols are standards that govern how computers transfer files between modems over a telephone line. Protocols determine what type of error checking and data compression, if any, occur during transfer.

You do not really need to know anything about specific protocols-just make sure you are using the same protocols as the computer with which you are communicating.

Turning off the computer

It is a good idea to turn off your computer when you are not using it for a while.

❖ If you have work in progress and expect to resume shortly, use the Windows Millennium Edition Standby command to save your system settings so that, when you turn on the computer again, you automatically return to where you left off.

To leave the computer turned off for a longer period, use the Windows Millennium Edition Shut Down command instead.

❖ Never turn off the power if the hard disk drive light is on. Doing so may damage your hard disk drive.

Caring for your computer

This section gives tips on cleaning and moving your computer. For information about taking care of your computer's battery, see "Running the computer on battery power".

Cleaning the computer

To keep your computer clean, gently wipe the display panel and exterior case with a lightly dampened cloth. Ask your dealer for suggestions for appropriate cleaning products.



CAUTION: Keep liquid, including cleaning fluid, out of the computer's keyboard, speaker grille, and other openings. Never spray cleaner directly onto the computer. Never use harsh or caustic chemical products to clean the computer.

Moving the computer

Before moving your computer, even across the room, make sure that all disk activity has ended and all external peripheral cables are disconnected.



CAUTION: Don't pick up the computer twists display/panel or by the back (where the ports are located).

Chapter 4

Easy buttons

Buttons function description

Software specification

Easy Buttons

Buttons function description

Player function Mode

This player application will auto detect both CD Audio and CD extra title, and play these titles as well.

Play / Pause button:

Starts to play an Audio CD title

Continues playing the title

Pauses the current play status

Stop / Eject button:

It stops playing the CD title and returns to the beginning position of the track, if it is in playing mode.

It ejects the CD ROM tray, if it is in stopped mode.

It closes the CD ROM tray, if CD ROM tray is open.

Next track button:

It jumps to the beginning position of the next track.

If the current track is the last track then it will go to the first track.

Previous track button:

It jumps to the beginning position of the current track, if it has already playing a while.

Or it jumps to the beginning position of the previous track, if it just start playing.

If current track is the first track then it will go to the last track.

Internet function Mode

Internet Browser button:

Pressing this button will launch a system default Internet Browser application, such as Microsoft® Internet Explorer or Netscape.

E-mail button:

Pressing this button will launch Microsoft® Outlook Express.

It will also turn off Email LED, if there were unread E-mails detected which made LED on.

Two User defined buttons:

Press this button will launch the user defined linking application.

See configuration for detailed description about how to configure these three 2 user defined buttons.

Software specification

Configuration Menu



Once you have installed the software driver and restart Windows, an Easy Buttons activator icon will appear on the Windows Taskbar. Right single-click the activator icon to pop up a menu with which you can select the following items;



Exit Button... item

To close all four Easy buttons applications and their functions. To find the Easy buttons icon from the Start Menu and select it to launch this program again. Or you can restart Windows, the Easy buttons program will always run automatically.

Configuration Button... item

Selecting this menu item will invoke a Configuration Buttons dialog box.

OnScreen Display

This menu item contains four sub items for you to configure the properties of the OSD.

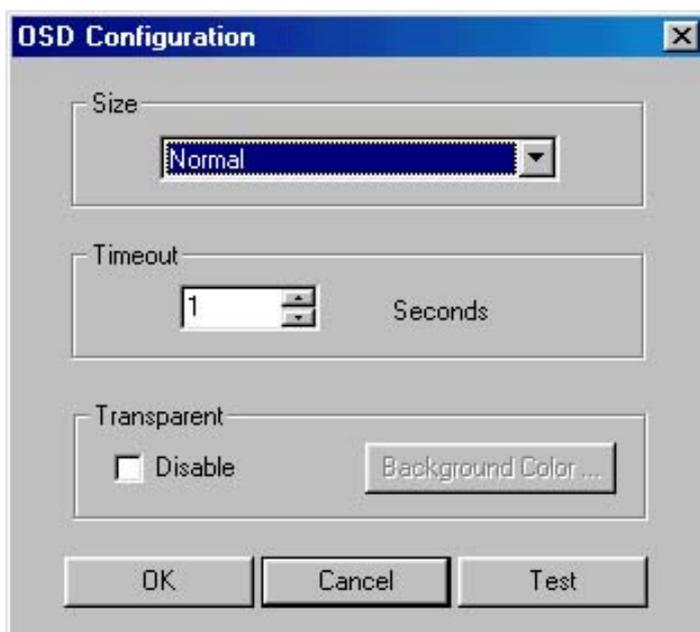


Disable: To disable the OSD function.

Color: Select the color of OSD text.

Font: Select Font, and Style of OSD text.

Settings: Invoke an OSD configuration dialog box for you to configure the OSD size, display timeout, and its transparency.



Size: To select the OSD size from the Size list box.

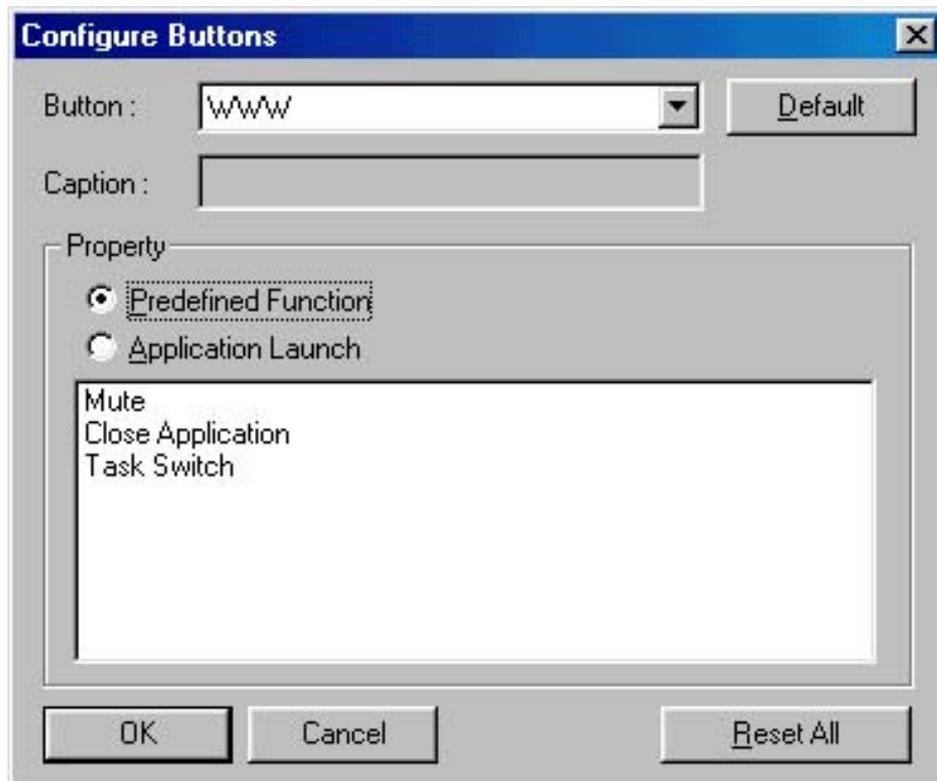
Timeout: Adjust or input the interval time of showing OSD.

Transparent: To enable or disable the transparency of the OSD.

If the transparency is disabled, you can select background Color.

Configure Buttons dialog box

From this dialog box, you can configure four Easy buttons as your own specific defined buttons.



The dialog box contains below properties for you to configure your specific defining button.

Button list box: Four identically buttons name in the list for select.

Default button: Restores the default function of selected button.

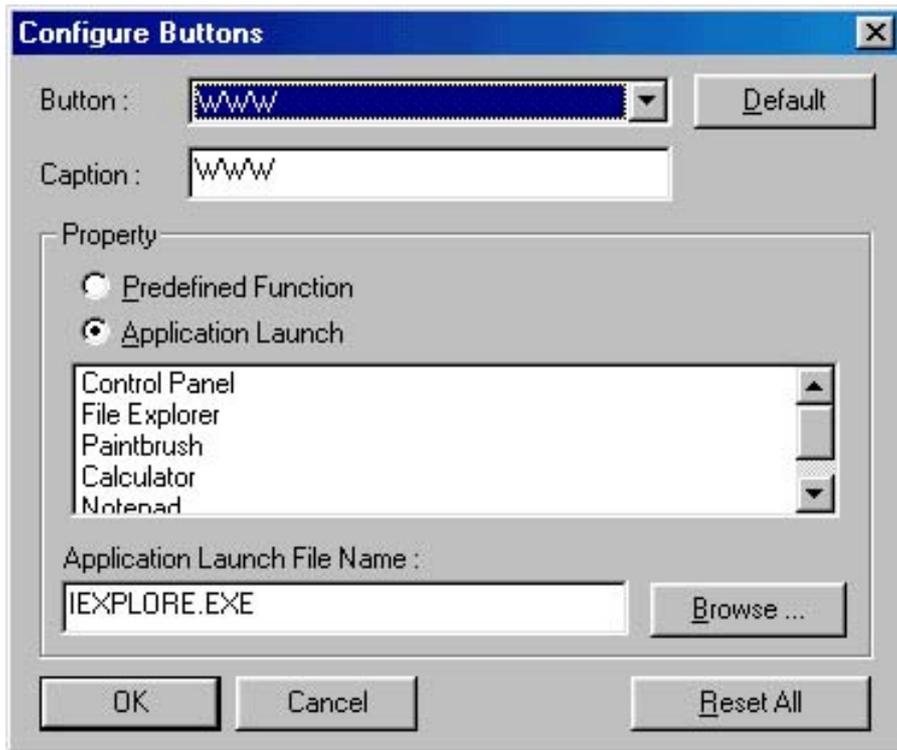
Label text box: Change the text message of the OSD, and Hint label.

Predefined Function: Those functions on the list have been predefined and supported by the program. The predefined function are;

Mute: To make the sound mute on or off.

Close: To close current active application.

Task Switch: To switch the current task (application window) to next task.



Attach to File: To link an executable application file or select predefined application from the list. If you select **Attach to File** option, it has two more items described as below.

Browse File: An file dialog box for you to find the path of that file.
Or you can drag the icon of that file from the Explorer and drop the icon into the Text box of **Application File Name**.

Attach File Name: You can directly input the specific application file name with its path or parameter (if necessary).

Email Detector Application

This application will monitor your POP3 E-mail server, to see if you have any new coming mail in the server. You can set an interval value to connect to the server periodically. If it did have new coming mail, it will announce you and act as
1. POP up a message box, 2. play a sound, or 3. turn on a dedicate LED.



Once you have installed the software driver and restart the Windows, an E-mail Detector activator icon will appear at Windows Taskbar. Right single-click the activator icon to popup a menu with Which you can select the following items;

Detect Now: To check if there is any new coming mail on server immediately.

Configuration...: To configure your E-mail box information, and other properties for detect the email. See the detailed description as below.

Exit: To close the E-Mailer Detector application.

E-Mailer Detector Configure dialog box

Before you start to use this E-Mailer Detector application, you have to configure your E-mail box information in the E-Mailer Detector Configuration dialog box.

The screenshot shows the 'E-Mail Detector Configuration' dialog box. It features a title bar with the text 'E-Mail Detector Configuration' and a close button. The main area is divided into three sections: 'E-Mail', 'Detect', and 'Notify'. The 'E-Mail' section includes a 'Search Info ...' button, 'User Name', 'Password', 'Advance ...' button, and 'POP3 Server' fields. The 'Detect' section has checkboxes for 'Detect E-Mail at beginning' and 'Enable Auto-Detect', and a spinner for 'At intervals of 60 minute(s)'. The 'Notify' section has checkboxes for 'By showing an E-Mail message' (checked) and 'By playing sound', and a 'Browser ...' button. At the bottom are 'OK' and 'Cancel' buttons.

Outlook Default: To ask program to grab the default information of your E-mail box information, which includes POP3 server address, User name, and Port Number, but not includes Password.

POP3 Server: Server address.

User Name: Mail box user name.

Port: Mail box Port Number.

Password: Mail box Password.

Detect email at beginning: Always detect email when system start, only if when system start by press E-mail button.

Enable Auto-Detect: If enable, program will periodically detect the mail server for new coming mail automatically.

At interval of ? Minutes – Set the intervals of time for periodically detecting the new coming mail.

By showing an Email list: When notify, to show the receiving mail list.



By playing audio: When notify, to play a selected audio file.

How E-Mailer Detector Work?

After you complete the configuration of E-Mailer Detector, you can select Detect Now from the menu to check if the configuration works well. The procedure of mail detection of the program described as below;



Step 1. The program will first check if the line is connected. If it is not connected, it will invoke Dial-Up to connect to the server.

Step 2. After connection succeed, it then check the validation of User Name and password.

Step 3. If Step 1 and Step 2 are both valid, The program start retrieving the Email information, and reporting it by showing a message box, playing sound, or turn on the E-mail LED.

After report the information, the program will disconnect the line was disconnected before detection. Or keep its connection if it was.

Chapter 5

Managing power usage

Running the computer on battery power

Charging batteries

Monitoring battery power

Charging the main battery

Disposing of used batteries safely

Traveling tips

Mobile Computing

This chapter covers all aspects of using your computer while traveling.

Managing power usage

Your computer's power-saving options greatly increase the length of time you can use the computer before you need to recharge the battery.

To change the power usage mode, click **Start**, point to **Settings**, then click **Control Panel**. In Control Panel, double-click the **Power Option** icon to display the Power Option Properties window.

Select the power scheme with the most appropriate settings for your computer. Keep in mind that changing any settings on the Power Option Properties window will modify the currently selected scheme.

Consult your Windows Millennium Edition documentation for more information on the Power Option utility.

Running the computer on battery power

The computer contains a removable nickel metal hydride (NiMH) battery pack that provides power when you are away from an AC outlet. You can recharge it many times.

In addition to the removable main battery, the computer has an internal real-time clock (RTC) Lithium rechargeable battery. The RTC battery powers the RTC memory, which stores your system configuration settings and the current time and date for up to a month while the computer is turned off.

Using additional battery packs

If you spend a lot of time traveling and need to work for many hours without an AC power source, you may want to carry additional charged battery packs with you. You can then replace a discharged battery and continue working.



NOTE: A new battery pack should be fully discharged and recharged three times before being used.

Maximizing battery life

A main battery can be recharged many times. Gradually over time it will lose its ability to hold a charge. To maximize the life of your main battery:

- ❖ Don't leave the computer plugged in and unused for more than a few hours. Overcharging the main battery may shorten its life.
- ❖ If you are not going to use the computer for a long period of time, remove the battery.
- ❖ Alternate between battery packs if you have a spare.
- ❖ Make sure the computer is off when you are replacing the battery.
- ❖ Store spare battery packs in a cool dry place out of direct sunlight.

Charging batteries

The main battery needs to be charged before you can use it to power the computer. You can charge the battery using your computer.

Charging the main battery

To charge the main battery while it is in your computer, plug the computer into a live AC outlet. It takes about 2.5 hours to charge the battery to full while the computer is off. It takes much longer to charge the battery to full while the computer is on.



TECHNICAL NOTE: The battery only can charge a small current while the computer is consuming full power.

The battery may not start charging immediately if:

- ❖ The battery is extremely hot or cold.

To ensure that the battery charges to its full capacity, wait until it reaches room temperature: 5°C to 35°C. (41°F to 95°F).

- ❖ The battery is almost completely discharged.

Leave the power connected, and the battery should begin charged after a few minutes.



HINT: Once a battery pack is fully charged, we recommend that you operate your computer on battery power until the battery pack discharges completely. Doing this extends battery life and helps ensure accurate monitoring of battery capacity.

Charging the RTC battery

In addition to the main battery, the computer contains an internal battery for the real-time clock (RTC). The RTC battery provides power for the internal real-time clock and calendar.

During normal use, the main battery keeps the RTC battery adequately charged. Occasionally, the RTC battery may lose its charge completely, especially if you have had the computer turned off and without main battery pack inserted for a long time.

It is seldom necessary to charge the RTC battery because it charges while the computer is on. However, if the RTC battery is low, the real-time clock and calendar may display the incorrect time and date or stop working.

To recharge the RTC battery, plug the adapter into system for at least 24 hours.

The computer can be used while the RTC battery is being charged. Although the charging status of the RTC battery cannot be monitored, if the power is on, it takes approximately 24 hours to fully charge the RTC battery.

Monitoring battery power

Determining remaining battery power



NOTE: Wait at least 16 seconds after turning on the computer before running to monitor the remaining power. The computer needs this time to check the battery's remaining capacity and perform calculations.

1. Click Start, point to Settings, and then click Control Panel.
2. Double-click the **Power Option** icon.
3. Choose the **Power Meter** tab to show the current charge state of the battery. The value displays as a percentage of remaining battery charge.



TECHNICAL NOTE: The computer drains the battery faster at low temperatures. Check your remaining charge frequently if you are working in temperatures below 10 degrees Centigrade. The computer calculates the remaining battery charge based on your current rate of power use and other factors such as the age of the battery.

Conserving battery power

How long a fully charged battery pack lasts when you are using the computer depends on a number of factors, such as:

- ❖ How the computer is configured?
- ❖ How much do you use the display panel instead of an external monitor?
- ❖ How much do you use the hard disk and other drives?
- ❖ Whether you use any optional devices to which the battery supplies power, such as a PC Card
- ❖ Where are you working- since operating time decreases at low temperatures?

What to do when the battery runs low

When the battery runs low you have these options:

- ❖ Plug the computer into a live AC outlet and recharge the battery.
- ❖ Save your work and turn off the computer.

If you don't manage to do any of these things before the battery completely runs out of power, the computer automatically enters Standby and turns itself to Standby keeps track of where you were so, when you turn on the power again, you can continue where you left off.

Battery alarms

The computer can be configured to warn you when the battery is running low. You can set each of the following alarms:

- ❖ Low Battery
- ❖ Critical Battery

Each alarm can be set to alert you when a specified percentage of remaining battery power has been reached. You can also set how the alarm action occurs - sound an alarm, display a message, both, or none. You can also set the computer to execute Standby when the alarm goes off.

To set the alarm levels:

1. Click Start, point to Settings, and then click Control Panel.
2. Double-click the Power Option icon.
3. Click **OK** to clear the Power Option Advisory dialog box.

The Power Option dialog box appears.

4. Click the **Alarm** tab.
5. Set the alarm levels as desired.

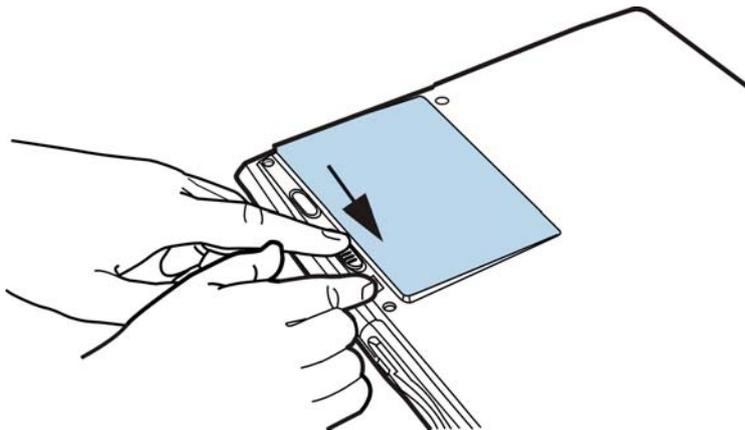
For more information on battery alarms, refer to your Windows Millennium Edition down.

Changing the main battery

When your battery runs out of power, you have two options- connect the AC adapter or install a fresh battery. For instructions on using the AC adapter, see "Connecting the AC adapter".

Removing the battery

1. Save your work.
2. Shut down the computer. Never removes the battery while the computer is on.
3. Close the display panel, ensuring that it snaps into place.
4. Turn the computer upside down with the front of the computer facing you.
5. Push down the battery In/Out knob first then slide the latch lock in the direction of the arrow, as shown the illustration below.



6. Pull the release latch back in the direction of the arrow, then gently pull the battery out of the battery bay.



NOTE: The release latch is spring-loaded and will snap back into place when you release it.



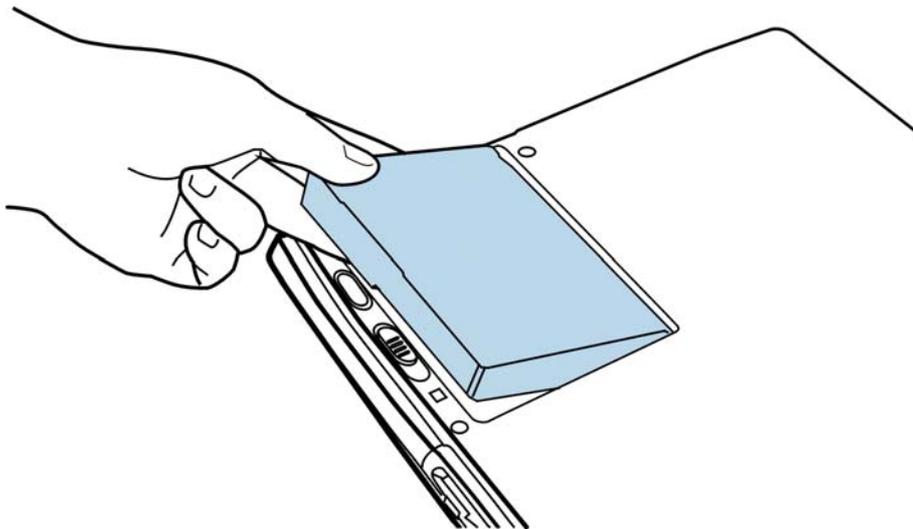
WARNING: If the battery is leaking grits case is cracked, put on protective gloves to handle it, and discard it immediately following the advice in "Disposing of used batteries safely".

Inserting a charged battery

- 1.** Wipe the battery terminals of the charged battery with a clean cloth to ensure a good connection.
- 2.** Slide the battery in to the battery bay, then push down In/Out knob and hold it down.
- 3.** Push down the battery pack gently. When the battery has been properly seated, you should hear it click into place.



NOTE: The release latch is spring-loaded and will snap into place.



- 4.** To secure the release latch in place, slide the latch lock in the direction of the arrow, as shown in the inset in the illustration above.
- 5.** Turn the computer right side up.

Disposing of used batteries safely

You can recharge a main battery many times. It should last for years. When the useful life of the battery expires or if the battery becomes damaged, you must discard it responsibly.

Batteries should not be disposed of together with household waste. To make sure that they are forwarded to recycling or proper disposal they may be returned free of charge to an authorized dealer/distributor.



CAUTION: The computer uses a nickel metal hydride battery which can explode if not handled or disposed of properly. Putting spent batteries in the trash is not only irresponsible, it may also be illegal. Dispose of the battery as required by local ordinances or regulations.

Traveling tips

The environmental precautions also apply on journeys.

❖ Do not leave your computer exposed to direct sunlight for long periods of time- for instance, on the dashboard of a car- or place it here it could get wet or covered in dust.

They all provide plenty of extra space for manuals, power cables, CD-ROMs, and diskettes. See your dealer for more information.



TECHNICAL NOTE: When traveling by air, you may be required to put your notebook through airport security. The X-ray equipment used will not harm your computer.



WARNING: Please ensure your personal computer is turned off before you put it in your bag.

Chapter 6

Adding a printer

Personalizing your desktop

Emulating a full-size keyboard

Exploring Your Options

In this chapter, you will explore other features of your notebook computer.

Adding a printer

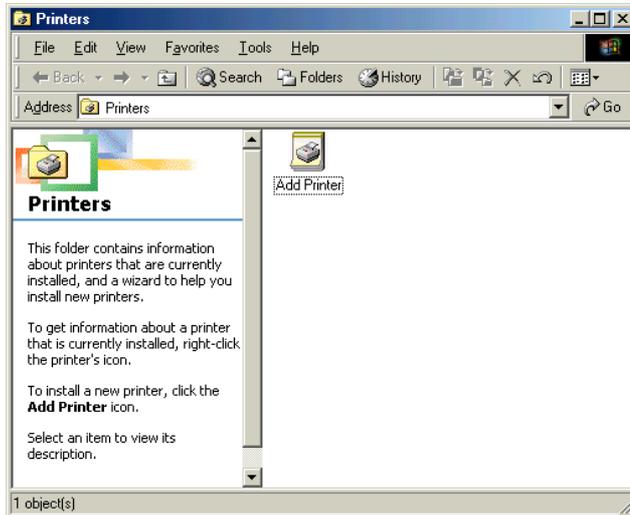
When you turned on your computer for the first time, the Windows Millennium Edition Setup program offered you the opportunity to define a printer. Read this section if you did not do so or if you want to set up a different printer.

Setting up a printer involves choosing a printer driver. This special program acts as a translator that turns your work into a form the printer can understand.

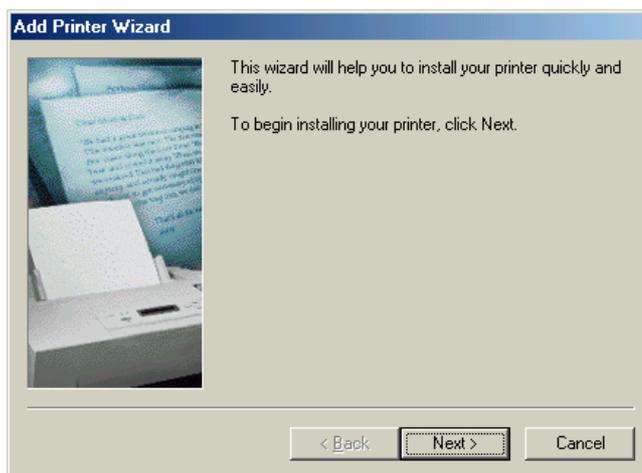
If you are using any non-Windows programs, you need to set up a printer driver for each of those programs. Refer to your program's documentation for more information.

To set up a printer with the Add Printer Wizard:

1. Click the **Start** button, point to **Settings**, then click **Printers** to display the Printers window.



2. Double-click **Add Printer** to start the Add Printer Wizard.



3. Click **Next**.

The Add Printer Wizard asks you to select your printer.



TECHNICAL NOTE: If your printer is Plug and Play, Windows Millennium Edition recognizes it automatically. You can ignore the remainder of this section. See your printer manual.

4. If the printer you are setting up:

Is not connected to a network select **Local printer**.

Is connected to a network select **Network printer**.

5. Click Next.

The Add Printer Wizard prompts you to select your printer.

6. From the list of manufacturers end printers, select your printer, then click **Next**.

The Add Printer Wizard prompts you for the printer port.



HINT: If your printer is not in the list, see your printer manual or packaging. The driver may be on a diskette that came with the printer. If not, it is possible that you can download the driver from the printer manufacturer's Web site.

7. Select the port settings according to the instructions in your printer's documentation and select the port to which your printer is connected, then click **Next**.

The Add Printer Wizard prompts you to enter a "friendly" printer name.

8. Enter a name for your printer.



HINT: If you are using more than one printer, make sure the name is descriptive enough to help you tell the difference.

9. If you want this printer to be:

- The default printer for windows Millennium Edition, click **Yes**. The default printer is the one your system prints to automatically.
- Available when specifically requested, click **No**.

10. Click Next.

Windows Millennium Edition prompts you to print a test page.

11. If your printer is connected and turned on, click **Finish** to print a test page.

To complete the setup procedure without printing a test page, click **No**, then click **finish**.

You are now ready to print.

12. If you requested a test page, click **OK** to print.

Depending on your program, you may see various messages indicating the status of your print job.

Personalizing your desktop

Your desktop is your virtual workspace. This section explains how to customize its features for the way you like to work. There are these aspects of the desktop you can customize:

Taskbar- which resources to display for quick access

Active Desktop- what information from the Internet to always display

Desktop style- which type of display to use for windows and how to browse folders and files

Toolbars- what information appears at the top of each window

Customizing the taskbar

As you work, the taskbar changes to reflect what you are doing. Its icons provide shortcuts to programs, documents, files, folders, system features, and components. Open applications also have Forward and Backward buttons to allow navigation through folders, documents, and Web sites.

For example, you can personalize the taskbar to include not only Quick Launch icons, but also your favorite URL addresses or local folders and programs.



DEFINITION: URL stands for Universal Resource Locator, which is the address that defines the route to a file on the Web or any other internet facility. Generally, it is known as the World Wide Web site address.

Having a list of favorite URLs handy saves time because using it bypasses the need for you to launch your browser first.

To access all taskbar options:

1. Point to an empty space in the taskbar and click the secondary button.
2. Point to **Toolbars** and click you're setting.

Emulating a full-size keyboard

Although the computer's keyboard layout is compatible with a standard full-size keyboard, it has fewer keys.

Pressing the Fn key simultaneously in combination with one of the specially marked keys allows you to emulate a full-size keyboard.

Chapter 7

Problems that are easy to fix

Problems when you turn on the computer

Fixing device-related problems

Memory card problems

Power problems

Keyboard problems

Track point problems

Display problems

Disk drive problems

CD-ROM drive problems

Sound system problems

PC Card problems

Printer problems

Modem problems

Develop good computing habits

If you need further assistance

If Something Goes Wrong

Some problems you may encounter when using the computer are relatively easy to identify and solve. Others may require help from your dealer or the manufacturer of a software program.

This chapter aims to help you solve many problems by yourself without additional help. It covers the problems you are most likely to encounter.

Problems that are easy to fix

Your program stops responding

If you are working with a program that suddenly freezes all operations, chances are the program has stopped responding. You can exit the failed program without shutting down Windows Millennium Edition or closing other programs.

To close a program that has stopped responding:

1. Press **Ctrl, Alt, and Del** simultaneously (once).

Windows Millennium Edition displays the Close Program dialog box. This box lists all the programs and processes currently in operation. If a program has stopped responding, the words "not responding" appear beside its name in the list.

2. Select the program you want to close then click **End Task**.

Closing the failed program should allow you to continue working. If it does not, continue with step 3.

3. Close the remaining programs one by one by selecting the program name and clicking **End Task**.

4. Click Shut Down.

Windows Millennium Edition displays the Shut Down Windows dialog box.

5. Select **Restart**, then click **Yes**.

Your computer shuts down and restarts Windows Millennium Edition, thus restoring operations.



CAUTION: Pressing Ctrl, Alt, and Del simultaneously twice to restart your computer is not recommended. By closing all open programs prior to shutting down Windows Millennium Edition you ensure that all data is saved.

Your program performs an illegal operation

If you receive the message, "Your program has performed an illegal operation," you should record the details of the message and consult the software manufacturer.

To record the details:

1. Click the **Details** button and select the text Windows Millennium Edition displays.

The Details button displays information that the software manufacturer needs to help you solve your problem.

2. Press **Ctrl** and **c** simultaneously to copy the text to the clipboard.

3. Open Notepad (click **Start**, point to **Programs**, then point to **Accessories** and click **Notepad**).

4. Press **Ctrl** and **v** simultaneously to paste the details into Notepad.

5. Add a paragraph break and type some notes describing what you were doing when you received the message.

6. Save the file and refer to it when you contact the software manufacturer.

You open a program that immediately stops responding

If CPU Sleep mode is on (enabled), it may stop a program from responding. Close the program you are trying to open and turn off (disable) Sleep mode. Then, try to run the program again.

To close the program:

1. Press **Ctrl**, **Alt**, and **Del** simultaneously.

The Close Program dialog box displays all the programs and processes currently in operation. If the program has stopped responding, the words "not responding" appear beside it.

2. Click End Task.

3. When the dialog box appears, click **End Task** again.

Problems when you turn on the computer

These problems may occur when you turn on the power.

The computer will not start

Make sure you attached the AC adapter and power cable properly or installed a charged battery.

Press and hold down the power button for a few seconds.

The computer is not accessing the hard disk or the diskette drive

Your computer normally loads Windows from the hard disk. If you have a hard disk problem, you will not be able to start the computer. Insert a system diskette into the diskette drive, then press the power button.

Power problems

The computer displays the **Non-System disk or disk error** message.

Make sure there is no diskette in the diskette drive. If there is one, remove it and press any key to continue. If pressing any key does not work press **Ctrl, Alt, and Del**, or press the reset button to restart the computer.

Fixing device-related problems

If you do not have a hardware conflict, but you think your problem could be related to one of your computer's devices, you can use:

- ❖ Dr. Watson - A diagnostic tool that takes a snapshot of your system whenever a system fault occurs.
- ❖ System Information - Collects your system configuration information and provides a menu for displaying the associated system topics.

After diagnosing the problem, read the part of this section that describes problems and solutions related to specific devices.

Memory card problems

Incorrectly connected or faulty memory cards may cause errors that seem to be device-related. So it is worthwhile checking for these first:

1. Click Start, then click Shut Down.
2. Click the button next to **Shut down**, then click **OK**.

Windows Millennium Edition shuts down and turns off the computer automatically.

3. Remove the memory card.
4. Reinstall the memory card, following the instructions in "Installing a memory module", and making sure it is seated properly.
5. Check for the error again.
6. If the error recurs, remove the memory card entirely and check for the error again.

If removing the memory card eliminates the error, the memory card may be faulty. If the error occurs without the memory card installed, the error is not caused by the memory card.

Power problems

Your computer receives power through the AC adapter or from the main battery. Power problems are interrelated. For example, a faulty AC adapter or power cable will neither power the computer nor recharge the main battery.

Here are some typical problems and how to solve them:

The AC power light does not come on when you plug in the AC adapter and power cable.

Make sure the AC adapter and power cable are finely plugged into both a working wall outlet and the computer.

If the AC power light still does not come on, check that the wall outlet is working properly by plugging in a lamp or other appliance.

The AC adapter and power cable work correctly, but the battery will not charge.

The battery doesn't charge while the computer is consuming full power. Try turning off the computer.

The main battery may not be inserted correctly in the computer. Turn off the computer, remove the battery, clean the contacts with a soft dry cloth (if necessary) and replace the battery.

The battery may be too hot or too cold to charge properly. Its temperature needs to be in the range 5 degrees to 50 degrees Centigrade. If you think this is the probable cause, let the battery reach room temperature and try again.

If the battery has completely discharged, it will not begin charging immediately. Leave the AC adapter and power cable connected, wait 20 minutes and see whether the battery is charging.

If the battery light is glowing after 20 minutes, let the computer continue charging the battery for at least another 20 minutes before you turn on the computer.

If the battery light does not glow after 20 minutes, the battery may have reached the end of its useful life. Try replacing it.

The battery appears not to power the computer for as long as it usually does.

Check the power options using the Windows Millennium Edition Power Management utility. Have you added a device, such as a PC Card or memory module, that takes its power from the battery? Is your software using the hard disk more? Is the display power set to turn off automatically? Was the battery fully charged to begin with? All these conditions affect how long the charge lasts.

For more information on maximizing battery power, see "Maximizing battery life".

Keyboard problems

If, when you type, strange things happen or nothing happens, the problem may be related to the keyboard itself.

The keyboard produces unexpected characters.

A keypad overlay may be on. If the numeric keypad or cursor control light is on, press **Fn** and **F10** simultaneously to turn off the cursor control light or press **Fn** and **F11** simultaneously to turn off the numeric keypad light.

If the problem occurs when both the keypad overlays are off, make sure the software you are using is not remaking the keyboard.

Refer to the software's documentation and check that the program does not assign different meanings to any of the keys.

You have connected an external keyboard and Windows Millennium Edition displays one or more keyboard error messages.

If you have a second keyboard, try it. If it works, the first keyboard may be defective or incompatible with your computer.

Nothing happens when you press the keys on the external keyboard.

You may have plugged the external PS/2 keyboard in while the computer was turned on. Using the Track point-pointing device, click **Start**, then click **Shut Down**. When Windows Millennium Edition displays the Shut Down Windows Millennium Edition dialog box, select **Restart** and click **OK**. The computer will restart and recognize the device.

The keyboard locks and the computer will not restart.

Make sure the power is on and press the reset button.

Display problems.

Here are some typical display problems and their solutions:

The display is blank.

Display Auto Off may have gone into effect. Press any key to activate the screen.

You may have activated the instant security feature by pressing **Fn** and **F1** simultaneously. If you have registered a password, type it and press **Enter**. If no password is registered, simply press **Enter**. The screen reactivates and allows you to continue working.

If you are using the built-in screen, make sure the display priority is not set for an external monitor. To do this, press **Fn** and **F5** simultaneously (once). If this does not correct the problem, press **Fn** and **F5** simultaneously again to return the display priority to its previous setting.

If you are using an external monitor:

- ❖ Check that the monitor is turned on.
- ❖ Check that the monitor's power cable is firmly plugged into a working power outlet.
- ❖ Check that the cable connecting the external monitor to the computer is firmly attached.
- ❖ Try adjusting the contrast and brightness controls on the external monitor.
- ❖ Press **Fn** and **F5** simultaneously to make sure the display priority is not set for the built-in screen.

The screen does not look right.

You can change the display settings by clicking a blank area of the desktop with the Track point secondary button, then clicking Properties. This causes Windows Millennium Edition to open the Display Properties dialog box. The Appearance tab of this dialog box allows you to choose the colors for the screen. The Settings tab allows you to choose the screen resolution.

The built-in screen flickers.

Some flickering is a normal result of the way the screen produces colors. To reduce the amount of flickering, try using fewer colors.

To change the number of colors displayed:

1. Point at the desktop and click with the secondary button.
2. Click Properties, and then Settings.
3. Change the Colors option and click **OK**.

For more information, see Windows Help.

A message indicates a problem with your display settings and that the adapter type is incorrect or the current settings do not work with your hardware.

Reduce the size of the color palette to one that is supported by the computer's internal display. To change the display properties:

1. Point at the desktop and click with the secondary button.
2. Click Properties, and then Settings.
3. Change a setting and click **OK**.

For more information, see Windows Help.

Disk drive problems

Problems with the hard disk or with a diskette drive usually show up as an inability to access the disk or as sector errors. Sometimes a disk problem may cause one or more files to appear to have garbage in them. Typical disk problems are:

You are having trouble accessing a disk, or one or more files appear to be missing.

Make sure you are identifying the drive by its correct name (A: or C:).

Run ScanDisk, which analyzes the directories, files and File Allocation Table (FAT) on the disk and repairs any damage it finds:

To run ScanDisk:

1. Click Start, point to Programs, Accessories, System Tools and click ScanDisk.
2. Click the drive you want to test.
3. Select the type of test you want to use.

A thorough test is more complete but takes much more time than a standard test.

4. Click Start.

ScanDisk tests the disk.

Your hard disk seems very slow

If you have been using your computer for some time, your files may have become fragmented. Run Disk Defragmenter. To do this, click **Start**, point to **Programs**, **Accessories**, **System Tools**, and click **Disk Defragmenter**.

Your data files are damaged or corrupted.

Refer to your software documentation for file recovery procedures. Many software packages automatically create backup files.

You may also be able to recover lost data using utility software, which is available from your dealer.

Some programs run correctly but others do not.

This may be a software configuration problem. If a program does not run properly, review the program's hardware configuration requirements. Most software documentation lists the minimum hardware requirements. See "Features and Specifications" to review the hardware configuration of this computer.

A disk will not go into the diskette drive.

You may already have a diskette in the drive. Make sure the drive is empty.

You may be inserting the diskette incorrectly. Hold the label of the disk with the hub side facing down, and insert it so that the metal head window cover goes into the drive first.

The metal cover or a loose label may be obstructing the path into the drive. Carefully inspect the diskette. If the metal cover is loose, replace the diskette. If the label is loose, replace the label and try inserting the diskette again.

The computer displays the Non-system disk or disk error message.

If you are starting the computer from the hard disk make sure there is no diskette in the diskette drive.

If you are starting the computer from a diskette, the diskette in the drive does not have the files necessary to start the computer. Replace it with a bootable diskette.

The drive can not read a diskette.

Try another diskette. If you can access the second diskette, the first diskette (not the diskette drive) is probably causing the problem. Run ScanDisk on the faulty diskette (for instructions, see "Disk drive problems").

CD-ROM drive problems

You cannot access a CD in the drive.

Make sure the CD-ROM tray has closed properly. Press gently until it clicks into place.

Open the CD-ROM tray and remove the CD. Make sure the CD-ROM tray is clean. Any dirt or foreign object can interfere with the laser beam.

Examine the CD to see whether it is dirty. If necessary, wipe it with a soft clean cloth dipped in water or a neutral cleaner.

Replace the CD in the drawer. Make sure it is laying flat, label side uppermost. Press down until the CD-ROM disc locks on the spindle. Close the CD-ROM tray carefully, making sure it has shut completely.

You press the CD-ROM eject button, but the CD-ROM tray does not slide out.

Make sure the computer is connected to a power source and turned on. The CD-ROM drive eject mechanism requires power to operate.

If you need to remove a CD and cannot turn on the computer, use a narrow object, such as a straightened paper clip, to press the manual eject button. This button is in the small hole next to the CD-ROM eject button on the right side of the computer.

Some CDs run correctly, but others do not.

If the problem is with a data CD, refer to the software's documentation and check that the hardware configuration meets the program's needs.

The color of the materials used to make the CD can affect its reliability. Silver-colored CDs are the most reliable, followed by gold-colored CD. Green-colored CDs are the least reliable.

Sound system problems

You do not hear any sound from the computer.

Adjust the volume control.

If you are using an external headphone or speakers, check that they are securely connected to your computer.

In SETUP, check that the sound function is enabled.

The computer emits a loud, high-pitched noise.

This is feedback between the microphone and the speakers. It occurs in any sound system when input from a microphone is fed to the speakers and the speaker volume is too loud. Adjust the volume control.

Changing the settings for the Record Monitor feature in the Recording Control Utility (default off, or the Mute feature in the Mixer Utility (default Enabled), may cause feedback. Revert to the default settings.

PC Card problems

PC Cards (PCMCIA-compatible) include many types of devices, such as a removable hard disk, additional memory, fax/modem, or pager.

Most PC Card problems occur during installation and setup of new cards. If you're having trouble getting one or more of these devices to work together, several sections in this chapter may apply.

- ❖ Resource conflicts can cause problems when using PC Cards.
- ❖ If the device is a modem, see "Modem problems".

PC Card checklist

- ❖ Make sure the card is inserted properly into the slot.
- ❖ Make sure all cables are securely connected.
- ❖ Make sure the computer is loading only one version of Card and Socket Services.
- ❖ Occasionally a defective PC Card slips through quality control. If another PCMCIA-equipped computer is available, try the card in that machine. If the card malfunctions again, it may be defective.

Resolving PC Card problems

Here are some common problems and their solutions:

The slots appear to be dead. PC Cards that used to work no longer work.

Check the PC Card status:

- 1.** Click the **My Computer** icon with the secondary button, then click **Properties**.

Windows Millennium Edition displays the System Properties dialog box.

- 2.** Click the Device Manager tab.

- 3.** Double-click the device listed as your PC Card.

Windows Millennium Edition displays your PC Card's Properties dialog box. This dialog box contains information about your PC Card configuration and status.

The computer stops working (hangs) when you insert a PC Card.

The problem may be caused by an I/O (input/output) conflict between the PCMCIA socket and another device in the system. Use Device Manager to make sure each device has its own I/O base address.

Since all PC Cards share the same socket, each card is not required to have its own address.

Hot swapping (removing one PC Card and inserting another without turning the computer off) fails.

Follow this procedure before you remove a PC Card:

1. Click the **PC Card** icon on the taskbar.
2. Click **Stop xxxx**, where **xxxx** is the identifier for your PC Card.

Windows Millennium Edition displays a message that you may safely remove the card.

3. Remove the card from the slot.

The system does not recognize your PC Card or PCMCIA socket controller.

This problem may be caused by a low battery. Replace the battery with a fully-charged one or charge the battery fully as follows:

1. Make sure the computer is not in Standby.
2. Turn off the computer.
3. Connect the AC adapter and power cable.
4. Keep the computer plugged in for about seven hours with the power turned off.

If power is not the problem, try removing the card, inserting it again, and reinstalling it using the procedure in "Inserting PC Cards".

The problem may also be caused by a conflict with any additional memory in your system. If you recently installed a memory expansion card, turn off the computer, remove the memory, turn on the computer and try the PC Card again.

A PC Card error occurs.

Reinsert the card to make sure it is properly connected.

If the card is attached to an external device, check that the connection is secure.

Refer to the card's documentation, which should contain a troubleshooting section.

Printer problems

This section lists some of the most common printer problems.

The printer will not print.

Check that the printer is connected to a working power outlet, turned on and ready (on line).

Make sure the printer cable is firmly attached to the computer and the printer.

If your printer is ECP- or IEEE 1284-compliant, make sure you have an IEEE 1284 printer cable.

Check that the printer has plenty of paper. Some printers will not start printing when there are just two or three sheets of paper left in the tray.

Run the printer's self-test to check for any problem with the printer itself

Make sure you installed the proper printer driver.

Try printing another file. For example, you could create and attempt to print a short test file using Notepad. If a Notepad file prints correctly, the problem may be in your original file.

Contact your network administrator if the printer is on your network.

The printer will not print what you see on the screen.

Many programs display information on the screen differently from the way they print it. See if your program has a print preview mode. This mode lets you see your work exactly as it will print. Contact the software manufacturer for more information.

Modem problems

This section lists common modem problems.

The modem will not receive or transmit properly.

Make sure the RJ-11 cable (the one that goes from the modem to the telephone line) is firmly connected to the modem's RJ-11 jack and the telephone line socket.

Check the serial port settings to make sure the hardware and software are referring to the same COM port (look in Device Manager under Modems for the PC Card modem).

Check the communications parameters (baud rate, parity, data length and stop bits) specified in the communications program. It should be set up to transmit at 300, 1200, 2400, 4800, 9600, 14400, 28800, 33600 bps (bits per second) or higher. Refer to the program's documentation for information on how to change these settings.

The modem is on, set up properly and still not transmit or receive data.

Make sure the line has a dial tone. Connect a telephone handset to the line to check this.

The other system may be busy or offline. Try making a test transmission to someone else.

Develop good computing habit

- ❖ Make sure you are prepared.

- ❖ Save your work frequently.

You can never predict when your computer will lock forcing you to close a program and lose unsaved changes. Many software programs build in an automatic backup, but you should not rely solely on this feature. Save your work!

- ❖ On a regular basis, back up the information stored on your hard disk.

Here are two ways you can do this:

- Copy files to diskette in Windows Millennium Edition.

- Connect a tape drive to the system and use specialized software to copy everything on the hard disk to a tape.

Some people use a combination of these methods, backing up all files to tape weekly and copying critical files to diskette on a daily basis.

If you have installed your own programs, you should back up your programs as well as your data files. If something goes wrong that requires you to format your hard disk and start again, reloading all your programs and data files from a backup will save time.

- ❖ Read the user's guides.

It's very difficult to provide a fail-safe set of steps you can follow every time you experience a problem with the computer. Your ability to solve problems will improve as you learn about how the computer and its software work together.

Get familiar with all the user's guides provided with your computer, as well as the manuals that come with the programs and devices you purchase.

Your local computer store or book store sells a variety of self-help books you can use to supplement the information in the manuals.

- ❖ If problem- solving is taking a long time, take a break.

If you have been fighting to solve a problem for a long time, you are probably frustrated by now. Stand up and take a deep breath. Often, you can find a new solution to a problem just by stepping away from it for a few moments.

If you need further assistance

If you have followed the recommendations in this chapter and are still having problems, you may need additional technical assistance. This section contains the steps to take to ask for help.

Before you call

Since some problems may be related to the operating system or the program you are using, it is important to investigate other sources of assistance first.

Try the following before contacting:

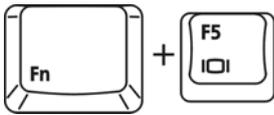
- ❖ Review the troubleshooting information in your Windows Millennium Edition documentation.
- ❖ If the problem occurs while you are running a program, consult the program's documentation for troubleshooting suggestions. Contact the software company's technical support group for their assistance.
- ❖ Consult the dealer from whom you purchased your computer and/or program. Your dealer is your best source for current information.

Appendix A

Hot Keys

Hot keys are keys that, when pressed in combination with the Fn key, turn system functions on and off. Hot keys have a legend on or above the key indicating the option or feature the key controls.

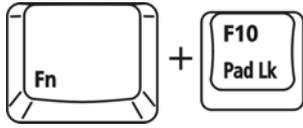
Power-on display



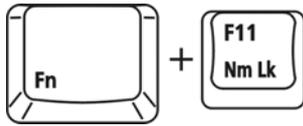
Power on display

When pressing the hot key, the display device will switch among CRT only, LCD only and simultaneous display. It will not update the setting of option 'Power on Display' in system setup.

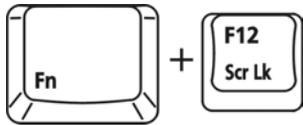
Keyboard hot keys



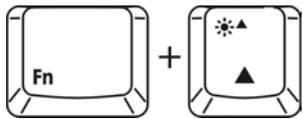
Cursor keypad on/off.
Pressing this hot key can enable/disable the embedded cursor keypad. Numeric lock state is logically disabled.



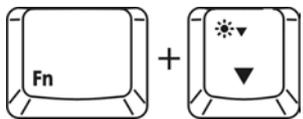
Numeric keypad on/off.
Pressing this hot key can enable/disable the embedded numeric keypad. Numeric lock state is logically enabled.



This hot key turns the scroll lock feature on and off.



When pressing the hot key can increase the brightness of LCD display.



When pressing the hot key can decrease the brightness of LCD display.

Appendix B

Features and Specifications

This appendix lists the features of the computers and summarizes their specifications.

Built-in features

This section lists the computer's standard features and specifications.

Technology and processor

Microprocessor	Intel Desktop Celeron-800/ PIII 866MHz or above
Level 2 cache	128/ 256 KB
Bus clock speed	100 Mhz front side bus Celeron 100Mhz P-III 133Mhz
Memory	On board 64/128 MB SDRAM (PC133) Upgrade to 384MB by 256MB on 1.25" SODIMM socket

Power and batteries

Power Main battery supply 60 watt external AC adapter; 90-264 V AC input voltage, 47-63 Hz 19V DC output

Removable, rechargeable Li-ION battery pack approximately 2.5 hours* life (BatteryMark4.0)

*Battery life and charge time may vary depending on applications, power- management settings, and features used

RTC battery Lithium rechargeable battery provides power for the internal real-time clock and calendar

Automatic power off features Saves battery power by automatically turning off the display, hard disk and system when they have not been accessed for a set length of time

Storage capacity

3.5-inch diskette drive	Accommodates both 1.44 MB high-density (2HD) and 720 KB double-density (2DD) diskettes
Hard disk drive	2.5-inch service removable Enhanced IDE drive and controller provides nonvolatile storage for the drive

Ports

Parallel port	An IEEE 1284 Enhanced Capability Port (ECP) for connecting a parallel device such as a printer that provides increased performance when used with an ECP-compatible device
PS/2 port	PS/2-compatible port allows you to connect a full-size keyboard or a PS/2 mouse.
Microphone jack	3.5 mm jack lets you connect an external microphone or other monaural audio input device
Headphone jack	3.5 mm jack lets you connect stereo headphones
Video (CRT) port	15-pin D-shell connector lets you connect to an external video display, which is recognized automatically
USB port	Two Universal Serial Bus ports provide USB device connection
PC Card slots	Two 32-bit CardBus-ready stacked PC Card slots let you install up to two Type II PC Cards, or one Type III PC Card
Modem port	Built RJ11
LAN port	Optional RJ45

Standard hardware

Display	800x600 SVGA TFT Color 12.1" LCD 1024x768 XGA TFT Color 13.3" LCD 1024x768 XGA TFT Color 14.1" LCD 1024x768 XGA TFT Color 15.0" LCD 1400x1050 SXGA+ TFT Color 15.0" LCD
Keyboard	Keyboard with 12 function keys and dedicated Windows keys
Sound support	4299A AC97 Codec software wave table, supporting 16-bit stereo, Windows Sound System and SoundBlaster Pro-compatible sound support; built-in stereo speakers, headphone, microphone jacks and S/PDIF out.
CD-ROM drive	Maximum 24X speed, 5.25-inch
Internal modem	Integrated V.90 modem with RJ11/ jack

Special features

Hibernation mode	Windows Millennium Edition feature that electronically bookmarks and records what you are doing when you turn off the computer and returns you to the same place when you turn the power back on
Advance Configuration and Power Interface	Windows Millennium Edition feature that determines the system's power needs and automatically configures the computer for maximum power savings
Security	Power-on password (one-level password support); hard disk drive access password; cable lock slot; keyboard lock
Windows access	Dedicated key for opening the Microsoft Windows Start menu

Specifications

Physical dimensions

Size	Width x Depth x Height
	322 x277 x 38.0 mm/ front
	322 x277 x 44.0 mm/ back
Weight	7.2lb/ 3.27kg. for 14.1" TFT LCD

Environmental conditions

	Operating	Non-operating
Temperature	5°C to 35° C	-20°C to 65° C
Relative humidity	20% ~ 80% non-condensing	10% ~ 90% non-condensing
Altitude (relative to sea level)	0 to 10,000 feet	0 to 40,000 feet storage

