

CL32

User Manual

Safety Instructions

Use the following safety guidelines to help protect yourself and your computer.

When Using Your Computer



CAUTION: Do not operate your portable computer for an extended period of time with the base resting directly on your body. With extended operation, heat can potentially build up in the base.

Allowing sustained contact with the skin could cause discomfort or, eventually, a burn.

- Do not attempt to service the computer yourself. Always follow installation instructions closely.
- Do not carry a battery in your pocket, purse, or other container where metal objects (such as car keys) could short-circuit the battery terminals. The resulting excessive current flow can cause extremely high temperatures and may result in damage from burns.
- Be sure that nothing rests on your AC adapter's power cable and that the cable is not located where it can be tripped over or stepped on.
- Place the AC adapter in a ventilated area, such as a desktop or on the floor, when you use it to run the computer or to charge the battery. Do not cover the AC adapter with papers or other items that will reduce cooling; also, do not use the AC adapter while it is inside a carrying case.

- Do not push objects into air vents or openings of your computer. Doing so can cause fire or electric shock by shorting out interior components.
- Use only the AC adapter and batteries that are approved for use with this computer. Use of another type of battery or AC adapter may risk fire or explosion.
- Danger of explosion if battery is incorrectly replaced.
- Replace only with the same or equivalent type battery recommended by the manufacturer.
- Dispose of used batteries according to the manufacturer's instructions.
- Before you connect the computer to a power source, ensure that the voltage rating of the AC adapter matches that of the available power source.
 - 115 V/60 Hz in most of North and South America and some Far Eastern countries such as South Korea and Taiwan.
 - 100 V/50 Hz in eastern Japan and 100 V/60Hz in western Japan.
 - 230 V/50 Hz in most of Europe, the Middle East, and the Far East.
- If you use an extension cable with your AC adapter, ensure that the total ampere rating of the products plugged in to the extension cable does not exceed the ampere rating of the extension cable.

- To remove power from the computer, turn it off, remove the battery, and disconnect the AC adapter from the electrical outlet.
- To help avoid the potential hazard of electric shock, do not connect or disconnect any cables or perform maintenance or reconfiguration of this product during an electrical storm.
- Do not dispose of batteries in a fire. They may explode. Check with local authorities for disposal instructions.
- When setting up the computer for work, place it on a level surface.
- When traveling, do not check the computer as baggage. You can put your computer through an X-ray security machine, but never put your computer through a metal detector. If you have the computer checked by hand, be sure to have a charged battery available in case you are asked to turn on the computer.
- When traveling with the hard drive removed from the computer, wrap the drive in a non-conducting material, such as cloth or paper. If you have the drive checked by hand, be ready to install the drive in the computer. You can put the hard drive through an X-ray security machine, but never put the drive through a metal detector.
- When traveling, do not place the computer in overhead storage compartments where it could slide around. Do not drop your computer or subject it to other mechanical shocks.

- Protect your computer, battery, and hard drive from environmental hazards such as dirt, dust, food, liquids, temperature extremes, and overexposure to sunlight.
- When you move your computer between environments with very different temperature and/or humidity ranges, condensation may form on or within the computer. To avoid damaging the computer, allow sufficient time for the moisture to evaporate before using the computer.

➔ **NOTICE: When taking the computer from low-temperature conditions into a warmer environment or from high-temperature conditions into a cooler environment, allow the computer to acclimate to room temperature before turning on power.**

- When you disconnect a cable, pull on its connector or on its strain relief loop, not on the cable itself. As you pull out the connector, keep it evenly aligned to avoid bending any connector pins. Also, before you connect a cable make sure both connectors are correctly oriented and aligned.
- Before you clean your computer, turn it off, unplug it from its power source, and remove the battery.
- Handle components with care. Hold a component such as a memory module by its edges, not its pins.



CAUTION: When using your telephone equipment, basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury to persons, including the following:

- Do not use this product near water, for example, near a bathtub, washing bowl, kitchen sink or laundry tub, in a wet basement or near a swimming pool.
- Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.
- Do not use the telephone to report a gas leak in the vicinity of the leak.
- Use only the power cord indicated in this manual.

Regulatory Notices

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 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 for your equipment. If they do, you will be notified in advance to give you an opportunity to maintain uninterrupted telephone service.

Federal Communications Commission (FCC) Statement

You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the

user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the 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.

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

FCC RF Radiation Exposure Statement:

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

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This device was tested for typical lap held operations with the device contacted directly to the human body to the back side of the notebook computer.

To maintain compliance with FCC RF exposure compliance requirements, avoid direct contact to the transmitting antenna during transmitting.

CE Notice (European Union)

Marking by the symbol **CE** indicates compliance of this Compal computer to the EMC Directive and the Low Voltage Directive of the European Union. Such marking indicates that this Compal system meets the following technical standards:

- EN 55022 — "Limits and Methods of Measurement of Radio Interference Characteristics of Information Technology Equipment."
- EN 55024 — "Information technology equipment - Immunity characteristics - Limits and methods of measurement."
- EN 61000-3-2 — "Electromagnetic compatibility (EMC) - Part 3: Limits - Section 2: Limits for harmonic current emissions (Equipment input current up to and including 16 A per phase)."
- EN 61000-3-3 — "Electromagnetic compatibility (EMC) - Part 3: Limits - Section 3: Limitation of voltage fluctuations and flicker in low-voltage supply systems for equipment with rated current up to and including 16 A."
- EN 60950 — "Safety of Information Technology Equipment."



NOTE: EN 55022 emissions requirements provide for two classifications:

- Class A is for typical commercial areas.
- Class B is for typical domestic areas.

To determine which classification applies to your computer, examine the FCC registration label located on the back panel of the computer. If the label indicates a Class A rating, the following warning applies to your computer:

RF INTERFERENCE WARNING: This is a Class A product. In a domestic environment this product may cause radio frequency (RF) interference, in which case the user may be required to take adequate measures.

This Compal device is classified for use in a typical Class B domestic environment.

A "Declaration of Conformity" in accordance with the preceding directives and standards has been made and is on file at Compal Computer Corporation.

CCC Notice (China Only)

On Class A systems, the following warning will appear near the regulatory label:

Warning: This is a Class A product. In a domestic environment this product may cause radio interference, in which case the user may be required to take adequate measures.

声明

此为 A 级产品，在生活环境中，该产品可能会造成无线电干扰
在这种情况下，可能需要用户对其干扰采取切实可行的措施

BSMI Notice (Taiwan Only)

Most Compal computer products are classified by the Bureau of Standards, Meteorology and Inspection (BSMI) as Class B information technology equipment (ITE).



R 31199

This Compal device is classified for use in a typical Class B domestic environment.

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"

About this user's manual

This user's manual is designed to let you easily find the information you need to get the most from your notebook.

Chapter 1 introduces you to the features of your computer.

Chapter 2 gives you useful details on using your computer.

Chapter 3 tells you how to look after your notebook computer, whether at home or traveling.

Chapter 4 talks about PC Card peripherals and how to use them.

Chapter 5 goes into more detail about power management and explains how to conserve power while on the move.

Chapter 6 gives you tips on solving typical problems you may run up against.

Chapter 7 introduces you to BIOS, the nervous system of your computer, and how to change its fundamental settings.

There is no need to read the manual from the beginning to end. Simply find your way to the section that interests you using the index, or browse through the manual.

You will come across the following icons in the manual:



Helpful pointers and tricks to get more from your notebook



To help you note and avoid possible damage to your notebook's hardware or software, or loss of your work



Points out possible damage to property, personal injury or death

Information in this document is subject to change without notice.

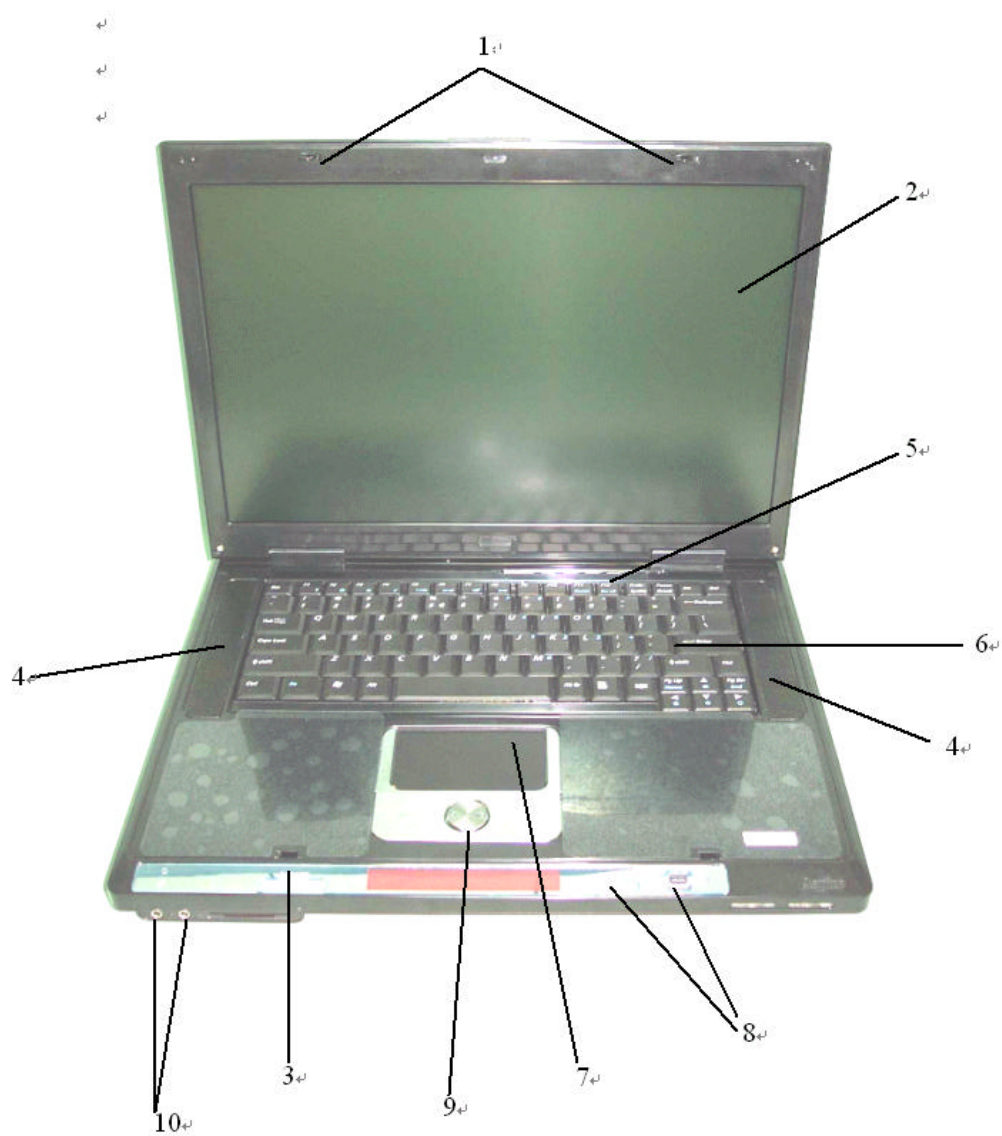
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1 Introducing Your Notebook

1.1 Front



1	Case Latch	6	Keyboard
2	Display	7	Touch Pad
3	Device Status Lights	8	Easy Buttons
4	Spreaker	9	Touch Pad Buttons
5	Power Button	10	Audio Jack

1.1.1 Case Latch

Secures the display case to your notebook. To open the display, slide the case latch to the right and lift the display. When you close the display the case latch secures it automatically.

1.1.2 Display

Your display is either a 15.4" COLOR TFT/XGA or COLOR TFT/SXGA+ LCD.

1.1.3 Easy Buttons

These buttons launch your favorite programs.

	Launches a pre-configured program.
	Launches a pre-configured program.

1.1.4 TouchPad

The TouchPad works like a desktop mouse. For more information see Keyboard and TouchPad in Chapter 2.



1.1.5 TouchPad Buttons

The left and right TouchPad buttons work like the left/right buttons on a standard mouse.

1.1.6 Device Status Lights

	Indicates power on; flashing indicates standby mode.
	Indicates battery status. For details, see Battery.

1.1.7 Optical Media Drive

The optical media drive provides a means for you to import/export data and small files into/from your computer. Depending on the configuration of your computer, you may either be able to record CDs or play DVDs.

1.1.8 Keyboard

The keyboard includes a numeric keypad and the Microsoft® Windows® logo key.



See Keyboard and TouchPad in Chapter 2 for more on using keyboard shortcuts.

1.1.9 Power Button

- ⏻ Press to turn your notebook on. For more on power settings see Power Management.



Windows XP, which comes preinstalled, goes into the shutdown sequence automatically if you press the power button while on.

You can configure this in Control Panel: Power Options – Advanced.

1.1.10 Keyboard Status Lights

	Indicates uppercase letter function enabled
	Indicates numeric keypad enabled
	Indicates scroll lock function enabled

1.1.11 Speaker

To adjust the system speaker volume, look under the Sounds and Audio Devices Properties of the Control Panel. See Chapter 2 for more details. Many software programs, such as multimedia applications, also include their own volume controls.

1.1.12 AC Adapter Connector



Use this connector to attach the AC adapter to your notebook. You can connect an AC adapter when your notebook is switched on or off.



While the AC adapter works with electrical outlets worldwide, power connectors and power strips vary from country to country. Ensure you use compatible cable or correctly connect the cable to the power strip or electrical outlet. Failure to do so may cause fire or damage to equipment.

1.1.13 Air Vent

An internal fan creates airflow through the vents, preventing your notebook from overheating.



When it gets hot, your notebook will switch on the fans, which may make some noise. This is normal, and does not mean there is a problem.



Never block, push objects into, or allow dust to gather in the air vents. Doing so may damage your notebook or cause a fire.

1.1.14 USB Connector



Use this port to connect a USB device, such as a mouse, full-size external keyboard, or printer, to the computer.



USB is a peripheral expansion standard that supports a data-transfer rate of up to 480 Mbps. USB peripherals have a single standard for cables and connectors. You can install and remove USB devices while the computer is on. This is known as "hot swapping".

1.1.15 Infrared Port

Use this port to send and receive infrared (IR) signals to and from other IR-compatible devices. Supports a transfer rate of up to 4 Mbps per second.

1.1.16 PC Card Slot

Supports two type II PC Cards or one type III card. For more information, see PC Cards in Chapter 4.

1.1.17 Audio Ports

You can connect a headphone or an external speaker to the  port and a microphone to the  port. The built-in speakers are disabled when a device is connected to the  port.

1.1.18 Wireless Communication Switch

Turns the wireless communication function on or off. The wireless communication LED  on the front panel lights when the function is activated.

1.1.19 Speaker

To adjust the system speaker volume, look under the Sounds and Audio Devices Properties of the Control Panel. See Chapter 2 for more details. Many software programs, such as multimedia applications, also include their own volume control.

Security Cable Connector



To protect your notebook from theft, you can purchase an antitheft device. Instructions for use are included with such devices.



Before purchasing any antitheft device, check that it will work with your notebook's security cable connector.

1.1.20 Parallel Port



Use this port to connect parallel devices, such as a printer.



To protect your notebook, wait 5 seconds after turning it off before disconnecting any external device.

1.1.21 External Monitor Port

-  Use this port to connect an external monitor to your computer. See Display, Chapter 2-5.

1.1.22 USB Connectors



Use these ports to connect up to three USB devices, such as a mouse, full-size external keyboard, or printer.



USB is a peripheral expansion standard that supports a data-transfer rate of up to 12 Mbps. USB peripherals have a single standard for cables and connectors. You can install and remove USB devices while the computer is on. This is known as "hot swapping."

1.1.23 Modem Jack



The modem jack allows you to connect your notebook to a telephone line with a standard RJ-11 connector.



Never connect the modem jack to a digital line. The high current of a digital line could damage the modem.

1.1.24 Network Jack



The RJ-45 network jack allows you to connect your computer to a local area network (LAN).



Be careful not to plug the telephone line into the slightly larger network connector.

1.1.25 TV-out Port



Use this port to connect a television set. See Display, Chapter 2-5, for details.

1.1.26 IEEE 1394 Port



The IEEE 1394 port allows you to connect devices that utilize IEEE 1394 technology to your computer. This technology is widely used in consumer products such as digital cameras.

1.1.27 Battery Release Latch

The battery release latch secures the battery pack. To release, simply slide the latch across. The battery pack will pop up.

1.1.28 Battery Pack

With a charged battery pack installed, you can use your notebook without connecting it to an electrical outlet. For more details, see [Battery](#), Chapter 5.

1.1.29 HDD

The HDD should only be removed if you need to repair or replace the installed HDD unit.

1.1.30 Memory Module Cover



The memory module(s) is (are) housed beneath the memory module cover.

1.1.31 ODD Release Latch

This releases the optical media drive (ODD). Slide it to the left, then carefully pull the ODD from its bay.

2 Operating Your Notebook

2.1 Turning Your Notebook On and Off

Turning Your Notebook On

Turning Your Notebook Off

Logging Off

Adding User Accounts

Standby Mode

2.1.1 Turning Your Notebook On



You can configure the computer to start from a specific drive, such as a CD-ROM, an external floppy disk, or even an external. See Chapter 3, the BIOS Setup Program.

Press the power button  to turn on your notebook.



Do not turn off the computer until the operating system has loaded completely. Turning the computer off during its initial startup will result in an error the next time you start your notebook.

2.1.2 Turning Your Notebook Off



If your notebook is using Microsoft Windows XP Professional operating system, there are security and networking features not available in Windows XP Home Edition. You will see different options in some windows, related to security and networking.

Save and close any open files, exit any open programs. Click **Start > Turn Off Computer > Turn Off**.

Your notebook will automatically turn off after the shutdown process is finished.



*You can configure Windows XP to shut down or go into sleep mode by pressing the power button. Open the **Control Panel: Power Options – Advanced** dialog box to do this.*

2.1.3 Logging Off

With Microsoft Windows XP, multiple users can access a single computer with their own, personal settings. Using their own password, each user logs on to the computer, meaning other users cannot access their settings or files. To log off:

1. Save and close any open files, exit any open programs, click **Start > Log Off > Log Off**.
2. To switch users, click **Start > Log Off > Switch User**.

Using **Fast User Switching**, programs that previous users were running remain running in the background. This means a possible slower computer response. It may also stop multimedia programs, including games and DVD software, from running.



Fast User Switching does not work if your notebook is running Windows XP Professional and is a member of a computer domain or if the notebook has less than 128 MB of memory.

You can set up **Fast User Switching** in the Control Panel dialog box, under **User Accounts: Change the way users log on or off**.

2.1.4 Adding User Accounts



Different account options are available when a computer is running the Windows XP Professional operating system and is connected to a domain.

With Windows XP installed, the system administrator or a user with administrator rights can create additional user accounts:

1. Click **Start > Control Panel > User Accounts**.
2. Under **Pick a task**, click **Create a new account**.
3. Under **Name the new account**, enter the name of the new user. Click **Next**.
4. Under **Pick an account type**, choose one of the following options:
 - **Computer administrator**: Can change all computer settings.
 - **Standard (Windows XP Professional only)**: Can install some programs and hardware.
 - **Limited**: Can only change your own personal settings, such as your password. You are not able to install programs or use the Internet.
5. Click **Create Account**.

2.1.5 Standby Mode

To find out how to conserve power using the Standby Mode, see Power Management, Chapter 5.

2.2 Tips For Using Windows

Microsoft Windows XP Help

Windows Desktop

Start Button

Taskbar

Notification Area (System Tray)

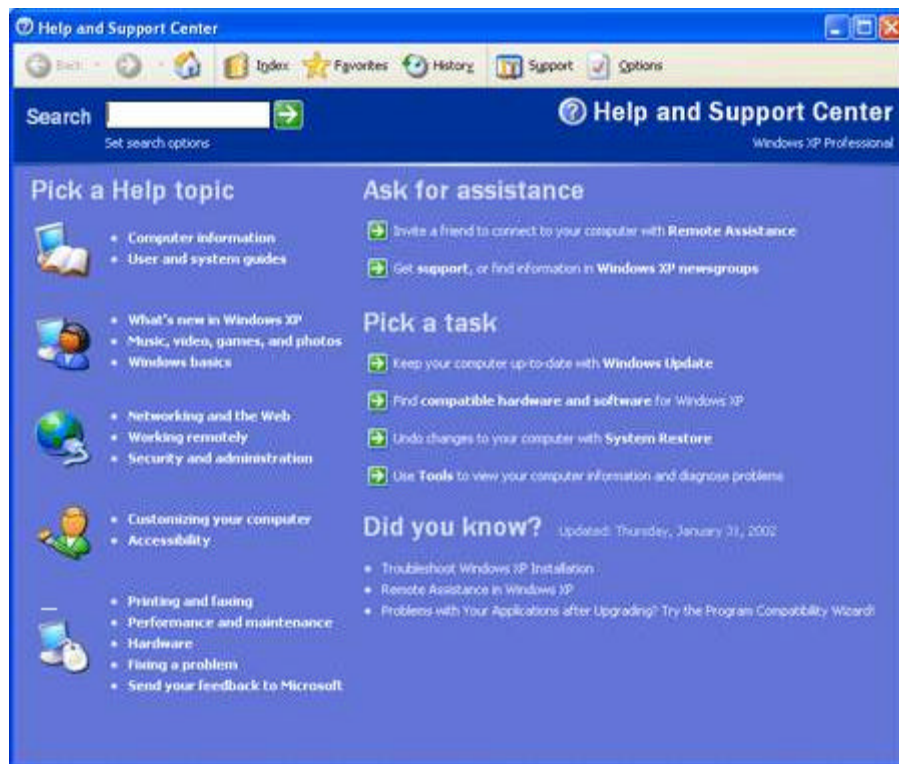
Recycle Bin

Control Panel

My Computer

2.2.1 Microsoft Windows XP Help

For Microsoft Windows XP help, click the **Start** menu then click the **Help and Support** icon. The Help and Support Center dialog box opens.



2.2.2 Windows Desktop



Depending on your notebook setup and software, your desktop may have different or additional shortcuts. See Personalizing Your Desktop, section 2-4, for more information.



2.2.3 Desktop Cleanup Wizard

The Desktop Cleanup Wizard moves icons for programs not frequently used to a folder 7 days after you first start your notebook and every 60 days after that.

The Start menu's appearance changes as program icons are moved. To turn off the Desktop Cleanup Wizard:

Right-click an empty spot on your desktop > **Properties** > **Desktop** > **Customize Desktop** > click **Run Desktop Cleanup Wizard every 60 days** to remove the check mark > **OK**.

The Desktop Cleanup Wizard can be run any time by simply clicking **Clean Desktop Now** under **Desktop Cleanup**.

2.2.4 Start Button

The **Start** button allows easy access to your notebook's programs.



The **Start** menu is designed to adapt, to show the programs you use most frequently. To always keep an item on the **Start** menu, no matter how often it's used, right-click the item and click **Pin to Start menu**.

Log Off allows the current user to log off so a new user can log on to the notebook using their personal settings.

Turn Off Computer provides options for turning off, restarting, and placing your notebook in power saving modes. If your notebook is running Windows XP Professional and is connected to a domain, different options appear in the **Shut Down** window.

2.2.5 Taskbar

The **Start** button is on the left and the notification area on the right. Each time you open a program a button for it appears on the taskbar. To move between programs, simply click the relevant button. Windows XP groups multiple instances of the same program on a single taskbar button if more space is needed.

Toolbars can be added to or removed from the taskbar:

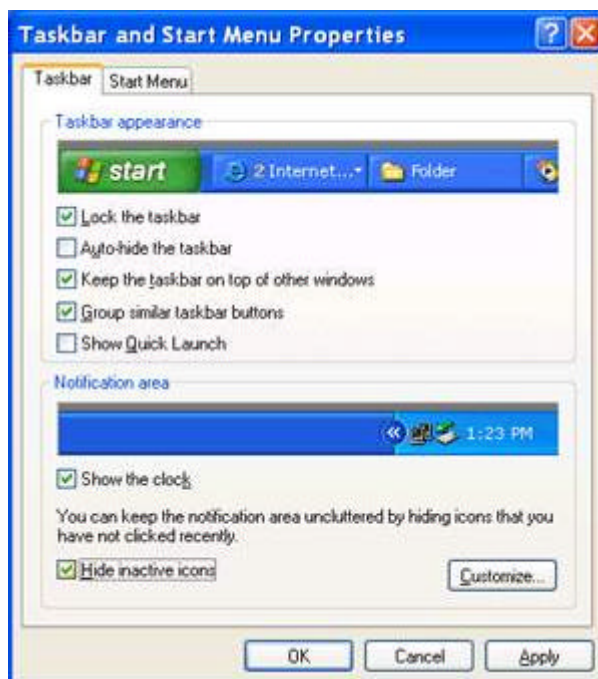
Right-click an empty spot on the taskbar, and select **Toolbars > choose the toolbar you want to add.**

2.2.6 Notification Area (System Tray)

The icons in this area allow quick access to programs and computer functions, including the clock and printer status. Windows XP hides icons that are not used frequently. Click  to see hidden icons.

To prevent Windows XP from hiding icons:

Right-click an empty spot on the **Taskbar** > **Properties** > ensure that **Hide inactive icons** is not checked.



2.2.7 Recycle Bin

When you delete a file, it is moved to the **Recycle Bin**. Files can be restored from the **Recycle Bin**.

Emptying the **Recycle Bin** deletes files permanently.

2.2.8 Control Panel

In the **Control Panel** you can change how Windows looks and works.

Click the **Start** button and then **Control Panel**.

There are two interfaces - you can choose either **Classic View** or **Category View**. You can switch interfaces in the upper left hand window of the **Control Panel** dialog box.

Under **Pick a Category**, choose the category of the task you wish to complete, and then choose the task in the next window.



2.2.9 My Computer

My Computer allows you to see the contents of your notebook's drives. The **My Computer** icon appears on your Desktop. To see the contents of a drive or folder, open **My Computer** then double-click the icon for the drive or folder you want to view (for example, drive C).



*You can also use **Windows Explorer** to see the contents of your notebook and find files. To open **Windows Explorer**, right-click the **Start** button and click **Explore**. Find the drive or folder that you want to view. To find out more about **My Computer** and **Windows Explorer**, see the **Help and Support Center**.*

2.3 Keyboard and TouchPad

Numeric Keypad

Keyboard Shortcuts

Easy Buttons

StickyKeys

TouchPad

Customizing the TouchPad

2.3.1 Numeric Keypad

Keypad numbers and symbols are marked in blue on the lower right edge of the keypad keys.

To enable the numeric keypad, press  .

The  indicator will light when the numeric lock is on.

To disable the numeric keypad, press   again.

To use the primary function of a dual-function key when the numeric keypad is enabled, press  and the desired key.

2.3.2 Keyboard Shortcuts

 	Switches Display Mode (LCD > CRT > Simultaneous). Switches the video image to the next display in the following sequence: the integrated display, an external monitor, and both displays simultaneously
 	Number Lock
 	Scroll Lock
 	Brightness Up
 	Brightness Down



When using an external PS/2 keyboard, the Fn key can be simulated by using the left-Ctrl + left-Alt keys. USB keyboards do not support this function.

2.3.3 Windows Logo Key Functions



opens Windows Explorer



opens the Run dialog box



opens the Search Results dialog box



opens the Search Results - Computers dialog box
(when your notebook is connected to a network)



opens the System Properties dialog box

To adjust keyboard operation, including character repeat rate, in the **Control Panel** click **Printers and Other Hardware > Keyboard**.

2.3.4 Easy Buttons

The Easy Buttons are designed to give you fast access to the programs you use most often.

By default, the easy button keys are not configured for any particular program. The first time you press one of them, the Configure Buttons dialog box opens.

Select the button you'd like to configure, and then assign a program to it either from the **Application Launch** list of pre-defined defaults or by using the **Browse** button to locate a different program.

The **Caption** option lets you define the caption that appears on your screen when you press the button.

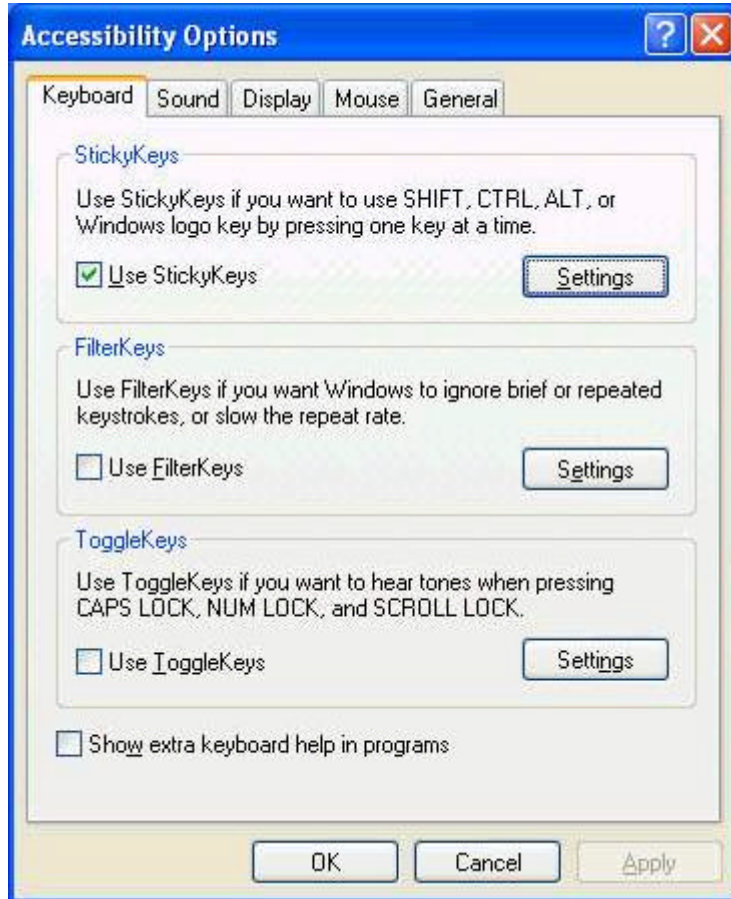
2.3.5 StickyKeys

The StickyKeys function lets you use the SHIFT, CTRL, ALT, FN keys or the Windows logo key (referred to as modifier keys) in conjunction with other keys by pressing one key at a time instead of simultaneously.

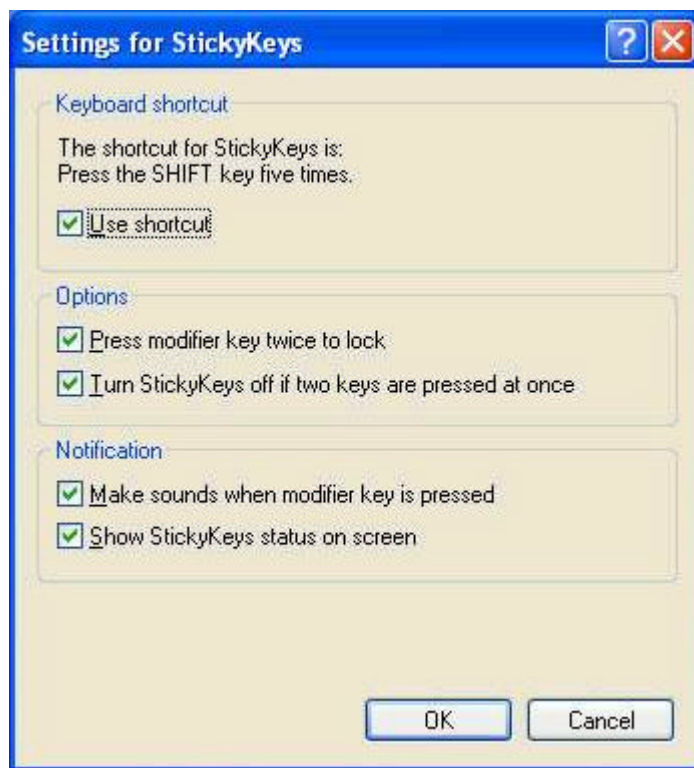
To activate StickyKeys mode, press the Shift key five times and then click OK.



Alternatively, you can click on **Start > Control Panel > Accessibility Options** and check **Use StickyKeys** before clicking **OK**.



To further customize **StickyKeys**, click **Settings** in either of the above dialogue boxes. The following dialogue box will appear.



Click **Use shortcut** to enable the listed shortcut to activate StickyKeys mode.

By checking **Press modifier key twice to lock**, pressing the **SHIFT, CTRL, ALT, FN** or the Windows logo key twice will 'lock' the key until it is pressed again. This allows you to perform multiple commands with these keys in succession without having to press the modifier key again each time.

Check **Turn StickyKeys off if two keys are pressed at once** to have StickyKeys automatically disable whenever any two keys are pressed simultaneously.

If **Make sounds when modifier key is pressed** is checked, a tone will be heard each time a modifier key is pressed. Different tones are heard when activating and deactivating modifier keys.

Check **Show StickyKeys status on screen** to display the StickyKeys icon in your toolbar whenever the StickyKeys mode

is activated. The icon will change to indicate which modifier key, if any, is currently active.

Click on **OK** to confirm your changes, or **Cancel** to exit the dialogue box without making any changes.

2.3.6 TouchPad

The TouchPad responds to the movements and pressure of your finger, allowing you to move the cursor around the screen, in the same way you would with a mouse.



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

You can use the TouchPad by moving either your right or left thumb off the space bar and on to the TouchPad.

Gently move your thumb across the TouchPad in the direction you want the cursor to move.

The TouchPad buttons have 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 left button one time and release it. The functionality of these buttons depends on your software.

Double-clicking is a common technique for selecting objects or launching programs.

You may also select object or execute applications from icons by double tapping. This is similar to double-clicking, but instead of pressing the TouchPad buttons, you tap the TouchPad itself.

2.3.7 Customizing the TouchPad

To adjust TouchPad settings, use the Mouse Properties window, which you can open by clicking **Control Panel > Printers and Other Hardware > Mouse**.

Select the desired settings and click **Apply**.

Click **OK** to save the settings and close the window.

2.4 Personalizing Your Desktop

Choosing Wallpaper

Choosing a Screen Saver

Choosing a Desktop Theme

Creating a Shortcut on the Desktop

2.4.1 Choosing Wallpaper

To make your notebook reflect your style, you can set background colors and patterns, the wallpaper, on the desktop.

Control Panel > Appearance and Themes > Pick a task > Change the desktop background.

The **Display Properties** window offers a choice of wallpapers. Choose the name of the wallpaper you want to display, or click (None) if you prefer not to use a wallpaper image.

You can also choose your own images by choosing Browse, and specifying images in a directory.

The Position pull-down menu lets you either **Tile** your selected image, **Center** (places one copy of the image in the center of the screen) or **Stretch** (enlarges it to fit the screen).

To accept the settings, click **OK** and close the **Display Properties** window.

2.4.2 Choosing a Screen Saver

Control Panel > Appearance and Themes > Pick a task > Choose a screen saver.

Select a screen saver from the **Screen Saver pull-down menu**, or click (None) if you prefer not to activate a screen saver.

You can customize your screen saver by choosing **Settings**. To check your selections, choose **Preview**.

To accept the settings, click **OK** and close the **Display Properties** window.

2.4.3 Choosing a Desktop Theme

Desktop themes change the appearance of your desktop and add sound effects:

Control Panel > Appearance and Themes > Pick a task > Change the computer's theme.

Select a theme from the Theme pull-down menu in the Display Properties Window, and then click **OK**.

2.4.4 Creating a Shortcut on the Desktop

A shortcut is an icon that is placed on the desktop let you quickly access programs, files, folders, and drivers. To create a shortcut:

Open **My Computer** or **Windows Explorer**, and highlight the file or program you want to create a shortcut to.

Click and hold down the right TouchPad button, drag the highlighted item to the Windows desktop, and then release the right TouchPad button to display a pop-up menu.

Click **Create Shortcut(s) Here**.

An icon appears on your desktop - double-click to activate the shortcut.

2.5 Display

Adjusting Brightness

Using an External Monitor or Television

Setting Display Resolution

2.5.1 Adjusting Brightness

To conserve power when running your notebook from the battery, set the brightness to the lowest comfortable setting using the keyboard shortcuts.

2.5.2 Using an External Monitor or Television

When you start your notebook with an external display device such as an external monitor or television attached and turned on, the image may appear on either the display or the external device. Alternatively, you can

Press   to switch the video image to the display only, the display and the external device simultaneously, or the external device only.

2.5.3 Setting Display Resolution

To view a program at a specific resolution, both the video controller and display must support the program and the necessary video drivers must be installed.

Before changing any of the original display settings, note the original settings for future reference.

Start > Control Panel > Pick a category > Appearance and Themes.

Under **Pick a task...**, click the area you want to change, or under or **pick a Control Panel icon**, click **Display**.

You can try different settings for Color quality and Screen resolution.

If you choose a resolution or color palette that is higher than the display supports, the settings will automatically adjust to the closest possible setting.

2.6 Networks

To access a network:

At the office, you can access a network via the built-in PCI LAN.

For specific information about connecting to the LAN or WAN, consult your systems administrator.

If you are working from home or while traveling, you need a dial-up connection. Ask your system administrator for the telephone number of the network.

To set up the connection, go to **Start > Control Panel > Network and Internet Connections** (in Classic Interface, **Network Connections**).

Enter the details for your connection and click **OK**.

2.7 Managing Programs

Running Programs

Adding Software

Removing Software

2.7.1 Running Programs

Programs are any software that process data - like a word processing program or an email program. They require an operating system - like Windows XP - to run on.

To run a program, click **Start > Programs**.

Click the program you want to run.

On the right side of the title bar in the window of any open program, there are three icons: 

 minimizes the program. That is, it is removed from the screen, but is still running. It will appear as a button on your bottom taskbar. To restore the program, simply click the button.

 enlarges (maximizes) the window to fill your entire screen. When the window is maximized, the button switches to , which will reduce the size of the window when clicked.

 closes the program or document.

2.7.2 Adding Software

To check what software is already installed on your computer, click **Start > All Programs**. If a program is listed in the **All Programs** menu or the **Start** menu, the software is already installed.

Before installing software, check the software's technical requirements to ensure that it is compatible with your notebook and that there is enough memory and hard drive space for installation and operation.

Temporarily disable your notebook's antivirus software before installing software. See the documentation that came with the antivirus software for detailed procedure.



Be sure to enable your antivirus software once you have installed any new software.

Insert the software installation CD into the CD drive and follow the instructions that came with the software to help you respond to the prompts on the screen.

If the software installation CD does not automatically run, click **Start > Run**. In the dialogue box, type x:\setup.exe (where x is the letter of your CD drive [usually D or E]). Then click **OK** and follow the prompts on your screen.

2.7.3 Removing Software



Once you've begun removing software, do not interrupt the process. To do so may result in data loss and corruption of your operating system.

Start > Control Panel > Add or Remove Programs > Change or Remove Programs.

Select the program that you want to remove and click the **Change/Remove** button. Instructions for removing programs will appear on the screen.



Some programs may not be listed and cannot be removed via this window. In this case, check the documentation that came with the specific program.

2.8 Managing Files

Updating Antivirus Software

Backing Up Files

Finding Files

Copying a File on the Hard Drive

Copying a File to a Floppy Disk

Moving Files

Renaming Files

Deleting Files

Emptying the Recycle Bin

Retrieving Files From the Recycle Bin

2.8.1 Updating Antivirus Software

There are thousands of known viruses, and more appear all the time. Installing antivirus software is the only way to protect your data, software and hardware. Regular updates are necessary to ensure protection.

Your computer dealer can advise you regarding purchasing antivirus software.



Before installing any software from unlicensed sources, scan for viruses. Regularly backup your data to safeguard against loss if your notebook is infected.

2.8.2 Backing Up Files

Regularly backing up your files will protect you from losing data from accidental file deletion, viruses or hard drive failure.

Programs can be reinstalled, but unless you have backed up your work, you will lose your data files.

The most convenient way to back up your files is to a CD-RW drive, although for smaller files, you can use a floppy disk.

2.8.3 Finding Files

Right click on **Start > Search**.

In the search window, type either **All or part of the file name** or **A word or phrase in the file**.

Specify where you want the system to look by specifying a drive or folder in the **Look in** pull-down menu.



Windows will search the entire hard drive (or drive C partition) if the default setting of C: is unchanged.

Click **Search** to begin searching.

Files found that match your search criteria are listed in the **Search Results** window.

2.8.4 Copying a File on the Hard Drive

From the **Desktop**, select **My Computer**.

Locate the file you want to copy, and click the file to select (highlight) it.

Under **File and Folder Tasks > Copy this file**.

In the **Copy Items** window, select the location where you want to copy the file.

Click **Copy**.

2.8.5 Copying a File to a Floppy Disk

Insert a floppy disk into the floppy drive.

From the **Desktop**, select **My Computer**.

Locate the file you want to copy, and click the file to select (highlight) it.

Under **File and Folder Tasks** > **Copy this file** > **Copy Items** > **3½ Floppy (A:)**.

Click **Copy**.

2.8.6 Moving Files



Never move files that are part of an installed program. Doing so may make the program unusable.

From the **Desktop**, select **My Computer**.

Locate the file you want to move, and click the file to select (highlight) it.

Click **Move this file**.

In the **Move Items** window, click the location where you want to move the file.

Click **Move**.

2.8.7 Renaming Files

Use **Windows Explorer** or **My Computer** to locate the file you want to rename, and click the file to select (highlight) it. Click the **File** menu and click **Rename**.



Never change a file's extension (the last three characters after the period). Doing so may render the file unusable.

Type the new filename and press **Enter**.

2.8.8 Deleting Files



*Never delete files that are part of an installed program.
Doing so may render the file unusable.*

Use **Windows Explorer** or **My Computer** to locate the file you want to delete, and click the file to select (highlight) it.

Click the **File** menu and click **Delete**.

Click **Yes** to send the file to the **Recycle Bin**.

If you accidentally delete a file, see **Retrieving Files From the Recycle Bin**.

2.8.9 Emptying the Recycle Bin

Files remain in the **Recycle Bin** and take up space on the hard drive until you empty them from the **Recycle Bin**.



Files deleted from a floppy disk or from a network are permanently erased. You cannot recover them from the Recycle Bin.

Double-click the **Recycle Bin** icon.

The **Recycle Bin** window appears and lists all deleted files, their previous locations, and the date you deleted them.

Click the **File** menu, and click **Empty Recycle Bin**.

When the confirmation dialog box appears, click **Yes** to delete all file(s).

All files disappear from the **Recycle Bin** and are removed from your notebook.

2.8.10 Retrieving Files From the Recycle Bin

Deleted files are moved to the **Recycle Bin** and remain there until you empty the Recycle Bin. If you delete a file in error, you can retrieve it from the **Recycle Bin**:

Double-click the **Recycle Bin** icon . 

The **Recycle Bin** window will appear, listing all deleted files, their previous locations, and the dates you deleted them.

Select the file you want to retrieve, click the **File** menu, and then click **Restore**.

The file disappears from the **Recycle Bin** and is moved to its original location.

2.9 Playing CDs and Movies

Inserting Discs

Adjusting Volume

Adjusting Picture

2.9.1 Inserting Discs



Be careful not to press down on the drive tray when opening or closing it. When the drive is not in use, keep the tray closed.



Do not move the computer when playing CDs or DVDs.

Press the eject button on the front of the drive.

Pull the tray out.

With the label side up, place the disc in the center of the tray.

Snap the disc onto the spindle.

Gently push the tray back into the drive.

If your notebook has a CD-RW/DVD or DVD, you can watch movies.

For more information on playing CDs or watching movies, click **Help** on the CD player software or DVD player software.

2.9.2 Adjusting Volume



If you do not hear anything when playing a CD or DVD, check that the speakers are not muted.

Start > All Programs > Accessories > Entertainment > Volume Control.

In the Volume Control window, click and drag the bar in the Volume Control column and slide it up or down to increase or decrease the volume.

2.9.3 Adjusting the Picture

If you receive an error message that the current resolution and color depth are using too much memory and preventing DVD playback, adjust the display properties:

Start > Control Panel > Pick a category > Appearance and Themes > Pick a task... > Change the screen resolution.

In the **Display Properties** window, click and drag the bar in **Screen resolution** to change the setting to 1024 x 768 pixels. Click the pull-down menu under **Color quality > Medium (16 bit) > OK.**

3 Caring For Your Notebook

3.1 Caring For Your Notebook

[Cleaning Your Notebook and Keyboard](#)

[Cleaning the Display](#)

[Cleaning the TouchPad](#)

[Cleaning the Diskette Drive](#)

[Cleaning the CD/DVD Drive](#)

[Precautions](#)



Never spray cleaning products directly onto your notebook's case or display. Only use products designed for cleaning computer displays.

3.1.1 Cleaning Your Notebook and Keyboard

Shut your notebook down, turn it off and disconnect it from the electrical outlet and any external devices, such as a printer.

1. Remove batteries.
2. Using the brush attachment of your vacuum cleaner, gently remove dust from your notebook's openings and keyboard.
3. Using a slightly moistened soft, lint-free cloth, wipe your notebook and keyboard. **Use only water or a recommended computer cleaner.**

3.1.2 Cleaning the Display

1. Shut your notebook down, turn it off and disconnect it from the electrical outlet and any external devices, such as a printer.
2. Remove batteries.
3. Using a slightly moistened soft, lint-free cloth, wipe your notebook's display. **Use only water or a recommended computer cleaner.**

3.1.3 Cleaning the TouchPad

1. Shut your notebook down, turn it off and disconnect from the electrical outlet and any external devices, such as a printer.
2. Remove batteries.
3. Using a slightly moistened soft, lint-free cloth, carefully wipe the TouchPad, being careful not to allow any moisture into the gaps. **Use only water or a recommended computer cleaner.**

3.1.4 Cleaning the CD/DVD Drive



Never touch the lens. Use only compressed air to clean the lens.

If you experience problems playing CDs or DVDs, including skipping, clean the unlabelled side of the disc with a soft, lint-free cloth or using a commercial product.

3.1.5 Precautions

- Don't spill liquids on the keyboard. If liquid is spilt on the keyboard, turn your notebook off immediately. Leave off overnight to let it completely dry out before using it again.
- Don't turn off your notebook if a drive light indicates a drive is active. Turning off your notebook while it is reading from or writing to a disk may damage the disk, the drive, or both.
- Keep your notebook and disks away from objects that generate strong magnetic fields, such as 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 email, disk or download from the Internet. You will need a special program to scan for viruses. For further information, talk to your computer dealer.

3.2 Traveling

[Identifying Your Notebook](#)

[Packing Your Notebook](#)

[Setting a Password](#)

[Travel Tips](#)

[If Your Notebook Is Lost or Stolen](#)

3.2.1 Identifying Your Notebook

Attach a nametag or business card to your notebook, or use a permanent marker or stencil to write a unique identifying mark (such as your driver's license number) on the case.

Write down your service tag sequence and store it in a safe place away from the notebook or carrying case. Use the service tag sequence if you need to report a loss or theft to law enforcement officials.

Create a file on the Desktop called **if found**. Place information such as your name, address, and telephone number in this file.

Contact your credit card company, and ask if it offers coded identification tags.

3.2.2 Packing Your Notebook

Remove any external devices attached to the computer and store them in a safe place. Remove any cables attached to installed PC Cards, and remove any extended PC Cards.

Fully charge the main battery and any spare batteries you plan to carry with you.

Turn off the computer or put the computer into hibernate mode.

Disconnect the AC adapter.

Remove any extraneous items, such as paper clips, pens, and paper, from the keyboard and then close the display.

Pack your notebook and accessories in their carrycase.

Avoid packing the computer with items such as shaving cream, colognes, perfumes, or food.

Protect the computer, the batteries, and the hard drive from hazards such as extreme temperatures and dirt, dust, liquids, or overexposure to sunlight.

Pack the computer so that it does not slide around in the trunk of your car or in an overhead storage compartment.



When traveling by air, never check your notebook as baggage.

3.2.3 Setting a Password

To provide extra protection for your data and documents, it is advisable to set a password.

As your notebook is booting (starting up), press **F2** to take you to the **BIOS Setup Utility**. Use the right arrow key to highlight **Security**.

Use the down arrow key to select: **Set Supervisor Password...** **[Enter]**. Press **Enter**.

Type your password, press **Enter** and re-type to confirm. Press **Enter**. Your changes will be saved. Press **Enter** to continue.

To enable password protection, use the down key to select **Password Required to Boot**. Press **Enter**. To turn on password protection, use the down key to select **Enabled**; to turn password protection off, select **Disabled**. Press **Enter**.

Use the right arrow key to select **Exit**. Your notebook will now boot as normal.

3.2.4 Travel Tips

- If you are traveling internationally, carry proof of ownership—or of your right to use the computer if it is company-owned—to speed your passage through customs. Investigate the customs regulations of the countries you plan to visit and consider acquiring an international carnet (also known as a merchandise passport) from your government.
- Ensure that you know which electrical outlets are used in the countries you will visit, and have appropriate power adapters.
- Check with your credit card company for information about the kinds of emergency travel assistance it offers to users of portable computers.
- When traveling by air, ensure that you have a charged battery available in case you are asked to turn on the computer.
- Before you use the computer on an airplane, verify that such usage is permitted. Some airlines forbid the use of electronic devices during the flight. All airlines forbid the use of electronic devices during takeoff and landing.



Never walk your notebook through a metal detector. Send it through an X-ray machine, or have it manually inspected.

3.2.5 If Your Notebook Is Lost or Stolen

Call a law enforcement agency to report your notebook lost or stolen. Include the service tag sequence in your description of the notebook. Ask that a case number be assigned and write down the number, along with the name, address, and telephone number of the law enforcement agency. If possible, obtain the name of the investigating officer.

If the notebook belongs to a company, notify the security office of the firm.

4 Peripherals

4.1 PC Cards

[PC Card Types](#)

[Extended PC Cards](#)

[Installing a PC Card](#)

[Removing a PC Card](#)

4.1.1 PC Card Types

The PC Card slot supports one Type II card. The PC Card slot supports CardBus technology and extended PC Cards. "Type" refers to the card's thickness, not what it does.



A PC Card is not a bootable device.

4.1.2 Extended PC Cards

An extended PC Card is longer than a standard PC Card. When using extended PC Cards, follow these precautions:

- Protect the exposed end of an installed card. If the end of the card is struck, the system board may be damaged.
- Always remove an extended PC Card before packing your notebook in its carry case.

4.1.3 Installing PC Cards

PC Cards may be 'hot-swapped', which means you can install a card while your notebook is running. The card will be detected automatically.

Usually PC Cards have a mark or symbol to show which end to insert into the slot. Cards are keyed to prevent incorrect insertion. Check the documents that came with your card if the orientation is unclear.



1. Hold the card with its orientation symbol pointing into the slot and the topside of the card facing up. The push-button latch may need to be in before inserting the card.
2. Slide the card into the slot until it clicks into the connector.
3. If you encounter too much resistance, do not force the card. Check the card orientation and try again.

Your notebook will recognize most PC Cards and automatically load the appropriate device driver. If the configuration program tells you to load the manufacturer's drivers, use the floppy disk or CD that came with the PC Card.

4.1.4 Removing PC Cards



Before removing a PC Card, stop it running from the configuration utility on the taskbar. Failure to do so could result in data loss. Never try to remove a PC Card by pulling on its cable, if one is attached.



1. Press the release latch.
2. Press the latch again to eject the card.
3. Remove the card.

4.2 Printers

Check the printer documentation to check your printer has a parallel interface.

If your printer did not come with a suitable printer cable, you can purchase one from a computer or electronics store.

These instructions are for a parallel printer, the most common type of interface.

1. Turn off your notebook.
2. Connect the printer cable to the printer and to your notebook's parallel port.
3. Plug the printer's power cable into an electrical outlet.

For further steps, refer to the documentation that came with your printer.

If you started your computer with a printer connected and turned on, it may have been detected automatically (Plug and Play). If not, then you may have to install the printer driver for your printer, either using the instructions provided with your printer, or in Windows XP via **Start > Control Panel > Pick a Category... > Printers or Other Hardware > Pick a task... > Add a Printer > Add Printer Wizard** or in the Control Panel Classic Interface, **Printers and Faxes > Add a Printer > Add Printer Wizard**.

The Add Printer Wizard interface will take you through the steps to connect your notebook and printer.

5 The Power System

5.1 Power Management

[Managing Your Notebook's Power](#)

[Power Management Modes](#)

[Power Options Properties](#)

[SpeedStep](#)

5.1.1 Managing Your Notebook's Power



See Battery for more information on getting the best performance from battery packs.



Use your notebook connected to an electrical outlet as often as possible, as battery life expectancy is affected by the number of times it is charged.

When leaving your notebook unattended for long periods, place it in standby or hibernate mode. You can exit either power management mode by pressing the power button.

5.1.2 Power Management Modes

5.1.2.1 Standby Mode

This mode conserves power by switching off the hard drive and display after a preset period of inactivity (a time-out). When standby mode is exited, your notebook will return to the same operating state it was in before entering standby.



If your notebook loses power from both the electrical outlet and the battery while in standby mode, data may be lost.

To enter standby mode in Windows XP:

Start > Turn off computer > Stand By.

or

You can set your notebook to go to Standby Mode:

- When you close the lid of your notebook
- When you press the power button

via the Advanced tab settings in **Power Options Properties** (accessed via **Start > Control Panel > Pick a category > Performance and Maintenance > Power Options**).

To exit standby mode, press the power button. You can exit standby mode by pressing a key or touching the TouchPad. For more information on standby mode, see Turning Your Notebook On and Off, Chapter 2.

5.1.2.2 Hibernate Mode

In Hibernate mode, power is conserved by system data being copied to the hard drive, and your notebook completely turning off. When Hibernate mode is exited, your notebook will return to the same operating state it was in before entering hibernate mode.

Hibernate Mode can be enabled/disabled in the Power Options Properties window.

If enabled, your notebook will go into hibernate mode if the battery charge level becomes critically low.

Depending on how you set the Power Management Options on the Advanced tab in the Power Options Properties window, use one of the following methods to enter hibernate mode:

- When you close the lid of your notebook
- When you press the power button
- **Start > Turn Off Computer > Hibernate** (if the Hibernate option does not show, press **Shift**, and the Standby option will switch to Hibernate).

If the Hibernate option is not available for these methods, Hibernate mode has not been enabled. Check the **Enable Hibernation** box on the Hibernate tab of the Power Options Properties window and click **Apply** to enable Hibernation.



If your PC Cards do not operate correctly after exiting Hibernate mode, remove and reinsert the card or restart your notebook.

To exit Hibernate mode, press the power button. You cannot exit Hibernate mode by pressing a key or touching the TouchPad. For more information on Hibernate mode, see Turning Your Notebook On and Off, Chapter 2.

5.1.3 Power Options Properties

To access the Windows Power Options Properties window:

Start > Control Panel > Pick a category > Performance and Maintenance > Power Options

5.1.3.1 Power Schemes Tab

The Power Schemes pull-down menu in the Power Options Properties displays the selected preset power scheme.



To maximize battery power, use the Portable/Laptop power scheme.

In Windows XP the processor's performance level depends on the power scheme you select. You do not need to make any further adjustments to set the performance level. Each preset power scheme has different time-out settings for entering standby mode, hibernate mode, turning off the display, and turning off the hard drive. For more information on power management options, see the Help and Support Center.

5.1.3.2 Alarms Tab



Enable audible alarms by clicking each Alarm Action button and selecting Sound alarm.

The Low battery alarm and Critical battery alarm settings alert you when the battery charge falls below a certain percentage.

When you receive your notebook, the Low battery alarm and Critical battery alarm check boxes are selected. See Battery for more information on low-battery warnings.

5.1.3.3 Power Meter Tab

Displays the current power source, battery status and charge amount.

5.1.3.4 Advanced Tab

With the Advanced tab you can:

- Set power icon and standby mode password options.
- Depending on your operating system, program the following functions by clicking an option from the corresponding pull-down menu, and then clicking **OK**.
 - >Set the computer to Stand by/Hibernate/Do nothing when you close the laptop lid
 - >Set the computer to Ask me what to do/Stand by/Hibernate/Shut down/Do nothing when you press the power button.

5.1.3.5 Hibernate Tab

The Hibernate tab lets you enable hibernate mode by clicking the **Enable hibernation** check box.

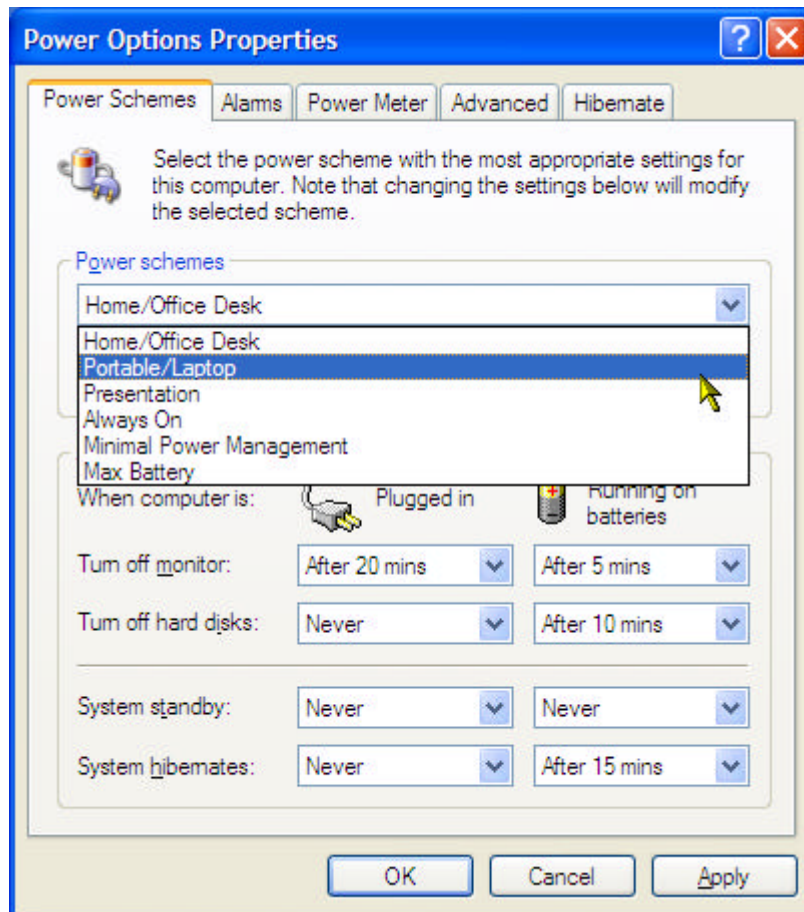
5.1.4 SpeedStep

Your notebook is equipped SpeedStep technology to better manage power consumption. It changes the processor speed to find the best balance between your computing performance and power consumption needs. Higher speeds enjoy better performance, while slower speeds conserve more power.

In Windows XP, the processor's performance level depends on the Power Scheme you select (see Power Options Properties). You do not need to make any further adjustments to set the performance level. Each preset power scheme has different time-out settings for entering standby mode, hibernate mode, turning off the display, and turning off the hard drive.

For example, the **Portable/Laptop mode** automatically changes SpeedStep modes depending on if you are running the computer on AC power or batteries in order to prolong battery usage while still providing optimal performance.

You can also individually alter and save each of these settings and schemes if desired.



Windows XP automatically chooses the SpeedStep mode to find the most appropriate speed for your processor according to the Power Scheme you choose and your current system demands.

5.2 Battery

[Battery Performance](#)

[Checking the Battery Charge](#)

[Charging the Battery](#)

[Removing a Battery](#)

[Installing a Battery](#)

[Storing a Battery](#)

[Working With Extra Battery Packs](#)

[Maximizing Battery Life](#)

5.2.1 Battery Performance

Using a battery lets you work with your notebook without connecting it to an electrical outlet. Your notebook comes with one 8-cell Li-Ion battery pack installed, which will give you approximately 4 hours of operating time.

The performance of the battery can vary, depending on operating conditions. Your battery may last less time if you are running power-intensive programs, playing CDs or DVDs, using PC Cards or have high display-brightness settings.

The Power Management Options can be set to alert you when the battery charge is low.



Ensure any battery you use is compatible. Failure to do so may risk fire or explosion. For more details on purchasing compatible batteries, talk to your notebook retailer.



Batteries should never be disposed of with household waste. Contact your local waste disposal or environmental agency for advice on disposing of used lithium-ion batteries.



Only use the BATCL51L battery pack with this computer.

5.2.2 Checking the Battery Charge

Battery Status	Indicator  behavior
Charging	blinks blue
Fully Charged	solid blue
Discharging	off
Battery Use	solid amber
Critical Low	blinks amber > approximately 3 minutes left; system beeps

5.2.3 Power Meter

The power meter  indicates the remaining battery charge. When your notebook is running on battery power, you can check the remaining battery charge, double click the  icon on the taskbar. For more details, including how to make the icon appear on the taskbar if it is not already, see [Power Management](#).

5.2.4 Low-Battery Warning



After a low-battery warning, save your work immediately, then connect your notebook to an electrical outlet. Hibernate mode will begin automatically if the battery runs completely out of power.

You will hear the low-battery warning when the battery charge is approximately 90 percent depleted. Your notebook will beep once, indicating approximately 10 to 15 minutes of battery operating time remain. If you do not connect your notebook to alternative power source during that time, there will be a periodic beep. Your notebook will automatically enter hibernate mode if the battery charge reaches a critically low level. For more information, see Power Management.

5.2.5 Charging the Battery



When connected to an electrical outlet, a completely discharged battery will charge in 3 to 5 hours (depending on whether your notebook is on or off and what programs, if any, are running). You can leave the battery in your notebook as long as you like. The battery's internal circuitry prevents the battery from overcharging.

Before using the battery for the first time it must be charged. Connect the computer to an electrical outlet and allow the battery to fully charge, indicated by the battery indicator light on the front panel of the notebook.



Once a battery pack is fully charged for the first time, use your notebook on battery power until the battery discharges completely. This will extend battery life, and helps ensure accurate monitoring of battery capacity.

If necessary, the battery will be charged whenever your notebook is connected to an electrical outlet.

The battery will not be charged if it or your notebook is too hot, either from use or being in a hot environment. If this occurs the battery indicator  will light red. Disconnect your notebook from any electrical outlet, and allow it and the battery to cool to room temperature. You can then reconnect your notebook to the electrical outlet and charge the battery. The battery indicator  will also light red if the battery is bad and needs replacing.

5.2.6 Removing the Battery

Before removing the battery, ensure your notebook is turned off.

1. Slide and hold the battery release latch
2. Remove the battery

5.2.7 Installing a Battery

1. Slide the battery into the bay
2. Press it into place gently but firmly until the latch locks it into place

5.2.8 Storing a Battery

If storing your notebook for an extended period of time, remove the battery. Fully charge the battery before using your notebook again.

5.2.9 Working With Extra Battery Packs

If you spend a lot of time traveling, working without connecting your notebook to an electrical outlet, it may be a good idea to carry additional battery packs so you can quickly replace a discharged battery and continue working.

5.2.10 Maximizing Battery Life

A battery can be recharged many times, but over time it will lose its ability to hold a charge. To maximize battery life:

- Don't leave your notebook plugged in and unused for more than a few hours. Overcharging may shorten battery life.
- If you will not be using your notebook for a long period, remove the battery.
- If you have a spare battery pack, alternate the batteries.
- Ensure your notebook is off when replacing the battery.
- Store spare battery packs in a cool, dry place, out of direct sunlight.

6 Troubleshooting

6.1 Troubleshooting

6.1.1 Your Notebook Does Not Respond

If your notebook 'locks' and does not respond to your pressing keys or touching the TouchPad, hold the **power button** until the notebook turns off (this may take at least four seconds). Press the **power button** again to restart your notebook.

6.1.2 A Program Stops Responding

Press and hold the **Ctrl, Shift, Esc** keys or **Ctrl, Alt, Delete** keys.

When the **Windows Task Manager** dialog box appears, select the program that is not responding.

Click the **End Task** button.



If you need to restart your notebook, you can do so from the Windows Task Manager window. First close all programs to ensure you do not lose unsaved work, then click Shut Down to reveal a drop-down menu.

6.2 Finding Additional Help

[Updates](#)

[Microsoft Windows Help](#)

[Microsoft Windows Guide](#)

[Devices and Programs](#)

[Using the Drivers CD](#)

[CD-ROM, DVD, CD-RW or CD-RW/DVD HELP](#)

6.2.1 Updates

Documentation updates may be included with your notebook. These describe changes to your notebook or software. **Always** read these updates before consulting any other documentation, as they contain the most up-to-date information.

Readme files, which may be installed on your hard drive or found on CDs, provide last-minute updates about technical changes to your notebook, or advanced technical material intended for experienced users or technicians.

6.2.2 Microsoft Windows Help

Click **Start > Help and Support** or, if that option is not available, right click **Start > Search > Information in Help and Support**.

6.2.3 Microsoft Windows Guide

For more information on using the Windows operating system, see the Microsoft Windows documentation that came with your computer.

6.2.4 Devices and Programs

For help on using your computer's devices (such as a modem) and options you purchase separately from your notebook, refer to the accompanying documentation.

6.2.5 CD/DVD HELP

Depending on the Optical Media Drive installed on your computer, you will be supplied with accompanying software (for example, Easy CD Creator, for writing CDs; WinDVD for playing movies). Refer to the separate documentation appropriate to your configuration.

7 The BIOS Setup Program

7.1 Introduction

The BIOS (Basic Input and Output System) Setup program is a menu driven utility that enables you to make changes to the system configuration and tailor the operation of your Notebook to your individual work needs. A ROM-based configuration utility displays the system's configuration status and provides you with a tool to set system parameters. These parameters are stored in nonvolatile battery backed-up CMOS RAM, which saves this information even when the power is turned off. When the computer is turned back on, the system is configured with the values found in CMOS. Using easy-to-use menus, you can configure such items as:

- Hard drives, diskette drives and peripherals
- Video display options
- Password protection from unauthorized use
- Boot devices

The settings made in the Setup program intimately affect how the Notebook performs. It is important, therefore, first to try to understand all the available options, and second, to make settings

appropriate for the way you use the Notebook. This chapter will guide you through the Setup program by providing clear explanations for all Setup options.

A standard configuration has already been set in the Setup program by the factory technicians, so you will very likely have little to worry about for now. However, eventually you may want to customize your system to suit your own performance needs. It is recommended that you read this chapter and become familiar with the adjustments that can be made in the BIOS.

The next section explains how to move around in the Setup program, as well as how to specify and save your new settings. A brief discussion of the optional settings among the different submenus follows.

7.2 Navigating through the BIOS Setup Program

The Setup program has been designed to make it as easy to use as possible. It is a menu driven program, which means you can scroll through the various directories and make your selections among the various predetermined choices. If you accidentally make a setting and do not know which one to switch back to, use the BIOS hot keys to return to the previous value. The hot keys are discussed in more detail later in this chapter.

When turning on the Notebook for the first time you may get a message prompting you to run the BIOS Setup program. A warning message may appear on the screen if the hardware configuration is changed or the POST fails. This message will inform you of any errors or invalid settings and prompt you to run the Setup program to correct the problem.

Even if you are not prompted by a message instructing you to use the Setup program, at some time in the future you may want to change the configuration of your computer. For example, you may want to make changes to the display option settings or enable the Notebook's password function for security purposes. It will then be necessary to reconfigure your system using the Setup program so that the computer can recognize these changes.

The list below gives a few examples of reasons why you may want or need to run the BIOS Setup program.

- You have set up the computer for the first time and you got a message stating that you should run the BIOS Setup program.
- You want to redefine the communication ports to prevent any conflicts.
- You want to change the password or make other changes to the

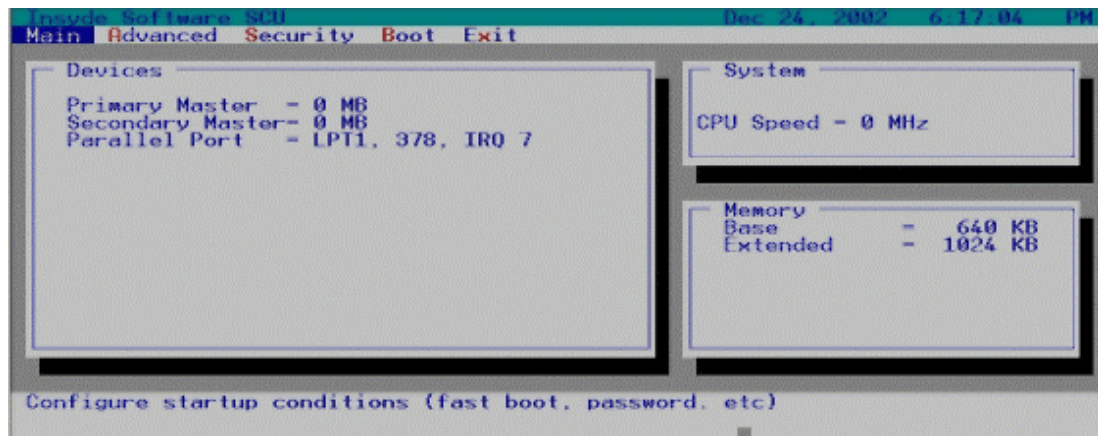
security setup.



The few examples listed above are by no means a complete list.

7.2.1 Accessing the BIOS Setup program

To access the BIOS Setup program, press the F2 key as soon as the computer starts up and you see the INSYDE BIOS screen.



The Menu Bar

The top of the Setup screen has a menu bar with the following selections:

Main	Use this menu to make changes to the basic system configuration.
Advanced	Use this menu to enable and make changes to the advanced features available on your system.
Security	Use this menu to set User and Supervisor passwords.
Boot	Use this menu to specify the order in which the Notebook is to check for a device to boot the system.
Exit	Use this menu to specify how to exit the Setup program.

To move between menu bar items, use the [←] and [→] arrow keys until the desired item is highlighted. For example, if you want to move from the Main menu to the Advanced menu, press the right arrow key [→] once.

Item Specific Help

At the bottom of the Setup screen, you will notice an item specific help bar. For each item that you select on the menu, the bar informs of its specific function as well as the hot keys related specifically to that item and/or submenu.

7.2.2 Launching submenus

A submenu contains additional options for a field parameter. To call up a submenu, simply move the highlight to the desired field and press the [Enter] key, or click it with your mouse key. The submenu will then immediately appear.

If you are a first time user or are not familiar with BIOS Setup programs, it is highly recommended that you take a few minutes to familiarize yourself with each of the submenus and their corresponding functions. If you accidentally make unwanted changes to the current configuration, go to the Exit menu and select Discard Changes.

7.2.3 Saving Changes and Exiting the Setup Program

Refer to the Exit Menu section of this chapter for detailed information on saving changes and exiting the Setup program.

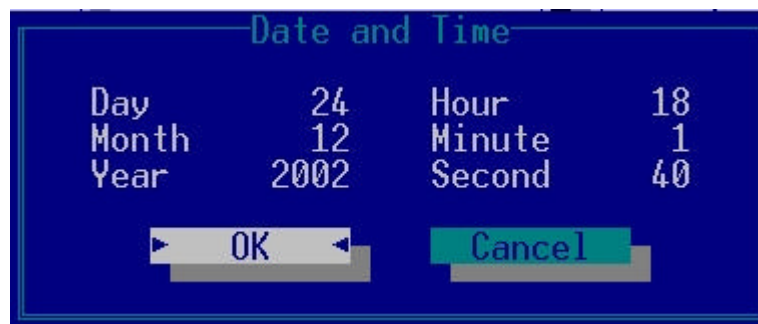
7.3 The Main Menu

When the Setup program is accessed, the Information screen appears. Use the down key to select the Main Menu.

Enter the Main Menu of the BIOS setup program to make changes to the Notebook's basic system configuration. Each of the fields displayed in this menu is covered below in detail.

Date and Time

Sets your system to the time that you specify (usually the current time). The format is hour, minute, and second, using the 24-hour clock. Insert the appropriate information. Use the mouse to move between the hour, minute, and second fields.



Splash Boot Logo

Selecting this option displays the INSYDE BIOS splash logo when you start your computer. If you do not select it, the startup system check sequence is displayed.

Use the [SPACE] bar to select the Splash Boot Logo option or not.

Language

Sets the BIOS Setup program's language. Choose either English or Japanese.



Version Info

Displays the BIOS Setup program's version information.



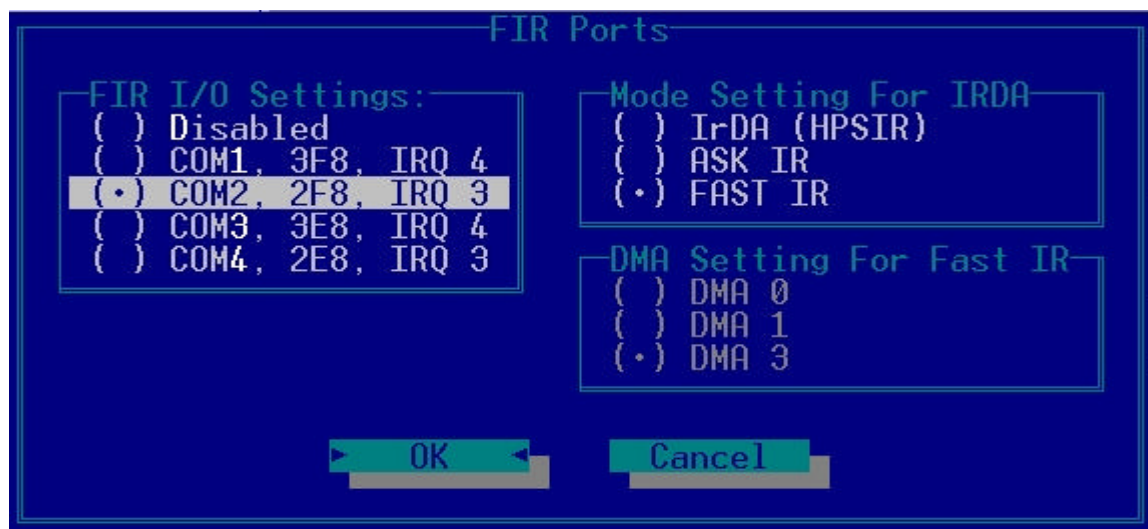
7.4 The System Devices Menu

Selecting *System Devices* from the menu bar displays the System Devices Menu.

This menu allows you to configure the Notebook's ports options. Each field on this menu is covered below.

FIR Ports

This field allows you to configure the Notebook's FIR Port. The following options are available:



FIR I/O address – Lets you Disable the FIR Port or assign an I/O port to the device. The following I/O options are available:

- Disabled
- Com1, 3F8, IRQ 4
- Com2, 2F8, IRQ 3
- Com3, 3E8, IRQ 4
- Com4, 2E8, IRQ 3

Mode Settings for IRDA – Allows you to configure the Notebook's FIR Port transmission mode. The following options are available:

- Normal (16650)
- IrDA (HPSIR)
- ASK IR
- FAST IR

The default value for this field is Fast IR.

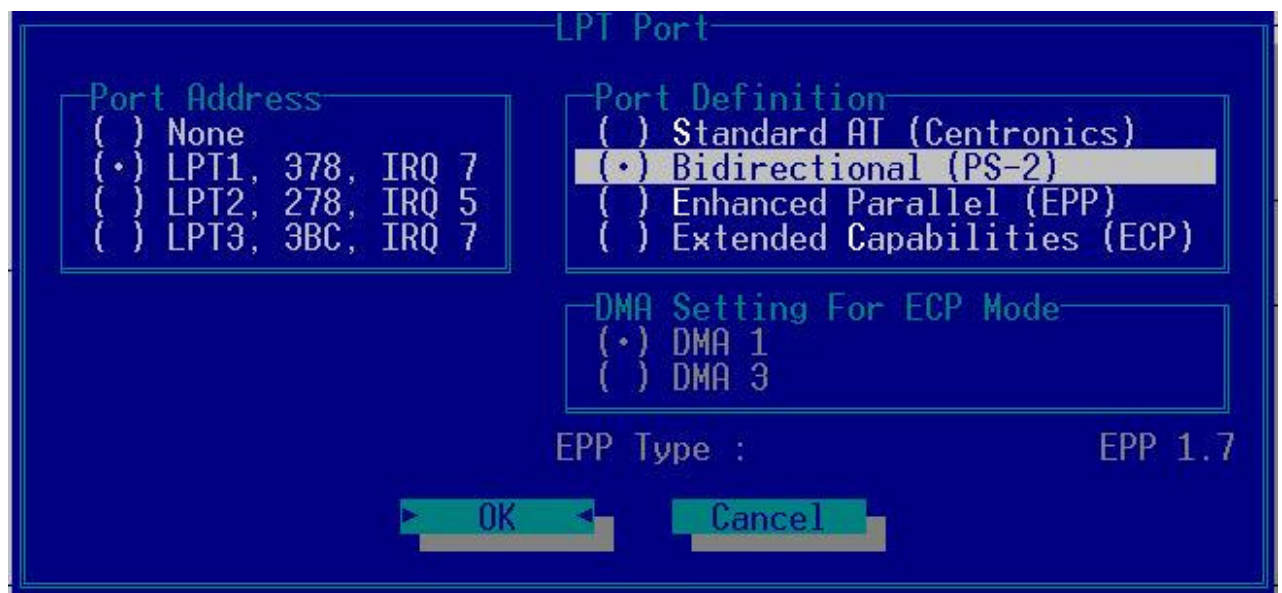
DMA Setting for Fast IR – This field is only available when the FIR Port Mode Setting for IRDA is set to FAST IR. The following options are available:

- DMA 1
- DMA 2
- DMA 3

The default value for this field is: DMA 3

LPT Port

This field allows you to configure the Notebook's LPT Port. The following options are available:



- None
- LPT1, 378, IRQ 7

- LPT2, 278, IRQ 5
- LPT3, 3BC, IRQ 7

The default value for this field is: LPT1, 378, IRQ 7



Changing the default address and IRQ settings for the Serial and LPT Port can cause conflicts with other installed peripherals

Port Definition – This field allows you to configure the Notebook's LPT Port transmission mode.

The following options are available:

- Standard
- Bidirectional
- Enhanced Parallel Port (EPP)
- Extended Capabilities (ECP)

EPP and ECP are bidirectional modes, allowing both data input and output. The EPP and ECP modes are only supported with EPP- and ECP-aware peripherals.

DMA Setting for ECP Mode – This field is only available when the Port Definition is set to ECP.

The following options are available:

- DMA 1
- DMA 3

The default value for this field is: DMA 1

Legacy USB

Enables or disables legacy USB device support.

Use the [SPACE] bar to select the Legacy USB option or not.

StickyKey

Enables or disables StickyKey support.

Use the [SPACE] bar to select the StickyKey option or not.

7.5 The Security Menu

The Notebook's advanced system of security allows you to set a password to prevent unauthorized access to system resources, data, and the BIOS Setup program. This section covers each parameter of the Security Menu. Selecting *Security* from the menu bar displays the following menu:

Each field of the Security Menu is covered in detail below.

A Note about Passwords

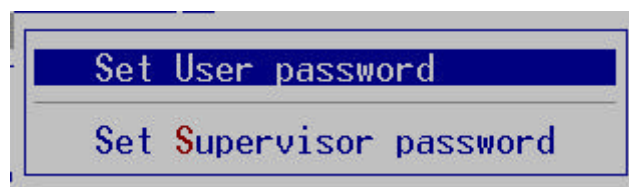
The BIOS Setup program allows you to specify passwords in the Security menu. The passwords control access to the BIOS and certain Security menu options during system startup.

The passwords are not case sensitive. In other words, a password can be entered using either upper or lower case letters; it makes no difference.

Passwords should be composed of characters A-Z, 0-9 and ten characters in length.

The administrator password must be set before the user password can be set.

Set User Password... / Set Supervisor Password...

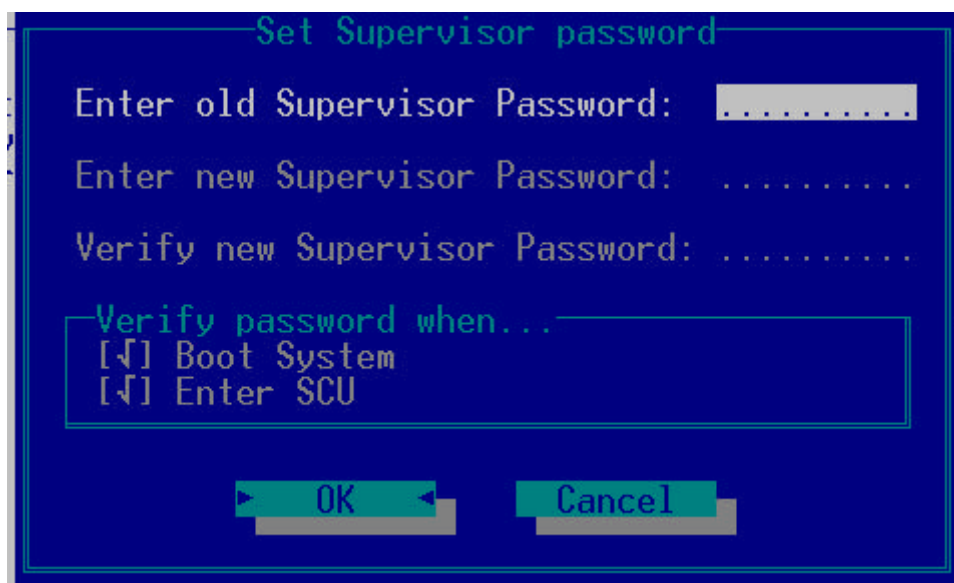


These fields allow you to set the System Password. The System Password allows full access to the BIOS Setup menus. To set the Supervisor password, highlight this field and press [Enter].

Type the password and press the [Enter] key. You can type up to ten alphanumeric characters. Symbols are ignored.

To confirm the password, type the password again and press the [Enter] key. The supervisor or user password is now set, and now you can choose when to verify the password – either when you boot the system, or when a person enters Setup.

To change or clear a password, enter the submenu again. You will need to enter the Supervisor password, after which you can create a new one or set the password verification options.



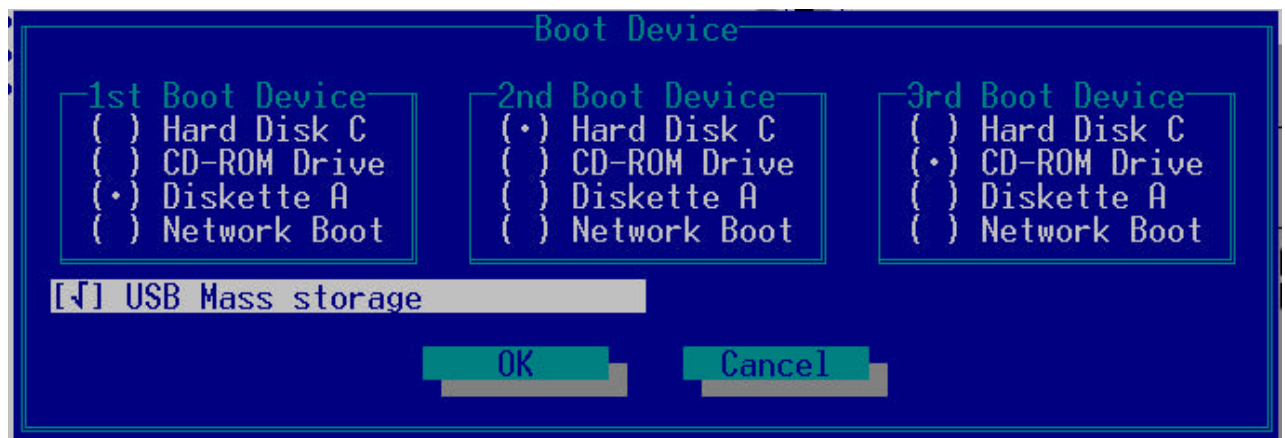
7.6 The Boot Menu

The Boot Menu allows the user to specify the order in which the Notebook is to check for a device to boot the system. To make changes, select Boot from the menu bar. The following screen appears:

Boot Device

The Boot Menu allows you to alter the priority the system uses to search for the boot device on system power up according to numerical order.

Use your mouse to select the First, Second, and Third boot devices from this submenu.



7.7 The Exit Menu

Once you have made all of your selections from the various menus in the Setup program, you should save your changes and exit Setup. Select Exit from the menu bar to display the following menu:

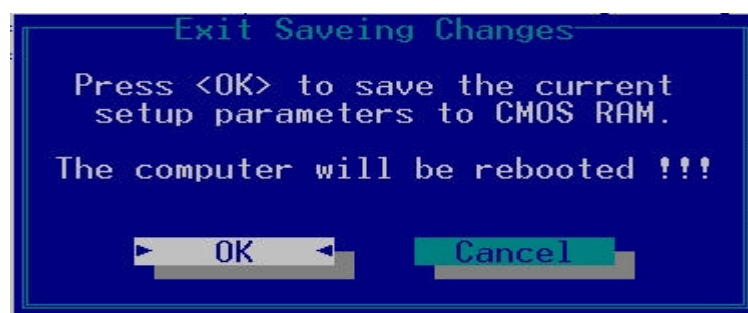


Pressing the [Esc] key can be used to close an open menu or submenu. Pressing it again saves the current parameters and reboots the computer.

Each of the options on this menu is described below.

Exit Saving Changes

Once you are finished making your selections, choose this option from the Exit Menu to ensure the values you selected are saved to Non-Volatile RAM. Changes you made to the Setup program must be changed to Non-Volatile RAM in order to make them operative. Non-Volatile RAM differs from standard RAM memory in that it is sustained by an on-board battery and stays on even when the Notebook is turned off.



Once your selections have been saved, the Setup program asks you to confirm your choice, and then reboot the computer.

System will reboot if OK is selected and will stay in Setup if Cancel is selected.

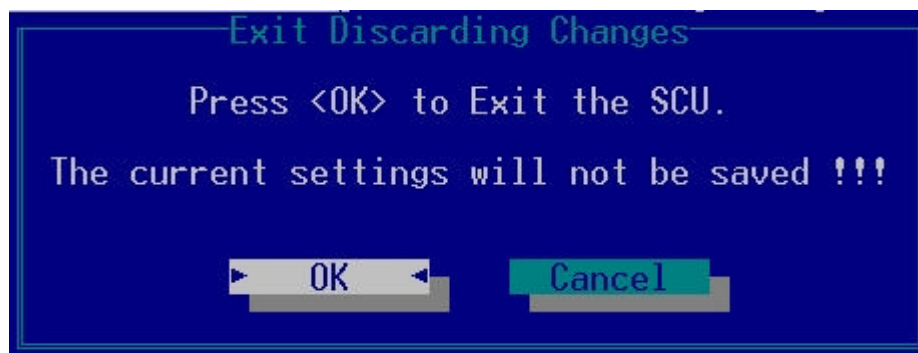
The next time you boot up the Notebook, the BIOS will attempt to load the values you saved in Non-Volatile memory. If these values cause the system boot to fail, reboot and press [F2] to enter the Setup program. Once in Setup, you can try to change the values that caused the system boot to fail. If the problem persists, load the default values (see *Get Default Values* below).



If you attempt to exit the Setup program without saving your changes, the program will prompt you with a message asking if you want to save your changes before exiting.

Exit Discarding Changes

This option can be used if you do not want to save the changes you have made to the Setup program. The default is set to No. If you have made changes to the fields other than system date, system time and password, the system will ask for confirmation when choosing *Exit Discarding Changes*.

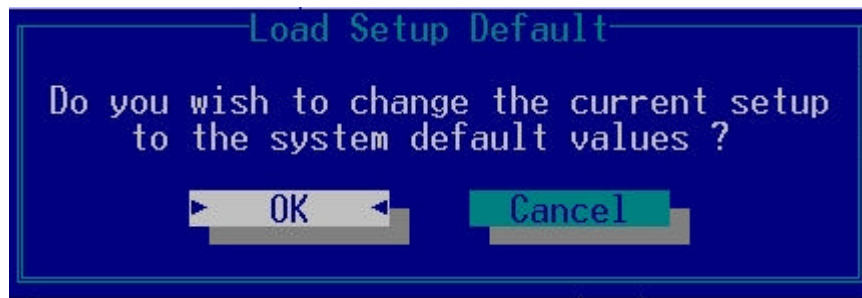


The system reboots using the original Setup values.

Load Setup Default

This option allows you to load the default values for each of the parameters on the Setup Menus. When this option is selected, a confirmation message appears.

The system will remain in Setup after either selection.



You can now select *Exit Saving Changes* or make other changes before saving the values to Non-Volatile RAM.

Discard Changes

Restores the Setup program's values to the ones it had when you entered the program during the boot sequence.

