WinBook®
Critically Proven.

User's Manual

for WinBook XL² notebook computers

WinBook XL²

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Federal Communications Commission (FCC) Statement

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC Rules. Their limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate receiving antenna.
- Increase the separation between 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.

Notice 1:

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Notice 2:

Shielded interface cables and AC power, if any, must be used in order to comply with emission limits.

Conventions of This Manual

Using this manual will help you get the most from your WinBook® XL2 computer. Keep the manual and the "Read Me First" card with your WinBook XL2 to refer to when you want information and help. If you are an experienced user of computers and/or Windows® 98, you might find it useful to read Chapter One on the features specific to your WinBook XL2 and then take advantage of the HTML-based "WinBook XL2 Help" file located in the **WinBook** folder in your Start menu. The hypertext links will enable you to move more quickly to the information you require. If you are a less experienced user, you should read through the manual carefully before using your system. Whether or not you are an experienced user, you should consult Chapter Nine (Troubleshooting) if you encounter any problems with your WinBook XL2. You will find answers there to many common problems or errors.

Before proceeding, you should be aware of some of the conventions of usage in this manual:

Every attempt has been made to keep this manual current, but there might be changes between the writing of this manual and your purchase of the WinBook XL2. Consult the "WinBook XL2 Help" file in the **WinBook** folder of your **Start** menu for the most current information on the functions and settings of your computer.

- Specific keyboard keys to be typed are indicated in square brackets: [Tab].
- Combinations of keys are indicated with a plus sign between the keys: [Shift]+[Tab]. For a combination of keys, you should depress the keys simultaneously. You might also find it easier to hold down the control keys ([Alt] or [Shift] or [Ctrl]) of the combination and then press the final key of the combination.
- The names of files in the Windows 98 long-filename format are represented as text contained within quotation marks: "Windows 98 file".
- Menus and Windows in Windows 98 are presented in boldface: **Control Panel.**
- Paths to launch programs and documents from the Windows 98

Start button are represented as paths in boldface: **Start/Settings/Control Panel/System.**

The pencil symbol indicates that you should take note of the accompanying information.

The exclamation symbol identifies information which is important for you to read to avoid damage to the computer, loss of data, or personal injury.

This identifies information that you might find particularly helpful in using your computer or this manual.

This warning cautions you against actions which might be destructive to your data or might disrupt proper system operation.

In order to get the optimal usage out of your WinBook XL2, you should remember the following:

- Read through all the instructions for your WinBook XL2, including this manual and the “Read Me First” card that came with your computer.
- Keep the area free of static electricity and magnetic fields. These can damage the computer and/or diskettes.
- Be sure to discharge static electricity from your body before touching the computer or keyboard.
- Use the same caution you would with any electronic equipment. Keep food, drinks, smoke and ashes away from your computer. Store the computer in an area that is not exposed to direct sunlight or heating

ducts. Keep the computer away from sources of excessive moisture. Damage to the computer caused by immersion is not covered by the warranty.

- When cleaning the computer or its components, apply the proper cleaning solutions or sprays only to the cloth, not to the computer or its components.
- If there is ever a need to disconnect internal components other than those mentioned in the instructions that came with your system, please have this done by a qualified service technician.
- You should never attempt to physically repair a CD-ROM/DVD drive, diskette drive or LS-120 drive yourself.
- Do not attempt to repair or open a battery yourself. The battery should not be exposed to extreme heat, as explosion can result. Proper battery disposal is required. Do not dispose of battery in regular waste.
- Do not block the cooling vents on the computer side. Do not operate computer while in a close fitting cover or case.

The information in this document and the associated WinBook XL2 Help file is subject to change without notice and should not be construed as a commitment by the manufacturer.

The manufacturer assumes no responsibility for any errors or omissions that might appear in this document or the associated WinBook XL2 Help file.

The software described in this document is furnished under a license and may be used and copied only in accordance with the terms of such license. No responsibility is assumed for the use or reliability of software or equipment that is not supplied by the manufacturer or its affiliated companies.

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Acknowledgements:

Copyright Notice:

Manual Version 1.1

Release Date: September, 1998

Chapter One: Getting Started

⚠ WARNING

Continuous use of a keyboard may cause repetitive stress injuries or discomfort, including carpal tunnel syndrome, tendonitis and tenosynovitis. You should seek medical advice if you feel any aching, numbing or tingling in your arms, wrists or hands.

Suggestions for maximizing comfort in using a keyboard include:

- Take frequent breaks from typing
- Maintain a straight wrist position
- Avoid resting on your wrists while typing
- Use a light touch on keys
- Ensure that your chair, work surface, monitor and keyboard are in the correct positions to keep your back and neck straight, your shoulders relaxed and your elbows at your sides.

Consult your doctor or other health professional for medical advice on how to reduce your risk of injury or discomfort from continuous keyboard use.

Your WinBook XL2 has all the power and can perform all of the functions of a desktop computer, but its slim design and light weight provide you with portability that can free you to use the computer almost anywhere you go. The battery power of your computer allows you to use the computer even where there are no electrical outlets.

In addition to a fast processor, fast video, a large screen and a large capacity hard drive that make your WinBook XL2 a match for desktop systems, there are several features of your WinBook XL2 that make it a particularly powerful tool for your computing needs:

Television Receiver Output: The TV-out port of your computer permits you to redirect the screen output to a television screen, for quick and easy large-screen viewing.

S-video Output: The s-video port of your computer allows you to send DVD and other computer output to s-video enabled televisions or video units for high-quality video playback.

MPEG-2 Software: Many CD-ROM video disks use MPEG compression to store video clips. Your WinBook XL2 has built in drivers for MPEG that allow for fast decompression of these clips and smooth CD-ROM video performance. Units with DVD will also provide smooth video playback with the MPEG-2 software.

Flexibility: Easily upgraded memory and hard drive, a docking port and PCMCIA slots with Zoomed Video (ZV) support provide you with the ability to quickly change and expand your system to meet new demands as they arise.

Windows 98: Your WinBook XL2 is optimized for use with Windows 98 and allows you take advantage of new features in Windows 98.

Save the inner box and all inserts and inner packaging. If you later need to ship or store the system, you will find these handy to have.

All software is preloaded onto the hard drive of your WinBook XL2. You can store the included disks and CDs in a safe place. Copies of the Windows 98 installation files are also stored on your hard disk, so that you will not need the CD to add Windows 98 features or drivers to your system.

Hardware

Inventory

When you unpack your WinBook XL2, check that all the items that you ordered are present and in good condition. Check the inventory checklist that came in the WinBook XL2 box to be sure that all the components and optional components that you ordered are included. If anything is missing or damaged, contact Customer Service immediately (the Customer Service number can be found on the “Read Me First” card that was enclosed in your box).

After your initial system start-up, store your Windows 98 manual in a safe place. It contains your Certificate of Authenticity number for Windows 98, which you might need in case of a reinstallation of Windows 98. If you lose this number, you cannot be issued another number without paying for a new copy of Windows 98.

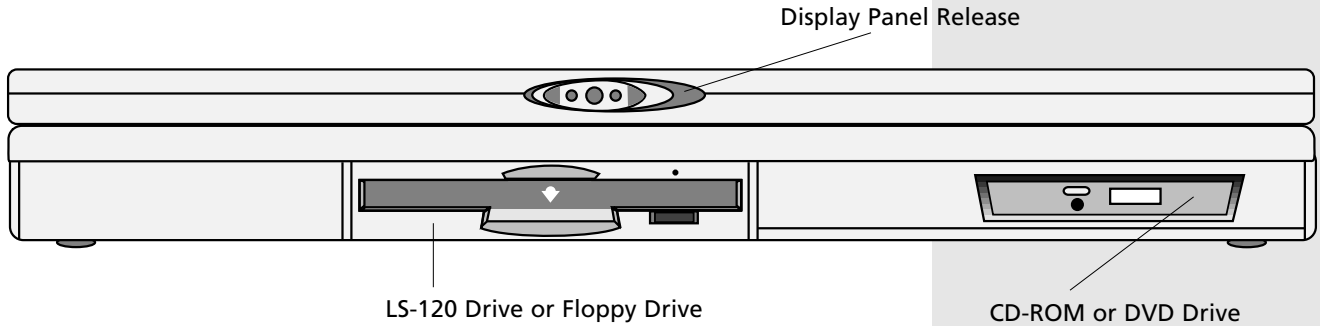
- **WinBook XL2, with built-in CD-ROM or DVD Drive and Floppy Drive or LS-120 Drive**
- **Primary Battery (installed)**
- **AC Power Adapter**
- **Power Cord**
- **This Manual**
- **WinBook XL2 Restore/Utility CD**
- **Windows 98 Manual and CD**
- **Pointing Stick Cover Set**
- **Phone Cord (in units with a built-in modem)**
- **Any optional components ordered**

NOTE: *The WinBook XL2 uses proprietary accessories (such as a port replicator) and you should only use those items that have been approved for your computer. Contact WinBook for information about obtaining approved accessories and upgrades. If you use items that are not approved for use with this computer, you might cause the computer to malfunction or to emit electromagnetic radiation in excess of local regulations. This does not apply to non-proprietary accessories such as PC cards, USB devices, printers, etc.*

The WinBook XL2

Before you begin using your WinBook XL2, you should take a moment to familiarize yourself with the various ports, bays, connectors, and indicators that make up your system.

Figure 1.1: Front View of the Closed WinBook XL2



THE FRONT *(Figure 1.1)*

The front release latch is used for releasing the display panel to reveal the LCD screen and keyboard of the WinBook XL2. To open the display panel: slide the release latch to the right and gently lift the display panel to a vertical position.

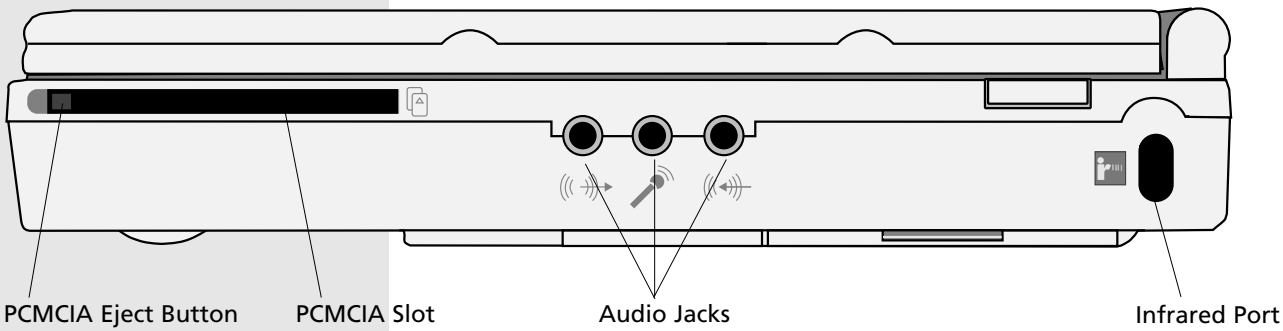
The hard disk drive for your system can be removed to allow for an easy upgrade. You will need to first remove the release screw through the bottom of the unit, as described in Chapter Seven.

The floppy disk drive or LS-120 drive is built into your system. If your WinBook XL2 came with an LS-120 drive, you will be able to use this drive to read or write to standard 3.5" floppy disks or to high-capacity LS-120 SuperDisks. If your unit came with a floppy disk drive, you will be able to use 3.5" floppy disks, but not LS-120 disks.

The CD-ROM or DVD drive is built into the system. To open the drive, turn on the system and press the release button. The door will slide open.

If your unit came with an LS-120 drive, there is a motor for ejecting the disks, as opposed to the spring in a 3.5" floppy drive. You will need to have the power on to eject a disk from an LS-120 drive. If you need to retrieve a disk and cannot power up the system, there is a small emergency release hole located just above the disk slot. Gently insert a paper clip into the hole to manually eject the disk. This method is designed to be used occasionally for an emergency retrieval of a disk and should not be used as a regular method of removing disks. Your drive will last longer if you remove the disk using the normal unloading method.

Figure 1.2: Right Side View of the WinBook XL2



THE RIGHT SIDE *(Figure 1.2)*

PCMCIA (PC card) slots (there is an additional slot on the left side) accept Type I or II PCMCIA cards or a ZV (Zoomed Video) card.

The eject button allows you to remove PC Cards from your system. See Chapter Five for more detailed instructions for using your PCMCIA slots.

The three audio jacks provide you with the ability to connect your system's audio to direct audio input to the system (using the "line-in" jack), to direct audio output to external speakers or headphones (using the "line out" jack), or receive input from an external microphone (using the microphone jack). Using external speakers or headphones will disable the internal speakers; using an external microphone will disable the internal microphone.

The IR (infrared) port allows you to connect to another system using IR technology. You must place the port within one to two feet of the other IR port for proper communication. The IR port on the WinBook XL2 comes disabled, to avoid device conflicts. If you will be using the IR port, see the WinBook XL2 Help file in the WinBook folder of the Start Menu for instructions (**Start/Programs/WinBook/WinBook XL2 Help**) for activating this port.

THE REAR *(Figure 1.3) (Figure 1.4)*

The back of the system has two doors that cover some of the I/O ports for your WinBook XL2. The door on the left flips down and slides in to reveal the docking port of your system. This door should be closed when the system is undocked. This will help prevent damage to the port, as well as preventing the door from being damaged in transport. To close this door, pull it out and flip it back into position until it clicks securely in place. The door to the right houses the parallel, serial, SVGA, TV-out and S-video ports for your system.

Between these two I/O doors is the PS/2 port, which allows you to connect an external PS/2 keyboard or PS/2 mouse to your WinBook XL2.

To the right of the right door is the USB port and the AC connection for your system.

The USB (Universal Serial Bus) port of your WinBook XL2 allows you to add a wide variety of devices to your machine. The USB port can allow you to connect up to 127 devices through this single port, at very high data transfer rates of up to 12 Mbps (Mega-bits per second).

The AC connector should only be used with the proper AC adapter supplied by WinBook.

Although you can connect up to 127 devices through the USB port, not all USB devices have a pass-through to permit a chain of connected devices. You might need to obtain a USB hub to permit you to connect multiple devices into this single port.

Figure 1.3 Rear View of the WinBook XL2

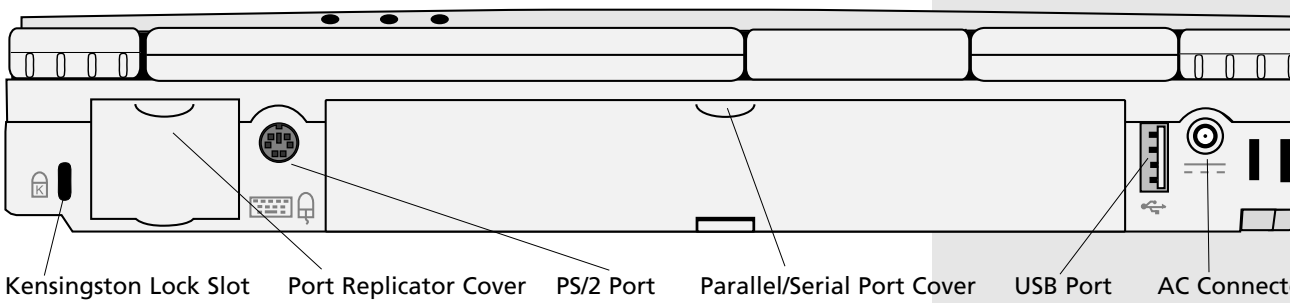
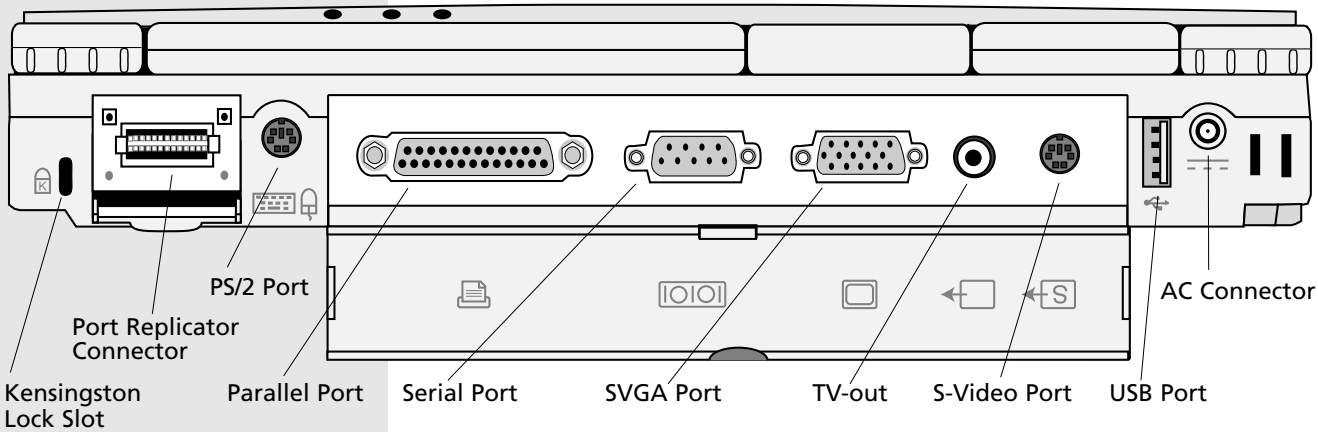


Figure 1.4: Rear View of the WinBook XL2, with Doors Open



The lock slot allows you to connect a special computer lock to secure your system. You can purchase a lock at most computer retailers. This lock is referred to as Kensington lock.

The 80-pin Docking Port provides a connection to an optional port replicator. It duplicates the rear connectors and adds in a second PS/2 port (so that you can connect both an external keyboard and external mouse), a stereo line-out, and a DC power-in jack. The port replicator also features a Game/MIDI port, not available on the actual WinBook XL2.

The Parallel Port provides a connection for a parallel printer or other parallel port device.

The 9-pin Serial Port provides a connection for serial devices, including a serial external mouse. The serial port is designated as COM1.

The SVGA port allows you to connect any standard computer monitor to your system.

The TV-out port allows you to connect your WinBook XL2 to a television receiver and direct the screen output to that receiver.

The S-video port allows you to direct the video output of your system to a device with an s-video connection.

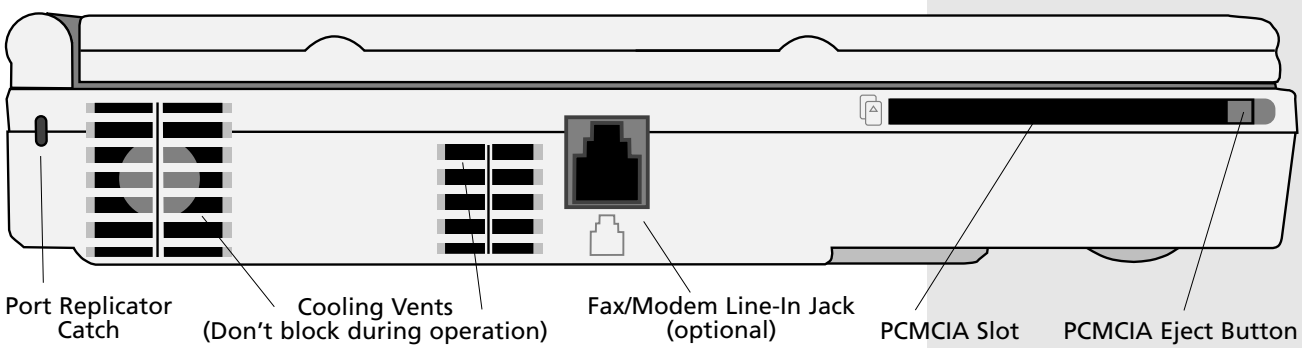
THE LEFT SIDE (Figure 1.5)

PCMCIA (PC card) slots (there is an additional slot on the right side) accept Type I or II PCMCIA cards or a ZV (Zoomed Video) card.

The eject button allows you to remove PC Cards from your system. See Chapter Five for more detailed instructions for using your PCMCIA slots.

The fax/modem line-in jack provides the connection for your internal fax/modem. This jack does not provide a pass-through option for connecting a phone to this same line. You can obtain adapters that will allow you to connect a phone to the same line as your WinBook XL2.

Figure 1.5: Left Side View of the WinBook XL2



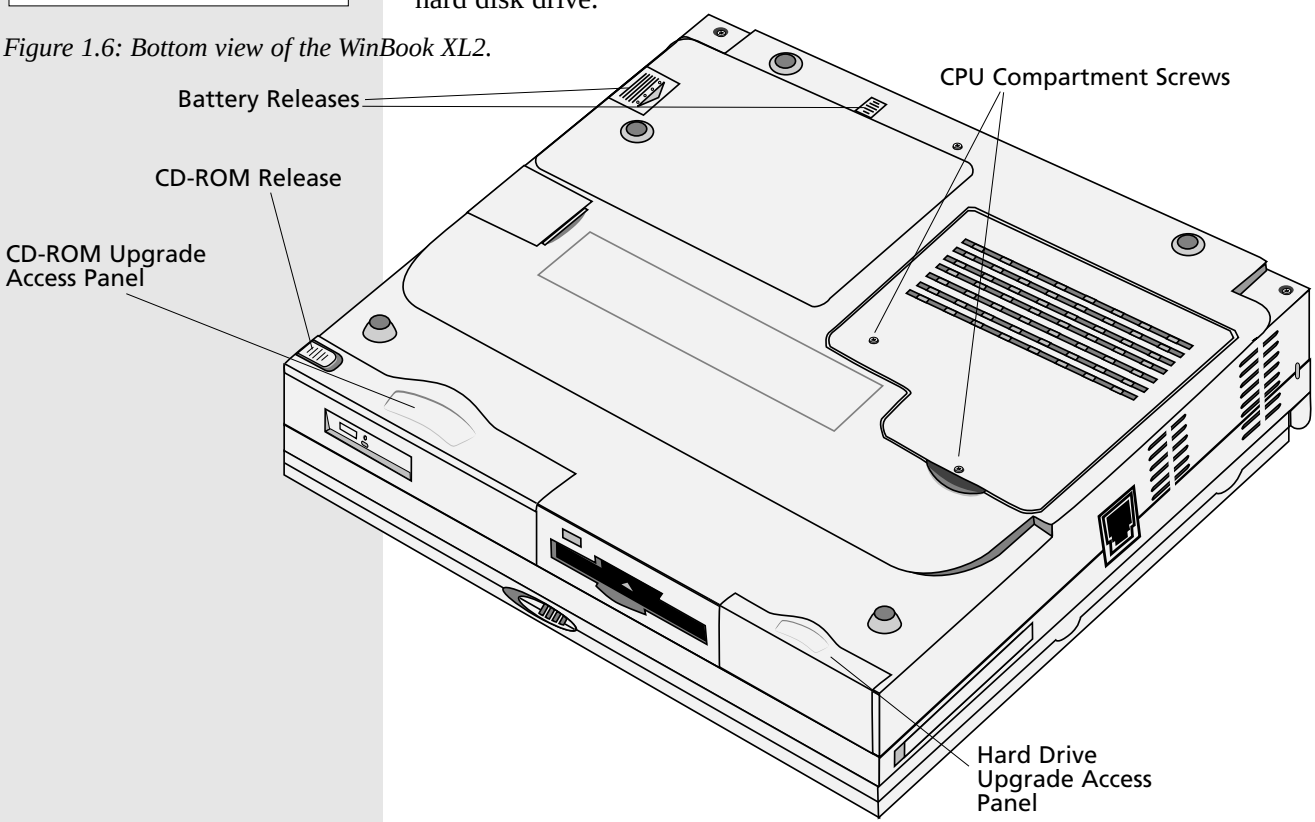
The bottom of your XL2 includes compartments which allow certified technicians access to the internal components of your system. You should exercise care when opening these compartments since damage to the components inside could seriously disrupt system operation.

THE BOTTOM *(Figure 1.6)*

The battery bay has two release latches. The first is at the rear of the system and should be slid back and held while the second release latch is activated. The second is on the battery and should be slid toward the center of the system. Once the releases are engaged, you will be able to angle the battery from the bay.

The release screw for the hard disk drive is located in the vented compartment on the bottom. See Chapter Seven for information on upgrading your hard disk drive.

Figure 1.6: Bottom view of the WinBook XL2.



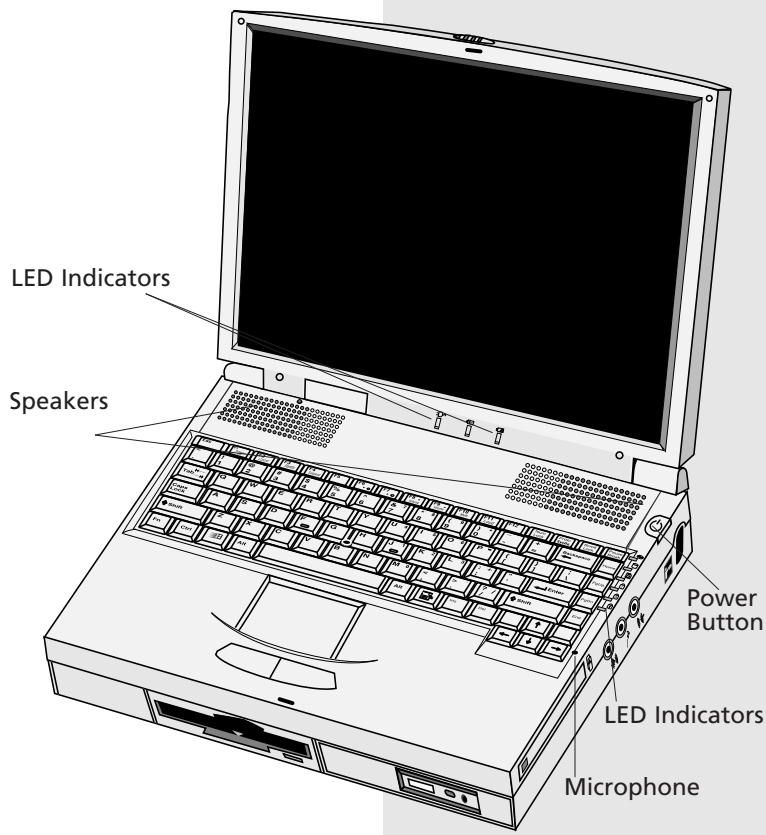
INDICATORS, MICROPHONE, SPEAKERS and POWER BUTTON
(Figure 1.7)

The power button for your system is located just above the keyboard on the right edge of the unit.

The built-in speakers are located at the right and left edges of the system, just above the keyboard.

The built-in microphone is located under the small hole just to the right of the cursor (arrow) keys of your keyboard.

Figure 1.7: Indicators, Microphone, Speakers and Power Button



Your system has two sets of LEDs that indicate system status: one set near the bottom of the display panel (these LEDs are also visible on the lid of the closed unit) and one set just to the right of the keyboard. *(Figure 1.8)*

The power LEDs located on the display panel indicate the different power use and battery statuses of your WinBook XL2. The functions of these LEDs are indicated by icons: a plug, a battery and a battery with a line through it (left to right). These LEDs can be seen whether the display panel is opened or closed.

- When the computer is turned on and using power supplied by the AC adapter the green light below the left icon (plug) will turn on.
- When the computer is turned on and using power supplied by the internal battery, the green light below the middle icon (battery) will turn on.

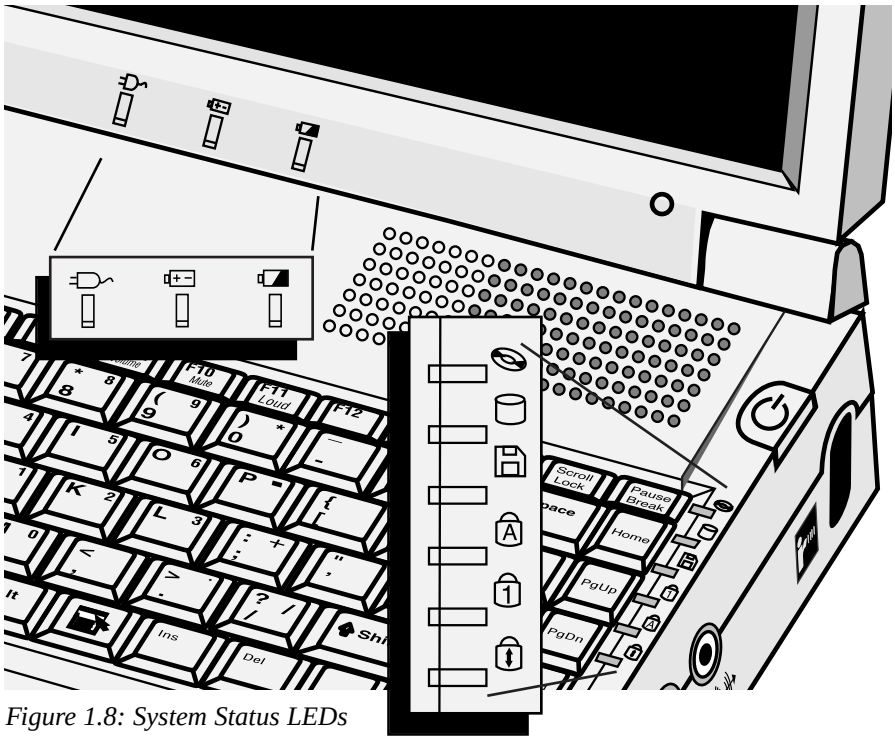


Figure 1.8: System Status LEDs

- When the system is placed into suspend or standby mode, the green light will begin to flash, until the system is awakened.

- When the AC adapter is recharging the internal battery, the amber light below the battery icon with a line through it will turn on. When the battery is fully charged, the light will turn green. When the battery is low on charge and only has enough power to run the computer for a few minutes, the green light will begin to flash red.

  The activity LEDs located just to the right of the keyboard indicate activity in the system. From top to bottom they are:

- **CD-ROM Drive Activity:** Indicates when the computer is reading information from the CD-ROM or DVD drive.
- **Hard Disk Drive Activity:** Indicates when the computer is reading from or writing to the hard disk drive.
- **Floppy Disk Drive Activity:** Indicates when the computer is reading from or writing to the floppy disk drive or LS-120 drive.
- **Caps Lock:** Indicates that the Caps Lock function has been activated.
- **Num Lock:** Indicates that the Num Lock function has been activated. The embedded number pad will be enabled.
- **Scroll Lock:** Indicates that the Scroll Lock function has been activated. In certain programs, this will prevent the screen from scrolling.

Power On

The first time you use your WinBook XL2, use your AC power adapter. This will allow your battery to fully charge. It is recommended that you then allow the battery to fully discharge and recharge three times. This will help calibrate the electronics that monitor and maintain the battery charge. After those three full discharges, you can partially discharge or charge your system as your use demands, although you should allow a full discharge/recharge periodically to help optimize battery life. See Chapter Three for more information on conditioning and maintaining your battery efficiency.

Connect your AC Adapter to your system. Connect the power cord to the adapter and connect the cord to a wall outlet or power strip. Slide the display panel release latch to the right and gently lift the display panel until it is fully vertical. Press the power button on your computer to initiate a boot of the system.

Your system should pass right through the memory tests and setup to start loading Windows 98.

The sharpness of the screen will vary with your viewing angle. Try moving the display panel slightly forwards or back to find the optimal contrast.

Every effort has been made to make certain that your WinBook XL2 system will function properly, but, if you should experience a problem when you turn on the computer, refer to Chapter Nine: Troubleshooting. If you cannot find the answer there or are unsure how to proceed, contact Technical Support (at the number indicated on the "Read Me First" card that came with your system).

When you first start your new WinBook XL2, you will need your Windows 98 manual. On its cover is your product key number for Window 98.

During this first setup, you can click on the Next button to move to the next step. Clicking on the Back button allows you to return to the previous step and review the information entered during that step.

1. You will be asked to type your name and the name of your company (if applicable). Be careful to enter this information correctly, since this information will be entered into the Windows Registry for your WinBook XL2. Correcting a misspelled name at a later date will require you to use the REGEDIT program, which is a program that you should completely avoid unless you are an experienced user of Windows 98.
2. You will be shown the EULA (End User's License Agreement). Read this agreement and then accept its terms by clicking on "accept." You will not be able to click on the Next button until you have accepted the terms (it will be "grayed out" until then).
3. In the next window you will be asked to enter the product key number from the Certificate of Authenticity on the front cover of your Windows 98 manual.
4. You are now ready to begin the Start Wizard, which will guide you through the rest of the setup. Click Finish to begin.
5. You will be asked to set the time zone for your location. If the date and time for your system are not correct, you can correct them here.
6. You will then be asked to set up your printer. If you do not have a printer, you can skip this step. If you are familiar with the process of setting up your printer, you can complete that setup now. If you are not familiar with the process, you can refer to the section on installing a printer in Chapter Four for detailed instructions for this process.

7. The Start Wizard will now update system setings and take you to the Windows 98 desktop.

8. You will be greeted by the Welcome to Windows 98 screen. You can register your copy of Windows 98 electronically, set up your Internet connection, explore Windows 98 and setup automated system maintenance from this screen. If you are unfamiliar with Windows 98, you should consider taking advantage of this Welcome screen. It will reappear each time you boot your system, unless you click off the checkbox beside "Show this screen each time Windows 98 starts." Note: If you disable this feature and want to enable it at a later time, you can find it in the System Tools menu **(Start/Programs/Accessories/System Tools)**.

If you purchased additional software with your system, you will need to install that software yourself before you can use it (which is discussed below). To run the preloaded software in Window 98 (which includes applets such as Wordpad and Paint), you can use the Start option on the Windows 98 taskbar. Select **Programs** from the Start menu, then find the program menu for the software that you wish to run. As you gain experience with Windows 98, you will find that there are other ways to access programs (such as shortcuts and toolbars) that may be easier for the way you work. Explore your system and learn its capabilities. The various options are there to allow you to work in the way most comfortable for you.

Your version of Windows 98 also comes preloaded with software for online service providers. You can double-click on the **Online Services** folder and then double-click on an icon to activate the associated software. The folder also includes an icon where you can find information about the terms of the services.

If you explore the start menu, you will also notice a WinBook folder in the program groups. This folder holds your WinBook XL2 Help file and possibly other files that contain information about your WinBook XL2. The WinBook XL2 Help file contains the information in this manual, as well as other information to help you run your WinBook XL2.

In some cases, you may first see a Safe Recovery message. This message appears because your computer has been previously turned on and the Setup program was not completed. You can ignore this message and continue with your installation.

Remember to store your Windows 98 manual in a secure place. You will need the product key on the cover if you ever need to reload Windows 98, such as when purchasing a new hard drive or repairing a damaged hard drive. If you lose this registration number, you will have to purchase an additional copy of Windows 98.

Once you are experienced with Windows 98, you will find that you can change the look and configuration of the desktop from the defaults provided for you.

The Keyboard *(Figure 1.9)*

Your main interface with your computer will be your keyboard. If you are unfamiliar with the standard PC keyboard, some of its keys are explained in this section. The keyboard has all the standard computer typing keys and some control keys. If you are not familiar with the computer control keys, the major ones are discussed below.

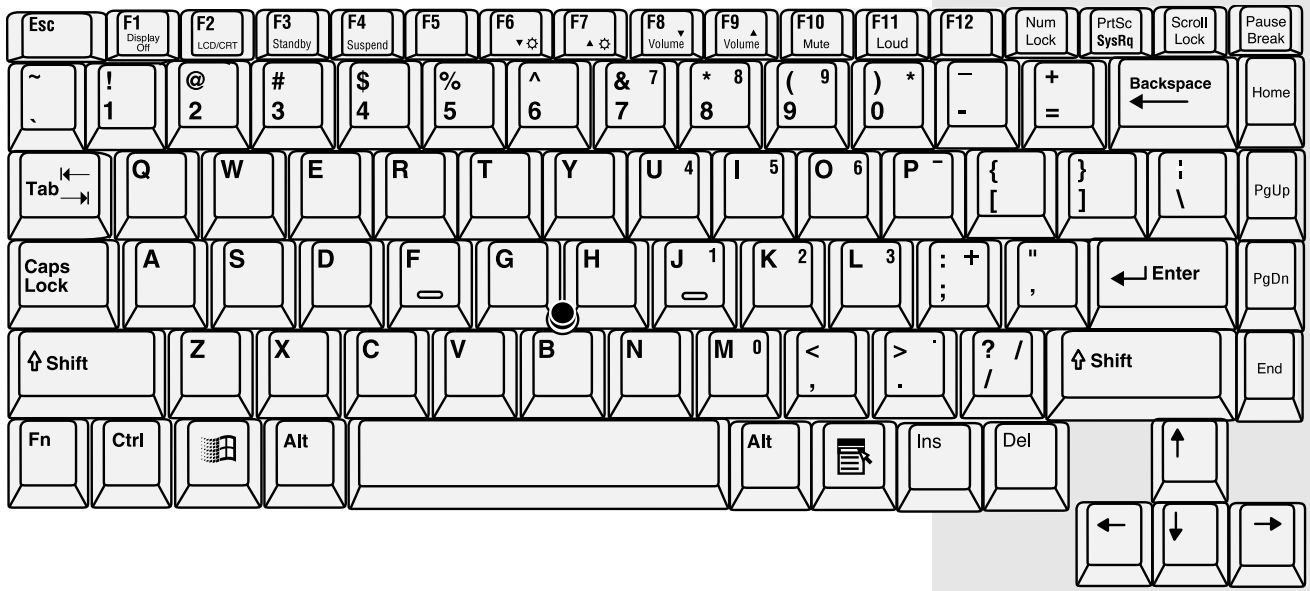
The [Alt] and [Ctrl] keys, like the [Shift] key alter the function of the traditional typing keys and the function keys. Depending on the software you are using, the actual function of the [Alt] and [Ctrl] keys will vary. They might also be used in combination with each other and/or with the [Shift] key to provide further possible combinations of functions with the typing keys. For example, the [Alt]+[Ctrl]+[Del] combination is used to close down an application in Windows 98 that has "hung" or can be used to provide a warm reboot of the computer system.

The function keys (F1-F12) serve different purposes and carry out different tasks depending on the application you have running. They are often used in combination with control keys. You should check the documentation for your application, especially sections on keyboard shortcuts, for information about what the keys do in that application.

The cursor (arrow) keys (which are all located in the lower right corner of your keyboard) and the [Pg Up], [Pg Dn], [Home] and [End] keys (which are located along the right edge of the keyboard) allow you to move the active cursor of the computer to various locations on the screen or within the document. The [Ins] and [Del] keys at the bottom of the keyboard to the left of the cursor keys allow you to insert and delete characters.

Your computer also has an embedded numeric keypad. This numeric keypad is printed in gray on the keyboard. If the NumLock key is engaged, the pad will allow you to type numbers as you would on a 10-key pad. If the NumLock is not engaged, the keys perform their normal alphanumeric function.

Figure 1.9: The XL2 Keyboard (Shown with pointing stick available on selected models.)



Your keyboard also has two Windows 98 keys: a Start key (which bears the Windows logo), which allows you to pull up the Start menu, and a Menu key (which looks like a pull-down menu), which pulls up the popup menu in programs that are Windows 98 compatible (this key acts just like a click of the right mouse button).

Keyboard System Controls

In addition to its function as a normal keyboard, your keyboard also contains controls for various aspects of your WinBook XL2, including the intensity of the LCD screen. These controls appear in green on the keys and are activated by pressing the [Fn] key (located at the lower left corner of your keyboard) in conjunction with the key for the specific control function (or by holding the [Fn] key while pressing the key for the specific control function).

KEYS	FUNCTION(S)
[Fn]+[F1]	Puts the LCD display into a standby mode
[Fn]+[F2]	If an external monitor or television receiver is present, you can toggle 1) to an external monitor, 2) to a TV receiver, 3) to a simultaneous display on the screen and a monitor, and 4) back to the built-in screen.
[Fn]+[F3]	Sends your system into Standby mode to conserve power
[Fn]+[F4]	Suspends current work to RAM or Hard Drive and powers down system
[Fn]+[F6]	Decreases screen brightness
[Fn]+[F7]	Increases screen brightness
[Fn]+[F8]	Decreases audio volume
[Fn]+[F9]	Increases audio volume
[Fn]+[F10]	Mutes system audio
[Fn]+[F11]	Maximizes audio volume

Mouse Buttons & Pointing Devices

Your WinBook XL2 comes with a built-in touchpad and pointing stick and can support an external mouse via the USB, PS/2 or serial ports. You can use two pointing devices simultaneously. See Chapter Four for more information about pointing devices.

When the rubber cover of the pointing stick starts to wear down, you can purchase additional covers from WinBook.

Pointing Stick *(on selected models)*

The pointing stick device is the small red knob (it looks like a pencil eraser) that sits just below the [G] and [H] keys of your keyboard. This pressure-sensitive device translates the pressure of your fingertip on the knob into movement of the cursor. Shift the pressure of your fingertip slightly in the direction in which you want to move the cursor. The two switches below the touchpad serve as the left and right mouse buttons and can be used with either the pointing stick or the touchpad.

Touchpad

The touchpad is a rectangular electronic panel located just beneath your keyboard. You can use the static-sensitive panel of the touchpad as a pointing device. Place your finger gently on the surface of the touchpad and slide it to move the cursor. You can use the buttons along the touchpad as left and right mouse buttons. You can also tap lightly on the touchpad, which the system will recognize as a left mouse click.

You can click and drag an item with the touchpad by pointing at the item, tapping to select it and then, while holding your finger on the pad, sliding your finger in the direction of the movement desired.

Use of an external pointing device with your WinBook XL2 is discussed in Chapter Four.

No matter which pointing device you use, its speed, or the speed of an external mouse, for your WinBook XL2 system can be adjusted to accommodate your personal preferences. You can alter the mouse speed for applications running in Windows 98 by accessing the **Mouse** selection in

the **Control Panel (Start/Settings/Control Panel)**. The options in this menu will allow you to alter the double-click speed (the time between clicks that the computer will recognize as a double-click rather than as two separate clicks) as well as the speed at which the pointer moves. You can also use the menus provided here to alter the pointing device for left-handed users.

LCD Display

Your WinBook XL2 comes with a back-lit LCD display panel. The intensity of the panel will vary slightly with your angle to the screen. You can adjust the angle of the panel to provide optimal clarity. You can also adjust the brightness of the screen by using the [Fn]+[F6] key combination (to darken the screen) or the [Fn]+[F7] key combination (to brighten the screen). Lower brightness will extend your battery charge.

Your screen will support a resolution of 1024 x 768 pixels with up to 64K colors or a resolution of 800 x 600 pixels with up to 256K colors. If you use the Windows Display Properties window (see below) to change down to a resolution lower than the standard resolution of your screen, the display will not occupy the full size of the built-in screen (although it might on an external monitor). Notice that when you put your computer into the DOS mode, which uses the VGA resolution (640 x 480) as a default, the display will be stretched to fit the full screen. When you are displaying the video on the built-in screen, you cannot choose a higher resolution than the standard resolution. However, you can use a higher resolution when you output the notebook's video to an external monitor that supports high resolutions.

You can quickly adjust the resolution and number of color settings through Windows 98's Display Properties window. To open this window, locate the red ATI display icon on the taskbar. Right-click on this icon to bring up the ATI menu. Select "Settings" and then "Display Settings" to bring up the display menu. Click on the Settings tab. *(Figure 1.10)*

You can now choose from the available display options, including window colors and backgrounds. For more information on video resolutions, see Chapter Six.

Battery & Power Saving

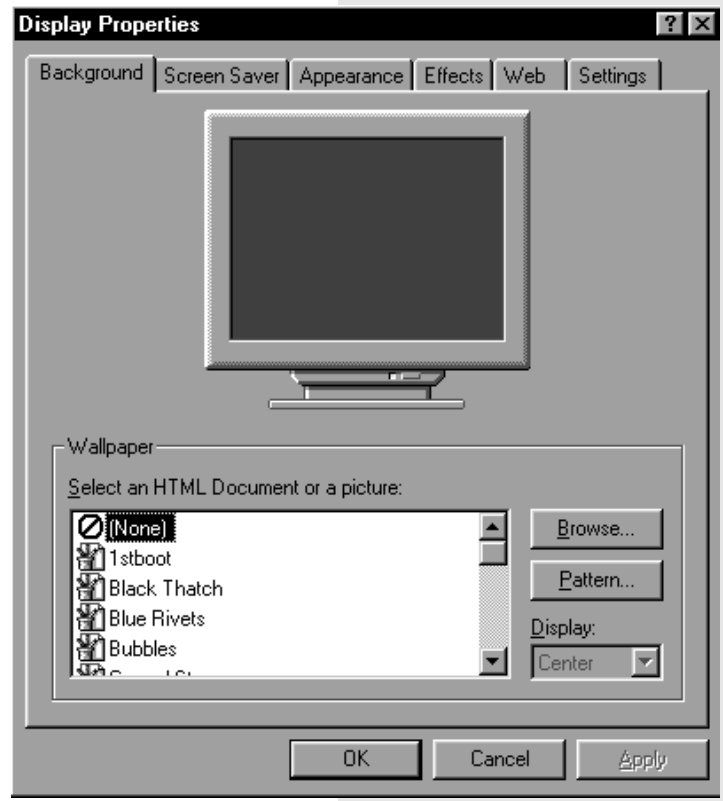
When the AC Adapter is connected to your WinBook XL2, your battery will charge whether the computer is on, off, or in the power saving mode. It will, however, charge much faster if the computer is off.

When your battery charge level gets low, you will receive several warnings.

- When the charge starts to get low, an exclamation mark will appear beside the battery icon on the taskbar.
- When about 10 minutes of battery power remain, you will receive warnings: the system will beep once to warn you that you have entered this low-charge state, the Battery Charge indicator (the right LED on the display panel hinge) will flash red about once per second.
- When about 5 minutes of battery power remain, you will receive additional warnings: the system will beep twice, the Battery Charge indicator (the middle LED on the display panel) will flash red about twice per second.
- When the battery reaches a critical level, Windows will pop up a warning telling you to switch to AC power or suspend.
- When your computer is in suspend or standby mode, the middle LED indicator will flash green once per second.

In addition to these warnings and actions taken by Windows 98, your WinBook XL2 has built-in measures to help preserve data when battery

Figure 1.10: The Display Properties Window.



Your unit will come set to enter the Suspend mode on low battery. This will help prevent data loss. You can alter this setting in the Setup program (see Chapter Eight).

power gets low. If your unit is set to Suspend on low power (the unit is shipped with this option active), you will receive a warning sound when a few minutes of power remain. When power gets critically low, the system will suspend to disk.

If your battery drains completely without being placed into the suspend mode, you might lose information which has not been saved. It is a good idea when using battery power to place the unit in the suspend mode if you think you will be leaving the unit for any substantial length of time.

To check your battery charge level:

Battery Icon

The battery icon provides a rough indicator of the battery charge level by starting out all blue (full charge) and becoming more gray as the charge level drops. You can also hold the cursor over the icon to get a popup reading of battery charge level.

Control Panel

Clicking on the Power icon in the Control Panel brings up the Windows 98 power management menu. You can get a reading on the current battery charge level here. You can also make changes here to the power management settings used during Windows 98 sessions.

Power Management

Your WinBook XL2 should run for over two hours on a single, fully charged battery and longer if power management is employed. The key to obtaining optimal battery life for your system is effective power management. You can set your system for the optimal power management level for your usage by using the Setup program (see Chapter Eight). You should familiarize yourself with the various power management features designed into your system so that you can configure your system for your needs.

Keep in mind that power management takes advantage of the times when you stop using resources. If you work continuously and use resources extensively, power management will not be able to take effect and extend battery life.

Connecting external speakers to your WinBook XL2 disables the built-in speakers.

You can also adjust system volume, microphone volume and other audio settings through the **Multimedia** icon in the **Control Panel.**

Audio/Sound

Built-in Speakers

Your WinBook XL2 comes with built-in audio hardware that plays sounds through the speakers built into the cabinet of your system. You can adjust the hardware volume as explained in the keyboard section above. You can also adjust the software controls of the audio through Windows 98.

You can adjust the audio volume by clicking once on the speaker icon on the taskbar *(Fig. 1.11)* and moving the volume slide.

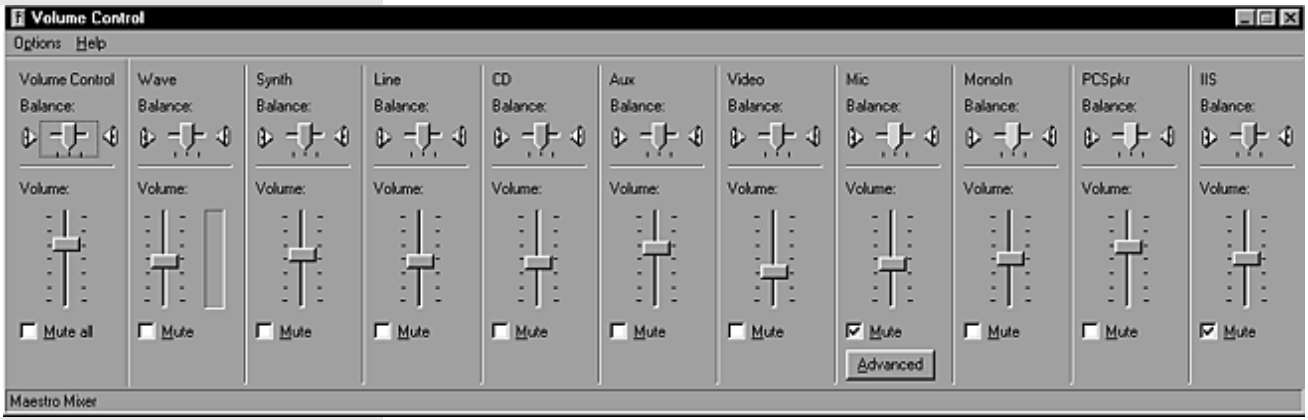
You can adjust the volume, tone and balance of the audio output from your software, by double-clicking on the speaker icon on the taskbar and using the slides in the audio mixer. *(Fig. 1.12)*

Figure 1.11: The speaker icon on the taskbar.

Built-in Microphone

The microphone built into the case of your WinBook XL2 provides you with an integrated source for adding sound to your applications or for using the speech functions of your applications. You will need applications capable of using such sound input to make use of the microphone. The audio software that is included with your WinBook XL2 provides one such application.

Figure 1.12: The Audio Mixer.



Connecting an external microphone to your WinBook XL2 disables the internal microphone.

Your system will ship with the microphone muted, which helps reduce feedback when the microphone is not being used by an application. Double-click on the speaker icon on the taskbar to call up the audio mixer. If the microphone is muted, you can click on its checkbox to enable the microphone.

CD-ROM Drive/DVD Drive

The CD-ROM or DVD drive provides you with a means of having access to programs or data that take up a lot of disk space, without having to sacrifice a large section of your hard drive for that purpose. The CD-ROM drive uses data CDs that are capable of holding hundreds of megabytes of data (DVD disks can hold several gigabytes of information). The high-speed access rate of your CD-ROM enables it to search that data and retrieve the specific data that you want very quickly. Data CDs are ROM (Read Only Memory) disks and cannot be written to with your CD-ROM drive. Their high capacity and fast speed makes them very useful for programs such as encyclopedias and other reference works that require a lot of space and a fast search mechanism, and to which you do not need to add data. Your CD drive can also be used to play audio CDs through the audio hardware built into your WinBook XL2. Your CD-ROM will also be able to read from photo CDs.

You can load a CD/DVD into the drive as described below:

1. Press the Load/Eject button.
2. The disc tray opens.
3. Wait until the tray stops. If the tray does not open far enough to insert the CD, gently ease the tray out until you have enough clearance to insert the CD.
4. Carefully place the CD (audio or data), with the label side up, on the disc tray. *(Figure 1.13)*
5. Be sure to carefully center the CD and press it into place on the loading tray. Since your WinBook XL2 is meant to be portable, the CD is secured onto the tray rather than simply resting in a recess.
6. Close the tray. Be certain that it is closed completely.

Dirt in the CD tray can affect performance. Be sure to keep the tray clean.

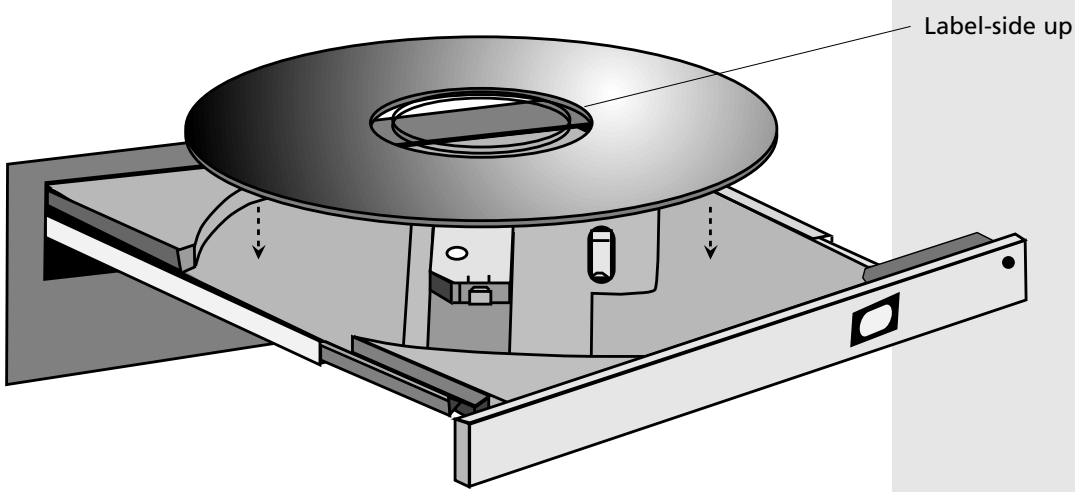


Figure 1.13: Loading a CD into the drawer.

In general, your software will control the CD-ROM directly. Data CDs are accessed via the software—consult your software instructions for the operations of a data CD. Windows 98 compatible CD-ROMs will usually have an autoplay feature that starts the program when the CD is detected. When the CD-ROM is to be used as an audio CD player, you can still use software to control the playing and volume of the CD. To adjust the volume of an audio CD playing in Windows 98, you can single-click (brings up the volume slide) or double-click (brings up the entire audio mixer window) on the speaker icon beside your clock.

If you need to open the CD drawer when the power is not on, you can use the emergency release, which is the small hole located on the front of the drive under the indicator LED. Use a paper clip to press on the release inside the hole. The tray can then be pulled gently forward until the disc can be retrieved. Slide the tray back into place until you feel it click. This method is designed to be used occasionally for an emergency retrieval of a disk and should not be used as a regular method of removing disks. Your drive will last longer if you remove the disk using the normal unloading method.

If your WinBook XL2 has a DVD drive, you will be able to use this drive to play DVD video disks. You can connect your computer to an s-video equipped television or video device to play videos stored on DVD. See Chapter Six for more information on DVD use.

Software

Preloaded Software

Your WinBook XL2 comes preloaded with Windows 98 as its operating system. There is also the necessary software to use your Infrared (IR) port and audio hardware in Windows 98.

For instructions for using Windows 98, check the Windows 98 manual, which is included in your WinBook XL2 box.

In addition to the software that you run and see, there is some preloaded software that runs in the background. Specific drivers (files that allow pieces of hardware to communicate effectively with the computer and operating system) have been preloaded for the various hardware units that have been packaged with your system (e.g. sound card, CD-ROM drive). These drivers are also important in allowing you to alter certain aspects of your system, such as the resolution of your video image.

If you have to reinstall Windows 98 at some point, you will lose some of these drivers. To regain normal functioning of your WinBook XL2 in such a case, use the Restore CD that came with your system.

Adding Software

If you purchased some other software, or if you already own software that you will be installing on your new WinBook XL2 system, or if you buy software at a later date, you will need to know how to install that software on the WinBook XL2 system.

Windows 98 software comes with uninstall functions built-in. If you ever want to remove a Windows 98 program, do not delete it. Use the **Add/Remove** feature to remove it.

The installation of software can be done through the **Add/Remove Program** icon in the **Control Panel**. Once in the Add/Remove window, click on Install in the **Install/Uninstall** menu. You can also use the instructions provided by the software manufacturer, which will usually involve clicking on **Run** in the **Start** menu and typing in the necessary program information. Most current software on CD-ROM will start automatically once the CD is inserted and recognized by your WinBook XL2.

To complete the installation of the software programs you should follow the instructions provided with the software. Most software programs (especially Windows programs) will install directly from within Windows 98. If your program must be installed from within DOS, you can run DOS within Windows by selecting the MS-DOS option in the **Start/Programs** menu or the specialized prompts in the WinBook folder (**Start/Programs/WinBook**).

Chapter Two: Basic Computing

If you are a veteran user of Windows 95, especially with Internet Explorer 4.0, you should be familiar with most of the functions of Windows 98. See the section on Windows 98 below for more detailed information.

The WinBook XL2 is designed to be run straight out of the box, so, if you are an experienced computer user, you should be ready to go. You can find additional information about specific features of your system in the chapters that follow and in the WinBook XL2 Help File in the WinBook folder on your hard drive. If you are not an experienced user or are new to the Windows 98 operating system, you should take a few minutes to read this chapter and familiarize yourself with some basic aspects of computing with your WinBook XL2.

RAM

RAM (Random Access Memory), also sometimes referred to as system memory, is the active memory of your computer, where it holds programs and data that are currently in use. The more RAM your computer has, the more space it has to run programs. Your WinBook XL2 came with a certain amount of RAM, but that is not the limits of the memory used by Windows 98. Windows 98 will set up a swap file on your hard drive to provide additional "virtual memory." When the programs you are running need more than the memory available in RAM on your computer, Windows 98 will "swap" some programs from RAM to that hard drive. When those bits of memory are needed, Windows 98 will swap them back into RAM (and, if necessary, swap other bits of memory to the hard drive). Even with the fast data bus and fast hard drive in your WinBook XL2, the reading and writing to the disk is slower than having the data available in RAM.

Some programs will require a lot of RAM to run. As a result, the number of programs that you can run simultaneously will vary with the type of applications in use.

When you place your WinBook XL2 in the Suspend mode, it will use a small amount of battery power to keep the RAM active while shutting down the other elements of your system. When you resume using the system, your active sessions in RAM will be available just as you left them.

Hard Drives

The hard drive is the fixed disk, which provides the primary storage medium for your data. Most of your programs and data will be stored on the hard drive. The capacity of your hard drive will probably be one or more gigabytes (1 gigabyte (GB) = 1,000,000,000 bytes or 1024MB). The programs you run and the data you create will be stored on this hard drive and take up some of that available space. Programs tend to take up a lot of disk space (some may take up over 100 megabytes, with software suites taking up considerably more), while the files that you create will generally take up much less (stored in plain text, a 1,000 page manuscript will fit in less than 1 megabyte).

Your hard drive is usually the C: drive in your system. There are a number of system tools that will allow you to keep track of disk usage and keep your hard drive running efficiently.

You can find out what is stored on this drive by double-clicking on the My Computer icon and then double-clicking on the C: drive icon. *(Figure 2.1: The C: Drive.)*

If your computer is connected to a network, you will also have access to hard drives on other computers. See the networking documentation in Windows 98 to see how to access such drives.

Figure 2.1: The C: Drive.

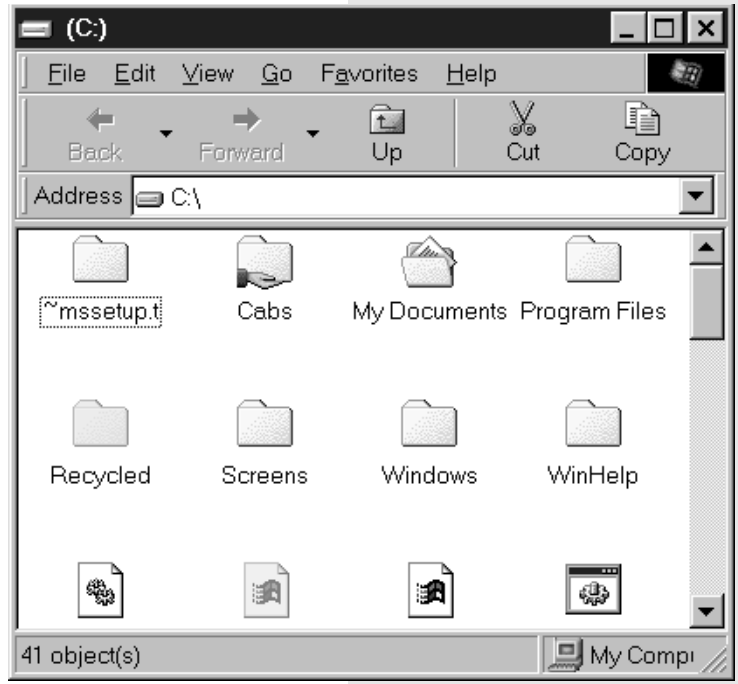
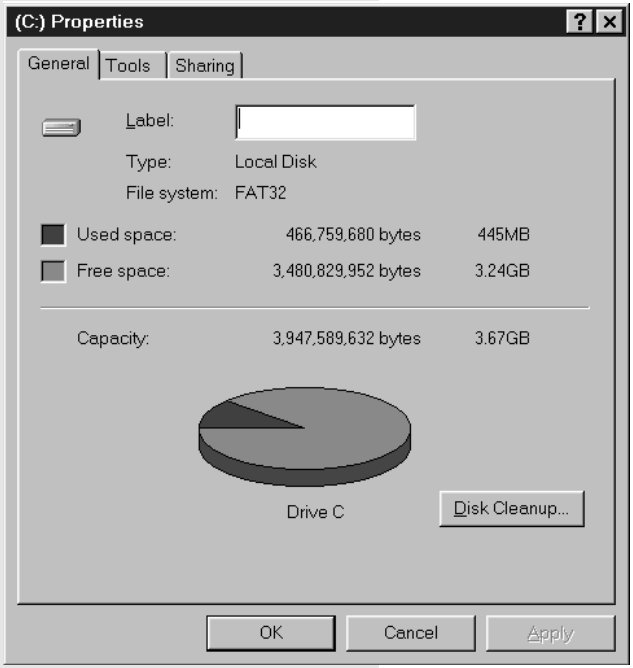


Figure 2.2: C: drive properties



You can also find out the capacity, used space and available space on the C: drive by right-clicking on the C: drive in the My Computer window and selecting properties from the drop-down menu. *(Figure 2.2: C: Drive Properties)*

The Windows Explorer provides an alternative way of seeing the contents of the C: drive **(Start/Programs/Windows Explorer).** See the Windows 98 documentation for more information on this program.

Computer disks will often get fragmented. This means that files are not stored in a single piece but are broken up and distributed. This happens because hard disks are random access devices. When they seek to save a file to disk, they randomly find the first available space and begin to store the information. If this space is not large enough to accommodate the whole file, then the computer will break off the remaining section of the file and find the next available space. And so on. This can result in files being broken into many small pieces and scattered across the drive. With heavy usage, the drive can eventually become very fragmented. This can slow access time to the disk. Keep in mind that even a very fast hard drive is still much slower than RAM, so slowing the access time to the disk will slow down what is already one of the slowest elements of your system. You can check fragmentation level and defragment the disk by using defragmentation software. One example comes with Windows 98 and can be found in the System menu **(Start/Programs/Accessories/System Tools).** A good defragmentation program will usually advise you as to whether or not the disk is sufficiently fragmented to warrant running the program at this time. Defragmentation can be a time-consuming process.

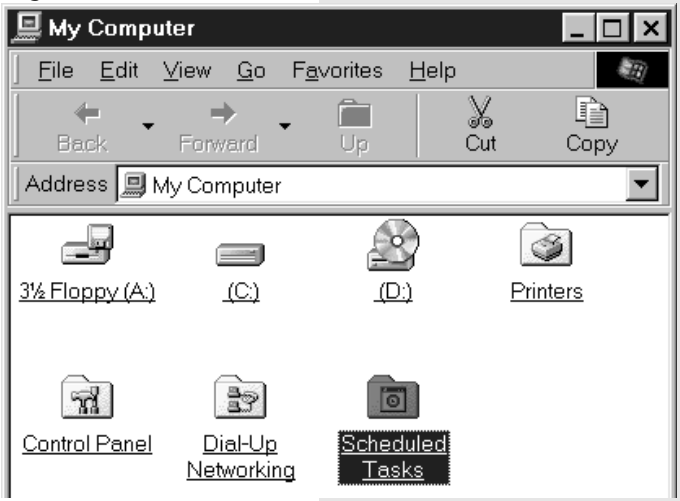
It is also a good idea to check your hard disk on a periodic basis for disk errors that can lead to data loss. The ScanDisk utility in Windows 98 **(Start/Programs/Accessories/System Tools/ScanDisk)** provides a means of checking your system for such errors. Information about using this utility can be found in your Windows 98 documentation.

If you do suffer a hard drive failure and have vital data which was not backed up, you can check with data recovery specialists in your area who might be able to retrieve some of that data for you.

You can automate the task of defragmenting and checking for disk errors by using the Task Scheduler built into Windows 98. This utility can be used for automating many of your tasks. See the Windows 98 documentation for more detailed information about using the Task Scheduler.

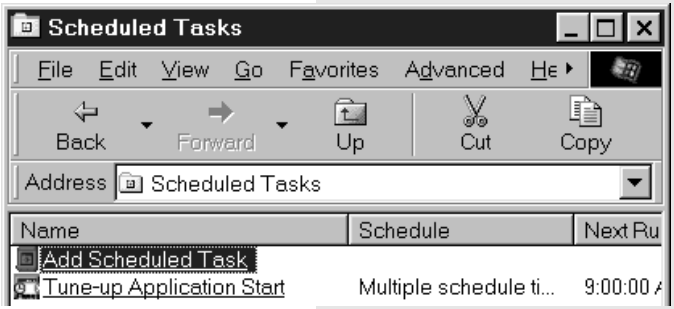
To use the Task Scheduler, double-click on the My Computer icon on your desktop. Double-click on the Scheduled Tasks folder. *(Figure 2.3: Task Scheduler)*

Figure.2.3: Task Scheduler



This will bring up the Scheduled Tasks folder. *(Figure 2.4: Scheduled Tasks)*

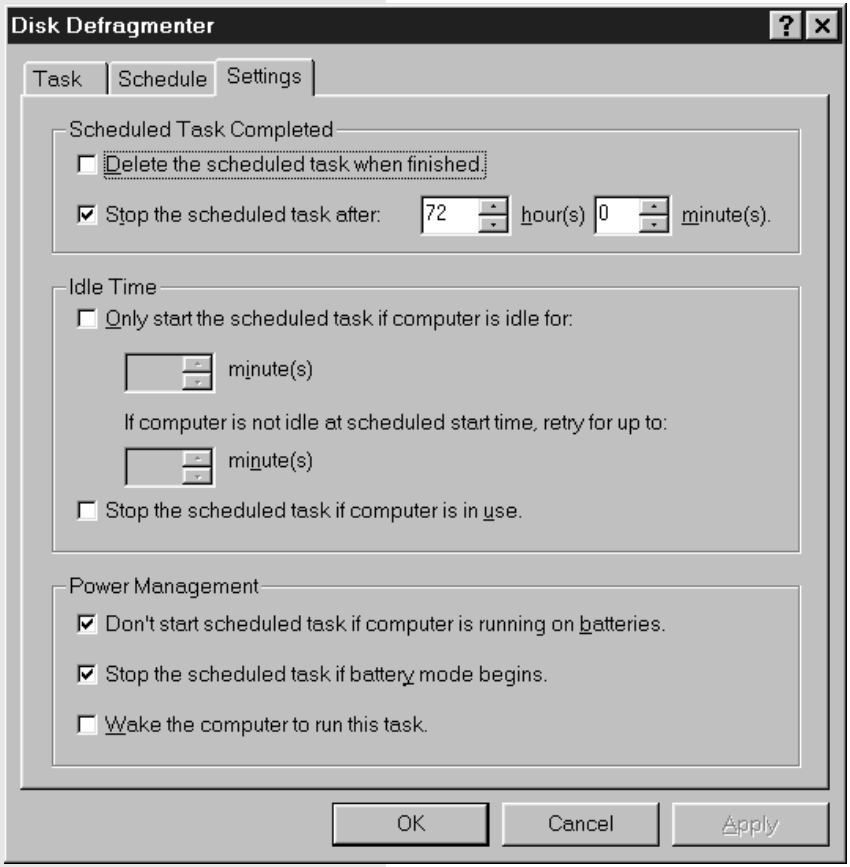
Figure 2.4: Scheduled Tasks



You can take a look at the scheduled tasks already present by right-clicking on them and selecting Properties. You can add a task (such as periodic defragmenting of your hard drive) by double-clicking on the Add Scheduled Task icon. This will bring up a wizard that will lead you through the scheduling process. Since you are using a mobile computer, it is suggested that you check the option on the last screen that takes you to the Advanced Properties dialog box (you can also do this later by right-clicking on this task and selecting Properties). Once the dialog box

comes up, click on the Settings tab and select those options that will limit the task when running on battery power. This will delay the task until you are running on AC and can be sure that the task will be properly completed. It will also keep an automated task from draining battery power from an unattended system. *(Figure 2.5: Advanced Task Scheduler Properties)*

Figure 2.5 Advanced Task Scheduler Properties



Hard disks can fail. While some data recovery is possible even from a faulty drive, you will save yourself money and time and aggravation if you are careful to back up your hard drive on a regular basis (your computer retailer can help you select a backup device that meets your needs). If you use your computer heavily, a daily or weekly backup is probably in order. If you use the system less frequently, a monthly backup might be in order. While it is often quicker to make a complete backup and then subsequent incremental backups of new information, you should make a complete backup every few backup cycles, to save you time in restoring your system in case of failure.

You can track the error-checking, back-ups and defragmentation of your hard drive by opening the My Computer window, right-clicking on the C: drive and selecting Properties. Click on the Tools tab to view the current status of your hard drive. *(Figure 2.6: Hard Drive Tools)*

Note: This tracking will only work if you use the Windows 98 utilities to perform these functions.

The Device Manager

While the Setup program (see Chapter Eight) tells your computer what equipment it is running, the Windows 98 Device Manager tells the operating system what equipment it is running. It is a good idea to learn about the various components of your system and how they operate. You might find that there are capabilities of your system that you had not anticipated. Or you might need to know what hardware is in your machine and to what standards it conforms in order to know how well your system will work with some new software you want to install. Or you might want to add some additional equipment to your system and will need to know if its settings will conflict with those in your WinBook XL2. Device Manager is the place where you can learn this information about your system. If you want to know more information about these pieces of the computer, you can click on the particular device in the Device Manager and then click on Properties. If there is a problem with the device, you will

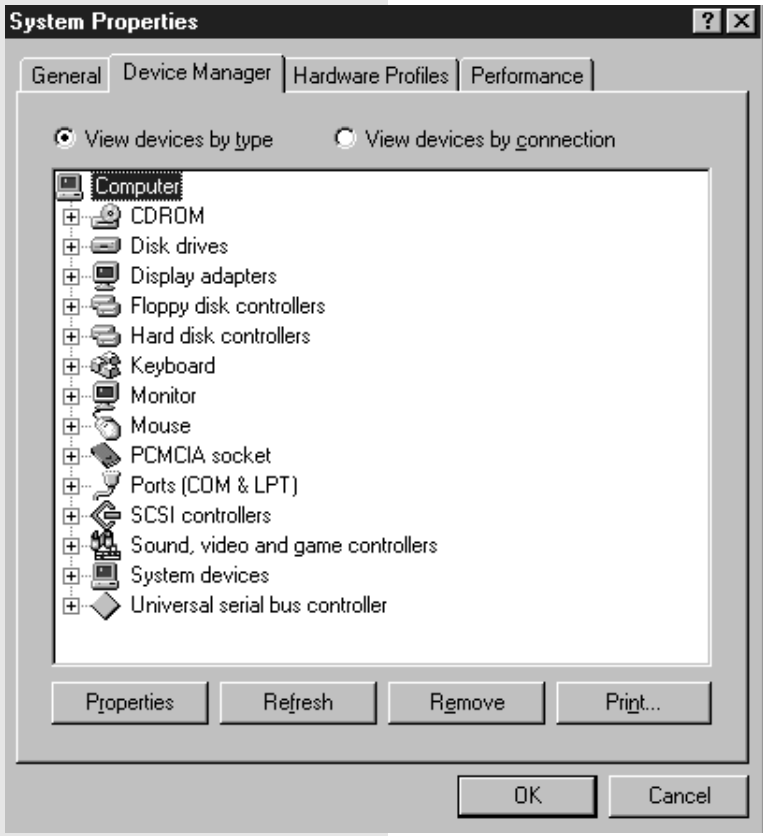
Figure 2.6: Hard Drive Tools

Be sure to read the Windows 98 manual carefully before altering any settings in Device Manager.

get some basic information here on the source of the problem. If there is a conflict between two (or more) devices, you will also be told which devices are trying to use the same IRQ or resource.

You can get to the Device Manager through the System icon in the **Control Panel** (**Start/Settings/Control Panel**) or by right-clicking the **My Computer** icon on the desktop and selecting Properties. In the System Properties window, click the Device Manager tab. *(Figure 2.7 Device Manager.)*

Figure 2.7 Device Manager



You can use the plus signs beside the device category to expand the category and reveal the actual devices that fall into that category.

Data Handling

Once you have your computer running, you will start to generate data of your own. This data will be stored in files (distinct collections of related data stored in a single format). You provide names for those files when you save them from within the application that has been used to create them. Windows 98 is capable of supporting long files names so that you can name a file running in a Windows 98 application with a good, descriptive file name (for example, "John Smith financial records for May 1996"). Programs which are not fully compatible with Windows 98 (DOS programs or Windows 3.x programs) may be restricted to the older DOS convention of 8 characters and a three character extension after a period (for example, jsmith96.fin).

Windows 98 does make use of the extensions to track which programs are associated with which extensions. Your software will usually assign an extension to the long file name when you save, but you can choose the extension yourself if you would prefer. The extension allows Windows 98 to know what application to use to edit that file. Depending on your settings, Windows 98 might not display those extensions in Explorer or My Computer (since it uses icons for those files to indicate the program with which they are associated), but it can be made to do so. Check the Windows 98 documentation for instructions on how to turn on that function.

OLE (object linking and embedding) is a built-in function of Windows 98 and of many applications that will run under Windows 98. OLE allows you to create documents that are, in fact, compositions of multiple files in multiple applications. Thus, you could write a report in a word processor that would include a set of data from a spreadsheet and a graph from a presentation graphics program and a picture from an image-editing program. This single document would be edited by using the programs to edit the individual components without you having to move from program to program (OLE keeps track of what program needs to be used for editing a certain part of a document).

Thus your data is stored in files and/or as documents. Your applications and Windows 98 should do all the keeping track of the documents, allowing you to concentrate on creating them.

Once you have created files or documents, you can make copies of them, rename them, move them around, or do many other things with them. You can also delete them when they are no longer necessary.

Fortunately, a file that has been deleted can usually be restored. If you have used the Recycle program in Windows 98, the deleted files will be stored there (until the bin is emptied). You can see the Windows 98 documentation for information on how to use the Recycle program. Even a file that has been “deleted” is usually recoverable, if you act quickly.

When the computer deletes a program, it does not immediately delete it. It marks that area of the disk as available for use. As you store more data, that area might be overwritten (where a file is stored is random). If not much data has been stored since the file was deleted, you can usually recover all or part of that file. There are various utility programs that can be used for such recovery. If you ever accidentally erase a file, you should look into obtaining such a program.

Very few people ever know exactly where every document on their hard drive can be found. Sometimes you will need to find a document. Many applications have such a function built-in. If the one you are using does not, you can use the find function built into Windows 98 **(Start/Find).** Files can be located by name (if you remember it), or by some text or data contained in the file, or by the date the file was last used. For more information about using find functions, see the Windows 98 documentation or the documentation that came with your application.

If the disks you buy are not formatted, you will need to format them. This prepares the disk for the kind of data storage used by your operating system. See the Windows 98 documentation for information on how to do this.

In addition to storing files on your hard drive, you may also choose to store them (or copy them) on diskettes. You computer will use diskettes (usually 3.5" diskettes) as secondary storage media. Secondary storage means that they are stored outside the memory of your computer. (Your primary storage medium is your hard drive.) Data is stored on diskettes as magnetic fields. Your WinBook XL2 system came equipped with a 3.5" diskette drive or an LS-120 drive capable of reading 3.5" diskettes. To read data from or write data to your diskette, insert your diskette into the drive. You will need to tell your software which drive to read from and write to (A:, unless you have changed the designation). A read/write head inside the drive will now be lowered and the diskette spun to allow access to its surface.

Always handle a diskette by its case. Do not touch the media inside the diskette. If possible, write on the label before placing it on the diskette. If you must write on the label while it is on the diskette, use a soft pen (such as a felt-tip pen). The information on a disk is stored as a magnetic field, and thus diskettes can be damaged or information erased by exposure to

magnetic fields. Avoid placing the diskette near sources of strong magnetic fields, such as motors, telephones, speakers and television sets. Avoid exposing the diskette to extreme temperatures, moisture, smoke, direct sunlight, dust, dirt and ashes. These can all damage your diskette. Store in a proper case when not in use.

You can prevent data on a diskette from being accidentally erased by moving the write protect notch so that the hole is open. This will allow you to read from the disk, but not to write to it or alter it.

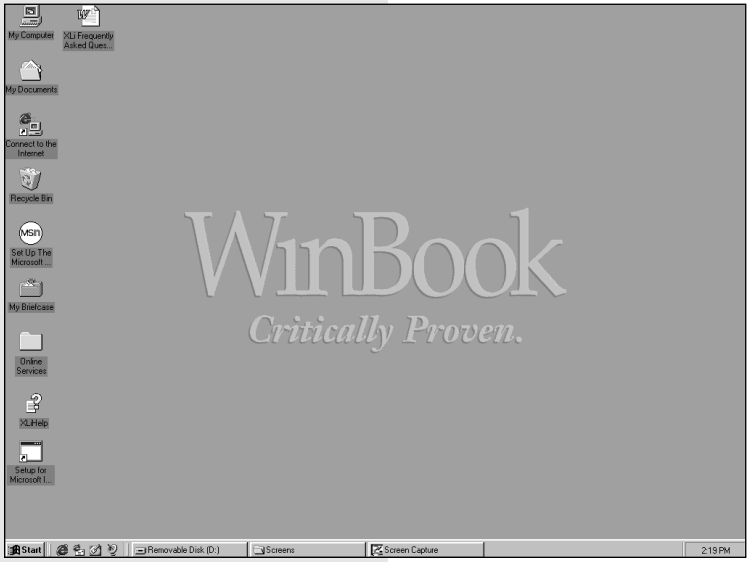
While the files you create will typically be relatively small, if you will be working extensively with graphics and sound and video, you will find that these files will take up a considerable amount of hard drive space. If your unit came with an LS-120 drive, it will be capable of storing 120MB on each disk and will provide space for those large files. If you have a 3.5" floppy drive, you can obtain an external, large-capacity drive that connects through the parallel port or a PCMCIA SCSI interface card. You can also save larger files in smaller formats by compression them with a file compression program (such as PKZIP).

Software on CD-ROM or DVD-ROM can provide you with savings of hard drive space. Some programs on CD-ROM or DVD-ROM will give you the option of setting up a minimal amount of the program on the hard drive and running off the CD or DVD. If you would not find it inconvenient to run the program with the CD or DVD in the drive, you might want to consider this when purchasing applications software that provides the choice of CD or DVD or multiple diskettes. This may often be slower, but, in a program that does not make a lot of calls to the disk, the difference might not be noticeable.

On the other hand, with the exception of CDs or DVDs that run directly from the compact disk, most CD programs install some of their parts on the hard drive. When buying software on CD or DVD, you might want to check to see how much hard drive space will be required. If you have a choice of minimal installation, you should consider how much the program

might be slowed by making a lot of calls to the CD-ROM/DVD-ROM drive. You could install the software each way for a while to test the speed, but another approach would be to consider the nature of the program and how intensively it will be using the CD or DVD.

Figure 2.8: Windows 98 Desktop



Windows 98 Functions

Your WinBook XL2 ships with the Windows 98 operating system. This desktop: *(Figure 2.8: Windows 98 Desktop)*

- Is designed for easier connectivity to the Internet, which can save you time if you rely heavily on Internet connectivity. Note: In order to take advantage of the power of the Active Desktop you will need an Internet connection via a modem or network PCMCIA card or other network connection.
- Can be set to allow for scheduled or immediate updates of web material, so that your desktop is maintained with current information.
- Can use a web page design, which helps make the differences between files on your computer and links to Internet sites less apparent. This can enable you to keep track of local and Internet materials together.
- Does not tile open Windows as you move down through a hierarchy of folders, but keeps a single window open while moving from one folder to the next. The window uses "forward" and "back" arrows to permit you to move through the hierarchy.

- Provides an “address” line for a given directory, which can allow you to quickly type in a different directory or web (World Wide Web—see below for more information) address and change the active window. Note: When typing in a new address, remember that web addresses use forward slashes to separate directories or folders, while Windows 98 uses backward slashes. If you type forward slashes for a folder on your hard drive, Windows 98 will convert these to backward slashes.

If you would prefer to change your desktop to the Windows 95 desktop, there is a section below that explains how to do so.

The Windows 98 desktop consists of a background, the taskbar (which can be hidden), icons, which represent ways of starting programs, and program windows. The desktop is the basic workspace of Windows 98. Programs are run in windows (which can fill the whole screen and obscure the desktop) of variable sizes that take up space on the desktop. One window is the active window and fills the foreground of the screen. That active window is the one available for direct input.

If you are not familiar with Windows 98, you should familiarize yourself with the taskbar. *(Figure 2.9 The Windows 98 Taskbar.)*

Figure 2.9 The Windows 98 Taskbar

The taskbar has a start button that allows you to launch programs or documents. It will also provide you with a list of the programs currently running. Holding the cursor over the items on the taskbar will bring up popup descriptions. The taskbar provides you with an easy way to bring a program or window to the foreground by clicking on that item on the taskbar. If you would prefer to work without losing some of your screen to the taskbar, you can adjust the settings to hide the taskbar. Check your Windows 98 documentation for information on how to adjust the taskbar settings.

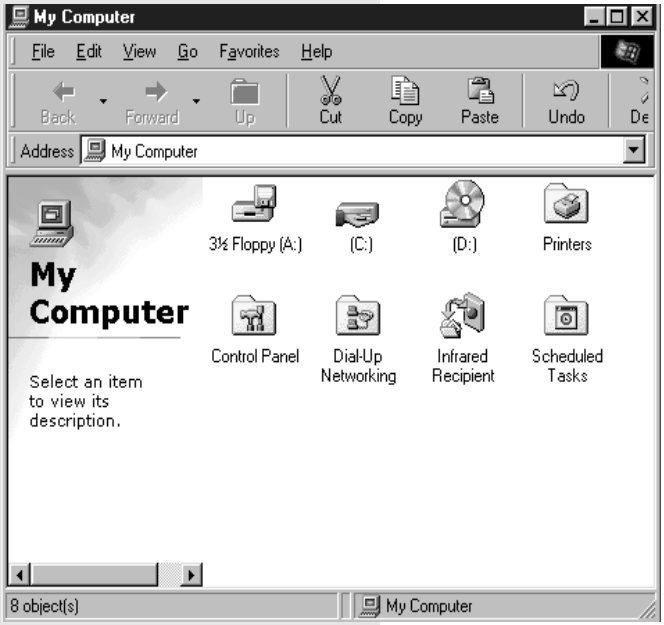
You can switch between Web style and Classic style (Windows 95 style) windows by right-clicking on the desktop, selecting Active Desktop/Customize my Desktop/Folder Options. This will pull up the dialog box that lets you toggle among the available modes.

Your taskbar also includes a clock. If you hold the cursor over the clock, you will see a popup date. If you need to adjust the time or date of your computer, you can double-click on the clock and use the Date/Time Properties Window to make the necessary adjustments.

The taskbar also includes a tray beside the start button. This is the Quick Launch toolbar. The left icon launches Internet Explorer. The second icon from the left launches the Outlook Express communication program. The third icon brings the desktop to the foreground, minimizing all windows. The fourth allows you view Channels, which are web sites optimized for use with the Active Desktop.

You should also take a moment to familiarize yourself with the My Computer icon. *(Figure 2.10 My Computer.)*

Figure 2.10 My Computer



This provides a starting point for getting at programs and files stored on your computer. In the "Web style" mode of the Windows 98 desktop you will also see a frame at the left of the open window which provides a description of the currently highlighted item in the window. You can also use the Windows Explorer program to provide access to the program and files. Both are important resources for finding, organizing, copying or deleting your files.

If you are not familiar with working in a Windows environment, you should take some time to familiarize yourself with how to navigate this operating system. Windows 98 allows you to multitask your operations, meaning that you can have several programs running simultaneously. Only one of these will be the active, foreground application. While the foreground application is the only one that you can control directly, background applications can con-

tinue to execute functions set in motion. Keystroke combinations or other shortcuts that are not used by the foreground application might also be usable by background applications.

You can toggle between open program windows by using the [Alt]+[Tab] keyboard combination or by clicking on the desired program on the taskbar or by clicking on a visible part of the program window (if the foreground program is not using the entire screen). Right-clicking on the program on the taskbar might allow you to access certain facets of the program via a popup menu without having to toggle the program to the foreground. You should learn the shortcuts between programs and familiarize yourself with how to create shortcuts in your system. The Windows 98 documentation can provide you with information on using the various aspects of this operating system.

Your WinBook XL2 has been set up with most common Windows 98 components active. There are, however, other components that can be added to the Windows installation. These can be added through the **Add/Remove Programs** selection in the **Control Panel** (**Start/Settings/Control Panel**). Once there, select the **Windows Setup** tab. You can find descriptions of these components in your Windows 98 documentation.

Although the Windows 98 manual does provide some documentation for DOS, if you are accustomed to using DOS and will still be using DOS under Windows 98, you should keep your old DOS manuals around for an explanation of DOS commands and features (although some may vary slightly from the DOS that runs under Windows 98).

Windows 98 has a number of components built into it which can allow you to write letters and papers, draw pictures, and the like. Each of these "applets" is adequate to simple tasks. If you plan to use your computer for more complicated tasks, you will want to purchase software for that purpose. For example, a full-featured word processor will allow you to take advantage of more elaborate features such as columnar text and a substantial thesaurus. If you have some primary purpose(s) for your computer, for

All running programs take up RAM. If enough programs are opened, you might run short of system resources and be unable to open additional programs.

If you find that a DOS program (e.g. a game) will not run, you may need to alter the DOS configuration that Windows uses for its DOS windows. DOS programs are still limited to using the first 640K of RAM for their primary functions. The number of drivers already in RAM (for sound cards, mouse, etc.) may reduce this amount. Since some games require over 500K of RAM to run effectively, the DOS configuration files may require some tweaking. You can find this information in the Windows 98 manual or on-line documentation. If you are not at all familiar with DOS memory requirements, you might want to read an older DOS manual to familiarize yourself with DOS-based programs. If you need additional drivers to use your system with DOS programs, check the disks that came with your WinBook XL2 or contact Technical Support for information on obtaining those drivers.

example keeping your financial records or writing a novel, you should look into purchasing the available software. This will allow you to take advantage of the speed and power of your computer. Your WinBook XL2 system is capable of running older DOS and Windows 3.x software if you already have such programs, but neither of these will take advantage of all of the features of your WinBook XL2 system. If those programs are adequate to your purposes, then they will run just fine, but, if you buy Windows 98 compatible software for your system, it will run most effectively. If you have existing Windows 95 software, most of it will run in Windows 98 without any problem. If you do encounter difficulties, contact the software vendor to see if there are updates of the program that address Windows 98.

Windows 98 Classic Desktop

If you prefer to use the original Windows 95-style desktop, it is possible to convert your desktop from the Web style desktop to the original.

To change the look of your folders, start by right-clicking on the desktop and selecting Active Desktop. You can then use the Customize my Desktop option to open the Display Properties window. You can delete any Active Desktop items from the list by selecting that item and clicking on the Delete button. Then click on Folder Options and click on the Yes button to view the Folder Options dialog box. Click on the radio button beside "Classic Style."

Open My Computer. You will see that these changes still leave your folders with the browser toolbar and address field. You can hide these by placing your mouse cursor just below the address field until it becomes the double-headed arrow that is used to resize windows. Click the left mouse button and drag the lower border of the toolbar area upward until the Address field and browser toolbar disappear. This should give you a desktop look that is much closer to the original Windows 95-style desktop.

Communications

Your WinBook XL2 might have come with a fax/modem (built-in or a PCMCIA card) that allows you to take advantage of the fax and communications abilities of your system. The fax/modem is capable of running in two modes: as a fax and as a modem (which can be connected to other computers via their modems).

You must disengage Call Waiting when using the fax/modem. The click from the Call Waiting can interrupt or cancel transmissions by the fax modem. Contact your local phone company for information.

Faxing

Your modem can allow the computer to send and receive faxes if you obtain fax software. Any Windows application which has a print command can be used to generate faxes. You can combine text and images from different programs into a single fax transmission. To send a fax from within a Windows program, you need only select the fax as your printer for that document. Then print the document just as you would to your printer.

Your fax can also be used to receive faxes, which can be sent directly to your printer to produce a hardcopy of the fax transmission.

Software logs will enable you to track all of the faxes that you have sent or received.

The current Federal Communications Commission regulation part 68, Section 68.318 (c)(3) states that it is illegal to transmit a fax in the United States which does not contain the following sender information:

"...in a margin on the top or bottom of each transmitted page or on the first page of the transmission, the date and time it was sent and an identification of the business, other entity, or individual sending the message and the telephone number of the sending machine of such business, other entity or individual."

Please be certain that you have complied with this regulation and set up your fax software appropriately before faxing.

Modem Communications

You can use the modem to connect to other computers with a modem, or to log into networks that allow modem access. Your modem can be set to emulate a terminal for logging into remote systems. It can also be used with log-in protocols to connect to certain providers and on-line services (including those provided with Windows 98). *(Figure 2.11 Online Folder)*

Your modem can be set to allow your computer to function as its own mini-BBS (bulletin board system), enabling callers to log-in to your computer and exchange information.

Due to limitations in telecommunications connections, maximum transfer rates might not be attainable in your area.

Note to advanced users: a list of AT commands is available in the WinBook XL2 Help file.

The speed of your modem (e.g. 56,600 baud) represents the speed at which the modem is capable of transmitting information. A modem with a speed of 56,600 baud means that the modem can transmit 56,600 bits (not bytes) per second (bps). Your modem may be capable of faster speeds of transmission from modem to computer. This does not affect the rate of communication between modems, but, if both modems are capable of such compression, a connection can have a higher effective speed if the sending system compresses the data as it is sent from the sending computer to the sending modem and if the receiving system decompresses the data as it is sent from the receiving modem to the receiving computer. Thus, it is possible to "connect" at higher speeds. You should always try to connect at the highest rate of connection available to you. The modems will negotiate the connection and establish the actual rate of transmission of information (the key is the compatibility of the modems—the standards in this industry are fairly well-established and thus compatibility is pretty much the norm).

Fig. 2.11 Online Folder

To connect to anything with your modem, you will usually need to sign on with some provider (unless you have log-in rights with some network already—e.g. at work) or dial-in to another computer already set to receive such connections. On-line service providers will allow you to connect to an extensive computer environment. You can use such providers to send and receive email (electronic mail), chat with other computer users, look up information in their databases, participate in electronic discussions with multiple parties, and even download software. The major service providers usually charge a monthly fee for connection time. Some services they provide may entail an additional charge. Since such electronic connections are an important resource for computer users,

Windows 98 comes with its own software for making such connections, as well as with software from some of the major service providers (in the Online folder).

You can also use your modem in conjunction with financial software to perform your banking and pay your bills electronically. Such software can also be used to track investments by logging into providers who transmit market data. In addition, you can use commercial tax preparation programs to send your tax forms to the IRS electronically. Your state and local tax offices might also offer such services.

Keep in mind that your modem is a phone, but unlike other phones, it is very sensitive to noise. While you might be able to listen through static and line noise and make out what your caller is saying, modems, which communicate in high-speed tones, are more finicky. If you find that your modem has a lot of disconnect problems, you might see if you can reduce the line noise in your phone lines (sometimes the noise is in the lines from your telephone service provider and there is little that you can do). Also, if someone picks up a phone connected to the line and then hangs it back up, this might be interpreted by your communications software to be a disconnect signal.

Internet and the World Wide Web

If your WinBook XL2 came with a modem, or if you have a network connection, you can use your computer to connect to the Internet and World Wide Web. Windows 98 is designed to help provide quick access to the Internet, so you will want to familiarize yourself with the Internet functions of Windows 98. To enter the Internet, you will need to log your computer into a network connected to other networks as part of the Internet.
If you have a modem, there are providers who just provide access to the Internet. Most major commercial providers also have connections to the Internet. You might also have access to the Internet by dialing into a network at home or school. Some communities have local “freenets” which

can be used to provide a connection to the Internet. If you have a direct connection to a network line, you will find this connection to be a much faster way to access the Internet than via modem.

Once connected to the Internet, you can use this connection to send email, download and upload files, and connect to a variety of information and entertainment sources. You will need a web browser, such as the Internet Explorer program that is included with Windows 98, to be able to access information on the World Wide Web. The browser program includes the necessary software to handle most of the program, text, graphics, sound and video files of the web. In some cases, you might need additional software for certain files, but this software should be available as a download from the web.

Internet connections are a useful way to exchange information and acquire updates of programs, including updated drivers or files for your WinBook XL2. Once you have become familiar with your WinBook XL2, you can find more extensive information about the World Wide Web in your WinBook XL2 Help file.

Chapter Three: Mobile Computing

You can connect and disconnect the power cord while working without disrupting the functioning of the system, as long as your battery is in place and has at least some charge remaining.

Battery Operation

Charging

Your WinBook XL2 comes equipped with a durable, lightweight, rechargeable lithium-ion battery that can power your system for over two hours when fully charged (longer if power management is used). The actual duration of a charge will vary with how you use the computer and with how much you take advantage of the power management features of the system.

The battery charges whenever the AC Adapter is connected to your system. The battery will charge whether the system is off, in the Suspend mode, or operating. The fastest recharge occurs when the system is off or suspended to disk. It takes about 2.5 hours to fully recharge the primary battery when the system is powered down, longer if you are using the system (about 5 hours).

Each time you charge and partially discharge the battery, it stores slightly less power. After about twenty cycles, it might only store about 80% of its potential charge. Similarly, if you do not use the battery for a few days, it will slowly self-discharge, and when it is recharged, it will hold less than 100% of the potential charge. You should frequently let the battery fully discharge and recharge to help keep the battery in good condition. This operation carried out every few weeks will maintain the battery efficiency.

When you replace the internal battery with a new one, you must first initialize the new battery so that the battery gauge in Windows 98 is calibrated correctly with the charge potential of your new battery. See the section below for calibration information.

Over time, as the battery is charged and discharged, it gradually stores less charge. Li-Ion cells generally last for 500 or more cycles before they begin to deteriorate. You should replace your battery when you notice that it begins to store significantly less charge.

Changing

You can purchase a second battery for your WinBook XL2.

This second battery is installed in the battery bay, replacing the original battery. *(Figure 3.1)*

1. Slide the center release on the battery toward the rear of the system.
2. Slide the edge release toward the middle of the machine.
3. Use the edge of the release to grip the battery and angle it from its bay. *(Figure 3.2)*
4. Angle the new battery into the bay.
5. Push it gently into the bay. Both releases should snap into place.

When you install a new battery, you will need to calibrate the battery. Install the new battery and connect the AC adapter. Let the battery charge fully. Then, turn on the power and press [Del] when prompted to enter the Setup program. Use the down arrow to move to the Power Management menu and hit [Enter] to view this menu. Near the bottom of this menu you will see "Battery Calibration." Use the down arrow to scroll down to it and hit [PgUp] to run the battery calibration. Follow the instructions provide by the battery calibration utility.

As part of the calibration, the WinBook XL2 will discharge the battery and shut down the system. This process can be very lengthy. You should see a message indicating the status of the calibration.

Once the calibration is completed, your WinBook XL2 will be able to accurately gauge the charge of the battery.

Note: You must perform this calibration when the battery is fully charged.

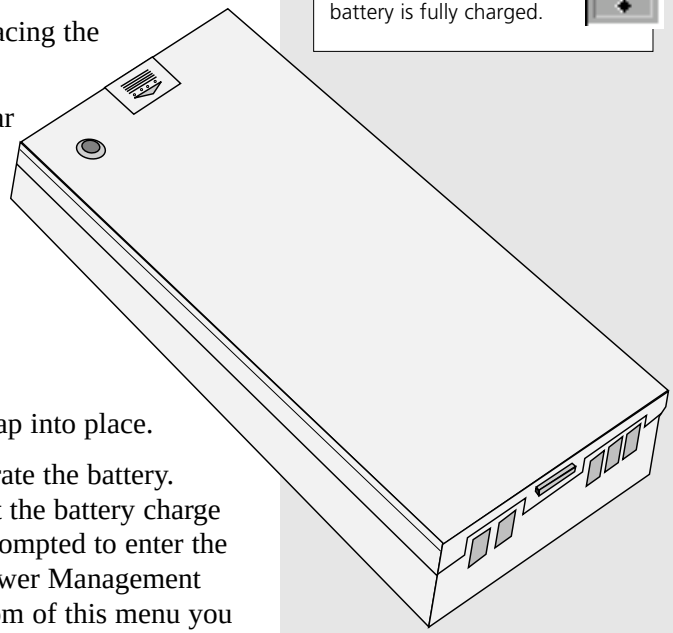
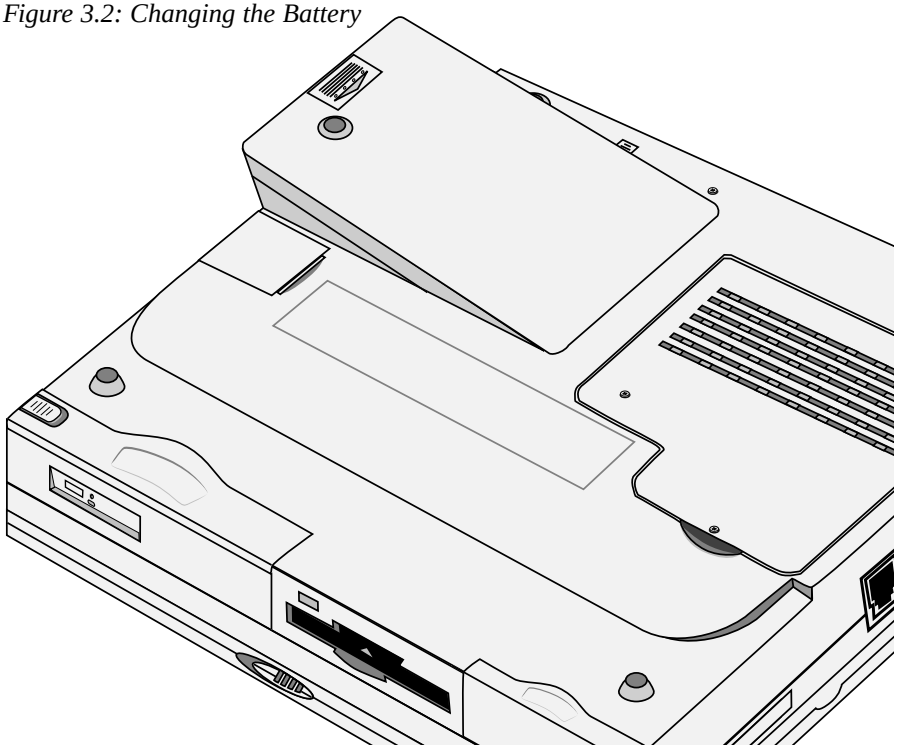


Figure 3.1: WinBook XL2 Battery

If your system is set to show a graphic during the power up, rather than text, you will need to press [Del] as soon as the graphic appears to enter the Setup mode. See Chapter Eight for information about using the Setup program.

Figure 3.2: Changing the Battery



Power Management

In order to make the most of the mobile computing capabilities of your WinBook XL2, you will need to be aware of how to manage the power consumption of your system. Aggressive power conservation can provide extended computer usage. Sometimes aggressive conservation will not be needed, or you might prefer not to engage it. You should set the default to match your most common needs. If you use the system primarily as a mobile system with long-term battery needs, you can use an aggressive setting. If your battery usage is usually limited, then you might prefer a more moderate setting. Remember: to reset the default, you must use the Setup program.

There are two power management systems available to you.

1. Your WinBook XL2 has power management features built into the BIOS Setup program. You can change the degree of power management by entering the BIOS Setup program (see Chapter Eight) and adjusting the power management settings. The Setup Program provides hardware power management options that can augment the Windows 98 power management discussed below. Even if you chose to use the Windows 98 power management as your main method of power conservation, you should consider enabling the BIOS setting to allow for a suspend to disk after a long period of inactivity (e.g. 60 minutes). This can spare you from losing data if you forget to shut down the system or leave your system for longer than anticipated.

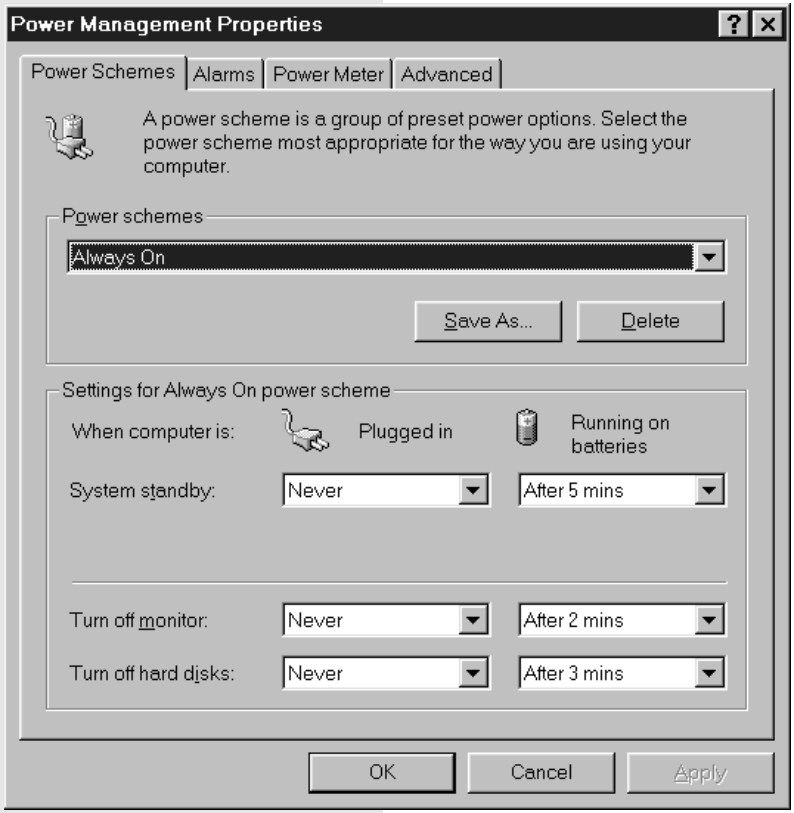
2. Your WinBook XL2 is ACPI (Advanced Configuration and Power Interface) compliant and can take advantage of Windows 98's built-in power management features. Windows 98 is designed to help manage power on portable computers and you will find its features useful in conserving battery life. ACPI also allows certain applications to exert control over power management. For example, a program might be set to override power management settings during a slide-show presentation. Since you can control these without having to exit to the Setup program, you might find it useful to take advantage of the Windows 98 power management if you will want to be able to make fine adjustments to power management while working. You can activate these by right-clicking on the **Power** icon (either the battery or plug) on the **taskbar** and clicking on Adjust Power Properties. *(Figure 3.3)*

Figure 3.3: The Power Utility

If you choose to allow Windows 98 to control the power management, it will take command of the power management settings during Windows 98 sessions. *(Figure 3.4)*

There are three power schemes in Windows 98: Home/Office Desk, Portable/Laptop and Always On. Each provides default settings which anticipate standard power usage in each setup. Your unit should be set to default to Portable/Laptop settings. You can customize the settings to match your usage and save your own schemes (e.g. Airline Travel).

Figure 3.4: Power Properties



The schemes allow you to set your computer to enter the standby mode, to turn off the monitor and to spin down the hard disk.

- Standby mode powers down most system functions. See the section below for an explanation of standby and suspend modes on your system.
- Turning off the monitor leaves other functions active, but allows you to save power by eliminating LCD use. Since the LCD uses a great deal of battery power, you can gain considerable savings by having the screen shut down.
- Spinning down the hard disk can also provide power savings, while not slowing your use of programs currently in RAM. You will notice a small lag when you access the disk and it spins back into use.

Engaging power savings while your system is plugged in can help speed the recharging of your battery, so you might want to create a power scheme that allows you to have a faster charging mode and another that allows you to use AC power without any power management interruptions.

Clicking on the Alarms tab will allow you to set the alarms for low battery (10%) and critical battery (3%) warnings. *(Figure 3.5)*

Clicking on the Power Meter tab will allow you view the current battery status. *(Figure 3.6)*

Remember: The hardware power settings in the BIOS setup program will kick in at the designated intervals, regardless of the Windows 98 settings. You should check to make sure that your settings there will not conflict with those set in Windows 98.

Figure 3.5: Power Alarms

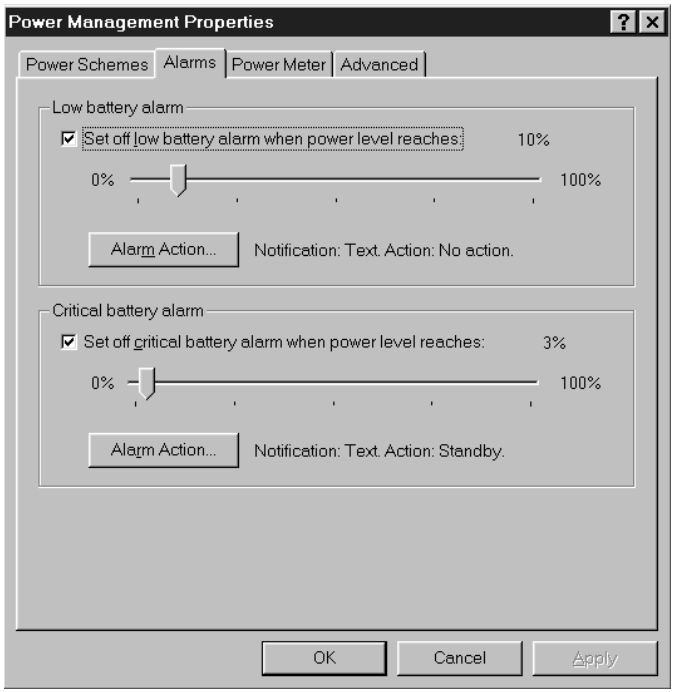


Figure 3.6: Power Meter

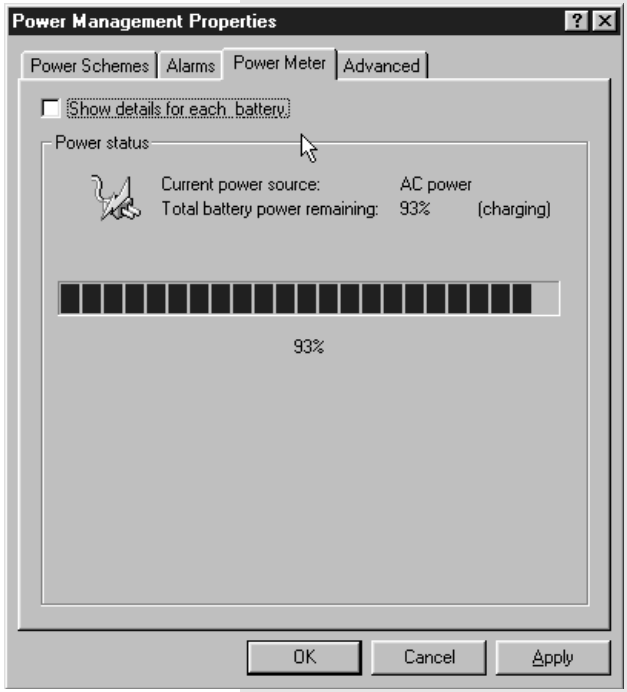


Figure 3.7: Advanced Power Properties

Clicking on the Advanced button on allows you to add a power meter to the taskbar (this is the default and is the battery/plug icon). It also allows you to set a password to be entered when the system leaves the Standby mode. *(Figure 3.7)*

Taking advantage of power management features can have a significant effect on the battery use you can get on a single charge. A fully charged battery should provide you over two hours of system use, but aggressive power management can extend that time.

There are some measures that you can take as a user to help optimize battery use in your WinBook XL2. If you are running one or more PCMCIA cards, using the system audio and making frequent calls to the floppy diskette, CD-ROM or hard drive, you will find that battery power will be consumed much more quickly than with standard system use.

WinBook XL2 Low Power Measures

When you are running on battery power, your WinBook XL2 tracks battery charge. When battery power gets low, the unit will provide warnings and eventually take action to help preserve data.

When the WinBook XL2 estimates that the battery has only a few minutes of battery power remaining (the actual time will vary with usage), the right indicator on the hinge of the display panel will start to flash red. A system buzzer provides an audible warning. (You can disable this buzzer in the Setup utility—see Chapter Eight). You can also set Windows 98 to provide low power warnings (see above).

When you receive the low power warnings, you should shut down your system, suspend your system or connect to a power source. If you respond immediately after receiving the warnings, you should have sufficient power to shut down completely, including saving large files. Do not attempt to restart your system until you have connected to the AC adapter or changed or charged your battery.

A few minutes after these warnings, the system will suspend. You will not be able to resume using the computer until you connect the system to a power source or replace the battery with a charged battery (if you have a spare). Once you provide power to the system, all data that had been held in memory will be restored.

Standby and Suspend Modes

While both Standby mode and Suspend mode permit power savings, each serves a different purpose. The Standby mode can shut down the screen and put the hard disk into a less power-demanding mode (the exact action of the Standby mode, as well as the default time for it to take effect are set using the Setup program-see Chapter Eight). It is intended to lower power consumption for short times. When you reactivate the computer, the system is ready to go almost immediately. It is best for a short power-down when you want to get back to work right away.

If your WinBook XL2 is unable to suspend to disk (for example if your Save-to-Disk partition is too small or damaged), it will suspend to RAM. When the unit is suspended to RAM, there will be a slow trickle of power and the battery could drain completely and data could be lost.

When the unit is suspended to RAM, the power management system cannot gauge battery charge levels. Since the Suspend-to-RAM mode uses a trickle of battery power to maintain the information in RAM, the battery will slowly discharge in this mode. As a result, it is possible, if the unit remains suspended until the battery is completely discharged, for the information in RAM to be lost. If you will be suspending the system for a long period, you should use the Suspend-to-Disk method.

Suspend provides more substantial power savings, as well as providing the safe mode for switching batteries. Since the system is powered-down, it takes longer to resume operation. The WinBook XL2 can remain in the Suspend mode for up to a week on a fully charged battery.

Remember which mode you have chosen when you shut down the computer. Hitting a key or moving the mouse will activate a WinBook XL2 in Standby mode. The Suspend mode is exited by hitting the power button.

There are two modes for suspending your computer: Suspend to RAM, which uses a trickle of battery power to keep the RAM active, and Suspend to Disk, which writes a copy of the current session to the hard drive and shuts down the RAM. The Suspend to RAM option provides you with a faster resume. The Suspend to Disk option will allow you to suspend for a longer time, since it does not require battery power to hold the session in RAM. Resuming from RAM is much quicker than resuming from disk. You should consider these factors when deciding which mode to use (see Chapter Eight for information about changing the Suspend mode).

Suspend-to-Disk, since it does not consume any power, can also be a useful way to save you time in getting started on your work. If you like to work with a number of programs open on a regular basis, you can use Suspend-to-Disk to save the active session with those programs already opened. Rather than wait for the system to shut down each program and then manually reloading each program the next time you are ready to work, you can Suspend-to-Disk and be ready to work once the session has been resumed. Keep in mind, it is still a good idea to shut down and restart your system every few uses, just to refresh the system or to allow your virus software to perform a complete scan of your system, if you have enabled such an option.

Suspending to disk requires a special disk partition set up for that purpose. This partition has already been preinstalled on your WinBook XL2. The pre-installed partition is large enough to accommodate most system memory requirements. If you expand the system memory and get an error message when you Suspend to Disk, you will need to increase the size of this

partition. You should not attempt to partition your hard drive unless you are an experienced user. Please contact Technical Support for instructions when you expand your system and need to create a larger disk partition.

Infrared (IR) Port

The infrared (IR) port of your WinBook XL2 provides a powerful tool for connecting to other computers, networks, and peripherals via a high-speed wireless connection. This port is sometimes referred to as a serial infrared port (SIR), but it is also capable of functioning as a second parallel port for printing. This port allows you send information between machines without having to attach cables or transfer information to a floppy disk or other removable disk. With the high speed of data transmission (up to 115,200 bits per second) and the ease of connection of the IR port, it is a quick and easy connection to establish.

Figure 3.8: Windows 98 Infrared Controls

Your WinBook XL2 comes with the IR disabled, since its IRQ use can conflict with other devices. If you want to activate this function, see the WinBook XL2 Help File in the WinBook folder for instructions. Select the topic "Activating the IR Port" from the help file index. It is a good idea to deactivate the IR when not in use, to help avoid conflicts with other devices.

To use your IR port, place the two IR ports within two feet of each other (optimal distance is usually between six inches and two feet) and either directly in line or at an angle of less than 30 degrees (less than 15 degrees is usually optimal). Click on the **Infrared** icon in the Control Panel (**Start/Settings/ Control Panel/Infrared**). *(Figure 3.8)*

This will bring up the IR software built into Windows 98. This software will begin scanning for a present IR device. If one is found, it will complete the connection. If a device is not found, try adjusting the distance and angle between the two IR ports. *(Figure 3.9)*

You can adjust the options for your IR port by selecting the Options tab. If your IR port does not function or conflicts with another device you have added, you can change the setting for the COM port (see Chapter Eight). *(Figure 3.10)*

Figure 3.9: Infrared Connection

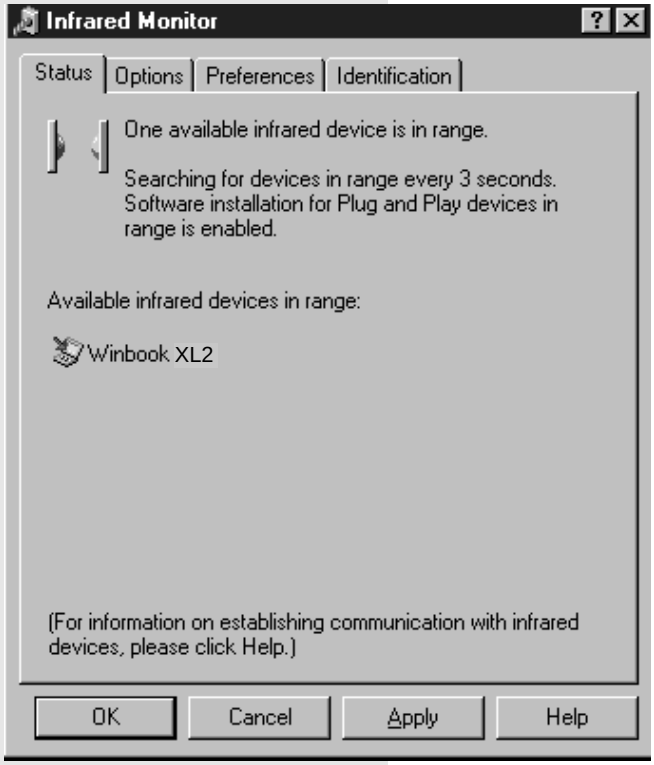
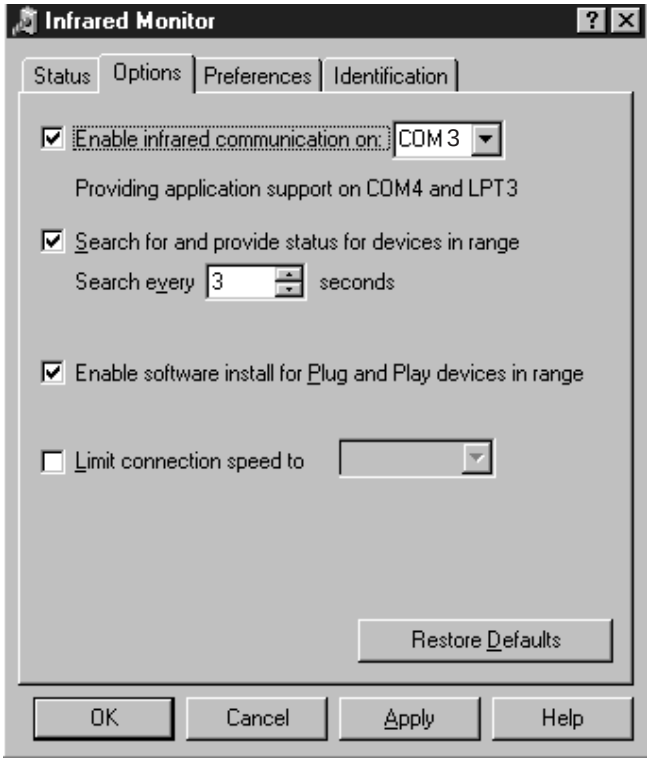
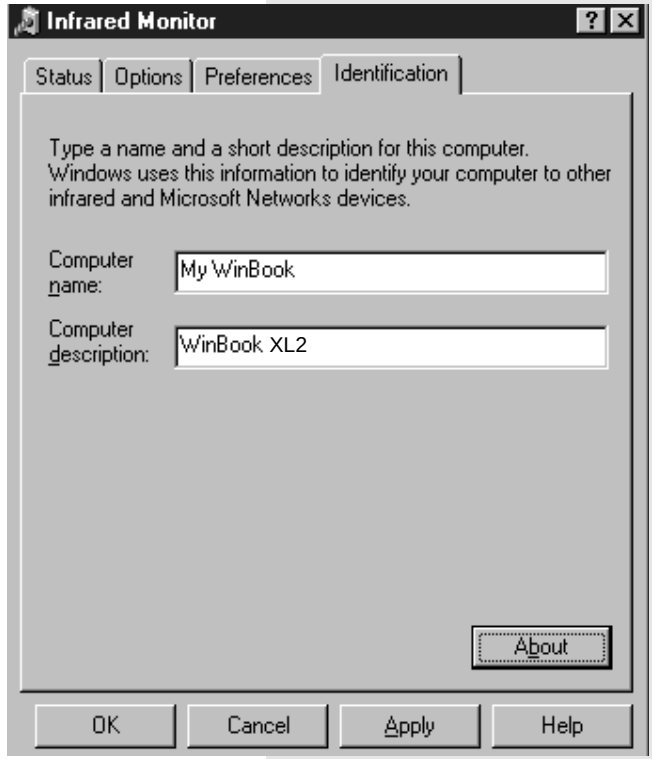


Figure 3.10: Infrared Options



For proper operation of a IR connection, you might need to set up the identification information in the IR software. *(Figure 3.11)*

Figure 3.11: Indentifcation of your computer



Once your connection is established, be careful not to obstruct the connection between the machines. Maintain the distance and angle and do not place any objects between the ports as this can disrupt the connection.

IR Connections Between Computers

Windows 98 includes an easy protocol for infrared file transfers, but it requires that all computers connected via infrared have the protocol. If you want to transfer files to a computer using Windows 95, you will need to set up the connection as a Direct Cable Connection. The WinBook XL2 Help File has information about how to set up and use such an infrared connection. If all computers involved are using Windows 98, you can follow the instructions below for transferring files.

Since files can only be sent via this protocol, you will have to actively send from one computer to another. You cannot use this infrared protocol to look for files on another computer. This helps prevent insecure transfers of files from your system. If you need to use infrared for two-way sharing of files, you can set up the connection as a Direct Cable Connection as detailed in the Help file.

Infrared Transfers

Once you have enabled the infrared port for your system, you can establish an Infrared connection by double-clicking on the Infrared Recipient Icon in

If you do not know whether your system is already set up for a Direct Cable Connection, check to see if it is available in the **Accessories** folder of the Program folder of the Start menu.

Figure 3.12: Infrared Recipient

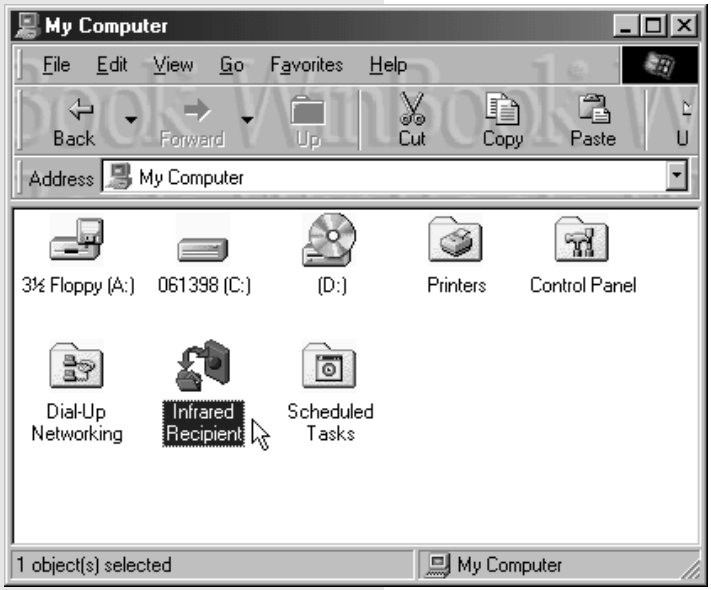


Figure 3.13: Infrared Transfer

My Computer. *(Figure 3.12)* This will open the Infrared Transfer window. Make sure that the infrared port of any other computer to be used is enabled. If there are other infrared-capable systems in range, it will list the systems detected. *(Figure 3.13)*

You might be asked to activate the Infrared Recipient utility on the other computer. If so, double-click on its icon in My Computer on that other system.

You can send files to any computer listed in one of two ways:

- Open a folder in My Computer or Explorer and select the files you want to send. Drag the files to the computer to which you want to send them. They will be sent to the "My Received Files" folder on the other computer.
- Click on the Send Files button and select the files that you want to send. They will be sent to the "My Received Files" folder on the other computer.

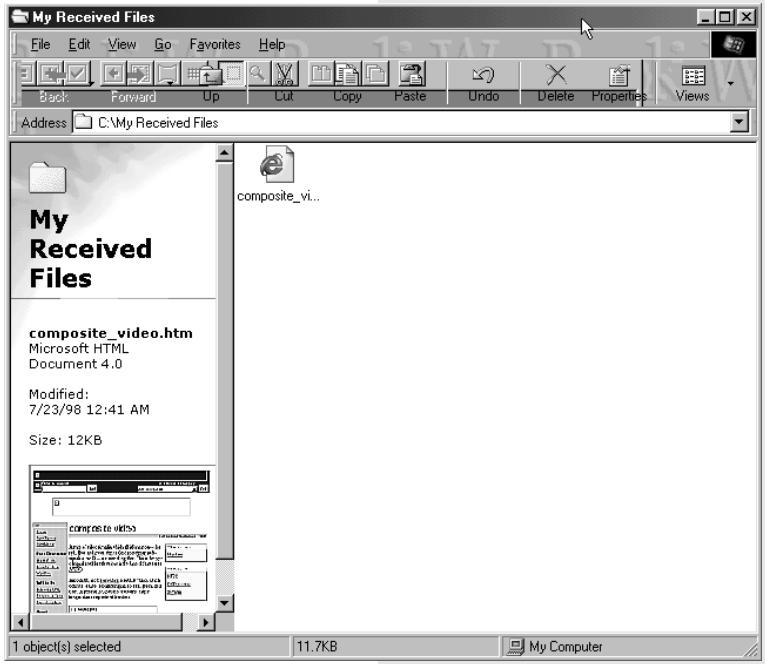
In either case, you will see a dialog box that indicates that files are being transferred to the other computer. *(Figure 3.14)* Once the files are send, the My Received Files folder on the receiving computer will pop up and you will see a list of the files in that folder. *(Figure 3.15)*

You can also view the files already in your My Received Files folder by clicking on the Received Files button in the Infrared Transfer window.

Once you have completed the infrared transfers, you can close the Infrared Transfer window by clicking on the "x" in the upper right-hand corner. You should also disable the infrared communication in Windows 98, since it will keep searching every three seconds for other infrared devices. You can disable the infrared by either right-clicking on the infrared icon on the taskbar and then clicking on "Enable Infrared Communication" from the menu or by opening the Infrared Monitor icon in the Control Panel *(see Figure 3.8)* and unchecking the box that enables infrared communication *(see Figure 3.10)*. When you end your session in Windows 98, you should also deactivate the infrared port in the BIOS Setup program to help minimize device conflicts. See your WinBook XL2 Help file for instructions for activating and deactivating the port.

Figure 3.14: Infrared Files Being Sent

Figure 3.15: My Received Files



IR Printing

You can use your IR port to print by connecting to a printer with built-in IR, a printer with an IR adapter connected to its parallel port, a network printer available via an IRLAN (infrared network node), or printer connected to a computer with an IR port.

Before proceeding, you must set up a connection for the printer via the IR port. See Chapter Four for information on setting up a printer. To test the printing capability of an application over an IR link to an IrDA-compliant printer such as the HP 5P, click on the Infrared icon in the Control Panel (**Start/Settings/Control Panel/Infrared**). The IR software will detect the printer's IR port. Now try the Print option in an application.

Using a TV Receiver

If you need a larger display and an external monitor is not available, you can use the TV-out jack on your WinBook XL2 to direct the screen output of your system to a television screen your WinBook XL2 includes both a standard TV-out jack and an s-video jack. You will need to purchase a A/V cable which is capable of fitting your jacks. The TV-out jack and the audio-out jack on your WinBook XL2 are not adjacent, so, if you want video and audio, you will want to purchase a cable that will be able to reach both jacks. If you want to enable the television output for your WinBook XL2, see Chapter Six.

Safety & Operation

The WinBook XL2 does not have a handle or a rough surface for a sure grip, so use a carrying case when traveling. At times, you may want to put both the case and the WinBook XL2 within a larger briefcase to conceal the system and reduce the risk of theft.

Do not use this product in an unstable location. Serious damage could result if the system should fall.

Avoid rough handling of your WinBook XL2. Jolts to the system can damage components or result in data loss. Transport your WinBook XL2 in a case or bag that provides adequate cushioning and a secure position. Never check your WinBook XL2 in as luggage when you are traveling. Even the toughest carrying case won't protect it from such rough handling. Although it is tempting to pack your WinBook XL2 in your luggage, it is apt to result in a broken system. The best solution is to carry the WinBook XL2 with you.

Avoid high and low temperatures. While you travel in the summer, do not leave your WinBook XL2 in a car trunk on a hot day. Trunk temperatures can reach 140° F, beyond the safe range for the WinBook XL2. Also be careful when shipping or storing your WinBook XL2 so that it is not exposed to high or low temperatures.

The batteries will not operate as well under extremes of temperature. They are specified to work from 41° to 98° F (5° to 35° C). Running your WinBook XL2 in temperatures below 41° F or above 98° F will reduce the battery life. If a battery module is left in the sun and gets quite hot, it is apt to fail to charge. This is due to a safety switch in the battery module that is aimed at preventing over-heating due to over-charging. Once the battery cools down, you will be able to charge it. In extremely cold weather, you may find that it takes longer for the battery to charge or that it does not fully charge.

Slots and openings in the system are for ventilation purposes. Do not obstruct or cover these openings or the system could overheat. Do not place the system in close proximity to a source of heat or a source of dust.

Protect your modem. Be aware that phone systems can be either analog or digital. Your modem is designed to work on an analog phone system. Most residential telephones are analog. Digital phone systems typically involve building- or company-specific PBX (Private Branch eXchange) systems.

Some PBX systems can use voltages that will damage an analog modem. Before you hook up your modem in a hotel or at a new company, check with the facilities manager. To find an analog line, you might look for a fax machine. Note that there are products available that will support analog modems on digital PBXs.

If an extension cord is used with this product, ensure that the total ampere ratings of all the devices sharing the extension cord does not exceed the rating of the extension cord, nor the rating of the wall outlet.

The WinBook XL2 can be used safely in a moving car. Power adapters that will connect between the WinBook XL2 and a cigarette lighter socket are available. For information, contact Sales at the number listed on the "Read Me First" card that came with your system.

Contact technical support if

a) The power cord appears damaged or frayed

b) Liquid has been spilled on the product

c) The product does not operate normally

d) The product has been dropped or the cabinet impeached

e) The product shows a distinct change in performance

Travel

Travel Tips

- It is a good idea to load common printer drivers onto your WinBook XL2 (such as HP Laser Jet and DeskJet drivers). This will allow you to print from many printers at your destination, even if you do not carry your own printer with you.
- Take along a bootable CD or floppy disk, just in case there is damage to your hard drive.

- Travel can present considerable risks of system shock or theft. Complete a full system backup before traveling.
- Be familiar with your Setup settings, or print a copy of them, in case there is damage to those settings while you travel.
- If you will be traveling to another country, check with your travel agent to determine whether or not you will need a special adapter to use the electrical outlets.
- If you do a lot of traveling, you might find it useful to purchase an acoustic coupler for your modem (which hooks to the handset instead of directly to a phone jack), to allow connection even where compatible phone jacks cannot be found. However, most public phones are now being upgraded to accept modem/fax connection from portable computers
- Hand your WinBook XL2 to an airport attendant rather than setting it on the conveyor for security checks. This will help reduce the possibility of theft. (Note: Airport X-Ray machines will not damage your system.)
- Password protect your system (with at least one level of password) to help preserve your data.
- Consider purchasing a lock for your WinBook XL2. The WinBook XL2 comes with a slot for connecting a lock located on the left side of your system case.
- Brand or physically mark your computer to make for easy identification.
- If you will be using an Internet provider or other on-line service, call ahead to find out local access numbers for your destination(s).
- In case your destination does not have outlets near convenient work spaces, you might want to pack a short extension cord.

Remember to pack:

- Your WinBook XL2
- Your WinBook XL2 CD (which contains the drivers for your system) and Windows 98 CD
- Your AC adapter/power cord
- Any international converters for your adapter
- A spare length of phone cord
- Printer and/or printer cable
- PCMCIA cards and any detachable connections for those cards
- Spare battery packs (if any)
- Bootable floppy or CD
- A spare floppy or two for easy file exchange
- Manuals for any critical software (printed or CD), including Windows 98

Remember to:

- Charge your battery
- Change your power management settings to more aggressive settings, if appropriate
- Transfer the working files you will need

Chapter Four: Desktop Operation

While your WinBook XL2 is capable of providing you with efficient and productive mobile computing, it has the speed and capacity to serve as a desktop system. Even if you have an existing desktop system, you will find it useful on occasion to be able to connect your WinBook XL2 as if it were a desktop system. This chapter discusses those functions of your WinBook XL2 that are typical of desktop systems.

Audio

Audio Software

Your WinBook XL2 comes equipped with an integrated sound system capable of providing you with quality audio sound through the built-in speakers or through external speakers connected via the jack on the right side of the system.

Controlling the Sound Levels

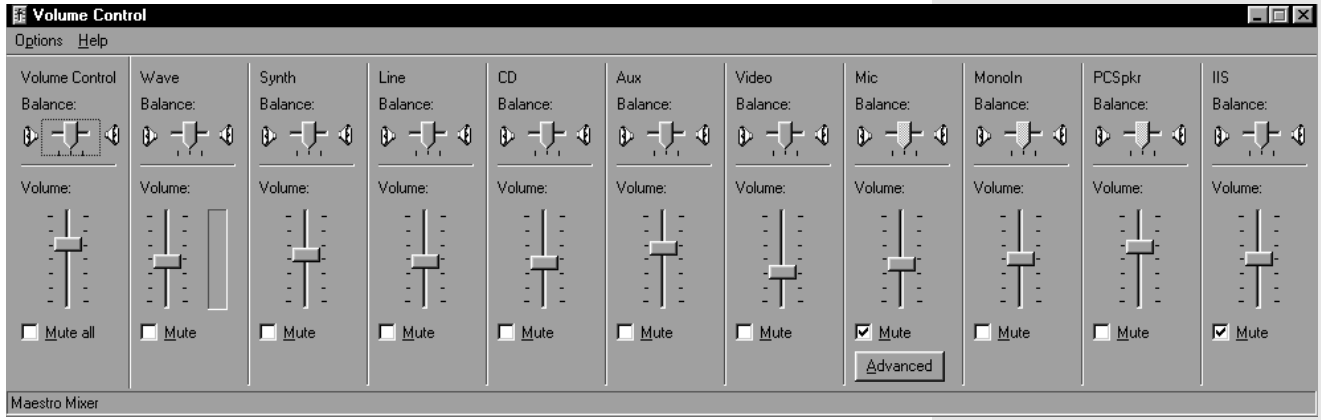
In addition to the keyboard controls for the sound:

[Fn]+[F8]	[Fn]+[F10]
Lowers audio volume	Mutes audio output
[Fn]+[F9]	[Fn]+[F11]
Raises audio volume	Maximizes audio output

which control the output of the sound hardware, you can adjust the volume and balance of the audio output by double-clicking on the speaker icon on the taskbar *(Figure 4.1)* and using the slides in the audio mixer *(Figure 4.2)*. You can also choose to mute the specific audio feature by clicking on the checkbox for that feature.

Figure 4.1: The speaker icon on the taskbar.

Figure 4.2: The Audio Mixer.



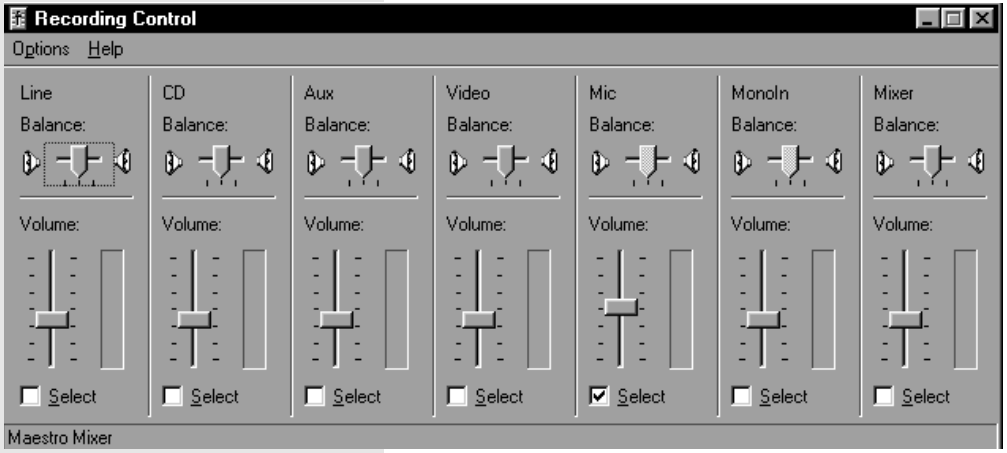
There are controls available here for System Volume, Wave Files, Synthesizer, Line-in, CD Audio, Auxiliary Audio, Video Sound, Microphone, Mono In, PC Speaker and IIS, but you can control which ones appear in the mixer by clicking on **Options/Properties** and checking or unchecking the boxes for the functions that you want to have visible in the mixer. Clicking on the "Mute" checkbox of a given function will mute that audio function.

To use the slide, you can either place the cursor above or below the slide and click (this will move the slide in increments) or click on the slide and drag it up or down. To adjust the balance (left-right) of that audio element, you can use the balance slide by dragging it to the left or right.

In the Properties menu, you will also find the controls for adjusting recording. If you will be using voice input via your microphone, you should adjust these settings to optimize voice input. You can only choose one audio input for recording. Choose the option by clicking the "Select" checkbox for that item.*(Figure 4.3)*

Unless you use the microphone in your system regularly, you should consider keeping it muted. This will help reduce the feedback through the microphone when a program is not controlling it. When a software application is using the microphone, you should not experience feedback.

Figure 4.3: Recording Control.



If your sound requirements change, you can look into a high-quality PCMCIA sound card for your system.

If the Advanced button does not appear on your mixer, click on Options/Advanced Controls.

There is an advanced microphone properties button on the audio mixer (below the slide for microphone volume). You can use this to make adjustments in audio input. Some software programs, such as voice recognition software, might require you make such adjustments for optimal performance. *(Figure 4.4)*

Figure 4.4: Advanced Microphone Properties

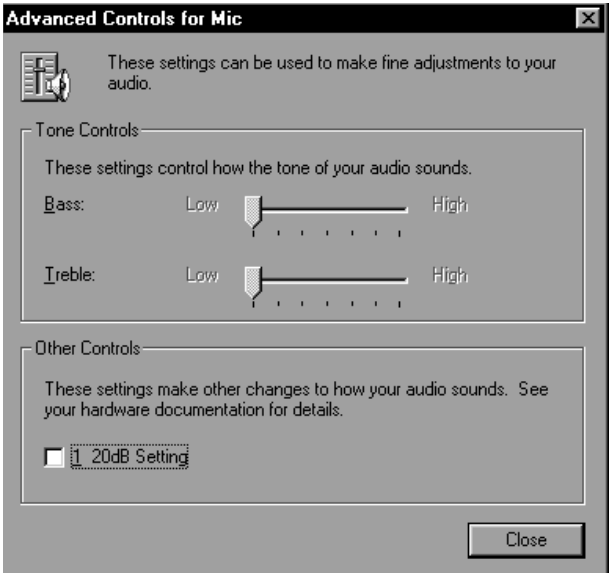
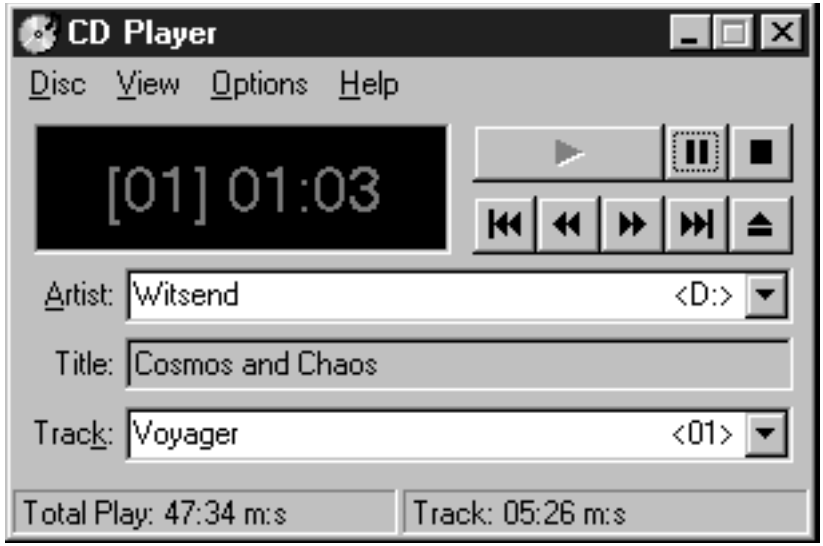


Figure 4.5: CD Player



You can also play audio CDs through the Media Player program **(Start/ Programs/Accessories/ Entertainment/Media Player)**.

Playing an Audio CD

You can play audio CDs through the sound system. Place the audio CD in the drive (see Chapter One for instructions on inserting a disk). The CD Player in Windows 98 will recognize the audio CD and launch the program to control the playback of the CD. It will appear on the taskbar. You can Maximize the program by clicking on it on the taskbar. *(Figure 4.5)*

The CD Player has an active display panel. You can click on the panel to toggle between: track and time, track and time remaining on the track, and the time remaining on the disk.

You can use this program to set up play lists for your CDs (Disc/Edit Play List). These will allow you to program the computer to remember this disk and play back tracks in an order in which you have saved them. There are

If you have left a CD in the drive and want to start playing it, you can either open and close the drive (to activate the autoplay) or manually start the CD Player software **(Start/Programs/Accessories/Entertainment/CD Player)**.

also CD player programs that you can purchase or download that will check the Internet for information on the CD and fill in the playlist information from available databases.

There are other settings in this program that will allow you to modify your CD playback. You can check the documentation built into Windows 98 for instructions on using the features of this program.

Playing Sound Files

In addition to playing music from audio CDs, your WinBook XL2 can play audio files stored in MIDI or WAVE file formats, as well as sound stored in audio form and used in programs and games. With the proper software, you can also use the sound system to play audio files via the World Wide Web, including live audio broadcasts.

The Media Player can be used to play sound files, play audio CDs, and run video clips in ActiveMovie or Video for Windows formats. For information on playing video on your system, see the Windows 98 documentation.

You can use your sound system to play back sound files via the Media Player program **(Start/Programs/Accessories/Entertainment/Media Player)**. You can open an existing file and then play it by clicking on the Play button (the right-pointing triangle). You can also use the built-in functions of the Media Player to alter the playback. Check the documentation in Windows 98 for information on the functions of the Media Player.

If you already have the CD Player active, the CD option will not be available in Media Player.

Sound Recording

You can obtain applications that will allow you to use your system microphone to record sounds and store them as files on your system. You can also use the Sound Recorder program built into Windows 98 **(Start/Programs/Accessories/Entertainment/Sound Recorder)** for this purpose. This program can also be used to modify the sound files with certain audio effect. Check the documentation in Windows 98 for information on using the various elements of this program.

You can store such sound files in one of three quality formats, which vary in the amount of disk space that they use: Telephone Quality, Radio

Quality, CD Quality (in order of increasing quality and file size). You can access these controls by clicking on **File/Properties**. High quality files of more than a few seconds in length will consume a considerable amount of disk space. You should choose the highest quality only when excellent sound quality is essential or disk space is not at a premium.

There are other quality levels available. You can read the documentation in Windows 98 for information on the sound quality.

It might require some adjustment to get the desired sound quality out of your microphone. You can use the voice settings in the mixer (double-click on the speaker icon on the taskbar and select **Options/Properties**) or the controls found by double-clicking on the **Multimedia** icon in the **Control Panel (Start/Settings/Control Panel)**. For sound files that require excellent sound quality, you should consider buying an external microphone designed for high-quality voice recording (which can be connected to your WinBook XL2 through the microphone jack on the right side of the system).

Wave files that you have recorded can be added to documents that support OLE. Sounds embedded in a document will be played via the Windows 98 software when double-clicked in the document. Check your software documentation to determine if your software will support embedded sounds.

External Speakers & Microphone

The ESS sound system is capable of providing high quality sound to external speakers and receiving and processing sounds from an external microphone or external sound source. To connect external speakers, follow the instructions provided with your speakers. When the speakers are connected, the built-in speakers of your WinBook XL2 will automatically be disabled. An external microphone will disable the built-in microphone.

Connection to some sound sources, such as musical keyboards, might require a MIDI port. You can obtain a port replicator for your WinBook XL2 that provides such a port.

Connecting Peripherals

Your WinBook XL2 has ports (serial, parallel, PS/2, infrared, USB), slots (PCMCIA) and jacks (AC power, microphone, audio in and out) that allow you to connect peripheral devices to your computer. You can also use the docking port to connect your computer to a port replicator.

If you connect to your printer via a network, contact your network administrator for details on the printer and the specific setup for your network connection.

Printer

Whether you purchase a portable computer or a desktop model, you will probably connect the printer to the computer via the parallel cable. You might also connect to a printer via a network connection, a serial connection, a USB connection, or via the IR (infrared) port (see Chapter Three for information on using the infrared printing option). Whatever the nature of the connection, you will need to set up the necessary drivers for the printer. You can vary the port connection (or network setup) at the step where it is requested.

If you will be connecting the device to a parallel or serial port instead of a virtual port (IR), you should shut down the system before connecting the printer (you do not need to shut down to connect a USB printer). If your printer is Plug and Play compliant, your system will detect the new hardware on boot and begin the process of setting up the printer.

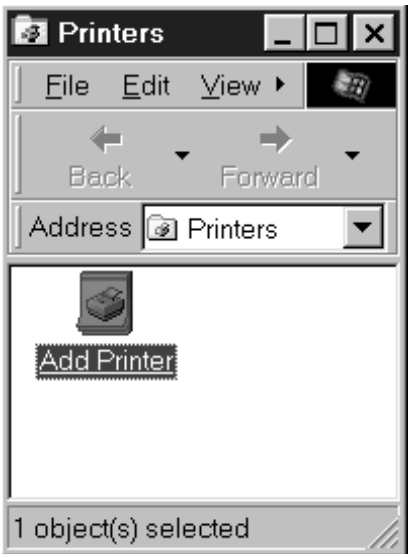
You might need to have the driver disk that came with your printer available for the installation of the printer drivers.

Installing Your Printer for Windows 98

When you first boot your WinBook XL2 you will be offered the opportunity to set up your printer. If you did not set up your printer at that time, or if you have added a printer to your system, you can follow the steps below to prepare your printer for use in Windows 98.

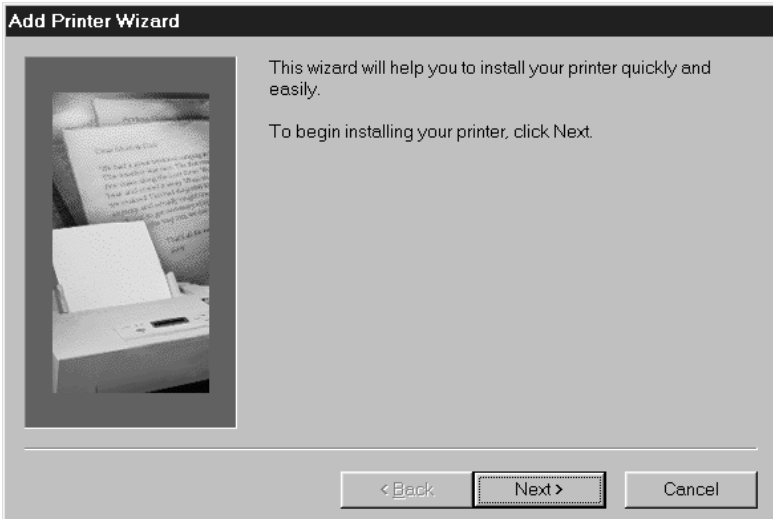
Select **Start/Settings/Printers** and then **Add Printer** *(Figure 4.6)*

Figure 4.6: Add Printer Window.



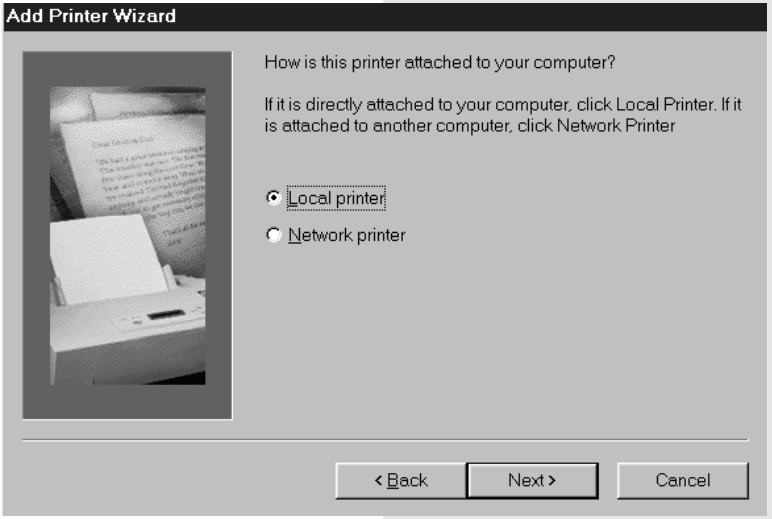
In the “Add Printer Wizard” click on Next. *(Figure 4.7)*

Figure 4.7: Add Printer Wizard.



You will be asked to identify the printer as local or network. *(Figure 4.8)*

Figure 4.8: Add Printer Wizard.

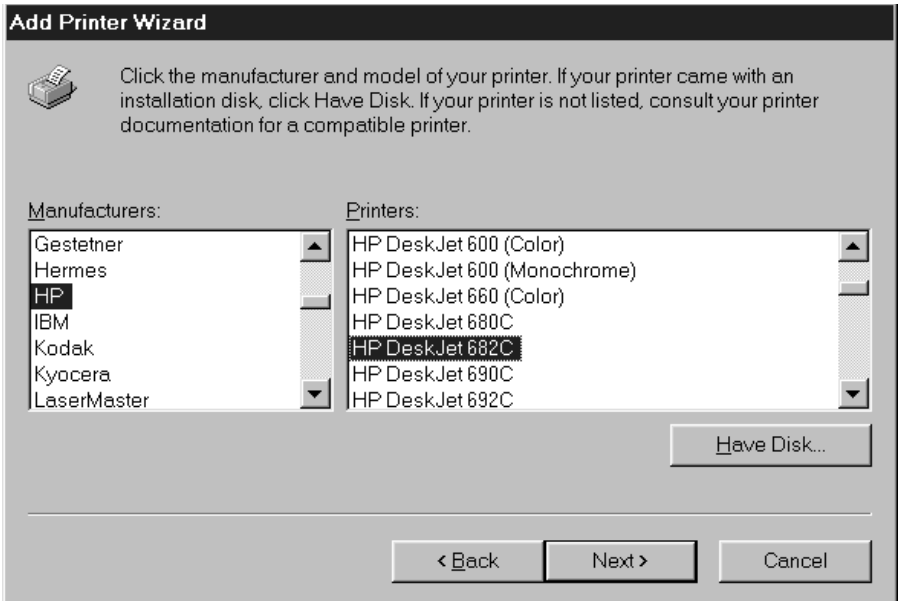


If your printer came with an installation disk, it might have drivers there (this will often be the case if the printer came into production after the most recent release of Windows 98). You should check your printer manual for information on using the installation disk. You can click on the Have Disk button if you have an installation disk

If you will be using an infrared port on your printer, check to determine if the printer is set up as an infrared serial connection or an infrared parallel connection.

Scroll through the list of manufacturers and printers to find yours. *(Figure 4.9)*

Figure 4.9: Find your printer.



If your model is not listed here, check your printer documentation for a compatible printer to use as a source of the printer driver. The program will then ask you to identify the connection for that printer (usually LPT1). *(Figure 4.10)*

You will then be prompted for a name for this printer. You can accept the default (e.g. HP DeskJet 682C), but you can choose any name you want (e.g. Old Betsy). If you are going to be working in an environment where there might be more than one printer of the same model, the names become an important way of distinguishing your printers from each other. If this is not the first printer set up on your system, you are also asked whether this will be your default printer. If most of your printing will be done on this printer, you should select Yes. *(Figure 4.11)*

Figure 4.10: Choose printer port.

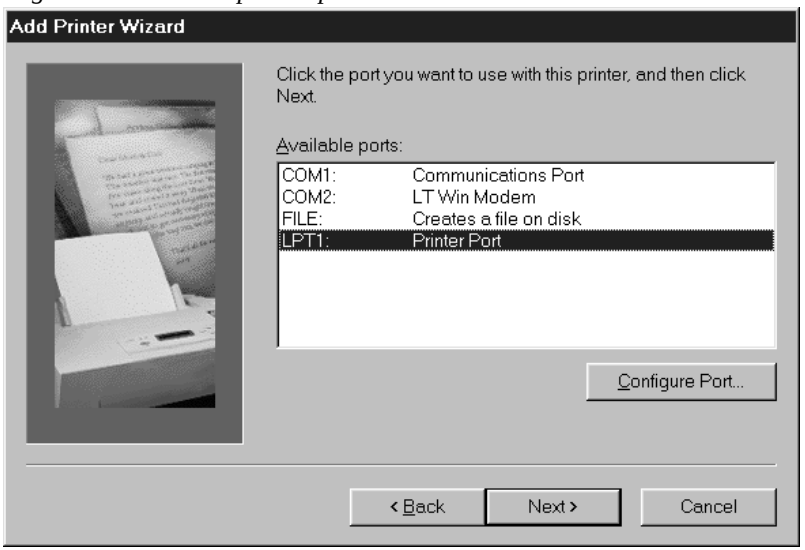
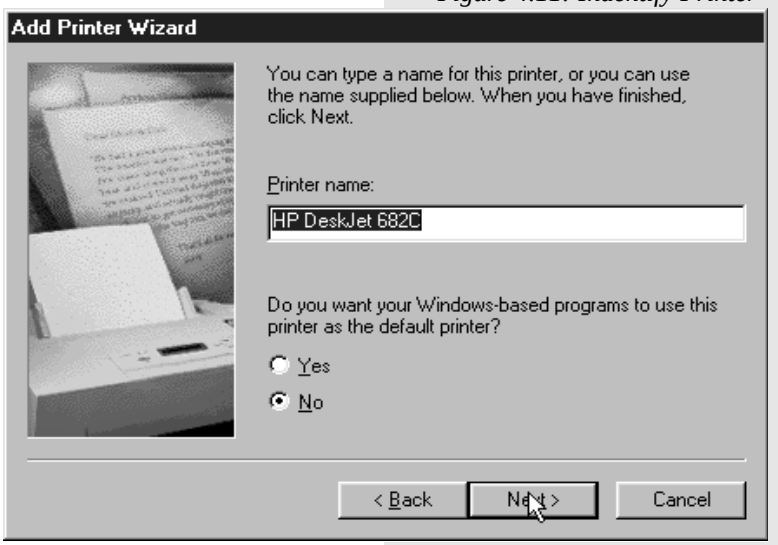


Figure 4.11: Indentify Printer



You will then be asked if you want to print a test page. This would be a good idea if this is a new printer, or the first printer that you have set up for your WinBook XL2. *(Figure 4.12)*

When Windows 98 has finished loading your printer drivers, you will be returned to the Printers menu. You should now see your printer listed there. You may also see some other drivers (e.g. for fax software).

You may have noticed that there is a fax driver in your printer choices if you have installed fax software. You can select the

You do not need to have a printer physically present to install the Windows 98 drivers for it. If you will be using another printer or might be transferring information to another site (such as work or home) where you will be using another printer, you can set up Windows 98 for those printers (so that files you are working on can be set up for that printer). If the printer is one you will be connecting to your computer, you will want to set up the proper port connections for this printer. If the printer is one you will be using elsewhere, you can set up the printer on the location "File."

fax board as a printer device for any Windows-based document in that you are running in Windows 98. The document will be sent to the fax board just as it would be sent to the printer.

Figure 4.12: Print test page.

If your device is Plug and Play, it might be detected on boot. If so, you will receive a message that new hardware has been detected and then instructions for completing the setup. If not, then you will need to set up the device according to the instructions provided by the device manufacturer.

Other Parallel Devices

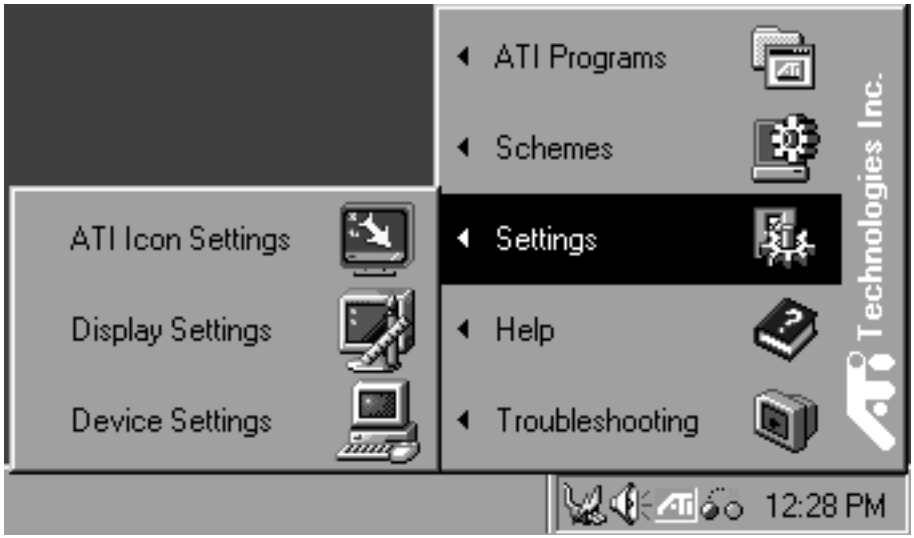
Your parallel port can also be used with other parallel port devices (e.g. a tape backup unit). Your parallel port is capable of supporting enhanced ECP and EPP transfer modes. ECP transfer mode provides significant performance increases for transfer to parallel devices (such as printers). EPP transfer mode provides increased performance for 2-way transfers such as those used to link another computer to your WinBook XL2 system for file transfer. You might need to check the documentation of your device to determine the modes supported. If you need to change the transfer mode of your printer, you can do so in the **Setup** program (see Chapter Eight).

Be sure to shut down your system before connecting the device to your system to prevent damage to your system and the parallel device.

External Monitor

You can connect an external VGA or SVGA monitor to your WinBook XL2 through the video port on the rear of the system. You can direct the output to the LCD, the external monitor or both by toggling the LCD/CRT setting ([Fn]+[F2]) or by right-clicking on the ATI display icon on the taskbar, selecting **Settings/Display Settings**. *(Figure 4.13)*

Figure 4.13: ATI Menu.



Once the Display dialog box appears, click on the "ATI Displays" tab, and then select the desired display option by clicking on its checkbox.

You can learn more about the various video features of your system in Chapter Six.

WARNING: When operating your WinBook XL2 with an external video device (CRT or TV), you should not close the LCD panel of the XL2. Closing the LCD panel will place the sensitive display in close proximity to the processor and can lead to damage of the screen assembly.

If you will want to use both an external keyboard and an external pointing device, you will need to set up both on the USB port or use one on the PS/2 port and the other on the USB port (keyboard or pointing device) or serial port (pointing device).

External Keyboard

Your WinBook XL2 comes with a PS/2 port (on the rear of the unit, between the two doors) and a USB port, either of which can be used to connect an external keyboard to your system. You should shut down the system before connecting a PS/2 keyboard. Connect the keyboard to the PS/2 port and start up the system. The WinBook XL2 should automatically detect the external keyboard and activate it. If your keyboard is USB, you can plug it in and it should be recognized by the system. PS/2 keyboards should be plugged or unplugged when the system is shut down; USB keyboards can be plugged or unplugged during operation.

The external keyboard will not disable the built-in keyboard, so you will be able to use both devices simultaneously. You can use the two keyboards in combination, since the computer will not distinguish between the input from each keyboard.

External Pointing Device

You can connect a serial or PS/2 Microsoft-compatible mouse or a USB mouse to your WinBook XL2. Your WinBook XL2 can support two pointing devices simultaneously (pointing stick and touchpad or pointing stick and PS/2 device).

The presence of an external PS/2 pointing device will disable the touchpad (the pointing stick will remain active). If you connect an external PS/2 mouse before you turn on your WinBook XL2, the WinBook XL2 will automatically sense the mouse and enable it.

If you use a serial mouse, connect the mouse to the serial port located behind the small I/O door on the back side of the WinBook XL2. The small I/O door is located on the right side of the WinBook XL2 as you face the back side. The serial port is the left connector inside of the small bay.

If your serial mouse is Windows 98 compliant, the WinBook XL2 should detect new hardware and take you through the process of installing the

hardware. If Windows 98 does not recognize your serial mouse, you will need to use Windows 98 to **Add New Hardware** (**Start/Settings/Control Panel/Add New Hardware**). You can have Windows 98 search for the mouse, or, if you know the correct settings, you can set up the mouse manually. If Windows 98 does not have drivers for your mouse, you can use a standard driver, or use a disk provided by the mouse manufacturer.

A USB mouse can be connected or disconnected during operation and the WinBook XL2 will automatically adjust to the presence or absence of the mouse. The presence of a USB mouse will not affect the use of the internal pointing devices.

If you choose to use a PS/2 mouse as your external pointing device and also use a PS/2 external keyboard, you might want to carry a PS/2-to-serial converter for your mouse so that you can use the keyboard and mouse at the same time.

Serial Devices

The Communications Ports on your WinBook XL2 allow you to connect external devices such as a mouse, a modem, a printer, a scanner or another computer to the WinBook XL2. The Serial Communications Port on your WinBook XL2 is COM1. There is also a serial infrared port which is normally located on COM3 (see Chapter Three for information about enabling and using the infrared port). In the event you have changed your port assignments in the Setup Program, and then experience problems, go back into the Setup Program and scroll down to load the optimal or fail safe values for your system. This will reset the Serial Port as COM1 (see Chapter Eight).

Devices connected after the WinBook XL2 is powered up may not work reliably. Connect devices to the Communications Ports while the computer is turned off. This not only helps to protect the WinBook XL2 from damage, but turning on the WinBook XL2 after connecting an external device to the port allows the computer to prepare itself and the device to operate together.

USB Ports

While the parallel and serial ports of your WinBook XL2 provide you with connections for many current external devices, your WinBook XL2 also comes equipped with a USB (Universal Serial Bus) port, which allows you

If your USB-compatible device comes with a manufacturer's installation disk, follow the manufacturer's instructions. Although Windows 98 includes USB support, individual devices might need specific drivers for optimal operation.

Since a USB device is capable of very high speeds, and since it does not use up the access to an available port (as a serial or parallel device does), you should consider available USB peripherals for your system.

to take advantage of a high-speed connection to newer devices. A USB port can allow you to connect up to 127 devices through a single port, at very high data transfer rates of up to 12 Mbps (Mega-bits per second). Devices can be connected through a USB hub (a USB external device that provides power and connection for other USB devices), or connected one to the other in a chain. Your WinBook XL2 will automatically check the USB port to determine what devices are attached. If they are new to your system, the Plug-and-Play interface will detect and identify the new equipment. The constant communication between the USB port and your devices allows you to connect and disconnect devices without shutting down your system.

You can connect a USB device by plugging the USB cable into the USB port on the rear of your WinBook XL. Since the USB devices can be chained together, you can plug USB devices into each other or into the USB port of your WinBook XL2. Note: not all USB devices provide a pass-through port for other devices. You might need a USB hub to allow several devices to be connected to the USB port of your system.

The system should automatically detect the new device and make it available for use. If the device is not immediately recognized, check the documentation for the device. If the device is new to your system, you might be asked to set up the device before use (for example, a new printer will need to be set up to run under Windows 98).

The USB port not only provides a connection between your WinBook XL2 and external devices, they are also capable of providing electrical current to run those devices. If you make considerable use of your WinBook XL2 under battery power, you should consider how USB devices might drain your battery or slow battery charging (when the AC Adapter is in use). If you have a USB device (such as a printer) that has its own electrical power source, you should consider using this device as a hub for your other devices. These devices can draw power through the hub device, leaving your WinBook XL2 free to conserve or recharge battery power. If you have a mobile USB device and want to make use of the WinBook XL2 as the

power source for the device, consider using an aggressive power management setting to help maximize battery life.

Optional Port Replicator

You can "hot dock" your WinBook XL2 into a port replicator, which means that it is not necessary to shut down or suspend your computer to connect it to your port replicator. Simply connect or disconnect the computer from the dock as you need.

If you have peripherals attached to your port replicator that have never been recognized by your system, you might be asked about the installation of new hardware. If you do not receive a window identifying the new hardware, that hardware might not be functional until you configure your system to recognize it. You can use the **Add New Hardware** icon in the **Control Panel (Start/Settings/Control Panel/ Add New Hardware)** to set up the system to work with this additional hardware.

To connect your WinBook XL2 to a port replicator, open the left rear door to expose the docking port of your system. Slide your WinBook XL2 back into the port replicator so that the docking port connects to the port replicator. Then secure the connection as directed in the documentation for the port replicator. *(Figure 4.14)*

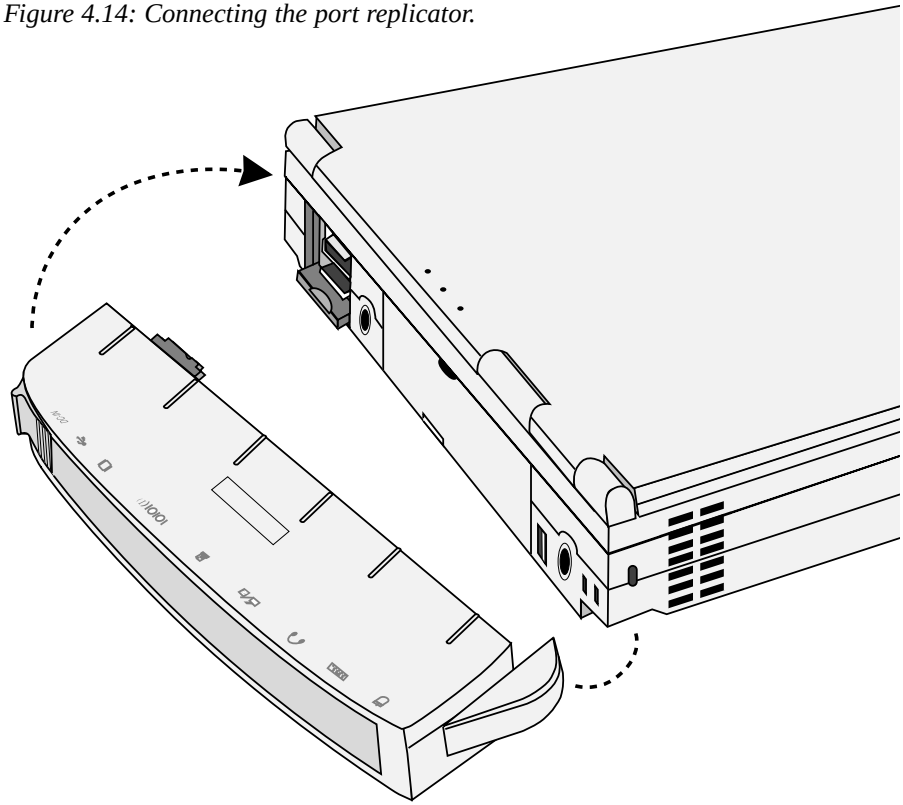
The port replicator provides you with the opportunity to set up a permanent work area for your WinBook XL2, for use as your desktop system. The port replicator holds ports for an additional keyboard, standard mouse, desktop monitor, serial device, parallel device, USB devices and the AC power adapter. It also has an easy slip-in connection for your WinBook XL2. Using the port replicator will allow you to slide your WinBook XL2 into the docking port and start right into your work, without having to make the connections to your extra monitor, keyboard, power adapter, etc. each time.The I/O (input/output) controller of the port replicator takes control

The Port Replicator does not include a TV-out jack or s-video jack. Since the Port Replicator covers the rear of the machine, you will have to undock your WinBook XL2 to use the TV-out or s-video features of your system.

The first time you use a peripheral on your system, you should be able to plug it directly into your mini-docking station or port replicator. If the computer does not recognize the new hardware, you can try plugging it directly into the native port on the WinBook XL2.

of the I/O for the computer and directs input to the system as if connected to the native ports of the WinBook XL2.

Figure 4.14: Connecting the port replicator.



The port replicator also provides a game/MIDI port. You can use this to direct musical input into your computer or to provide a connection for a joystick or gamepad. If you want to use a joystick or gamepad with your WinBook XL2, read the section of the WinBook XL2 Help File on joystick installation and use.

Chapter Five: PC Cards (PCMCIA)

If you want to use the card with an operating system other than Windows 98 (e.g. DOS), you can contact Technical Support for information on how to obtain the necessary drivers.

There are also Type III PC cards, which are thicker than Type I or Type II cards. Type III cards will not fit into the PCMCIA slots on your WinBook XL2. Check to be certain that a card is not Type III before purchasing it for your system.

PC Cards

PC Cards (or PCMCIA Cards) can be used to extend the capabilities of your system by providing a connection for adding a modem (or an additional modem, such as a cellular modem), a network connection, a SCSI interface, or other functions. PCMCIA cards provide a compact source of such extended capabilities and a common interface with your WinBook XL2. They can provide a very powerful source for upgrading your system. Your WinBook XL2 comes equipped with two PCMCIA slots, one on each side of the unit, which are able to use cards that conform to the PCMCIA standard.

Both slots of your WinBook XL2 are equipped for CardBus support and can use PC cards. Both slots are equipped to support Zoomed Video connections. If you want more information on Zoomed Video, see Chapter Six. Your WinBook XL2 can accept Type I and Type II PCMCIA cards (Type II cards are slightly thicker) in either slot. Since both slots function independently, your WinBook XL2 can support up to two cards at a time, in the following configurations:

Two Type I
Two Type II
One Type I and One Type II

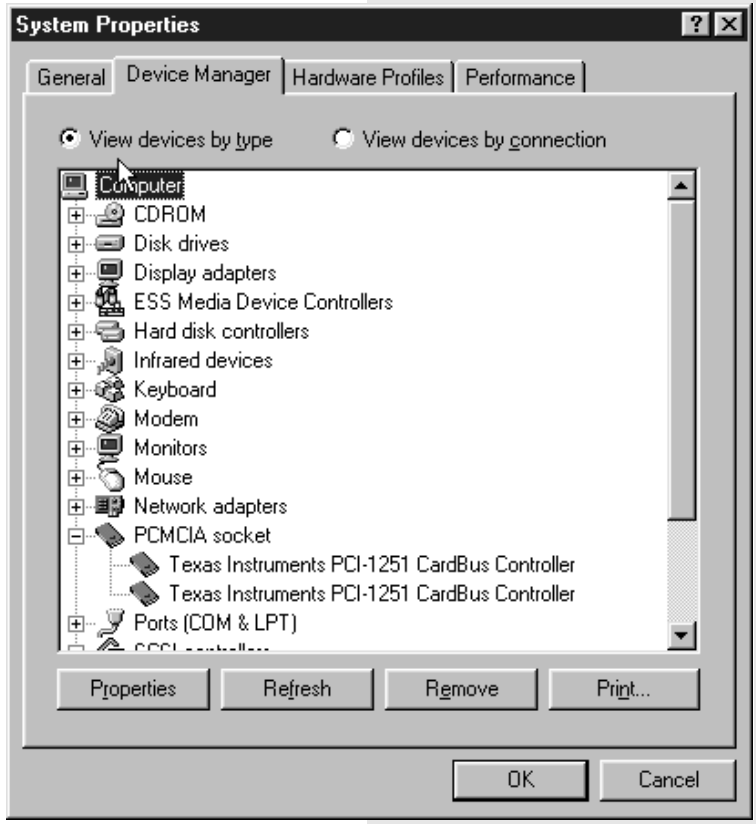
If your card is not configured for power management, which usually requires a driver (the software coding that communicates between the card and the machine) specific to the card, this can drain your battery. The preloaded drivers will work with most cards designated as Windows 98 compatible. If you find that your card does not work with the preloaded drivers, use the driver disk that came with your card or contact the card manufacturer to determine how to get your card to work with the WinBook XL2. If the driver for your actual card is not found in Windows 98 database of drivers and you choose a generic driver, you should consider taking the card out of the slot when it is not in use to avoid draining the battery.

Most cards with some external connection will allow you to remove or recess the connection for travel. Remember to take any removable connections with you when you travel if you intend to use the card.

Your system should already be equipped with drivers for the PCMCIA slot (these are not the same drivers as the ones for the specific cards). You can check to see if the drivers are loaded by clicking on the plus sign beside the PCMCIA socket choice in Device Manager. You can reach device manager via the **System** icon in the **Control Panel: Start/Settings/Control Panel/System**. Once in the System window, click on the **Device Manager** tab. Then click on the "+" sign beside PCMCIA Socket to see the PC card drivers. If the drivers are loaded, you should see the "Texas Instruments PCI-1251 CardBus Controller." *(Figure 5.1)*

If you want to use the card with an operating system other than Windows 98 (e.g. DOS), you can contact Technical Support for information on how to obtain the necessary drivers.

Figure 5.1: PCMCIA Information in Device Manager.



To use the PC Card:

1. Insert the card into one of the two slots (the slots are identical). *(Figure 5.2)*
2. Push to make sure it is properly seated. When you insert your PCMCIA card, Windows 98 should recognize the card (if it is one you have used before) and beep twice. A card icon will appear on the taskbar. *(Figure 5.3)*
3. If the card is new to your system, Windows 98 will attempt to recognize it and load the necessary drivers. The Add Hardware Wizard will guide you

Figure 5.2: PCMCIA Slots.

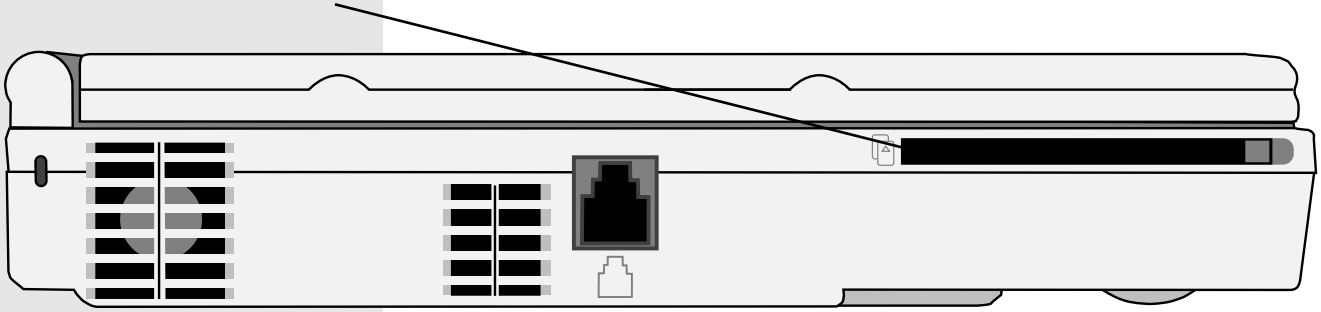


Figure 5.3: The PCMCIA Icon on the Taskbar.

through the process of loading these drivers. You might be asked to indicate the source of the drivers. Windows 98 has drivers for many PCMCIA cards, but you should check the documentation for your card to determine whether the manufacturer has provided more current drivers. *(Figure 5.4)* When the installation is complete, you will hear two beeps and a card icon will appear on the taskbar.

4. If Windows 98 does not recognize the card, you will be prompted to complete the installation of the necessary drivers. You can find the driver for your card, use a standard driver for the hardware or, if you have a disk from your manufacturer, you can load the drivers provided. Follow the instructions provided by the installation wizard. If you use a standard driver and one not specific for your card, the card should work, but certain features, such as power management, might not be active. When the installation is complete, you will hear two beeps and a card icon will appear on the taskbar.

5. If the card has any external connections, secure them to the card and the necessary external device.
6. When you are finished using the card, click once on the PCMCIA icon on the taskbar. This will bring up a popup menu for shutting down any cards in the PCMCIA bay. Select the appropriate card (if you have two cards in place) and click "stop" to deactivate the card. You should receive a message telling you when it is safe to remove the card. This procedure will protect your system and also help prevent data loss that might occur if you attempt to remove a card that is still actively linked to a network or modem connection.
7. You can now eject the card. Press the eject button in and it will pop out. Now press the button firmly in until the card ejects. The button should remain in; if it pops back out, you can push it in until it clicks into place.

Although most current PC cards are Plug and Play, you should always refer to the manufacturer's documentation for your card. Some manufacturers might have optimal ways for using their card.

Figure 5.4: Recognition of a PC Card.

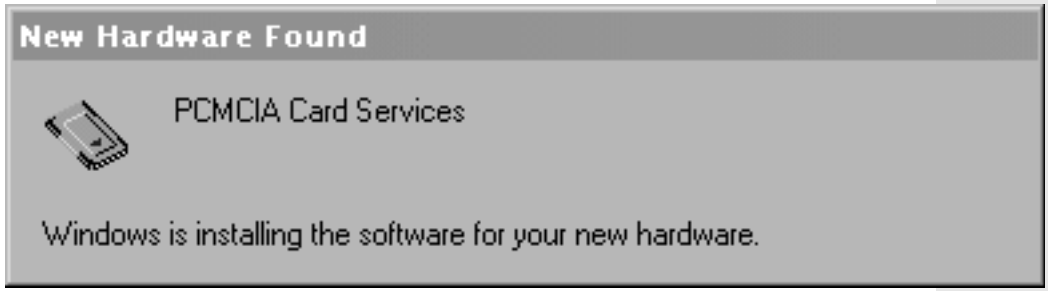
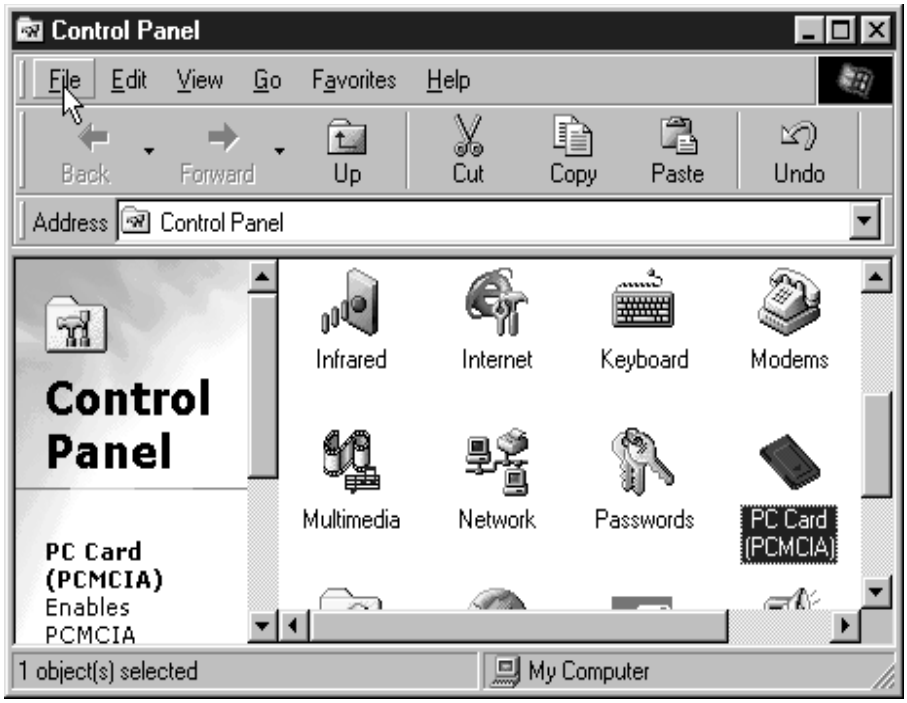


Figure 5.5: PCMCIA Properties.

You can check on the status of the installed PC Card by clicking on the icon on the taskbar. You can check or alter the properties of the PC card usage by your system by double-clicking on that icon. This will call up the PC Card Properties dialog box. *(Figure 5.5)*

You can also check the PCMCIA properties by selecting the PCMCIA icon in the **Control Panel**. *(Figure 5.6)*

Figure 5.6: Control Panel



Windows 98 will install standard networking protocols for cards it has recognized. Contact your network administrator to determine if you will need to configure your system for other protocols. If you will be using your network outside Windows 98 (e.g. in DOS), you will need to check with the manufacturer of your network card or with your network administrator to determine how to set up the proper drivers for this environment.

PCMCIA Network Connections

If you have a network PCMCIA card, you will first need to have your WinBook XL2 recognize the card and load the necessary drivers (see above). Once your network card has been recognized and Windows 98 has installed the necessary networking files, you will be asked to restart your system to allow the new networking environment to function.

Windows 98 will configure your files and then ask you restart your system so that the new files can take effect. Reboot your system. If you have added network functions for the first time in this process, you will be

If you decide not to enter a password, you can add one later by selecting **Passwords** in the **Control Panel**. Please read your Windows 98 documentation on passwords before changing settings in this utility.

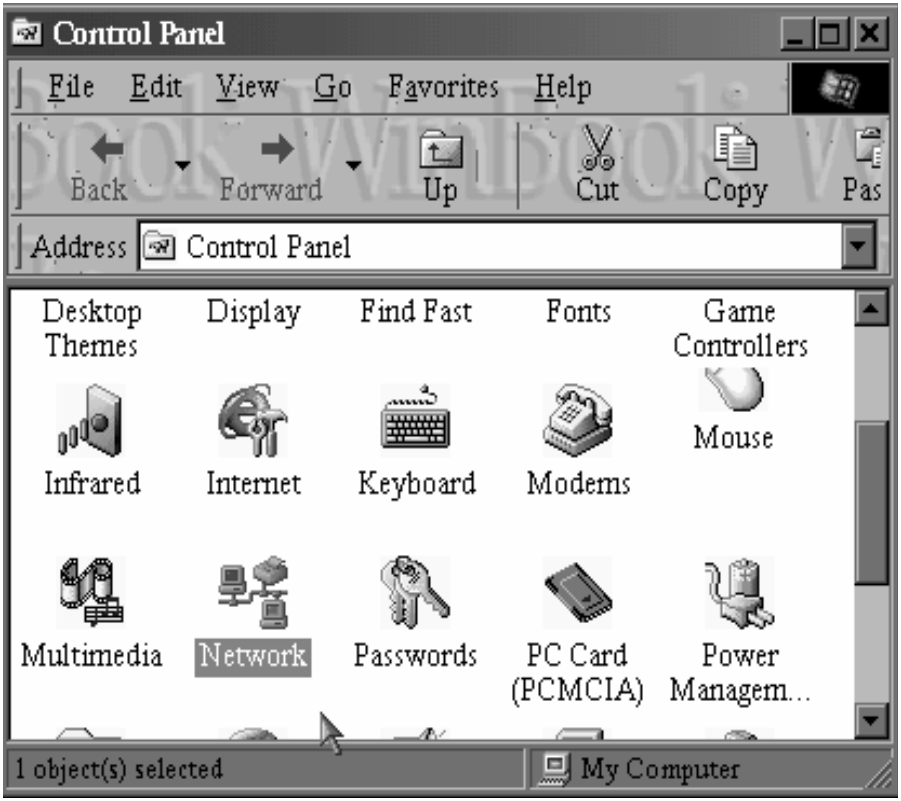
A"Network Neighborhood" icon will now be present on your desktop to allow quick access to network functions.

WinBook does not provide Technical Support for network functions. Contact your network administrator for assistance.

prompted for a username and password when Windows 98 loads. You must supply a username. If you leave the password blank, you will not be required to log in with that username in subsequent sessions. If you do choose a password, you will be asked to verify it. In subsequent sessions, you will need to provide that username and password when starting Windows 98.

You can double-click on the **Network** icon in the **Control Panel** to see the networking configurations that have been added to your system. *(Figure 5.7)*

Figure 5.7: Control Panel



You will see that client software has been added to your system. Windows 98 assumes that you will be operating this system as a client (a computer which primarily uses the network to access files or equipment on another computer, which is the "server"). If you will be using your system as a server, you should check the Windows 98 documentation for information on setting up your system this way.

You will also see software specific to the kind of networking card you have added (e.g. ethernet). There will be protocols there to control how the information is transferred between machines. *(Figure 5.8)*

You will also see a button here that will allow you to set up your WinBook XL2 for file and/or printer sharing. If you will want to allow your files or your printer to be shared by other computers on the network, you can set up the file and printer sharing as described in the section below. If you do not want to allow your resources to be accessed by other users, then you should leave the file and printer sharing disabled.

Once you have established the network settings for your system, you can double-click on the **Network Neighborhood** icon on your desktop. You can use this window just as you would **My Computer**. Resources on the network available to you can be accessed through this window. *(Figure 5.9)*

Figure 5.8: Network Properties.

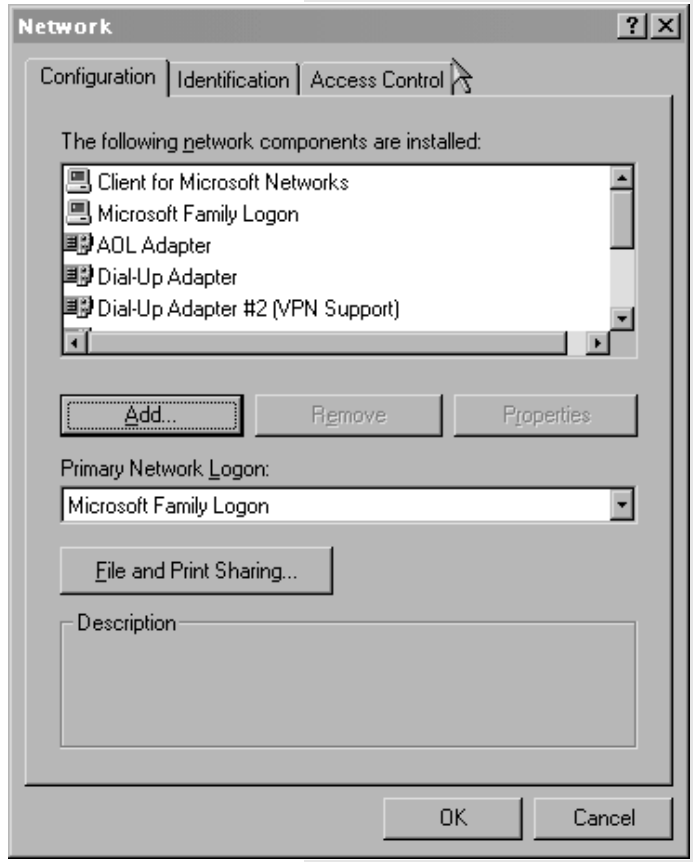
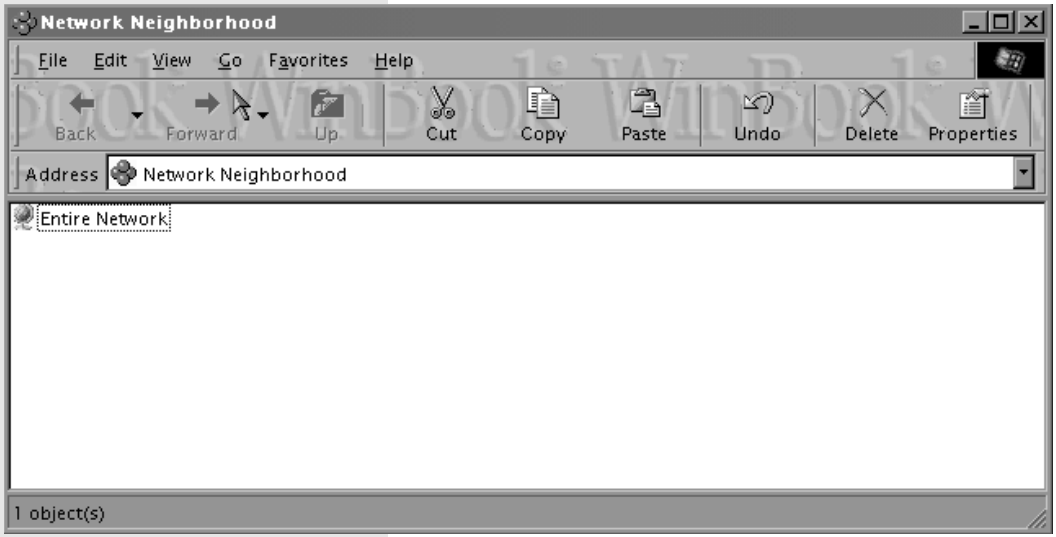


Figure 5.9: Network Neighborhood



Sharing

If you want to make files on your WinBook XL2 available to another computer, or if you want to allow another system to print to a printer attached to your WinBook XL2, you will need to set up your system for file sharing. You can set this up by double-clicking on the **Network** icon in the **Control Panel** *(see Figure 5.7)*

This will bring up the Networking window. Click on the File and Print Sharing button *(see Figure 5.8)*. You will be asked to decide if want to allow file sharing, print sharing, or both. Click on the appropriate checkboxes. *(see Figure 5.10)*

You have now established the file and print sharing for your WinBook XL2. You can click OK to exit the Network utility. When you have finished making these changes, you will be asked to reboot your system to allow the changes to take effect.

Figure 5.10: File and Print Sharing

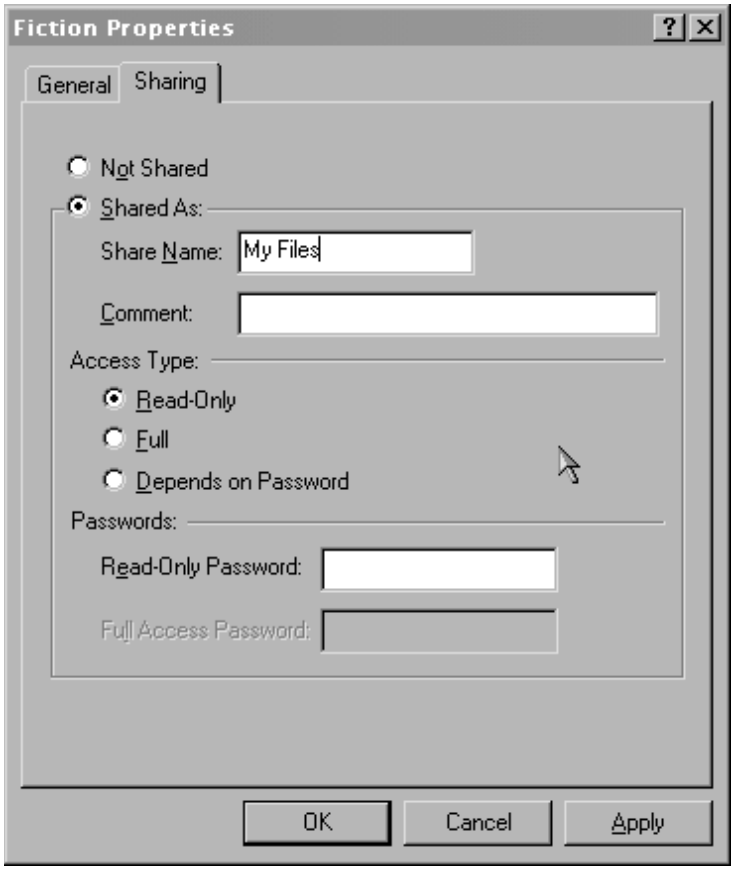
Sharing is a done by folders and not by files. You might want to set up separate folders for shared files, if you do not want all files in an existing folder to be accessible to another machine.

If you want to allow access to certain files on your system, you will now need to designate those files for sharing. Open the Windows Explorer program **(Start/Programs/Windows Explorer)** or **My Computer** and the drive window containing the folders you want to share. Find the folders that you want to share. Right click on the folder and click on the Sharing option of the pop-up menu. *(Figure 5.11)*

Figure 5.11: Sharing a Folder

You will now be asked to establish the kind of access you want to allow to this folder. *(Figure 5.12)*

Figure 5.12: Access to Shared Folders

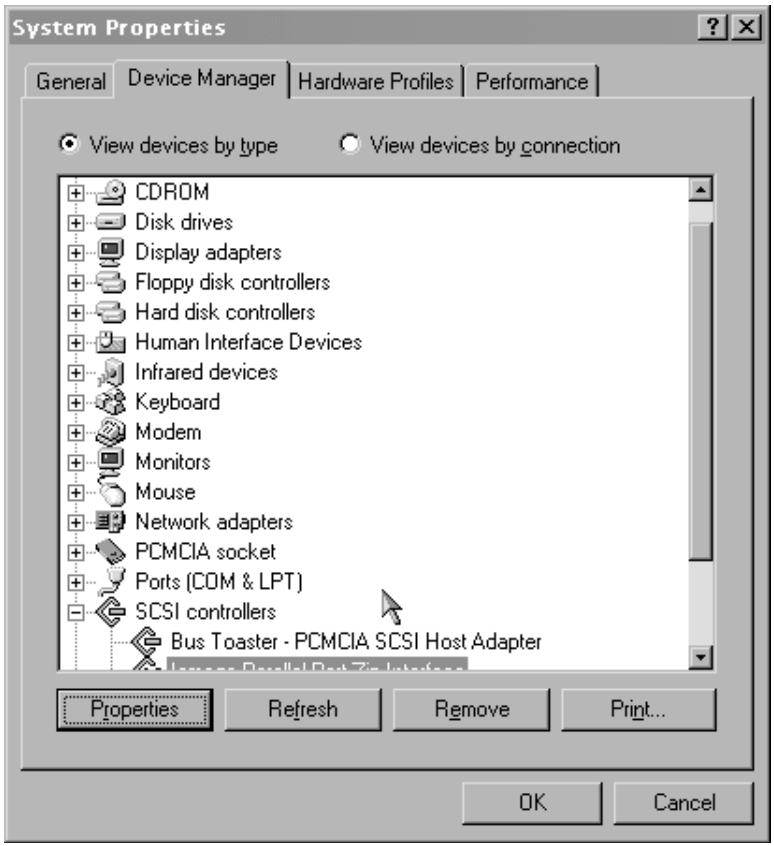


You should consider who will be using the access and why and establish the necessary passwords. Keep in mind that shared folders might be accessible to any machine connected to the network.

PCMCIA SCSI Interface

In order to use devices that require a SCSI interface, you will need to install a SCSI interface card in one of the PCMCIA slots in your WinBook XL2. Once your card has been recognized and the proper drivers loaded, you will be able to connect SCSI devices to your WinBook XL2. *(Figure 5.13)*

Figure 5.13 SCSI Properties.



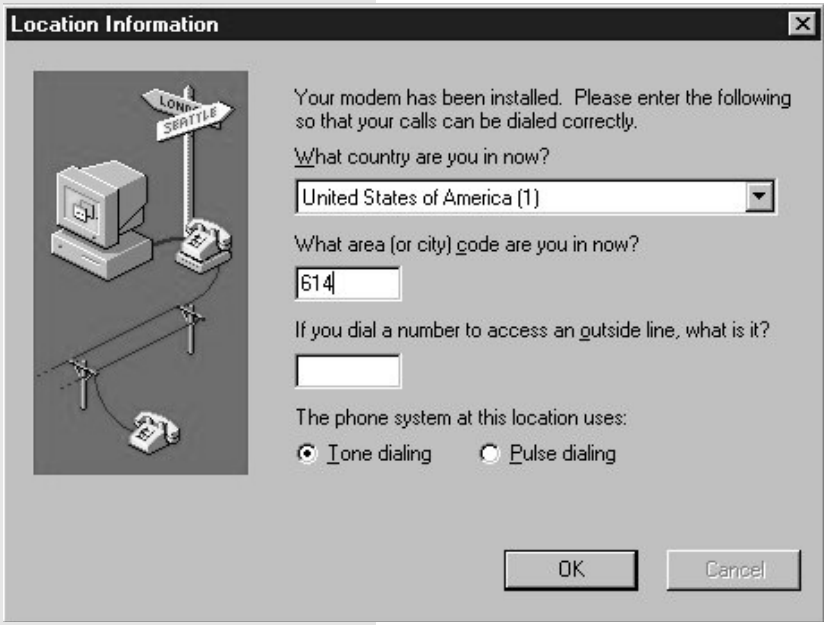
Power management is especially important for PCMCIA modems, since many are set to stay active so that they can be ready for incoming calls. If you are operating on battery power, you will want to conserve power usage by the modem. Check the documentation that came with your card, or adjust the power settings in the **Power Utility** in the **Control Panel**.

You can adjust the SCSI interface properties of your system by entering the Device Manager (**Start\Settings\Control Panel\System**). Click on the plus sign beside the SCSI controller option. Select the SCSI controller listed and hit the Properties button. You can now adjust the SCSI settings to meet the requirements of your hardware. You can check the documentation for your SCSI controller or your SCSI devices to determine what other steps might be required for proper operation.

PCMCIA Modem

Your WinBook XL2 might have come with an optional PCMCIA modem. Even if your unit came with a built-in modem, you might purchase a PCMCIA modem (e.g. one that connects to a cellular phone). If so, once the modem card has been recognized, you will be asked to set up the modem for use with your system.

Figure 5.14 Setting Up Your Modem.



Follow the steps above for installing and configuring your card. Once the correct driver has been installed and the modem is ready for use, you might be asked to fill in the settings for using this modem (if you have not set up a modem on this system before). *(Figure 5.14)*

Fill in the information requested to assure proper operation of your PCMCIA modem. See Chapter Two for more information about using a fax/modem with this system.

Chapter Six: Video Settings

Video Settings

Your WinBook XL2 provides you with a wide range of video inputs and outputs. You should take a little time to familiarize yourself with these aspects of your machine.

Your WinBook XL2 allows you adjust the brightness of the LCD screen by using the [Fn]+[F6] hot key combination to decrease screen brightness or the [Fn]+[F7] hot key combination to increase screen brightness. You will need to hold this combination for several seconds to see any affect. There is also an Autodim function in the BIOS power management settings. Autodim automatically reduces screen intensity when the system is using battery power. You can disable this if you need increased screen brightness while using battery power. See Chapter Eight for more information about the Autodim function.

Your WinBook XL2 will support a number of resolutions. Resolution is a measure of the number of pixels (a pixel is a single dot of color on the screen). In addition to supporting multiple resolutions, your system will also support a various number of colors at each resolution (that is, each dot can range through that many colors). Your screen will support a resolution of 1024 x 768 pixels with up to 64K colors or a resolution of 800 x 600 pixels with up to 256K colors. Notice that when you put your computer into the DOS mode, which uses the VGA resolution (640 x 480) as a default, the display will be stretched to fit the full screen.

If you lower the resolution of your LCD, you may find that the desktop area will not fill the entire screen. This should not be the case for an external monitor.

When you are displaying the video on the built-in screen, you cannot choose a higher resolution than the standard resolution. However, you can use a higher resolution when you output the notebook's video to an external monitor that supports high resolutions. When using an external monitor, the WinBook XL2 will support the following resolutions:

640x480	**16M colors**
800x600	**16M colors**
1024x768	**16M colors**
1280x1024	**64K colors**
1600x1200	**256 colors**

If your monitor supports these resolutions, you can select the higher resolutions (1280x 1024 and 1600x1200) after you have attached your external monitor to the SVGA port. Remember to change back down to a supported resolution before returning video output to the LCD screen.

Your WinBook XL2 provides easy access to various video settings and utilities by a right-click on the ATI icon in the system tray of your taskbar. You can alter the appearance of the pop-up menu for these video settings by clicking on "Settings" and "Icon Settings" and then selecting from among the choices offered by the dialog box. *(Figure 6.1) (Figure 6.2)*

Figure 6.1: ATI Pop-up Menu

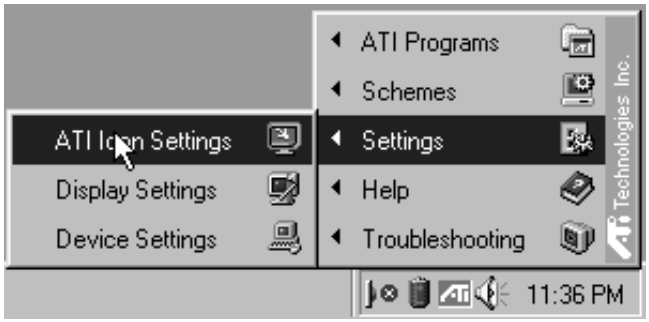
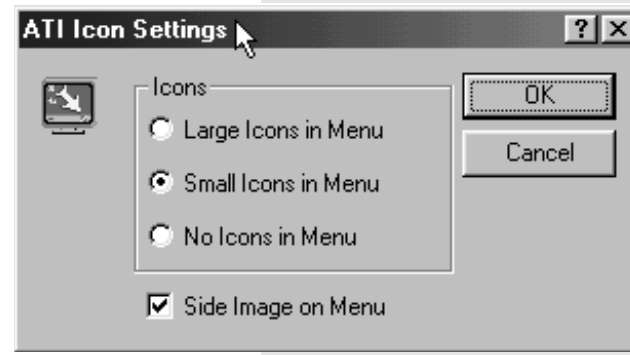


Figure 6.2: ATI Icon Settings

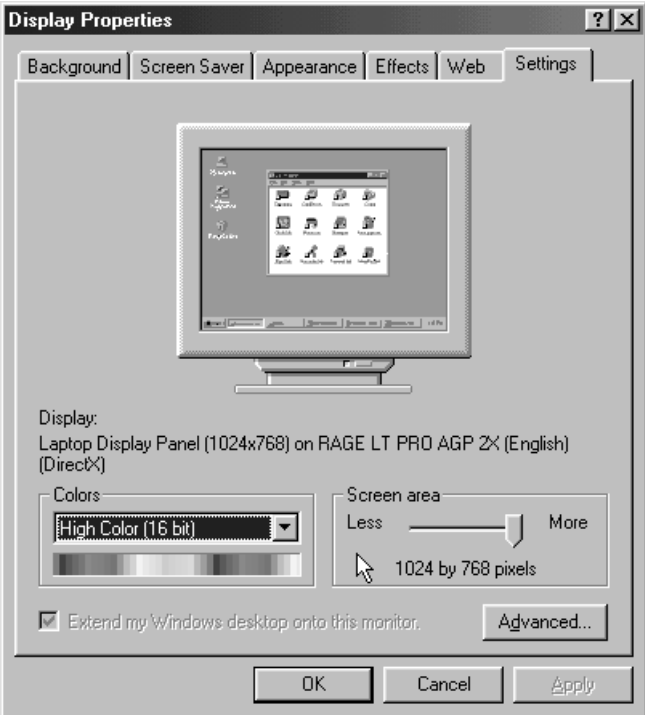


This pop-up menu also provides quick access to the Display Settings for your WinBook XL2. *(Figure 6.3)* Note: You can also bring up the Display Properties dialog box by right-clicking on the Windows 98 desktop and selecting "Properties."

Figure 6.3: Access to Video Settings

To adjust resolution, right-click on the ATI icon and select "Settings" and then "Display Settings" to bring up the display menu. Click on the Settings tab. *(Figure 6.4)*

Figure 6.4: Display Settings



You can use the drop-down box beside the color setting to increase or decrease the number of colors used. You can drag the slide for video resolution to the right or left to increase or decrease screen resolution.

In addition to these Windows 98 display properties settings, there are other settings specific to your system that can be found by clicking on the "Advanced" button. *(Figure 6.5)*

The tabs across the top allow you to move among the various dialog boxes that control settings for your system. These settings are discussed in detail in your WinBook XL2 Help file located in the WinBook folder of the Start Menu.

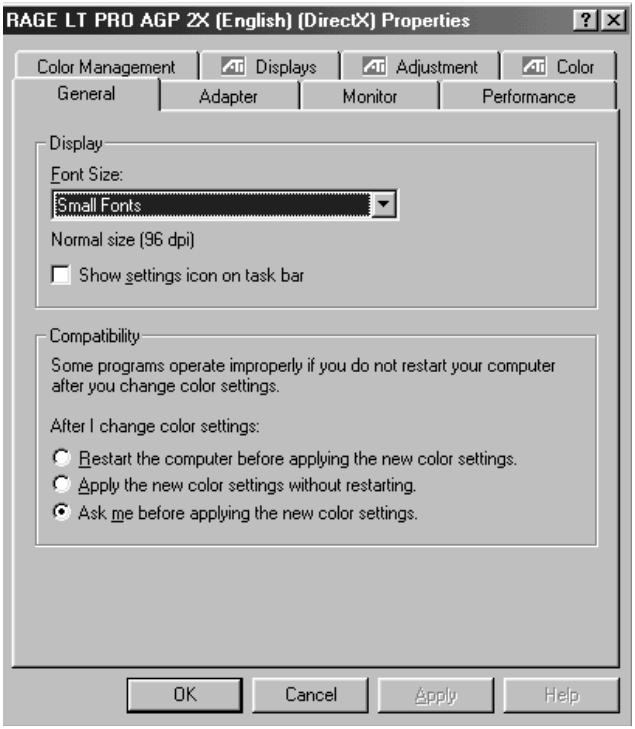
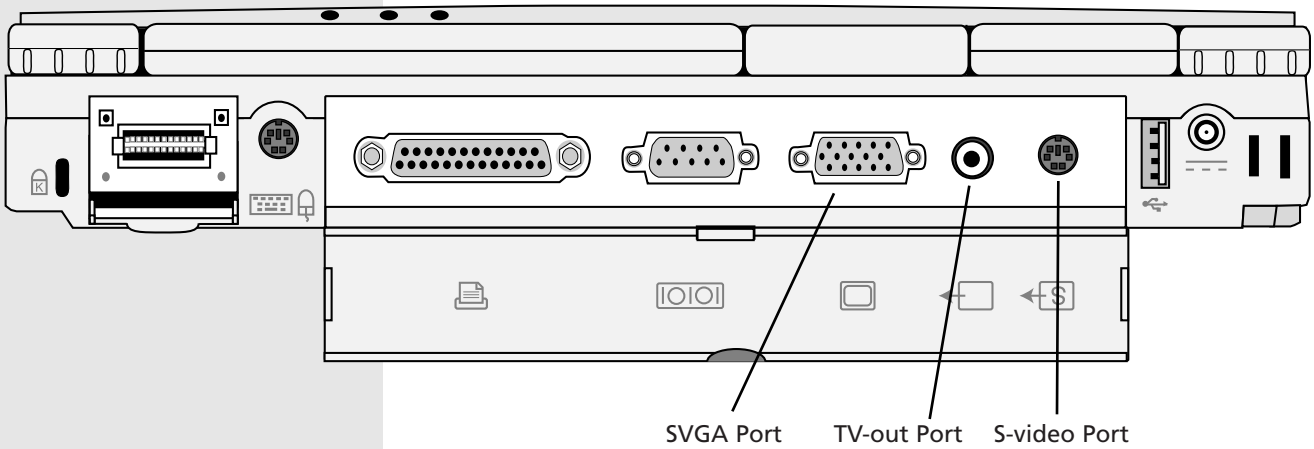


Figure 6.5: ATI Display Settings

SVGA Port

Your WinBook XL2 has three ports for directing video output to external devices: a SVGA port, a TV-out port and an S-video port. The TV-out and S-video ports are discussed later in this chapter. *(Figure 6.6)*

Figure 6.6: Location of ports on the rear of the XL2



The Television option will be grayed out unless your system is connected to a television. If it is, you can direct output to all three devices.

You can connect an external VGA or SVGA monitor to your WinBook XL2 through the video port on the rear of the system. You can direct the output to the LCD, the external monitor or both by toggling the LCD/CRT setting ([Fn]+[F2]) or by right-clicking on the ATI icon on the taskbar and selecting "Settings" and "Display Settings." This will bring up the Display Properties dialog box. Click on the "Settings" tab and then the "Advanced" button. This will bring up the Display settings for your system. Click on the "Displays" tab. You can select the desired display option by clicking on its radio button.

Directing the video output to both the LCD and the video monitor will slightly slow the video response time.

Your external monitor might require that you change the video driver from the default driver for the LCD screen. Check the WinBook XL2 Help file for specific instructions regarding video drivers.

A higher resolution on your external monitor might also mean a slower refresh rate, the speed at which a monitor sends a new image to the screen. A cathode ray tube (CRT) sends an image vertically down a screen one line at a time. The whole screen is thus refreshed at a certain interval (as the CRT cycles down the screen and then returns to the top). This speed is usually measured in Hz (cycles per second), which is a unit of frequency. A refresh rate of 60 Hz will produce a slightly perceptible flicker of the screen that can cause eye strain. A rate of 72 Hz or faster will usually produce a comfortable image. Your monitor may refresh at different frequencies depending on the resolution. Check your monitor specifications for the refresh rate, this may help prevent eye strain.

If you do need to use another driver with your external monitor, you might need to reset the driver for the LCD to achieve optimal display quality on the LCD. Windows 98 will usually provide you with a chance to review the changes and cancel them. It will also usually instruct you if you need to restart the system.

Unless your external monitor is a USB device, be sure to shut down your system before connecting the device to your system to prevent damage to your system and the external monitor.

If your monitor is Plug and Play compliant, the WinBook XL2 should detect its presence and help you set up the necessary drivers.

WARNING: When operating your WinBook XL2 with an external video device (CRT or TV), you should not close the LCD panel of the XL2. Closing the LCD panel will place the sensitive display in close proximity to the processor and can lead to damage of the screen assembly.

TV-out

Your WinBook XL2 comes equipped with a TV-out jack that allows you to direct the screen output of your system to a television screen. You will need to purchase A/V cables that are capable of fitting your jacks. The TV-out jack and the audio-out jack on your WinBook XL2 are not adjacent (they are separated by about 14 inches), so, if you want video and audio, you will want to purchase separate cables for audio and video transmission. If you want to enable the television output for your WinBook XL2, follow the directions below.

1. Turn off the computer. Open the back I/O port cover and locate the TV-out jack in the rear panel connector compartment. Locate the stereo speaker/headphone jack on the right side of the computer.

Your system does not come equipped with a TV-in jack, but you can direct video input to your display screen through the ZV port (see below).

2. Connect one end of video cable into the TV-out jack. Connect the other end of the cable to the video input jack of the TV receiver.

3. If you will need audio, you will need a "Y" cable with an "RCA mini" stereo jack (it looks like the jack on a set of headphones) on one end and a right and left RCA jack (looks like the jack on the video cable) on the other. Connect one end of the audio cable to the audio-out jack (the speaker/headphone jack) on the right side of your WinBook XL2. Connect the audio cable to the right and left channel audio input jacks. Note: If your television does not have stereo sound, you can obtain a cable with a single jack for both signals.

If you experience difficulties with the picture, check in the BIOS Setup program to be certain that your unit is set to NTSC rather than PAL. See Chapter Eight for information.

4. Start up your computer. Your system will automatically detect the presence of a device on this port.

5. After your computer has started and Windows has loaded, right-click the ATI icon on the taskbar and select "Settings" and "Display Settings." This will bring up the Display Properties dialog box. Click on the "Settings" tab and then the "Advanced" button. This will bring up the Display settings for your system. Click on the "Displays" tab. The television option will now be available. Click on its radio button. You can also send output to the LCD or external monitor by selecting their radio buttons.

NTSC is the U.S. colored TV standard, which broadcasts 525 lines of resolution transmitted as 30 interlaced fps (frames per second). PAL is the European colored TV standard, which broadcasts 625 lines of resolution transmitted as 25 fps.

Press [Fn]+[F2] to toggle the output to your WinBook XL2's display screen (you might need to press it more than once—wait to see if the display returns to the display screen and toggle it again if it does not). Toggle this key combination again to direct the output to the TV receiver.

If you set your system to direct video output to the TV-out port, the next time you boot the system, you will be greeted by a dialog box that reminds you that you have changed the video output to the TV-out setting. You can click on the checkbox to disable this reminder.

DVD

If your WinBook XL2 came equipped with a DVD-ROM drive, you will be able to use this drive to run software on DVD or to watch movies stored in DVD format.

Your WinBook XL2 comes equipped with software MPEG-2 support that will play video at 24 frames per second. MPEG-2 compresses video signals for quicker transmission. This compression standard is adequate for smooth DVD video playback. If you require even more precise video playback, you can look into a hardware MPEG-2 decoder on a PCMCIA card.

You can watch full-motion DVD films on your WinBook XL2 screen or direct the video to a television via the TV-out or S-video ports. You can also direct DVD audio output to external speakers or to the audio input of your television. Movies on DVD provide menus and additional information about the movie. A software DVD player will provide access to these additional features of the DVD. Check your WinBook XL2 Help file in the WinBook folder of the Start menu for information about using the DVD software in your system.

Since DVD activity will not reset power management timers, you should disable power management when using the DVD drive as a video playback system. You might find it useful to create a power scheme for DVD use. See Chapter Three for information about power management.

S-Video

Your WinBook XL2 comes equipped with an S-video port on the back of the system, which allows for higher quality video output to devices equipped with an S-video input port. If your television or video device has an S-video port, you can attain sharper image quality by connecting your WinBook XL2 to that device with that S-video port than you can with a traditional TV-out (composite) connection. This can be especially helpful in DVD playback, since it allows for smoother video transmission between your system and the video device.

You can connect your WinBook XL2 to a television with an s-video input in the same way as you connect with the TV-out jack (see above), substituting the s-video cable for the standard RCA video cable.

Your WinBook XL2 does not come equipped with an S-video "in" port. The S-video connection is designed only for video output.

You can find out more information about the S-video port in the WinBook XL2 Help file.

Zoomed Video

Zoomed Video (ZV) is a built-in aspect of advanced PCMCIA slots in notebook computers that allows video input to bypass the processor and system bus of the computer and send the video signal directly to the display screen. This allows you to maintain full-screen and full-motion video without the slowdown that usually results from video directed through the system bus. Zoomed Video does not send video to the processor of your system, so it is not a method of capturing video signals for editing by your computer.

Your WinBook XL2 comes equipped with ZV support via the two PCMCIA slots. In order to take advantage of your ZV port, you will need to purchase a ZV interface card for your system. You can contact your retailer for information about ZV equipment.

Chapter Seven: Upgrading

Your WinBook XL2 is designed to provide you the best technology currently available, but recognizing that computer hardware and software needs change quickly, we have designed the WinBook XL2 to be easily upgraded to meet your changing computing needs.

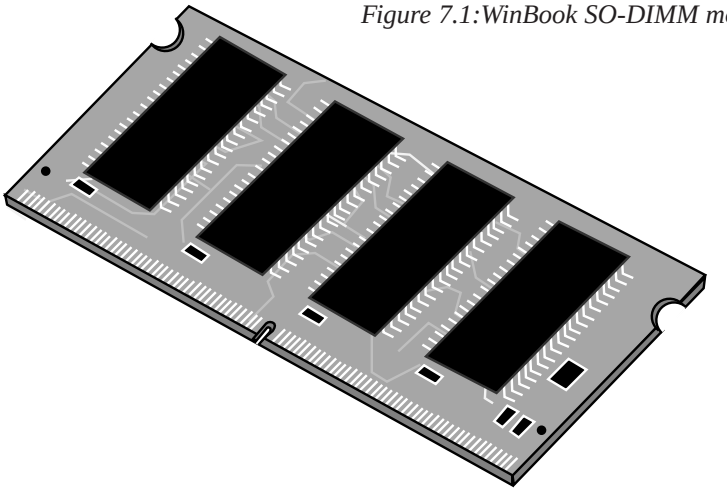
Memory

Since RAM requirements for software programs are constantly increasing, your WinBook XL2 is made to allow for an easy upgrade in system memory with SO-DIMM modules provided by WinBook Corporation.

Your WinBook XL2 has two memory slots that allow you to install new memory configurations. One slot, usually the left slot, will already be occupied by a module. You can add memory to the other slot and/or install a module with a higher capacity in the existing slot. *(Figure 7.1)*

Your WinBook XL2 requires SO-DIMM modules. You can contact the Sales department at the number provided on your "Read Me First "Card to find the right SO-DIMM modules for your system.

Figure 7.1:WinBook SO-DIMM module.



The chart below shows you some of the possible memory configurations for your WinBook XL2:

Module 1	Module 2	Total
16MB	None	16MB
16 MB	16MB	32MB
32MB	None	32MB
32MB	16MB	48MB
32MB	32MB	64MB
64MB	None	64MB
64MB	16MB	80MB
64MB	32MB	96MB
64MB	64MB	128MB

Electrostatic Discharge can cause damage to SO-DIMM modules (and other computer components). Always remember to (1) Keep the component in its protective packaging until you are ready to install it, and (2) Wear a wrist grounding strap attached to grounded metal or, if a strap is not available, discharge static before handling the SO-DIMM module.

To install memory modules:

1. Turn off the computer and disconnect the AC adapter. Remove the main battery (see Chapter Three for instructions, if needed).
2. Open the LCD panel so that it is fully vertical.
3. Slide the end cap off each end of the LCD hinge. Set the two caps in a safe place. (*Figure 7.2)*

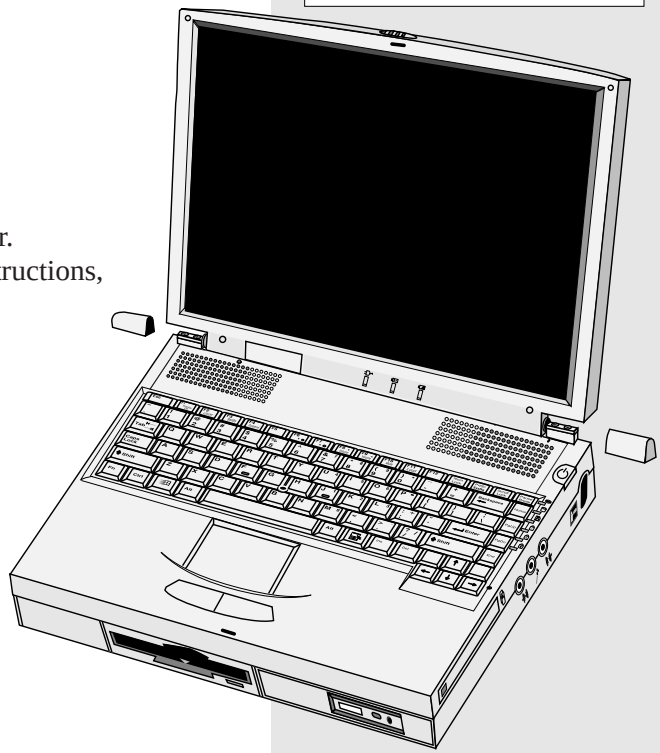
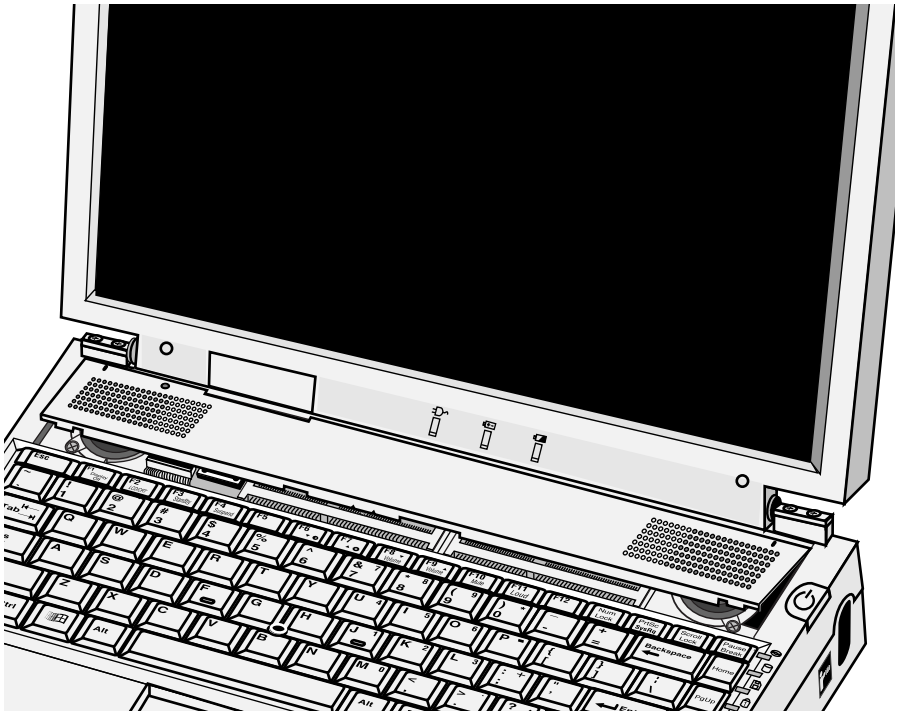


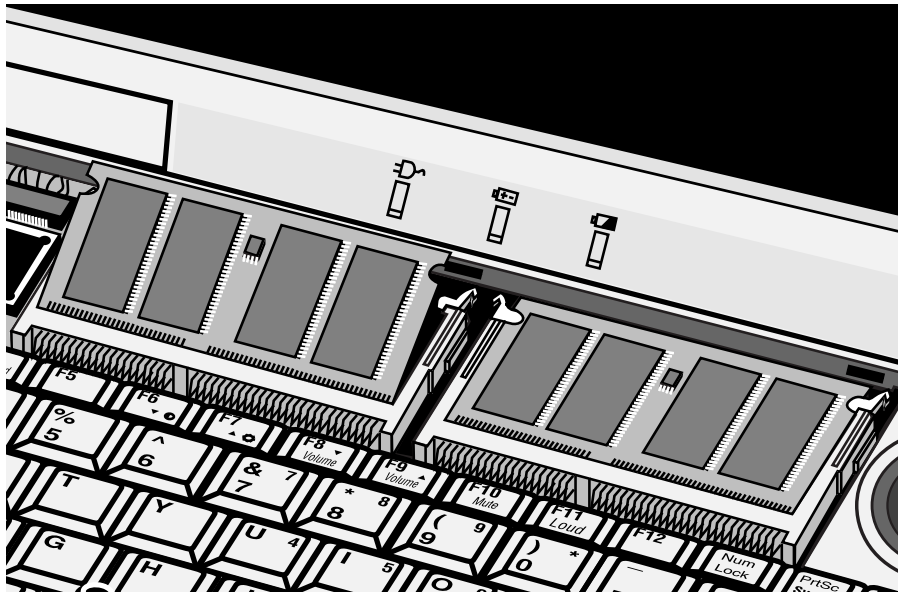
Figure 7.2: Removing LCD Hinges

Figure 7.3: Removing the RAM compartment panel



4. The RAM compartment is located under the panel just above the keyboard.
5. Gently slide the panel forward to loosen it.
6. Gently grip the side edges of the panel and angle it up and forward to remove it from the compartment. Set it in a safe place. (*Figure 7.3)*
7. You will now see the two RAM slots, one or both of which might already have SO-DIMM modules in place. If you will need to remove a module or modules to complete your upgrade, push outward on the edge clips to release the module, angle the card slightly upward and gently

Figure 7.4: Removing the Old Memory Card

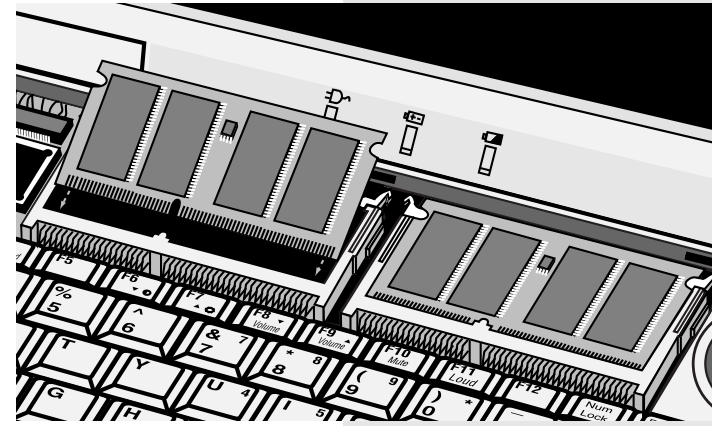


Be careful when inserting or removing a SO-DIMM module. Forcing a SO-DIMM module in or out of a socket can damage the socket and/or the SO-DIMM module.

slide it from its edge connector slot. Store the card in the anti-static bag that contains your new card(s). (*Figure 7.4)*

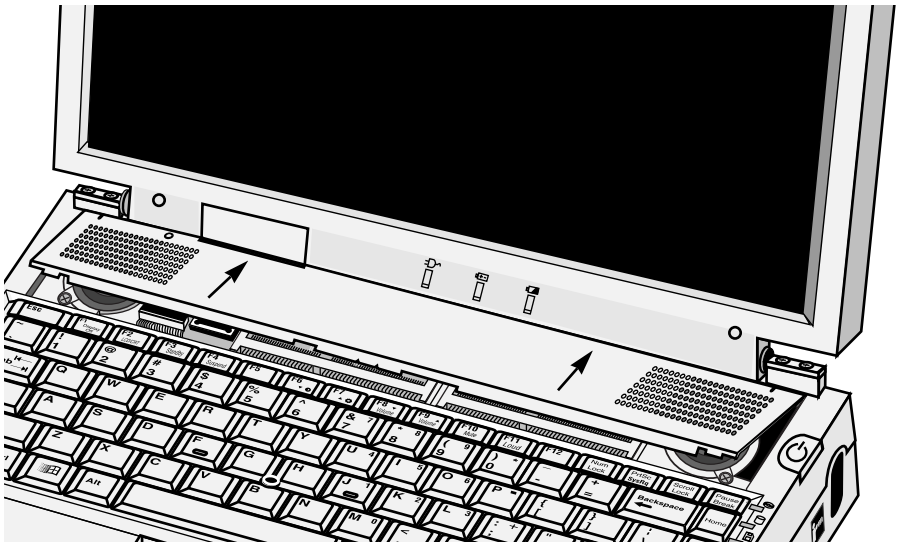
8. To install the new memory card, hold the card with its gold edge connector toward the edge connector slot of the compartment. In order to help you orient the card, the edge connector has been made with two unequal-length sections. The longer section is closer to the right side of the machine (as you face the bottom of the unit). (*Figure 7.5)*

Figure 7.5: Inserting the New Memory Card



The panel that holds the memory slots also contains the BIOS chip for your system and your internal speakers. Each is a fragile piece of equipment and you should exercise care when working in this compartment. You should never attempt to remove or replace the BIOS chip yourself since it can result in damage to your system. BIOS upgrades are done by a software update of the chip, so the chip should be left untouched.

Figure 7.6: Replacing RAM Compartment Cover



9. Holding the card at a shallow angle, insert the edge connector into the slot. When the card is fully inserted, the gold edge connector should not be visible.
10. Press the card downward until it is flat. You should hear an audible click as the latches of the connector secure the card in place.
11. Once the chips are properly seated, you can replace the cover on this compartment. Line up the cover and insert it at a 45-degree angle (with the far edge down). (*Figure 7.6)*
12. Push the cover down until it is flat and slide it towards the rear of the computer as far as it can go.
13. Slide the end caps back on.
14. Start your computer. The WinBook XL2 should automatically register the new memory. If the memory size indicated during the POST

(Power On Self Test) that appears when you boot does not match your new memory configuration, retrace the steps of the installation to be certain that the SO-DIMM modules are properly installed.

Swappable Drives

Hardware and software changes quickly. In order to make it easy for you to expand the capacity of your WinBook XL2, the hard drive in your WinBook XL2 is made to be easily swapped out for upgrading. *(Figure 7.7)* You should be sure to back up your hard drive before attempting to change the hard drive.

The swappable hard drive feature can also allow you to move your hard drive to and from another computer that supports the same swappable drive configuration. Or, if the system is to be used by several users, it can allow you to have separate hard drives for each user. This can help the users to maintain security and configuration options. Keep in mind that drives of different capacity might require some adjustment in the Setup program (see Chapter Eight). To maintain security in an environment where drives are swapped, you should consider enabling the password option in the Setup program. See Chapter Eight for more information about system security.

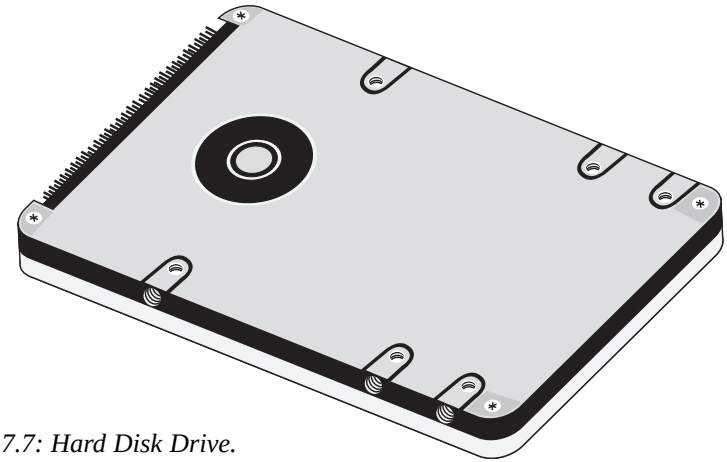


Figure 7.7: Hard Disk Drive.

Be sure that your hard drive is completely backed up before installing a new drive.

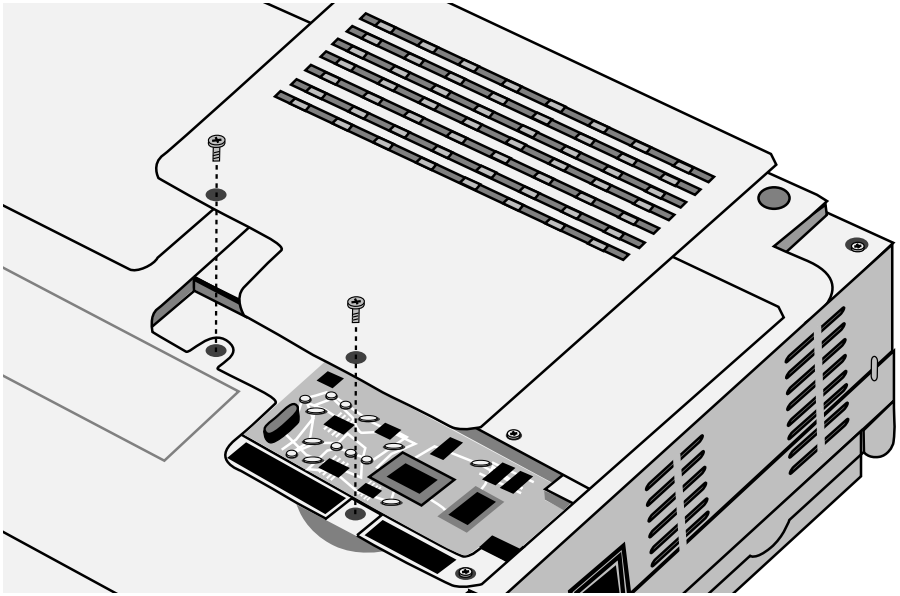
If you switch your drive to a machine with a different hardware configuration, Windows 98 will first need to recognize the new equipment. You might need to reboot the system to allow Windows 98 to function properly in the different hardware configuration.

Whenever you handle memory components (hard drive, SO-DIMM modules) from your system, you should be careful of excess static. It is advisable to wear a grounding strap, if you have one available. If you do not have a grounding strap, discharge static by touching a grounded object before beginning.

To upgrade your hard drive:

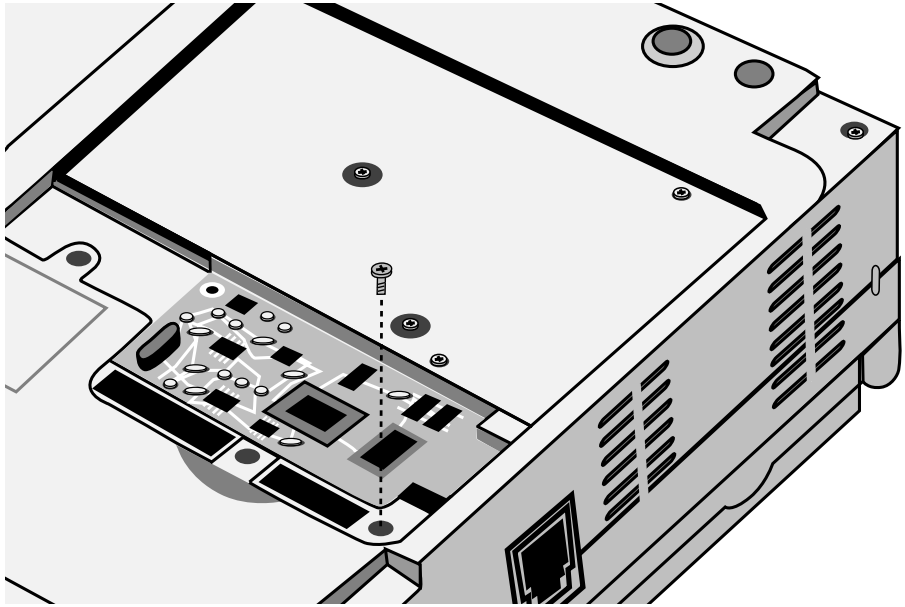
1. Back up the installed drive completely. Be sure that you have the bootable CD-ROM that came with your WinBook XL2 if your new drive does not come with an operating system (e.g. Windows 98) already loaded. NOTE: This is the bootable WinBook CD-ROM that came with your system, not the bootable Windows 98 program CD. The CD-ROM that came with your system has all the proper drivers for the WinBook XL2 hardware and a disk image utility for just this kind of upgrade.
2. Power down the system completely. You should unplug the AC adapter and remove the battery before removing the drive. Disconnect any attached peripherals. (See Chapter Three for instructions for removing the battery, if needed.)
3. Turn the system over.

Figure 7.8: Removing the Compartment Cover



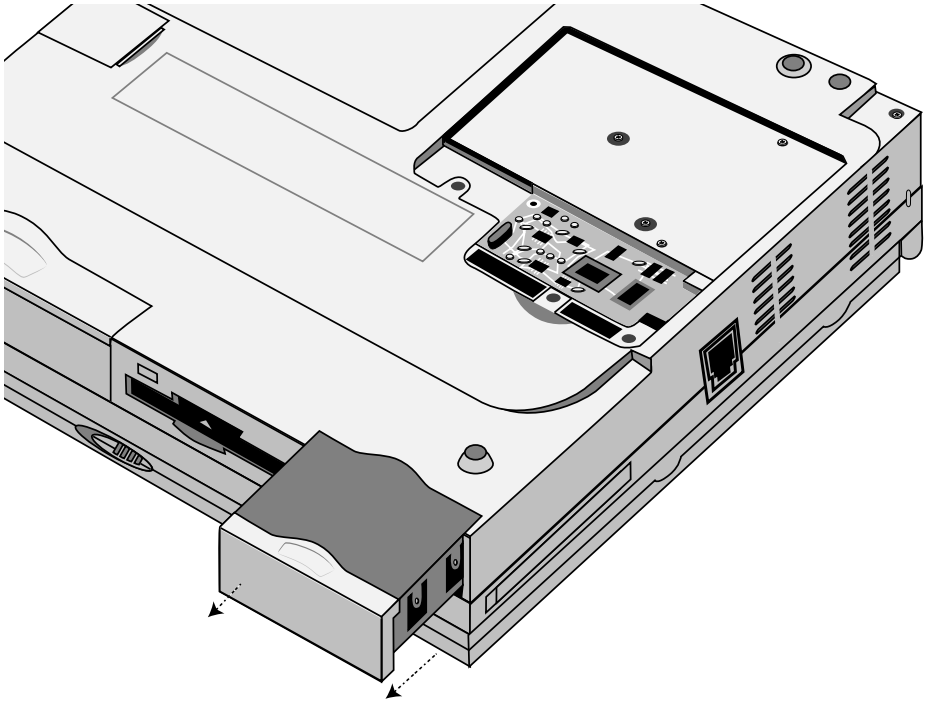
4. Remove the two screws that hold the cover with the vents (this compartment houses the modem and heat sink for your unit and you should exercise extreme care when working near these delicate elements of your system). Set the cover and the two screws in a safe place. *(Figure 7.8)*

Figure 7.9: Components in This Vented Compartment



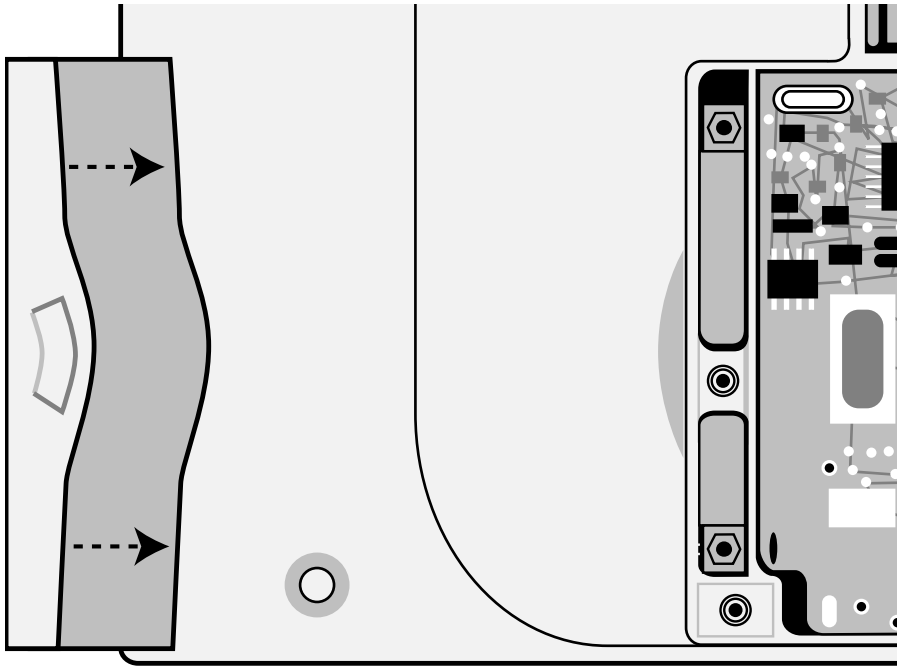
5. At the front of this compartment, you will see a screw that secures the the hard disk drive unit in its bay. Remove the screw that secures the drive and set it in a safe place. Be very careful not to drop the screw into this compartment, since there are delicate components of your system located here. *(Figure 7.9)*
6. Slide the hard disk drive unit out of the system. *(Figure 7.10)*
7. The drive is attached to a special bracket that secures it to the WinBook XL2. Remove this bracket from your existing drive.

Figure 7.10: Removing the Hard Disk Drive



8. Remove the new hard drive from its anti-static bag. You can use the same anti-static bag to store your old hard drive.
9. Attach the bracket to the new drive.
10. To install the new hard drive, you will need to slide the drive into the bay and press it gently into place. If the drive does not slide in easily, slide it out slightly and try again. Do not force the drive into place-this can bend the pins on the hard drive. Be certain that the screw hole on the bracket aligns completely with the screw hole in the case. *(Figure 7.11)*
11. Secure the drive to the case with the screw.

Figure 7.11: Installing the Hard Drive



12. Replace the compartment cover and secure it with its two screws.
13. If you have an operating system already installed on your new drive, you should be able to boot to it and proceed to step #14. Otherwise, turn on your WinBook XL2 and proceed to step #14.
14. Insert your boot CD-ROM into the CD-ROM/DVD drive. NOTE: This is the boot CD-ROM that came with your system, not the Windows 98 CD-ROM. The CD-ROM that came with your system has all the proper drivers and information to restore your WinBook XL2 to its original factory configuration.

15. When your computer boots from the CD-ROM, you will be asked to select options from a menu. Select "Install WinBook XL2 Windows 98 Master."
16. Windows 98 will now install on your new drive.
17. Depending on the backup system that you have, you might need to load the backup software from your original disks before restoring your files.
18. Either restore your existing programs, configurations and files from your backup or reinstall the software from your original disks or CDs. If you do chose to reinstall from your original disks, you might need to reset preferences in your programs. It is usually much quicker and easier to restore from your backup.

Firmware Upgrades

Your WinBook XL2 has certain software written into ROM (Read-Only Memory), including the BIOS (Basic Input/Output System) Setup Program discussed in Chapter Eight. This firmware, as this software is called when it resides on chips, can be upgraded to provide enhancements. These upgrades can be downloaded from the WinBook Web Page (www.winbookcorp.com) or obtained on diskette. Technical Support can provide you with help in erasing the current firmware and replacing it with the updated version. Use the Technical Support phone number provided on your "Read Me First" Card to get assistance in upgrading your firmware.

Other Upgrades (Card Bus)

The easiest way to upgrade the capabilities of your WinBook XL2 is to take advantage of the PCMCIA slots in your system. These can be used to provide a network connection, communications hardware, or connections to external equipment via a PCMCIA card (or PC card) interface. See Chapter Five for information on using the PCMCIA slots to expand your system.

Chapter Eight: Configuring & Maintaining Your System

Check your WinBook XL2 Help file in the WinBook folder of the Start menu for the most current BIOS information for your system. You can also obtain updated BIOS software from the WinBook technical support site: http://www.winbookcorp.com/

If your system is set to show a graphic during the power up, rather than text, you will need to press [Del] as soon as the graphic appears to enter the Setup mode.

Setup Program

The Setup program writes information about the equipment, security and power management of your computer directly into ROM (Read-Only Memory) in the computer's hardware (it is stored in the computer's BIOS chip). When you turn on your computer, it first looks at this information to see what the physical devices the system has available for its use.

Access to the **Setup** menu is during the boot process. When you first start the computer, you will be offered the chance to enter the Setup mode (by pressing the [Del] key). If you wish to enter after the computer has booted, you will need to exit Windows 98 (or whatever operating system you are running). You can restart the computer by selecting **Shut Down** in the Start menu, then selecting the **Restart** option. When the computer starts to reboot, press the [Del] key to enter the program.

Setup Utility Menu

Once you have entered the Setup program, you will arrive at the **Setup utility** menu. Scroll down to an item using the up-arrow and down-arrow keys or the Tab key. To select an item, hit Enter. *(Figure 8.1)*

In any of the menus, you can use the Tab key or arrows to move between items. Use the [PgUp] and [PgDn] keys to change the settings for a given item. Use the [Esc] key to move from a menu back to the main screen of the Setup utility.

Standard CMOS Setup: Selecting this item calls up the Standard CMOS Setup menu, which controls basic system information such as date, time, and drives. See the section on this menu below for specific instructions.

Advanced CMOS Setup: Selecting this item calls up the Advanced CMOS Setup menu, which controls advanced system information such as hardware access and boot settings. See the section on this menu below for specific instructions.

Figure 8.1: The Setup Utility Menu

Power Management Setup: Selecting this item calls up the Power Management Setup menu, which controls the built-in power management features of your WinBook XL2. See the section on this menu below for specific instructions.

Peripheral Setup: Selecting this item calls up the Peripheral Setup menu, which controls how your system uses its ports and audio. See the section on this menu below for specific instructions.

Auto-Detect Hard Disks: Selecting this item causes your system to auto-detect the current hard drive configuration, as well as configuration for your CD-ROM or DVD drive and your LS-120 drive (if present). You can also use the "Auto" setting in the hard drive section of the Standard CMOS

Setup to perform an auto-detect on each boot (see the section below on Standard CMOS Setup). This latter option should be used if you will be switching between hard drives and do not want to manually detect the hard drive each time you switch. Note: Using this option will set the BIOS to this specific hard drive, overriding the "Auto" setting

Change User Password: Selecting this item will allow you to establish or change the user password. The user password allows the person designated as the "user" to start up and operate the system. A "user" cannot alter the settings in the BIOS program. BIOS settings can only be altered by a "supervisor" (see below). You cannot set a user password without first establishing a supervisor password. If a supervisor password has not been selected, this item will be "grayed out" and will be skipped over when you scroll down. If a supervisor password has been established, you can enter a user password by scrolling down to this item and pressing [Enter]. You will be asked to type the new password and then type it again to verify it. The user password can only be changed by logging in as the "supervisor." You can use the "Password Check" setting in the Advanced CMOS Setup menu to establish whether the password will be checked only when entering Setup or any time the system is started.

Change Supervisor Password: Selecting this item will allow you to establish or change the supervisor password. The supervisor password allows the person designated as the "supervisor" to start up and operate the system, as well as to make changes to the BIOS settings (including the supervisor and user passwords). You can enter a supervisor password by scrolling down to this item and pressing [Enter]. You will be asked to type the new password and then type it again to verify it. You can use the "Password Check" setting in the Advanced CMOS Setup menu to establish whether the password will be checked only when entering Setup or any time the system is started. You can start the system with either the user password or the supervisor password.

If there will be more than one user of this WinBook and you want to limit other users' access to the BIOS settings, you should consider enabling this password option.

Auto Configuration with Optimal Settings: Selecting this item will cause the system to change all BIOS information from the current settings to settings that will provide optimal performance. This option allows you to quickly maximize system performance. **Note:** *This option will overwrite all customizing that you have made to the BIOS settings, as well all custom settings established by WinBook. Using this option could affect the operation of your system. Contact Technical Support before making this change unless you are an experienced user. Even if you are an experienced user, you should record your current settings before using this option.*

Auto Configuration with Fail Safe Settings: Selecting this item will cause the system to change all BIOS information from the current settings to fail safe settings. If you are having problems with system performance, this setting will allow you to use settings that should allow the basic system to operate correctly. This will reduce system performance, but should allow you to have a stable working environment if problems arise. You can reset the BIOS settings after the problems have been corrected. **Note:** *This option will overwrite all customizing that you have made to the BIOS settings, as well all custom settings established by WinBook. Using this option could affect the operation of your system. Contact Technical Support before making this change unless you are an experienced user. Even if you are an experienced user, you should record your current settings before using this option.*

Save Settings and Exit: Selecting this item writes the new information into the system BIOS and exits the Setup program. You will be prompted to verify this selection before the information will be stored on the CMOS chip.

Exit Without Saving: Selecting this item abandons all changes made to the Setup program in the current session and exits the Setup program. You will be prompted to verify this action before the changes are abandoned.

If you choose to enable the supervisor password, be sure to write down the password and store it in a safe place. If you ever forget this password, you will either be unable to use the system (if you set the password check for "always") or change the BIOS settings (if you set the password for "Setup"). You will need to return the unit to WinBook to restore full functioning to the system in this event.

You do not need to exit to the Setup program to adjust the time and date of your computer. You can adjust these from within Windows 98 by double-clicking on the clock on your taskbar and adjusting the information in the Date/Time Properties window. Windows 98 will also adjust your system time automatically to account for Daylight Savings Time if you choose that option.

Standard CMOS Setup Menu *(Figure 8.2)*

Date: This item allows you to adjust the date of your computer's internal clock. You can use the Tab key to move among the month, date and year fields. Use the [PgUp] or [PgDn] keys to change the values of the fields.

Time: This item allows you to adjust the time of your computer's internal clock. You can use the Tab key to move among the hour, minute and second fields.

Floppy Drive A: This item controls the setting for the type of floppy disk drive. If your WinBook XL2 came with a floppy disk drive, you should leave this value at "1.44 MB 3 1/2." If your unit came with an LS-120 drive, you should leave this item set at "Not Installed."

Figure 8.2: The Standard CMOS Setup Menu

Pri Master: This item allows you to adjust the settings for the Primary IDE drive (the Hard drive). Unless you are an experienced user, you should allow the settings to be set by the Auto-Detect option (see the main Setup Utility menu above).

Sec Master: This item allows you to adjust the settings for the master drive on the secondary IDE channel (the CD-ROM drive or DVD drive). Unless you are an experienced user, you should allow the settings to be set by the Auto-Detect option (see the main Setup Utility menu above).

Sec Slave: This item allows you to adjust the settings for the slave drive on the secondary IDE channel (the LS-120 drive, if present). Unless you are an experienced user, you should allow the settings to be set by the Auto-Detect option (see the main Setup Utility menu above).

Advanced CMOS Setup Menu *(Figure 8.3)*

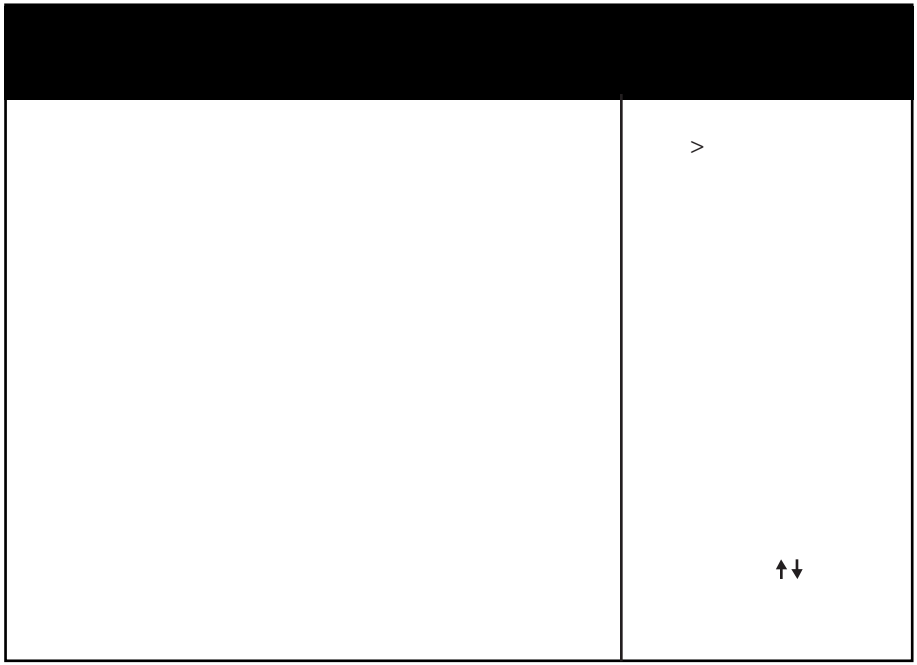
Select Display Type: This item allows you to set the default setting for video output on system start-up. The choices are: Simul, LCD or CRT. You can always vary from this default setting during a session by toggling the display with the [Fn]+[F2] key combination or by calling up the Display Properties window. Keep in mind that directing output to both the LCD and CRT will slow video response time slightly.

BootUp Sequence: This item establishes the BootUp Sequence for your computer. Your WinBook XL2 will check the drives in the order designated and load the operating system from the first drive in the sequence that contains one. If it checks all three drives and cannot find an operating system, you will receive an error message. The options are:

C:, A:, CDROM

A:, C:, CDROM (You will need to use this option if you want to boot from a floppy to disinfect a virus.)

Figure 8.3: The Advanced CMOS Setup Menu



CDROM, A:, C: (Since you have a bootable restore CD, you should select this option during normal system use.)

Boot Mode: This item allows you to set your computer to display text or a graphic during boot. If you want to be able to read system information at boot, you should set this item to "Text." You will see the BIOS information presented as the computer runs the POST (Power On Self-Test) and begins to boot. If you would prefer not to view the text, you can set this item to "Graphic." This display does not affect the operation or quickness of your system during boot.

Floppy Access: This item allows you to restrict users to "Read-Only" access to the floppy disk drive or permit full "Read-Write" access. If pass-

word protection has been enabled, this item cannot be changed by logging in with a "user" password. Restriction to "Read Only" access can prevent files from being downloaded from your system onto a floppy disk. It is an aggressive level of security.

S.M.A.R.T. for Hard Disks: S.M.A.R.T. is a set of hard disk diagnostics built directly into your hard disk drive. Activating this option will allow the WinBook XL2 to take advantage of these diagnostics. Set this item to "Auto" to have the system detect the presence of a S.M.A.R.T. drive. You can disable this item if you find that the S.M.A.R.T. diagnostics are causing problems with your hard drive.

BootUp Num-Lock: This item allows you to establish the default setting for the Num Lock. If you use a PS/2 keyboard and want the number pad enabled, you should set this option to "On." If you use the built-in keyboard, you will probably want to leave the Num Lock function "Off" so that the keys will function as a normal keyboard. You can activate the Num Lock during a session by using the [Num Lock] key.

Password Check: If you have chosen to enable the BIOS password(s), this allows you to set when this password will be required. If you select "Setup," the password will only be required when entering the Setup Utility. If you select "Always," you will need to use the password every time you start the system.

PCI IDE BusMaster: When "Enabled" this option allows your system to transfer data through DMA channels. This feature can also be "disabled" if DMA conflicts arise.

PS/2 Device: If you use the PS/2 port, serial port or USB port to connect a mouse, you can use this option to disable the built-in touchpad. Under normal operation, the unit will detect a PS/2 mouse and disable the touchpad on its own if set to "Auto." If you find a conflict with your external device, select "ExtPS2/TrackP" to disable the touchpad and minimize conflicts.

NOTE: If you use a Microsoft Intellimouse, you must disable the touchpad by selecting the "ExtPS2/TrackP" setting.

TV Display: This item allows you to designate the type of colored-TV standard to be used when a TV receiver is connected to the TV-out port. You should use the NTSC setting, which is the standard for U.S. colored televisions.

Display Expansion Mode: Enables or disables the auto expand function of the display. When the expand function is "Enabled," it will direct some 640 x 480 resolution programs to use the full display screen, even when Windows is set to a higher resolution.

Auto DIM: This item allows you to set the system to automatically dim the screen when using the battery. Since the screen uses much of your battery power, this can considerably lengthen battery life. If you need the full brightness of the screen, you should "disable" this option.

Power Management Menu

Your WinBook XL2 has an array of elaborate power management features that will enable you to extend battery life. As you use your system, you should try various power management settings to find the balance of system response and power management that works best for you. *(Figure 8.4)*

If you will be using your system primarily in a desktop setting, you should consider setting the power management to less aggressive settings. The aggressive settings are more appropriate for mobile usage. You can switch the settings as the specific situation demands by entering the setup program on boot-up.

Power Savings Mode: This item allows you to set the level of power management. There are three options:

Disabled: This setting disables all timeouts and the CPU auto doze.

Maximum: Provides optimal battery conservation, but slows performance.

Customized: Allows you to enter individual values for the various power management features to most closely match your needs.

Figure 8.4: The Power Management Menu

CPU Auto Doze Mode: This item allows you to enable the auto doze function, which reduces power use by the CPU when the system is idle.

(Note: This field might be display-only, depending on the setting selected in the Power Savings Mode above.)

Standby Timeout: The amount of idle time that must pass before the system automatically enters the standby mode. This item can be "disabled" or set to a specific time increment. (Note: This field might be display-only, depending on the setting selected in the Power Savings Mode above.)

Autosave functions (or other automatic functions, such as email checking) in programs can reset the timeouts for your system. If you want the system to time out after a specific period of inactivity, make certain that automatic functions are disabled or set with a longer time period than the system timeouts.

Suspend Mode: This item allows you to set the type of suspend mode to be used by the system when it suspends (due to a timeout or when the suspend mode is activated by the user). The options are:

Disabled: Prevents the system from entering the suspend mode.

DRAM: Removes power to all components except DRAM. Allows for a quick restart.

Disk: Removes power from all components and writes the session to a partition of the hard drive.

Auto: First enters DRAM mode, then enters the Disk mode after the time specified below.

(Note: This field might be display-only, depending on the setting selected in the Power Savings Mode above.)

Suspend Timeout: The amount of idle time that must pass before the system automatically Suspends functioning. This item can be "disabled" or set to a specific time increment. (Note: This field might be display-only, depending on the setting selected in the Power Savings Mode above.)

RAM to Disk Timeout: If the "Auto" suspend mode has been chosen, this setting determines how long the system will suspend to DRAM before suspending to disk. (Note: This field might be display-only, depending on the setting selected in the Power Savings Mode above.)

Suspend on Low Battery: When this function is enabled, the system will automatically enter the suspend mode when the battery reaches a critical level. This can help avoid inadvertent loss of data in an unattended system. If you rarely leave the system running on battery power while unattended, you might prefer to disable this setting. When the setting is disabled, the system will continue to run until battery power is completely used up. This can allow you to save your work or shut down the system after receiving

the low battery warning. (Note: This field might be display-only, depending on the setting selected in the Power Savings Mode above.)

Hard Disk Timeout: This item allows you to set the amount of idle time (no disk activity) before the disk is placed in a low-power mode. This item can be "disabled" or set to a specific time increment. (Note: This field might be display-only, depending on the setting selected in the Power Savings Mode above.)

Resume Alarm: This item allows you to set the system to resume at a specific time (designated below). This feature is useful if you have an automated daily function (backup, log on to network, etc.) that would require the system to be active. This is only available as an option when you have suspended to RAM.

Resume Alarm Time: If the item above is enabled, this item allows you to set the time at which the system awakes. Keep in mind that you should set this time to allow a few minutes before the scheduled activity (to allow the system to fully resume), but not so long in advance that it will timeout again before the activity begins.

Battery Auto Calibration: This item allows you to start a special program designed to optimize battery performance. It must be performed when installing a new battery. The battery will be discharged until fully empty. Then the computer will automatically be turned off. This process might take as long as two hours. You will then have to fully charge your battery. Performing this routine on a regular basis will help your battery retain its optimal charge level. Note: the system fan will turn on during calibration to keep the system cooled and help optimize calibration.

Battery Low Warning Beep: This item allows you to disable the beeping sound that your WinBook XL2 emits when the battery is low. We recommend that you leave this function enabled to help prevent data loss.

Peripheral Setup Menu *(Figure 8.5)*

Com2 Port (Modem): If you have an internal modem for your WinBook XL2, this item should be set to "Auto." If enabled, the modem port will be the Com2 port on your system. If you find that the "Auto" setting causes conflicts with other devices, you can use one of the other settings available under this option. For more information about I/O addresses and interrupts (IRQs), see the WinBook XL2 Help file, located in the WinBook folder of the Start menu. If your system does not have an internal modem, this option will be set to N/A and be "display only".

You should leave the settings in this menu at the values preinstalled by WinBook unless you have a specific reason for changing them and are an experienced user. Changing settings in this menu can affect the operation of your system.

Com1 Port: This item allows you to set the I/O address for the COM1 (serial) port. You can disable this port, set it to "auto" (which will automatically set the address on system start-up), or set a specific address. Be aware of conflicts that might arise if you set more than one device to a specific address. Your system might have come set to a specific address. If so, you should leave this item set to the address to assure proper functioning of your serial port.

Com3 Port (IR): This item allows you to set the I/O address for the COM3 (infrared) port. You can disable this port, set it to "auto" (which will automatically set the address on system start-up), or set a specific address. Be aware of conflicts that might arise if you set more than one device to a specific address. Your WinBook XL2 will come with the IR disabled to keep conflicts minimized during normal operation. You can activate this feature at any time by following the instructions provided in the Help file in the WinBook folder of the Start menu.

IR Mode: This item allows you to set the mode for the IR port. The options are: IrDA and ASK-IR.

IR DMA Channel: DMA channels allow a device to bypass the processor and can help speed up transmission of information from peripheral devices. If your IR is activated, you can set the DMA channel address to be used for IR. If you want to learn more about DMAs, check the WinBook XL2 Help file.

Figure 8.5: The Peripheral Setup Menu.

LPT Port: This item allows you to set the I/O address for the LPT (parallel) port. You can disable this port, set it to "auto" (which will automatically set the address on system start-up), or set a specific address. Be aware of conflicts that might arise if you set more than one device to a specific address. Your system might have come set to a specific address. If so, you should leave this item set to the address to assure proper functioning of your parallel port.

LPT Extended Mode: This item allows you to set the communication mode of the Parallel Port. There are four options:

Normal: This setting assumes that the communication is primarily from the computer to a peripheral (such as a printer). This setting is not intended for a parallel connection between your WinBook XL2 and another computer for file transfers.

Bi-Directional: This setting allows for information to move equally in both directions. This is required for file transfers between computers via a parallel connection.

EPP: This is an enhanced bi-directional mode.

ECP: This is an enhanced bi-directional transfer mode.

EPP Version: If you have chosen the EPP mode above, this item allows you to designate the version of EPP to be used by the system. The options are: 1.7 or 1.9.

LPT Port DMA Channel: If you have chosen the ECP mode above, this item allows you to designate the DMA (direct memory address) channel to be used by the LPT port. The options are: 0, 1 or 3. In any other LPT mode, the LPT port will not make use of the DMA option and this item will be N/A (not available). Be aware of conflicts that might arise if more than one device is set to use a specific DMA channel.

Security

Viruses

It is possible that your computer might become infected by a virus, a program which was designed to move into a computer's system and cause damage. Many viruses act by altering the boot record of your disk, thus rendering it unusable. Some viruses are relatively harmless. Many are very destructive and can cause serious data loss.

If you never exchange disks with anyone else, only buy software from major companies and do not exchange information via modem, your risk of

being infected is relatively minimal (although not nonexistent). Unfortunately, that is a very limiting way to use a computer. You should regularly check your computer for viruses (not all viruses act immediately, some are set to engage when a function is performed or when a specific date and time arrives). There are programs designed for checking for viruses on your system and eliminating those viruses if found.

If you have been making regular back-ups of your data, you should be able to survive infection by a virus with minimal damage. If you use your modem to upload and download files regularly, you should be sure that you are checking the files for viruses. Many antivirus programs will check files as they are received by the modem, this can including checking information as it is accessed from the World Wide Web.

If your system is infected with a virus, you will usually need to boot from a bootable floppy disk or CD-ROM that you are sure is free of infection. You should consider carrying a write-protected boot disk with your computer, to allow for a clean boot wherever you might be using your system.

New viruses come along frequently. You should update your virus software regularly (most virus software manufacturers have an update service) to keep your system secure from new viruses.

Passwords/System Security

There are a number of opportunities that you will have to use passwords to protect your system or your data. Keep in mind that a good password should be easy to remember, but should not be a word or number that could easily be guessed or that might be easily discovered in your other possessions. A good password should also be as long as possible (within the limits of your password utility) and should contain a combination of number and letters (and non-alphanumeric characters-such as punctuation marks-where permissible).

The password protection available to you includes:

BIOS password protection: You can set this password to restrict access to your hard drive at bootup or at entry into the BIOS Setup program.

This aggressive form of password protection can be used to limit access to your system and files. If this password is set to always activate, it will restrict the computer from booting unless your password is provided. It will not, however, protect your data if the drive is removed and placed into another machine. See above for information about setting this password.

Windows 98 passwords: These are designed primarily to distinguish between multiple users of a machine and to load that user's preferences. It does not offer any significant protection of your data. The password screen can be bypassed by pressing the [Esc] key, loading Windows 98 and allowing access to all of your files.

Screen saver password: If you use a screen saver in Windows 98, you can set the system to require a password to resume normal functioning. This can be used to protect your current session from a casual observer, but it does not provide any substantial security.

Network/ISP passwords: These passwords are used to restrict use of your network or modem connection. Although many programs, including Windows 98's Dial-up Networking, allow you to store these passwords so that you will not have to enter them every time you connect, you should consider how secure your environment is before storing such passwords.

If you work in a sensitive environment, you might want to clear lists of recently used documents or recently visited web sites. There are tools included on the Windows 98 CD that provide such protection. Check Windows 98 documentation for information about such features.

Encryption

Since passwords listed above will not protect your system from an aggressive attempt to gain access to your files, you might want to consider looking into file encryption for sensitive files. Encryption software is readily available and can provide a much stronger set of protections for your data.

Internet Connections

Internet (and other network) connections are an area where you want to be aware of the risk to your computer. In addition to viruses, another security risk of internet connection is that you can permit access to files on your hard drive that have been designated for sharing. You should always be sure the folders containing sensitive data have not been designated for insecure sharing across a network. See Chapter Five for information on the sharing of folders across a network.

You can provide a more secure connection on the Internet by taking advantage of the Virtual Private Networking (VPM) functions built into Windows 98. You can check the Windows 98 documentation for information about these kinds of connections.

When conducting business on the Internet, be certain that you are using a secure site before providing sensitive financial information such as credit card numbers.

Physical Security

You can help protect your WinBook XL2 from theft by taking several steps:

- Clearly mark the system with your name and other identifying information.
- Obtain a lock to attach to the lock slot. You can use this to secure the system to a heavy object, such as a desk.
- You can obtain alarms and other anti-theft devices from computer retailers.

See the travel tips in Chapter Three for more information about protecting your system.

Although you may have all the programs on disk or CD and feel that a complete backup is not necessary, you should keep in mind that reinstalling software is time-consuming and that you will then have to reset all the custom settings that you have made in all your software. A complete back-up is a much faster and safer way to restore your disk in the event of some technical or physical problem.

System Maintenance

Backup

It is a good idea to make backup copies of your files on a regular basis. You can obtain a tape backup unit or optical storage device or other device that will allow you to save your whole configuration of files at once. Software can be used to make that process automated. If you are not likely to generate a lot of data, you might be fine with backing up your work onto floppy disks. You will still want to provide a backup of your whole system first (in case you ever need to restore anything). You should try to back up your files on a regular basis (daily if you generate a lot of hard-to-replace work, and certainly weekly in any event).

Alternative back-up drives with large capacities, such as optical disks and ZIP drives, allow you to combine storage and back-up with a single device. If you download or create large files and do not want to limit your hard drive space, you might consider such an option. These drives provide more speed than a traditional backup-only drive. Most such drives can be connected to your WinBook XL2's parallel port or through a PCMCIA card that provides a SCSI port or other interface port. (Units with an LS-120 drive already have such a large -capacity drive.)

Archiving

In addition to backing up your work, it is also worth considering archiving old files. This means moving them off the hard disk (to free up space) and placing them into a safe location where they are less likely to be damaged or altered. If you will not be going back to alter a file (e.g. a previous year's tax records), then leaving it on your hard drive is an easy invitation for accidental alteration. Archiving such files will help prevent such mishaps.

Software Updates

One way to insure the optimal operation of your WinBook XL2 is to be certain that you have the most current software. Manufacturers regularly update and repair programs and drivers.

WinBook posts updated versions of your system's BIOS software on the technical support web site: **www.winbookcorp.com**

You can look for updates to the BIOS of the WinBook XL2 and download them from the site. There are instructions available for performing the upgrade, or you can contact Technical Support for assistance. WARNING: You must follow the directions carefully. Improper installation can affect system performance.

The BIOS updates will help make sure that the hardware in your WinBook XL2 is running efficiently.

You can also update Windows 98 by taking advantage of the Windows Update feature built into Windows 98. This update will check your installation and inform you of Windows 98 components that you have yet to install. It will also check the Microsoft web site and inform you of new versions that might be available for download. To use this update, click on the Windows Update icon on the Start menu. Follow the instructions provided, or check the Windows 98 documentation (online or text manual).

If Windows Update is not available on your Start menu, check in Start/Settings.

You must have some kind of Internet connection (network, Dial-up, online service) to take advantage of the Windows Update feature.

Windows 98 Maintenance Wizard

Another way to help keep your system running efficiently is to take advantage of the Maintenance Wizard in Windows 98 (**Start/Programs/Accessories/System Tools/Maintenance Wizard**). This wizard will help you set up automated tasks that will help keep your system running at optimal speeds.

- This wizard will allow you to deactivate items in the Start Up menu that you do not need to have running in the background at all times, speeding

Your computer will need to be on for the regularly scheduled maintenance routines to be completed at the right time. If your system is off or suspended to disk, those routines will be delayed.

up the system start-up. You can always reactivate these later by entering the wizard and checking them back on.

- It will defragment your disk (see Chapter Two for information) on a regular schedule.
- Your program use will be monitored and frequently used programs will be moved to the outer edge of the disk to allow for speedier loading.
- Your disk will be scanned for errors on a regular basis, which can help you catch disk problems before they can seriously affect system use or data integrity.
- Unnecessary files, such as temporary files or setups files for down-loaded programs, can be deleted on a scheduled basis to help save disk space.

Cleaning

Display: Before cleaning the screen, be sure that you power the system down and unplug it. Use a clean, soft cloth and appropriate anti-static cleaning solution. Do not spray the screen. Spray the cleaning solution onto the cloth and gently wipe the screen with the damp cloth.

Keyboard: After shutting off and unplugging the computer, use a hand-held vacuum or canned air to remove dust and debris that accumulate in your keyboard. Never shake the computer to dislodge debris-this can cause damage to your system.

Grease that accumulates on the keys can be wiped clean with a damp cloth or cotton swab. Never spray or pour liquid cleaners onto your keyboard. Moisture that gets under the keyboard can damage internal components of your WinBook XL2. Cleaning solutions should be applied lightly to a clean cloth or cotton swab.

Pointing devices: Before cleaning any part of your system, be sure to shut down and unplug the system. You can clean built-up dust and dirt from

your touchpad with a damp cloth or cotton swab. Do not spray cleaning solution directly onto the touch pad. Spray the cloth or swab and use it to rub gently on the surface of the touchpad. The pointing stick can be cleaned with a damp cotton swab.

Vents: After shutting down and unplugging your system, use a hand-held vacuum to clean the vents on the case of your WinBook XL2. If you work in a dusty environment, you should try to vacuum often to avoid accumulation of dust on internal components.

Operating Environment

In order to maintain the effective operation of your WinBook XL2, you need to take into account the environmental factors that can adversely effect your system.

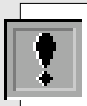
Temperature: Your system can be damaged by very high or very low temperatures.

- Try to avoid using your WinBook XL2 in temperatures below 41°F (5°C) or above 95°F (35°C).
- Avoid storing or shipping your WinBook XL2 in temperatures below -4°F (-20°C) or above 140°F (60°C). Long term (6 months) storage of a unit with a battery in place should not exceed 104°F (40°C)
- Running your battery in temperatures below 41°F (5°C) or above 104°F (40°C) will reduce battery life.
- The battery is made to shut off its charging circuitry if the temperature is too high. This helps prevents overcharging. If your battery gets too hot, you will have to wait for it to cool before it will charge.
- Cold batteries may take as much as twice as long to charge.

Humidity: A relatively small amount of moisture can cause a short in electronic components. If you see condensation appearing on other equipment around you, you should not turn on your WinBook XL2. In general, relative humidities in excess of 85% should be avoided.

Altitude: Pressurized airplane cabins are not a problem for operation of your WinBook XL2, although you should be aware of any restrictions that your airline might place on use of electronic devices in the cabin. Use of your WinBook XL2 at high altitudes (over 10,000 ft.) in the mountains, however, can lower disk drive reliability.

Dust accumulation: Try to avoid environments with excessive dust. If you do work in such an environment, be sure to vacuum the vents of your WinBook XL2 as described in the section on cleaning above.



Do not allow metal objects to short-circuit the battery terminals. Such contact can result in shocks or burns.

Battery Disposal: The batteries from your WinBook XL2 must be recycled or disposed of properly. Community regulations vary, but the chemicals used to power your battery are best dealt with appropriately. You can return them to WinBook for disposal. Call Customer Service at the number listed on your "Read Me Before Using" card and obtain a Return Materials Authorization (RMA) number.

Chapter Nine: Troubleshooting

AUDIO

PROBLEM: My music CDs won't play.

ACTIONS:

- Under Windows 98, the audio program should start up as soon as an audio CD is detected in the drive. Make sure the CD Player program is running in Windows 98. If it is not, then start the program (**Start/Programs/Accessories/Entertainment/CD Player**).
- Check the volume level by pressing [Fn]+[F9] to raise the hardware volume settings. You should also double-click on the speaker icon on the taskbar to be certain that the system volume and CD volume are both turned up (and that neither is muted).
- Check that Mute is not enabled. Press [Fn]+[F10] to toggle the Mute setting.

PROBLEM: I can't hear sound on my headphones.

ACTIONS:

- Check the volume level by pressing [Fn]+[F9] to raise the volume. You should also double-click on the speaker icon on the taskbar to be certain that the system volume and other volume settings are all turned up.
- Check that Mute is not enabled. Press [Fn]+[F10] to toggle the Mute setting.
- Are the headphones connected? Make sure the cord is plugged into the external speaker jack. This is the jack closest to the front of the system.
- Are you using the correct connector? The WinBook XL2's external speaker connector is compatible with a 3.5mm stereo audio plug. If you are using a different plug, it may not be compatible.

- Inspect the cord for wear or damage. Usually you will find this at the ends of the cable where connectors are attached. If you find damage to the cord, repair or replace the cord, then try again.

PROBLEM: I can't hear sound from the built-in speakers.

ACTIONS:

- Check the volume level by pressing [Fn]+[F9] to raise the hardware volume settings. You should also double-click on the speaker icon on the taskbar to be certain that the system volume and other volume settings are turned up.
- Check that Mute is not enabled. Press [Fn]+[F10] to toggle the Mute setting.
- If you have external speakers or head phones plugged into the WinBook XL2, the built-in speakers are automatically disabled. Try unplugging external speakers or headphones to see if the audio is restored to the built-in speakers.

PROBLEMS: I can't hear sound from speakers that I connected.

ACTIONS:

- Check the volume level by pressing [Fn]+[F9] to raise the hardware volume settings. You should also double-click on the speaker icon on the taskbar to be certain that the system volume and other volume settings are all turned up.
- Check that Mute is not enabled. Press [Fn]+[F10] to toggle the Mute setting.
- Are the speakers connected? Make sure that the cord is plugged into the stereo-out jack, which is the jack closest to the front of the machine.

- Are you using the correct connector? The WinBook XL2 external speaker connector is compatible with a 3.5mm stereo audio plug. If you are using a different plug, it may not be compatible.
- Inspect the cord for wear or damage. Usually you will find this at the ends of the cable where connectors are attached. If you find damage to the cord, repair or replace the cord, then try again.
- Most external speakers have their own volume control. Make sure that this volume control is not turned all the way down.
- Some external speakers require a source of power in order to work correctly. Usually these are referred to as "powered speakers." If you are using powered speakers, you will have to either install batteries or plug them into an AC outlet to get them to work correctly. You may also have to turn the speakers on with a switch to get them to work properly. Consult your external speaker manual for more details.

PROBLEM: Buzzing or humming sound.

ACTIONS:

- Check volume, tone and mixer controls on software. Follow the manufacturer's setup instructions for these controls.
- Double-click on the speaker icon on your taskbar. If all the audio settings are at maximum volume, try reducing them to about 3/4 volume.

PROBLEM: Microphone volume is too low.

ACTIONS:

- If you have connected an external microphone, make sure that it is securely connected. If it has its own volume controls, check them to be sure that they are not set too low.

- Double-click on the speaker icon on the taskbar. When the mixer appears, click on Options and then Properties. When the mixer property window appears, click on the radio button beside Recording and then click OK to view the recording mixer. Check to see that the microphone settings are correct.

PROBLEM: Speaker volume is too low when playing DVD video.

ACTIONS:

- If you require greater audio output for your DVD videos, consider connecting amplified external speakers to your system or connecting to the audio input of your television.

Booting Up

PROBLEM: System reports an error message that is not related to any setup problems.

ACTIONS:

- Your system may have a virus which has infected the master boot record. Boot from a clean (uninfected and write-protected) floppy disk or from a bootable CD and run a virus checking software to find and remove the virus.
- Write down the message and call Technical Support at the number listed on the "Read Me First" card that was included with your system.

PROBLEM: System prompts for a password on boot.

ACTIONS:

- Boot password has been enabled. Type in your password to continue. If you have lost the password or the password has been enabled by accident, call Technical Support.

PROBLEM: System will not accept my password.

ACTIONS:

- Check the System Status LEDs to be sure that the Num Lock and/or Caps Lock are not activated.
- If you have forgotten your password, there is no easy way to recover the password. You will need to return the computer to WinBook for service.

PROBLEM: The computer provides a message indicating that the operating system is missing.

ACTIONS:

- The computer might not be recognizing the hard drive as the boot drive. Check the Standard CMOS Setup menu of the Setup program to be certain that the hard drive has been set up properly.
- Try rebooting with the WinBook Restore CD provided with your system or a bootable diskette. Then see if you can access the C: drive. If you cannot, contact Technical Support.
- Re-install the Windows 98 operating system. Do not do this until you have exhausted other options. Reloading Windows 98 will also mean reloading your Windows 98 programs, since the new installation will not have the information for the Windows 98 programs that you have installed on your system. You will need to use the "Restore" CD provided with your system to provide the drivers for your various hardware components. Follow the directions in the menu that pops up when the system has booted from the Restore CD to install Windows 98 in the original configuration for your WinBook XL2. If you have a full back-up of your drive, you should then be able to restore your programs and files to the drive from your backup.

PROBLEM: Cannot boot from floppy disk.

ACTIONS:

- Boot sequence might be set to access the C: drive first. Enter the Setup program (see Chapter Eight) and check the BootUp Sequence option in the Advanced CMOS Setup menu. Select either "CDROM, A:, C:" or "A:,C:, CDROM" as the sequence.
- Floppy does not have the necessary files to properly boot. Try another bootable diskette.
- Floppy is defective. Throw it away.

PROBLEM: Cannot boot from CD.

ACTIONS:

- Boot sequence might be set to access the C: drive first. Enter the Setup program (see Chapter Eight) and check the BootUp Sequence option in the Advanced CMOS Setup menu. Select "CDROM, A:, C:" as the sequence.
- CD-ROM does not have the necessary files to properly boot. Try another bootable CD-ROM.
- CD is damaged. If this is the Restore CD that came with your WinBook XL2, contact Technical Support about obtaining a replacement.

PROBLEM: Computer does not come on when the power switch is turned on.

ACTIONS:

- Be sure to depress and hold the power switch for at least 4 seconds.
- Be sure that battery is properly seated in the battery bay.
- If you are not sure of the battery charge level, try connecting the AC adapter.

PROBLEM: No video output to LCD.

ACTIONS:

- Be sure that the output has not been redirected to an external monitor. Use the [Fn]+[F2] key combination to toggle the video output.

CD-ROM/DVD

PROBLEM: My CD-ROM/DVD Drive door won't open.

ACTIONS:

- Turn the WinBook XL2 on. While the power is ON, press the button on the drive. The drive door should open.
- If the door still will not open, you can manually eject the disk. There is a small hole on the door of the CD-ROM/DVD drive. Insert the end of a paper clip into the hole and push gently until the door releases. Pull the door forward until you can retrieve the disk. Push the door closed until it clicks into place. If this problem recurs, contact Technical Support.

PROBLEM: My music CDs won't play.

ACTIONS:

- Under Windows 98, the audio program should start up as soon as an audio CD is detected in the drive. Make sure the CD Player program is running in Windows 98. If it is not, then start the program (**Start/Programs/Accessories/Multimedia/CD Player**).
- Check the volume level by pressing [Fn]+[F9] to raise the hardware volume settings. You should also double-click on the speaker icon on the taskbar to be certain that the system volume and other volume settings are all turned up.

- Check that Mute is not enabled. Press [Fn]+[F10] to toggle the Mute setting.

PROBLEM: My DVD video won't play.

ACTIONS:

- Launch your DVD player. DVD videos required a software decoder to allow playback. You will need to start the DVD player to allow DVD playback.

PROBLEM: DVD video playback pauses or the screen goes blank.

ACTIONS:

- Make sure that your Power Management is disabled. DVD video is sent directly to the secondary video controller and does not pass through the processor, so it does not reset power management timers. Deactivating the power management should prevent such interruptions.

PROBLEM: Speaker volume is too low when playing DVD video.

ACTIONS:

- If you require greater audio output for your DVD videos, consider connecting amplified external speakers to your system or connecting to the audio input of your television.

Drives

PROBLEM: My Hard Disk Drive is full.

ACTIONS:

- Delete backup files or move them to an alternative storage medium (floppy disk, optical disk, etc.). Many programs save backup files. Backup files are a way to recover most of your work should your active file become damaged. If you keep extra copies of your files and have updated those files since the last time you opened them, you can delete backup files from the hard disk to create more space for new work.
- Archive files or programs that you no longer use by moving them to an alternative storage medium (floppy disk, optical disk, etc.). You can also uninstall programs that you no longer use.
- Many programs, such as World Wide Web browsers will store files on your hard drive as a cache to speed up their operation. You can check the program documentation for instructions on how to decrease the default cache size.
- Empty the Recycle Bin. Windows 98 features a Recycle Bin. When you delete files, Windows 98 copies them to the Recycle Bin. You should always check the contents of the Recycle Bin before you empty it, but you can empty the Recycle Bin to create more disk space for new files. You might prefer to use a smaller recycling bin. The default size in Windows 98 is 10% of your hard disk capacity. You can adjust this to a smaller configuration. See the Windows 98 documentation for information on how to adjust the size of the Recycle Bin.
- The WinBook XL2 comes equipped with removable hard drive. If it would be inconvenient to remove files to gain disk space, you can easily upgrade your drive to one with a higher capacity. See Chapter Seven for information about upgrading your hard drive.

PROBLEM: My Floppy Drive won't save my work.

ACTIONS:

- Is the write-protect tab on the floppy disk open? The 3.5-inch disks used in the WinBook XL2 floppy disk drive feature a write-protect tab that must be closed to allow you to save to the disk. If there is a hole on the left-hand side of the disk, pull the disk completely from the drive and turn it over. You should find a sliding tab between the hole and the edge of the disk. Slide the tab closed to save files on the disk.
- Have you formatted the disk? Some new disks are not formatted for use with your WinBook XL2. If your disk is not formatted, or if the disk is formatted for use with another type of computer, Windows 98 will notify you. Format the floppy disk by clicking on My Computer, then right-clicking on the 3 1/2 Floppy icon and selecting Format.
- Is the disk already full? If you have saved files on this disk before, you may have reached the disk's capacity. If the disk is full, use a different disk or remove existing files from the disk to make room for other files that you want to save.

PROBLEM: My Floppy Drive won't read my disk.

ACTIONS:

- Is the disk fully inserted into the disk drive? Disks only fit into the drive one way. As you insert the disk, the circular metallic object on the disk must face down, the sliding hatch must face the opening of the computer's drive, and the notched corner of the disk must face toward the front side of the computer. In units with a Floppy Diskette Drive, make sure that the disk springs into position. The drive's eject button should spring outward when the disk is properly inserted. In units with an LS-120 drive, the motorized drive should take the disk and properly seat it. You can press the eject button and then reinsert the disk to make certain that it is fully seated.

- Have you formatted the disk? Some new disks are not formatted for use with your WinBook XL2. If your disk is not formatted, or if the disk is formatted for use with another type of computer, Windows 98 will notify you. Format the floppy disk by clicking on My Computer, then right-clicking on the 3 1/2 Floppy icon and selecting Format.

PROBLEM: Diskette will not eject from the diskette drive.

ACTIONS:

- A label may have become detached and is blocking the ejection of the disk. Visually inspect slot to see if you can see any obstruction by the label. Call Technical Support if you observe an obstruction.
- The metal cover on the diskette might be bent. Call Technical Support.

PROBLEM: My LS-120 drive won't eject its diskette or LS-120 disk.

ACTIONS:

- Turn the WinBook XL2 on. While the power is ON, press the button on the drive. The disk should eject.
- If the disk still will not eject, you can manually eject it. There is a small hole on the front of the drive, just about the slot. Insert the end of a paper clip into the hole and push gently until the disk releases. If this problem recurs, contact Technical Support.

Keyboard

PROBLEM: My WinBook XL2's built-in keyboard doesn't work.

ACTIONS:

- If you have connected an external keyboard to your WinBook XL2, try restarting the WinBook XL2.

- If restarting the WinBook XL2 doesn't help, remove the external keyboard and restart the WinBook XL2 again. Your external keyboard may be faulty or incompatible with the WinBook XL2.

PROBLEM: The external keyboard that I connected to my WinBook XL2 is not working.

ACTIONS:

- If you plugged the keyboard into the WinBook XL2 after it was turned on, restart the WinBook XL2 with the keyboard plugged in. If restarting doesn't help, your keyboard may be defective or incompatible with PS/2 or USB specifications.
- If you try the keyboard on another PS/2 or USB compatible computer and the keyboard works, your port might be defective. Call the Technical Support number listed on the WinBook XL2 "Read Me First" card for assistance.

PROBLEM: The characters on the screen repeat while I type.

ACTIONS:

- You may be holding the keys down for too long while you type. You can configure the keyboard to wait longer before the auto repeat feature starts. To adjust this feature, click on the Keyboard icon in the Control Panel (Start/Settings/Control Panel) in Windows 98. A dialogue box appears with adjustable settings for the keyboard.
- Check to be certain the keyboard is clean. Dirt under the keys could cause them to stick.

Miscellaneous

PROBLEM: Date reads January 1, 1980 or some other very early date.

ACTIONS:

- The lithium ion battery that maintains the system clock might be discharged. Contact Technical Support for information about replacement.

PROBLEM: System is not using AC power source when AC adapter is connected.

ACTIONS:

- Make sure all connections are secure.
- Make sure that there is electricity from the outlet.
- If you are using a surge protector or power strip, be certain that it is not shut off.
- Check for damage to the cords or the adapter. If cords or adapter are damaged, replace them.

PROBLEM: System will not run on battery power.

ACTIONS:

- Be sure the battery is properly installed in the battery bay.
- Plug in the AC adapter, boot the computer and then check the battery level. Be sure that it is charged.

Modem

PROBLEM: Fax/Modem will not send or receive data.

ACTIONS:

- Check to be sure that the phone line is plugged into the modem jack.

- Check to be certain that the phones are working.
- If this modem is internal, check to see that it has not been disabled. Enter the Setup program (see Chapter Eight) and check the Peripheral Setup Menu. If the modem has been disabled, set it to "Auto" or to a specific address. If the modem is a PCMCIA modem, check the PCMCIA properties window (the PCMCIA icon in the Control Panel) to see if the card is being recognized by the system. If not, try removing and reinserting the card.
- Make sure other communications programs have been properly shut down and thus releasing the communications line.
- Reboot the system to reinitialize modem.

PROBLEM: Fax does not automatically receive incoming faxes.

ACTIONS:

- Check software to be certain that the auto receive option is enabled.

PROBLEM: Fax/modem disconnects during transmission.

ACTIONS:

- Be sure that you have disabled Call Waiting on your phone.
- Check for faulty connections.
- Check the noise in the lines. Excessive line noise might cause the connection to be dropped.

PROBLEM: Slow fax/modem transmission time.

ACTIONS:

- Check to be certain that the software you are using is set to connect at the maximum speed allowed by the connection.

PROBLEM: Modem does not connect properly to host system.

ACTIONS:

- Check to make sure that connection type and protocol are properly set.
- Check to be certain that the receiving system is compatible with your modem.
- Try connecting at a slower speed.
- Be certain that all software for the connection is properly set.

PCMCIA Cards

PROBLEM: I cannot fit a specific card in the PCMCIA bay.

ACTIONS:

- Check to be certain that the card is not a Type III card. The PCMCIA slots on your WinBook XL2 are not made to accept a Type III card.

Pointing Devices

PROBLEM: I plugged an external PS/2 pointing device into the WinBook XL2, but it doesn't work.

ACTIONS:

- Although the external and internal pointing devices should work together, there may be an unusual incompatibility problem between the external and internal pointing devices. To check this, enter the Setup Program and disable the internal pointing device. Follow the instructions below.

  Reboot the system and press [Del] to enter the Setup program. Enter the Advanced CMOS Setup menu. Use your arrow keys to move the highlight down the screen to PS/2 Device. The default setting is "Auto"

which should recognize the presence of an external PS/2 device and prepare the system for its use by disabling the touchpad.

Because the WinBook XL2 can only support two pointing devices at once, units with both a touchpad and pointing stick require that the touchpad be disabled when an external device is present. The "Auto" setting should handle this transition. If not, use the [PgUp] or [PgDn] key to toggle the setting to " ExtPS2/TrackP." Hit [Esc] to return to the Main menu. Scroll down to "Save settings and exit" and hit [Enter]. Confirm that you want to save the settings and then hit [Enter]. Wait while the computer restarts.

After your WinBook XL2 restarts, the touchpad will not work, but the external device should begin working. If none of the pointing devices are working, you can use the [Alt]+[F4] key combination or the [Start] key to enter the shutdown menu. The underlined letters in the menus will allow you to use the keyboard to select the choices to restart your computer. As it restarts, enter the Setup Program and enable your internal pointing device by setting it back to "Auto." You should try another external pointing device to determine if there is a defect in the device or in the WinBook XL2 PS/2 port.

NOTE: *If you use a Microsoft Intellimouse, you must disable the touch pad by selecting the "ExtPS2/TrackP" setting.*

PROBLEM: I plugged an external USB pointing device into the WinBook XL2, but it doesn't work.

ACTIONS:

- Restarting the WinBook XL2 will usually solve pointing device problems.
- While most USB devices are Plug-and-Play, some USB devices might require the installation of drivers from the pointing device's manufacturer. Check for an installation disk and follow the installation routine described by the manufacturer.

PROBLEM: My WinBook XL2's built-in pointing device is not working.

ACTIONS:

- Restarting the WinBook XL2 will usually solve pointing device problems.
- Check settings in the Setup Program (see Chapter Eight). If the internal device is not set to "Auto," change the setting.

PROBLEM: The pointing device that I use is hard to operate. It moves faster or slower than I'm used to.

ACTIONS:

- Try adjusting the pointer's motion settings. Click on the Mouse icon in the Control Panel (**Start/Settings/Control Panel**) and adjust the settings as indicated in the dialogue box that comes up. Note: The touchpad works best with a medium to slow setting. You might want to alter the setting if you use an external mouse or the pointing stick more often than the touchpad.

PROBLEM: The point indicator on the display disappears when I move it quickly across the screen.

ACTIONS:

- Does the mouse move faster than you are used to? You can adjust the pointing device's speed (see pointing device problem above).
- Move the pointing device more slowly across the screen. Rapid pointer movement can cause the pointer to sometimes disappear when the WinBook XL2 is using resources to save a file or print a document. Usually the pointer's characteristics will return to normal after the WinBook XL2 finishes tasks that consume its resources.

- Adjust the mouse cursor size or add trails. This can be done by clicking on the Mouse icon in the Control Panel (**Start/Settings/Control Panel**) and adjusting the settings as indicated in the dialogue box that comes up.

PROBLEM: Touchpad performs erratically.

ACTIONS:

- The touchpad may perform erratically if your fingers have excess moisture or perspiration. Try drying your hands and wiping clean the surface of the TouchPad.
- If you have a tendency to rest your wrists or the heel of your hand below the keyboard as you type, be careful not to rest your hands on the surface of the touchpad. Since the pad interprets a light tap as a mouse click, resting your hand on the touchpad might result in inadvertently sending a mouse command.

Ports

PROBLEM: The device that I plugged into the serial port is not working.

ACTIONS:

- Check the Peripheral Configuration submenu of the Advanced menu of the Setup program to be sure that the port is set to either "Auto" or set to a specific address (make sure the address is correct and does not conflict with another device). If the port is disabled, the WinBook XL2 will not communicate with external devices connected to the port.
- Check the Peripheral Setup Menu. If the serial port is set to a specific address, be sure that the port has been set to the default value (COM1/IRQ4). If it is set to another value and you have not made this change to avoid conflict with another device, set the serial port COM1/IRQ4 or switched from the "Enabled" setting to the "Auto" setting for the serial port.

- Check the Windows 98 Device Manager to determine if there is a conflict. See Chapter Two if you are unfamiliar with how to open Device Manager. Once in Device Manager, click on the "+" sign beside "Ports" and then click on "Communications (COM1)." Click on the Properties button. You should see information about the current functioning of that port. Click on the Resources tab to see any detected conflicts. If a conflict exists with another device, consider changing the settings for that device or for your serial port as indicated in Chapter Eight.
- Your cable may be broken or you may have the wrong kind of cable. If so, the WinBook XL2 will not be able to communicate with external devices. Try replacing the cable.

PROBLEM: I can't get my Serial Infrared Port to work properly.

ACTIONS:

- The WinBook XL2 comes with the Infrared Port disabled. See the WinBook XL2 Help file for instructions on activating this port.
- Go into the Peripheral Setup Menu and be sure that the port is set to "Auto" or a specific address (make sure that this address does not conflict with another device).
- Go into the Peripheral Setup Menu to be sure that the port is using the correct IR mode (usually IrDA). Try the other IR mode (ASK-IR) to see if this corrects the problem.
- You must line up the external device correctly. The Serial Infrared Port uses infrared light to communicate with external devices. To use the port, you must have an unobstructed visual pathway between the WinBook XL2's serial infrared transceiver and the external device's serial infrared transceiver. If the line of sight between the transceivers is blocked, communication between the devices will stop. The WinBook XL2 and the external device should be about two feet apart with an angle of no more than 15˚. Some devices work best if kept at least six inches apart.

- Make sure that the transceiver windows on each device are clean. Finger prints or dust buildup may obstruct the line of sight between the devices.
- The virtual COM port link between two computers may not be reliable if a third IR adapter (such as a printer) is also within range. Move other IR adapters out of range.
- Connecting and disconnecting over a low-speed IR link or over a poor-quality link can take a long period of time (a few seconds), during which time the screen will appear to be frozen. To work around this, you should use a higher-speed connection or attempt to improve the connection. Try realigning the IR devices so they point right at each other, moving the devices closer together, or plugging in the AC power to boost power to the connection (in case of a weak battery).

PROBLEM: My external printer is not working.

ACTIONS:

- Make sure your application has selected the correct printer (generally under File/Print/Setup).
- Make sure the printer is ready to print. Check the printer's power cable to see that it is properly plugged into the printer and the electrical outlet. Also see that the printer's communication cable is connected properly to the WinBook XL2's LPT1 Port and to the back of the printer.
- If the printer is turned on, there should be a power indicator that illuminates. There is also usually an indicator showing that the printer is "ready" or "on-line." If this indicator is not illuminated, check to see that the printer has paper, and that the paper is aligned properly in the paper tray.
- Some printers require communication with the system when you boot up. If you connected your printer after starting your WinBook XL2, try restarting the computer.

- If you have a parallel device with a pass-though (such as a scanner or external drive) between your WinBook XL2 and your printer, make sure that the connections are secure and that the parallel device is on (many pass through devices require power to allow parallel signals to pass through).
- The printer port may not be enabled. Go into the Peripheral Setup Menu of the BIOS Setup program to be sure that the port is set to "Auto" or to a specific address (make sure that the address does not conflict with any other devices).
- Go into the Peripheral Setup Menu of the BIOS Setup program to be sure that the mode for the parallel port is appropriate for your printer. Some newer printers might require a bi-directional mode. Your WinBook XL2 has three bi-directional modes: bi-directional, EPP (an enhanced mode) and ECP (another enhanced mode). Check the printer documentation for specific information about the printer's requirement. If you use EPP mode, make sure that the setting is for the correct version of EPP.
- You may be using the wrong cable or the cable may be faulty. If your cable is the incorrect kind or faulty, contact your local computer store to obtain another. If you take the cable to the supplier, they might be able to test it to see if it is working.
- The printer driver in the operating system may not be set correctly. Check the Printers window in My Computer to be certain that your printer has been set up. If not, follow the directions in Chapter Four for setting up the printer. If the printer is set up, right click on its icon and select Properties in its popup menu. You can review the information for this printer to be certain that it is directed to the right port and is using the correct driver for your printer.

NOTE: *If you don't see your printer listed in the Windows 98 printer list, chances are that your printer's manufacturer can provide you with a Windows 98 Driver disk. Many printers from the same vendor may have similar characteristics and will be able to work with one of the Windows 98 standard drivers. If you don't see your printer listed, contact the printer's manufacturer to see if you can get a Windows 98 Driver, or use one of the existing ones in its place.*

PROBLEM: My printer prints strange characters that are not in the document that I am trying to print.

ACTIONS:

- This is often the result of garbage in the printer's memory buffer. Cancel the printing job (see Windows 98 documentation or the documentation that came with your software application), then turn off the printer's power switch. Turn the printer back on and try to print the document again.
- You may not have the printer drivers set up properly. See the problem above for information on printer drivers.

PROBLEM: Special devices that I connect to the Parallel Port do not function properly.

ACTIONS:

- You may need to enable special options in the Setup Program for this device. Some devices require two-way communication through the printer port to operate properly. You can choose two-way communication for the port in the Peripheral Setup Menu of the Setup program. Choose "bi-directional" or "ECP." ECP is the preferred choice, but you will need to determine if your device will support it.

Software

PROBLEM: Software will not run or causes problems with system operation.

ACTIONS:

- Check the web site for the software manufacturer for updates or patches that might correct the problems.
- Some older software might be incompatible with Windows 98. Check the web site for the vendor or Microsoft for information about incompatibilities.
- Try completely uninstalling the program and then reinstalling from your disks or CD. If files have been lost or damaged or altered by another program, this should return your program to normal functioning.

TV Out/S-Video Out

PROBLEM: Video does not appear on the TV receiver.

ACTIONS:

- Make sure that the TV-out or S-video connection is secure.
- Make sure that the TV out function is enabled. Your television must be connected to the WinBook XL2 to allow for the signal to be directed out. Right-click the ATI icon on the taskbar and select "Settings" and "Display Settings." This will bring up the Display Properties dialog box. Click on the "Settings" tab and then the "Advanced" button. This will bring up the Display settings for your system. Click on the "Displays" tab. If the radio button beside the Television option is not selected, click on it to select it. Close the dialog boxes. Output should now appear on the television (and LCD if you left it on, too).

- Use the [Fn]+[F2] key combination to toggle the video output. You might need to press this combination more than once to direct the output to the TV receiver.

PROBLEM: Entire desktop does not appear on the TV receiver.

ACTIONS:

- Check to be certain that you have selected the correct format (NTSC or PAL) for your local TV standard. See Chapter Eight for information.

PROBLEM: Sound is not being transmitted to the TV receiver.

ACTIONS:

- The TV-out port only directs video output to the receiver. To transmit sound, a cable must also be connected to the audio-out jack on the right side of your WinBook XL2 and to the audio in jacks of the TV receiver.

USB (Universal Serial Bus)

PROBLEM: USB device does not function properly.

ACTIONS:

- Make sure the USB connection is secure. If you have several devices chained together, make sure that all connections are secure.
- Devices in a chain might need to have their power on to permit the USB signal to pass through. Make sure all USB devices that are connected are powered on (if they have their own power source).
- While most USB devices will be recognized and properly configured, some might require their own specific drivers. Check device documentation to see if there is a required driver installation.
- Restart the system. This should allow the devices to be properly recognized and activated.

PROBLEM: USB causes rapid consumption of battery life.

ACTIONS:

- Make sure that your USB device is using its own power source or, if it does not have its own power source, connect it to a USB peripheral that does have its own power source (such as a printer).

Windows 98

PROBLEM: Windows 98 will not boot properly.

ACTIONS:

- If Windows indicates a registry problem, rebooting might clear it up. Windows keeps up to 6 copies of the registry and will try restoring from a backup if it encounters registry problems.
- Interupt the boot process by hitting the [F8] key just after the unit completes the POST (Power On Self-Test). This will bring up a menu asking you how to boot the system. Select "Command Prompt" from the menu and hit enter. When you have a C: prompt, run ScanDisk (by typing "scandisk") and/or ScanReg (by typing "scanreg") to check for problems with your files or with the Windows Registry. If problems are found, follow the suggestions for correcting them.
- Interupt the boot process by hitting the [F8] key just after the unit completes the POST (Power On Self-Test). This will bring up a menu asking you how to boot the system. Select "Logged" (to keep a log of the boot that you can later check), "Safe Mode" (which will load with minimal drivers and can provide a means of accessing software for diagnosing your problems) or "Step-by-step confirmation" (to check each command and locate the step causing the problem. If you need further assistance, check your Windows 98 documentation or check Microsoft's web page for technical assistance.

Zoomed Video

PROBLEM: Zoomed Video does not work.

ACTIONS:

- Make sure card is properly seated and that it has been recognized by the computer.

Glossary

A

AC Power Adapter

The "power brick" that converts the AC power coming from the electrical socket into lower voltage Direct Current (DC) that the micro-electronic devices inside your WinBook XL2 need.

ACPI (Advanced Configuration and Power Interface)

Power management standard in Windows 98. It helps optimize power management for your WinBook XL2. ACPI also allows applications to take control of power management, for example to prevent a timeout from interrupting a presentation.

Application

A software program designed to perform certain functions and uses.

ASCII (American Standard Code for Information Interchange)

This code uses values from 0 to 127 to represent letters, numbers, symbols, and punctuation marks. The standard allows information to be exchanged in one common form (without all of the extra codes that programs attach to those numbers and letters and symbols and marks). This form of text is sometimes referred to as ASCII text or just "text." Storing data as ASCII text can allow you to easily exchange information with people who might use other software than you do.

ATAPI (AT Attachment Packet Interface)

This set of protocols allows your CD-ROM, DVD or LS-120 drives to function using the IDE interface of your WinBook XL2.

BIOS (Basic Input/Output System)

This is the way in which your computer sends and receives very low-level instructions to and from your hardware equipment (such as your keyboard).

You do not use the BIOS, but Windows 98 (and DOS) uses the BIOS as a way of communicating with your equipment.

Bit

A bit (or Binary digit) is the smallest unit of information used by a computer. Eight bits make up a byte. Abbreviated with a small b.

Boot

The process of turning on a computer and loading the operating system (Windows 98) that controls the computer. A “cold” boot is when you turn on the computer. A “warm” boot is when you reset the computer (with the [Alt]+[Ctrl]+[Del] combination or by having Windows restart the computer from the **Shut Down** menu).

Browser or Web Browser

A program which allows a user access to the World Wide Web. The browser is able to read and use the HTML language of the World Wide Web, as well as to view the pictures or videos or play the audio images stored on the World Wide Web pages. Not all browsers can read all pages accurately and completely. Check the documentation that came with your browser to ascertain its capabilities.

Byte

A “word” used by the computer. It consists of 8 bits of information. Abbreviated with a capital B.

Cache

Memory that is used to improve performance by keeping recently used or soon-to-be-needed data in a separate memory position where it will not need to be searched for. This cache can be either an actual hardware cache with its own memory, or a section of your RAM separated off for this function.

C

Client

A computer on a network which relies on another "server" computer to provide some of its programs or functions, or for its connection to other computers on the network.

Clock Speed

This is the measure of how fast a computer's CPU (central processing unit) runs. It is usually expressed in MHz (megahertz), or millions of cycles per second. It is the number associated with the CPU of your system (as in a 266 MHz processor).

CMOS (Complementary Metal Oxide Semiconductor)

CMOS RAM is used to keep track of the system configuration when the power is off. The information is controlled by the Setup program. The CMOS chip is also the location of your computer's internal clock.

Control Panel

A program in Windows 98 which allows you to change many of the basic hardware and software settings for you system.

Cursor

The arrow or bar on the screen that informs you where the currently active input area of the display is. The mouse has its own cursor, which can be used to relocate the computer's cursor.

Cut and Paste

In Windows 98, cutting (or copying) is the process of highlighting a block of text or section of an image and moving (or copying) it to the clipboard, where it is temporarily held in memory. Pasting is the process of placing the mouse cursor at a desired location and then transferring the information into that position. This can be done within programs and between programs.

D

Desktop

The desktop is the primary workspace of your Windows 98 operating system. It contains icons (representing programs and applications), desktop components, application windows and dialog boxes.

DC (Direct Current)

The AC Adapter changes AC from a wall socket to lower voltage DC, and inputs the DC into the WinBook XL2 to charge the rechargeable batteries which power the WinBook XL2.

Defragmenting

A process by which files on a disk that have been broken up and stored at various places on the disk (due to space limitations) are put back together and stored in one piece. This process helps speed up the retrieval of information from the disk.

Diskette

A small disk used to store information outside the computer. A diskette is accessed through a diskette drive. Diskettes have relatively small capacity compared to a hard drive.

DMA (Direct Memory Access)

DMA allows data to be moved directly to RAM, without passing through the processor. This speeds up processing time.

DOS (Disk Operating System)

Prior to Windows 98, DOS was the primary operating system for Intel-based computer systems (often with Windows 3.x running as a graphic interface over DOS). Some programs (including many games and educational programs) you have or buy might still run in the DOS mode.

D-F

DVD (Digital Versatile Disk)

A new type of media that has a much higher storage capacity (17 GB) than CD-ROM (650 MB), and which can transfer the data at a higher rate than a CD-ROM. Hours of audio-visual content compressed by MPEG and Dolby compression can be stored on a DVD, making it an ideal medium for providing full-length video features or video intensive computer applications.

ECP (Enhanced Capabilities Port)

Mode of operation for the parallel port which provides high performance interfaces to ECP compatible expansion devices such as printers, backup tape drives, or LAN adapters.

Embedded Numeric Keypad

Feature of the WinBook XL2: 15 keys are within the rest of the keyboard. The numeric assignments are found on the upper right side of each key.

Ethernet

Local area network (LAN) hardware specification. Defines cable type, frequencies, etc.

Fax (facsimile)

A copy sent over a telephone line or other communications service.

Flash BIOS ROM

Memory chip in the WinBook XL2 that stores the basic operating firmware, including the system setup software, advanced power management, and PCI bus support. The flash BIOS can be updated from a floppy disk or with a file downloaded from the WinBook web page.

Folder

A collection of files (and/or other directories) on a disk. Files are saved in such folders to keep them organized.

Format

The particular way of preparing a physical disk for the storage and retrieval of information. The same physical disk can often be formatted for use under differing operating systems. A floppy disk must have already been formatted to be used in your computer.

Function Keys

The keys F1-F12 on your keyboard. They each perform different functions (sometimes in combination with the Alt, Ctrl, or Shift keys) designated by the software application currently active.

Gigabyte

The most proper definition is 1,073,741,824 bytes or 1024MB. Now more commonly used to mean simply 1 billion bytes or 1000MB.

Hard Drive

This is a disk coated with a magnetic material that is used by a computer to store data. These usually have a high capacity for data storage (in most newer computers this capacity is in Gigabytes).

Hot Docking

The ability of the WinBook XL2 to be connected to the port replicator while in normal operating mode.

H-I

HTML

(HyperText Mark-up Language) The language used by pages included in the World Wide Web. If you decide to create such a page, you would store a HTML document on the server of your Internet provider (you can check to see if your provider allows for such services).

Hypertext

A means of embedding in text certain commands which, when activated, can take a user to another position in a document, can call up other documents, can launch a program, or can set in motion some other action. The hypertext link is activated by clicking on the hypertext with the mouse cursor. Hypertext is used in Windows Help files, as well as in pages on the World Wide Web and Internet. Hypertext is usually indicated by some other color of text (often green or blue).

Infrared (IR) Port

Communications port that allows wireless communications between the WinBook XL2 and IrDA (Infrared Data Association) compatible devices. Communications over the infrared port operate similar to a TV remote control.

Internet

Not a physical network, but the interconnection of many physical networks (commercial, educational, governmental, and private). Much of the high-speed infrastructure that connects such computers is based on an old U.S. government network called ARPAnet. The connections of networks rely on a standard communication protocol (TCP/IP).

Internet Address

Every network connected to the Internet has a unique numeric IP address. To connect to certain Internet providers you may need to know this address (it is usually already encoded into the software that the provider supplies).

I/O Address (Input/Output Address or Port Address)

The numeric memory address where the processor sends information to a specific device. Devices cannot share the same address, so the information cannot be sent to any other device by mistake. Peripherals that perform more than one function (audio hardware) may require an address for each function.

IRDA (InfraRed Data Association)

An organization responsible for the specifications for IR data communications.

IRQs or Interrupts

Signals used by the devices in a computer to inform the CPU that they need CPU cycles. Your WinBook XL2 uses 16 interrupts which are numbered from 0 through 15 (with one reserved for error handling). Conflicts can occur if two devices use the same IRQ, since each can interfere with the functioning of the other.

Kilobyte

1024 bytes. Usually abbreviated K or KB.

LS-120

High-capacity drive in some WinBook XL2 units that is capable of reading special disks that are capable of storing 120MB of data on a single disk. LS-120 drives are also capable of reading and writing to 3.5” floppy disks.

Macro

A small program inside another program. Macros usually allow you to take a series of commonly repeated tasks within a program and create a small macro program that will carry out those steps for you.

M-N

Megabyte (MB)

1,048,576 bytes or 1024 KB.

Modem

(From MOdulate/DEModulate) A device which allows information to be transmitted from one computer to another via telephone lines.

MPEG-2 (Motion Picture Experts Group version 2)

MPEG-2 (pronounced M-peg) is a means of compressing video to allow for transfer of audio-visual images (up to broadcast quality) to devices such as computers. This compression method allows full-screen, smooth video transfer to your LCD (including video on DVD).

Multimedia

A system or program which combines different kinds of information (for example, text, graphics, sound and video) into a single presentation or document.

Network

Usually defined by the connection of three or more computers linked by physical cables or telecommunications connections. A very small network is sometimes referred to as a workgroup (if it is not structured on a client/server basis). Smaller networks (sometimes called LANs, or Local Area Networks) are sometimes connected together into larger networks (sometimes referred to as WANs, or Wide Area Networks).

NTSC

The U.S. colored TV standard, which broadcasts 525 lines of resolution, transmitted as 30 interlaced fps (frames per second).

PAL

The European colored TV standard, which broadcasts 625 lines of resolution, transmitted as 25 fps (frames per second).

PCMCIA Card (Personal Computer Memory Card International Association)

A device using PCMCIA standards (also referred to as the PC Card standard) that the user can install into the WinBook XL2. These credit-card sized electronic modules include, modems and network adapters. See Chapter Five for more information.

Pixel

Short for "picture element". A single dot on a computer's graphic display. They can be many different colors. All such pixels add up to form the display. The number of pixels displayed is the "resolution" of your computer's display.

Plug and Play

A set of software, firmware, and hardware specifications that when implemented together, allow the system to automatically configure internal hardware and software without user intervention.

Pointing Stick

Small lever or control, similar in design to a joystick, that allows the user to move a point indicator around the screen.

Power Management

Set of procedures the system adheres to in order to minimize power consumption. The user can modify these on the WinBook XL2 through the Setup Program.

P-R

PS/2 Keyboard

Keyboard standard for PCs that was set by IBM in 1987 with their introduction of the PS/2 system. The WinBook XL2 will work with keyboards adhering to this standard.

PS/2 Pointing Device

Pointing device that uses a PS/2 interface connector to plug into the computer, e.g. a mouse or trackball.

RAM (Random Access Memory)

The working memory of a computer which is used to run programs and hold active files. The RAM becomes active each time the computer is booted and is shut down each time the computer is turned off. RAM is usually measured in megabytes.

Refresh Rate

The speed at which a monitor sends a new image to the screen. A cathode ray tube (CRT) sends an image vertically down a screen one line at a time. The whole screen is thus refreshed at a certain interval (as the CRT cycles down the screen and then returns to the top). This speed is usually measured in Hz, which is a unit of frequency. A refresh rate of 60 Hz will produce a slightly perceptible flicker of the screen that can cause eye strain. A rate of 72 Hz or faster will usually produce a comfortable image. Your monitor may refresh as different frequencies depending on the resolution.

ROM (Read Only Memory)

A memory chip or medium that permanently stores information. The information cannot be altered.

S

SCSI Cards

Interface cards that connect your computer to accessories, usually disk drives, that conform to the Small Computer Systems Interface standard.

Server

A computer on a network that receives connections from other "client" computers and performs functions for them, as well as serving as the point of exchange for information among the clients. A server usually tends to be a very fast computer with a large amount of storage space.

SIR (Serial Infrared)

Infrared connection between two infrared-capable devices that operates as an additional serial port on the WinBook XL2. For the purposes of the operation of the system, the SIR uses IRQ and COM settings as if it were a normal serial port.

S.M.A.R.T.

S.M.A.R.T is a set of hard drive diagnostics that are built right into the hard drive. Your WinBook XL2 is able to read those diagnostics and monitor hard disk functioning.

Software Error Messages

Software error messages are returned from your operating system (Windows 98) or your application programs. These typically appear after the system has been booted, or during the running of an application program. If you receive this type of message, you should check your manual for the operating system and/or application program for help in diagnosing and correcting the problem.

Standby Mode

Reduced power mode that powers down sections of your WinBook XL2 that are not currently being used, to increase battery life.

S

Suspend Mode

Reduced power mode that allows you to store your work in DRAM or on Disk to save power. When you want to begin working again, you can bring the system back to where you left it.

Suspend to Disk

WinBook XL2 power management feature that allows you to quickly save your work to the hard drive while you are transporting or not using your system. (This is also referred to as "zero volt suspend" since it draws no power from the battery.) It provides the greatest power saving capacity, but does not allow operation to resume if the modem detects an incoming phone call or if a scheduled alarm takes place. See Chapter Eight for more details.

Suspend to DRAM

WinBook XL2 power management feature that powers-down but leaves the current program in RAM. This mode operates faster than Suspend to Disk and uses more power, but operation can be resumed if the modem detects an incoming phone call or if a scheduled alarm takes place.

S-video

S-video is a method of transferring high-quality video signals that involves breaking the signal into two components (chrominance and luminance). This dual signal provides higher image fidelity when displayed on a television screen. The WinBook XL2 has an s-video port that can be used to direct output to s-video enabled televisions or video devices.

Swap File

A portion of your hard drive which has been set aside by Windows 98 to serve as additional memory. Files and programs are swapped to this area of the disk if there is not enough RAM available.

System Error Messages

A system error message indicates a problem with the computer itself. These messages normally appear during the power-on self-test, before the operating system prompt appears.

Taskbar

The strip across the edge (usually bottom) of the Windows 98 desktop that holds the start button, system tray (containing the clock and other features), toolbars and buttons for the currently running applications. It provides a quick means of launching or accessing controls and applications.

Toolbars

A feature of Windows 98 that allows you to create toolbars on the taskbar or desktop. You can create the toolbars manually, or drag existing folders to the taskbar to create custom taskbars.

Touchpad

Pointing device that allows you to control the cursor with your finger. It is based on a pad that allows finger movements to be converted to pointer controls, and taps to be converted into switch inputs.

URL (Universal Resource Locator)

An address (or location) on the World Wide Web. Such addresses allow you to move to a specific site. Sometimes the address is embedded in a hyper-text link in the WWW (which then automatically takes you to that URL). These usually have a form such as: http://www.winbookcorp.com/.

S-U

U-W

USB

A new bus that is capable of transmitting data at a speed of up to 1.5MB per second. Up to 127 peripheral devices can be chained together and connected to the USB port of your system. The USB connection is capable of transmitting both data and current, so USB devices can even be powered by the power supply of your system.

VGA (Video Graphics Array)

The minimum graphics standard for operation of Windows. Has a resolution of 640 x 480 lines.

Virtual Private Networking

A feature of Windows 98 that allows you to establish a secure "tunnel" of data on the Internet.

WAVE Audio

This is recorded audio stored in files in a digital form. For example, when you speak into a microphone connected to your computer, your voice is converted into voltage and then digitized and stored in an audio file that can be played back later.

World Wide Web (WWW)

A subset of the Internet which relies upon browsers to allow a user to see images and watch video and hear sounds, rather than just view text. The HyperText Markup Language in which it is written allows the user to jump quickly from one point in the World Wide Web to another.

Write-protect

This is a way of preventing accidental alteration or loss of data on a floppy disk. A 3.5" disk is write-protected by sliding the plastic tab that covers one of the two little holes so that the hole is exposed (the other hole does not have a tab).

XGA (Extended Graphics Array)

Video standard that allows your WinBook XL2 to provide a resolution of 1024 x 768 pixels, while allowing for many more colors than SVGA or VGA video.

ZV (Zoomed Video) Port

A port built into the PCMCIA slots (and conforming to PCMCIA standards) that allows for high-speed video transmission. Video goes directly from the port to the display screen, bypassing the processor and system bus. This permits video playback at full-screen size and at full motion speed.

X-Z

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