Topline Amicus 3200

topline

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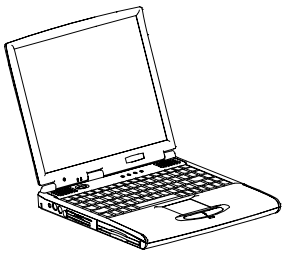
CHAPTER 1: INTRODUCING THE NOTEBOOK

Welcome

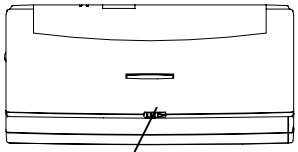
Welcome to your new notebook. This notebook is a state of the art portable computer that delivers high-performance processing and crisp graphics on a large built-in screen. The system has multiple media storage devices and versatile upgrade paths for increasing memory, adding peripheral devices, and so on. Because it features a large bright screen and has a full range of I/O ports, it can easily replace a typical full-sized desktop computer.

This chapter provides a guided tour of the your new notebook with a brief description of the major components.



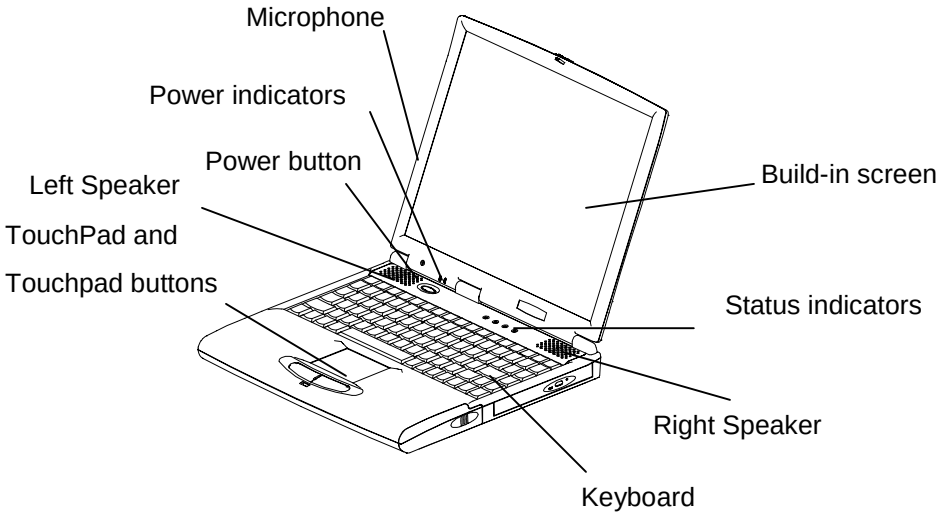
To Open the System

The built in screen forms an upper cover, which locks down when the system is not in use. To open the cover, slide the locking latch on the front edge of the notebook to the right and lift the built-in screen up to a good viewing angle.



Inside the Notebook

When the upper cover is opened, you can see the main working area of your notebook, This area includes the keyboard, the Touchpad, and Touchpad buttons, the audio system speakers and microphones, the power switch, indicator lamps, and the built-in screen.



Built-in Screen

The notebook is installed with an active matrix (TFT) display. Active matrix displays are comparable to cathode ray tube (CRT) full-sized

monitors. The screen uses a high-resolution SVGA display in which measures 800 pixels horizontally and 600 pixels vertically.

Power Button

The power switch is used to turn the system on and off. Press once, and hold down for about 2 seconds to turn the system on. Press again and hold down for about two seconds to turn the system off. Holding the switch down for 2 seconds is a safety feature to prevent accidental pressing of the power switch. Most operating systems, such as Windows 95/98 and Windows NT, require you to use a “Shutdown” function to prevent problems with your computer. If you are using an operating system that requires you to Shutdown, please do this before turning off the computer.

Touch pad

The Touchpad is a standard pointing device for notebooks. It allows you to control the movements of the screen pointer by moving your fingertip across the Touchpad surface. The Touchpad buttons allow you to select icons and menu choices, and drag and drop screen objects.

Keyboard

The Germanic language built-in keyboard has 85 keys. However, the keyboard has many embedded keystrokes so that it can duplicate all the keystrokes of a standard AT-enhanced keyboard. The keyboard also has special control functions, which allow you to control the operation of your notebook.

Microphone and Speakers

Your notebook is equipped with a 16-bit stereo sound system. You can use the built-in microphone and speakers to play and record sound, or you can use the sound ports to connect to other audio devices such as headphones or external speakers.

Power Indicators

The two power indicators are located on the down edge of both side display panel.

Left-side Indicator	
Steady green light	System is turned on
Flashing green light	System is in Suspend mode
Right-side Indicator	
Steady green light	Battery is fully charged
Flashing green light	Battery is charging

Status Indicators

The four status indicator lamps are located just above the keyboard. From left to right, the four indicators represent the HDD, Caps, Num. Lock, and Scroll Lock, respectively.

Status Indicators (from left to right)	
First Indicator	Hard Disk Drive
Second Indicator	Keyboard in Caps Lock Mode
Third Indicator	Keyboard in Num. Lock Mode
Fourth Indicator	Keyboard in Scroll Lock Mode

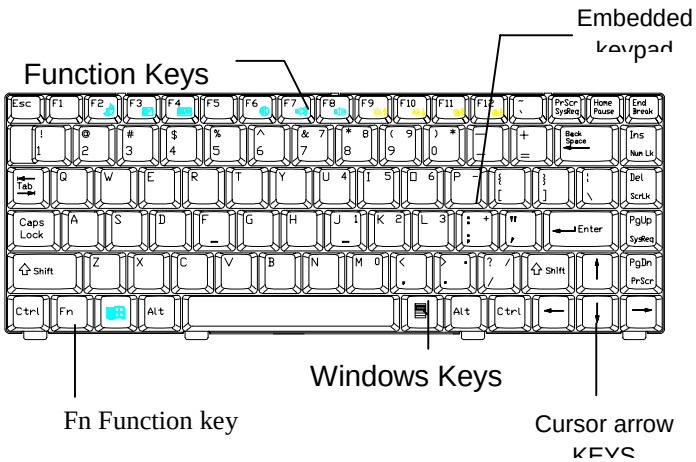
About the Keyboard

If you are not familiar with notebook computers, you should read this section which describes the layout of the notebook keyboard.

Keyboard Layout

The appearance of the notebook keyboard depends on the version of the system that you are using, and the language version of your system. For some languages, one or two extra keys are required, and

extra keystrokes may be embedded into the keys. The illustration below shows a picture of a typical keyboard.



Key Legends

In the upper left corner, each keycap carries a large legend of the normal keystroke. If there are two legends, the upper keystroke is selected by holding down the Shift key.

Embedded Keypad

The alphabet keys on the right side have an embedded numeric keypad that can be turned on by pressing the Num Lock key. The embedded keypad legends are usually positioned in the upper right corner of the keycaps (in some language versions, the keypad legends may be positioned on the front edge of the keycap).

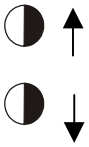
Function Keys

The function keys form the top row of the keyboard. The action of the function keys is usually determined by the software that the computer is running. Some of the function keys have a second action embedded. This action is identified as an icon on the keycap. This action is selected by holding down the Fn Function key (in the lower left corner of the keyboard) while pressing the function key.

Function Key Reference

The table below shows the meaning of the function key icons, and other embedded keyboard icons:

Keystrokes	Icon	Action
FN + F2		This key combination causes your notebook to suspend to RAM. (See chapter 4, for information on a suspend to RAM.)
FN + F3		This key combination causes your notebook to suspend to disk. (See chapter 4, for information on a suspend to disk.)
FN + F4		This key combination toggles the video display between the built-in screen and an external monitor. The first press switches the video to an external monitor, the second press causes a simultaneous display on the screen and monitor, and the third press returns the video to the screen only.
FN + F6		This key combination turns off the built-in speakers, and any speakers that are connected to the speaker sound port.
FN + F7		This key combination increases the volume of the speakers, and any speakers attached to the sound port.
FN + F8		This key combination decreases the volume of the speakers, and any speakers attached to the sound port.
FN + F9		This key combination increases the brightness of the built-in screen.
FN + F10		This key combination decreases the brightness of the built-in screen.

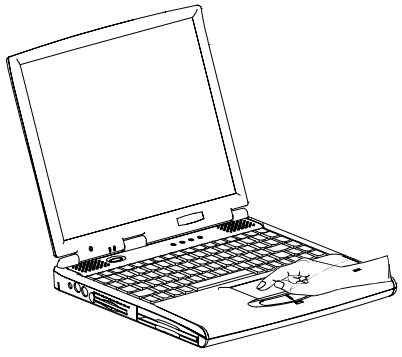
FN + F11 FN + F12		These two keystrokes are used to control the screen contrast. This system uses a bright active matrix display with a fixed contrast, so these functions do not operate on this notebook.

The Windows keys located on either side of the Space bar. They are active in Windows 95, Windows 98, or Windows NT.

	This key activates the Start button Windows Task Bar.
	This key opens the pull down menu of a selected icon or object. Its action is the same as right-clicking an icon or object with a mouse or Touchpad.

Using the Touchpad

If you are unfamiliar with notebook computers, you should read this section which explains how to use the Touchpad pointing device. Moving your fingertip across the Touchpad surface is exactly the same as moving a mouse across a Mousepad. The screen pointer (in graphical environments such as Windows) moves in response to the movements on the Touchpad.



Touchpad Buttons

Two buttons are located below the Touchpad. The button on the left acts exactly the same as the left button on a mouse. You can click it once to select an icon, object, or file, and click or double-click to execute an action on a selected icon, object, or file.

The button on the right acts exactly the same as the right button on a mouse. In the Windows environment, a right clicker usually displays a pull-down Properties menu for whatever icon, object, or file is selected.

Tapping the Touchpad Surface

You can operate most of the Touchpad functions with a single fingertip. When you need to execute a left button mouse click, tap gently on the Touchpad surface with your fingertip. Tap twice quite rapidly to execute a double-click. For drag and drop operations, tap twice, keeping your finger in contact with the Touchpad surface after the second tap. Then drag the objects around the screen by moving your finger. When your fingertip breaks contact with the Touchpad surface, the object is dropped.

To use tapping to duplicate the effects of middle mouse button, follow the directions above, but use two fingertips instead of one. To use tapping to duplicate the effects of a right mouse button, follow the instructions above but use three fingertips instead of one.

Scrolling with the Touchpad

In many Windows applications (Word, Excel, etc,) you can use the touchpad to scroll up and down. Move your fingertip up and down the right edge of the Touchpad. The application will scroll the text or cells up and down in response to the movement of your fingertip.

If you hold down the CTRL key while using the scrolling area, the scroller turns into a zoom function. Scroll up to zoom in, scroll down to zoom out.

If you hold down the SHIFT key while using the scrolling area, the scroller acts like the forward and back buttons in an Internet web browser. Scroll up to move forward through the hypertext links, scroll back to move backward through the hypertext links.

Autoscroll

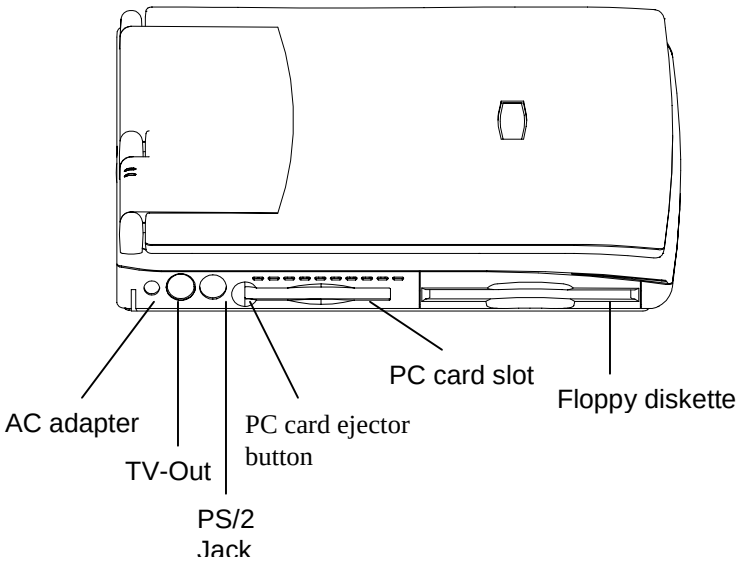
If you tap with two fingers on the Touchpad surface, you create an Origin mark on the document. When you then move the cursor away from the origin mark, the document will begin to scroll. The speed of the scrolling, and direction are determined by the location and distance of cursor from the origin mark. Any subsequent keystroke, mouse click, or scroll action terminates the AutoScroll.

Panning

This operates in the same way as AutoScroll, except that the operation terminates when the fingers are lifted

Left-side Description

The left side contains a FDD drive bay, a PS/2 port, TV-out port(option), a AC adapter port and a PC card slot.



Using the AC Adapter Jack

The rear side of the notebook has a single power jack for the DC power cable from the AC adapter.

TV-out Port

The TV-out port is a standard RCA-type jack. You can attach a standard A/V (audio/visual) cable into this port to connect your notebook to a TV receiver, a camcorder, or a video cassette recorder.

To send your notebook's video signal to the TV-out port, you must first use the video software utility to make sure everything is configured properly for transfer of the video signal to the TV format. You particularly want to make sure that you are using the right TV standard, i.e. either PAL or NTSC.

Before using the TV-out port, you must always change the resolution of your computer's display down to 800 x 600 (SVGA) or 640 x 480 (VGA). You cannot export the video image to a TV receiver while your notebook is displaying at the default resolution of 1024 x 768.

After you have made all the necessary changes required in order to send the notebook video to the TV-out port, you can use the TV-out to switch the video between the built-in screen and the TV-out port.

Using the PS/2 Port

This port lets you connect an external keyboard to your system, such as a full size AT-enhanced keyboard, or an external pointing device to your system, such as a mouse or a Trackball. The PS/2 device must have a mini-DIN PS/2 connector. If your device uses a larger AT DIN connector or a 9-pin serial connector, you can easily get an adapter to change it to a mini-DIN PS/2 connector.

You can plug in, and unplug an external keyboard even when your system is turned on. When you connect the external keyboard to your system, the built-in keyboard remains active and you can enter data through either keyboard.

When you use this port for connecting an external PS/2 pointing device to your system, such as a mouse or a Trackball, you can plug in, and unplug, the external pointing device even when your system is turned on. When you connect the device to your system, the built-in Touchpad remains active and you can control the screen pointer with either the Touchpad or the external-pointing device.

PC Card Slots

Two PC slots are provided so that you can enhance your system by sliding credit-card sized PC cards into the system. The buttons at the side of the slots are used to eject a card.

Device Bay

The device bay is normally installed with a floppy diskette drive and hard disk drive.

Floppy Disk Drive

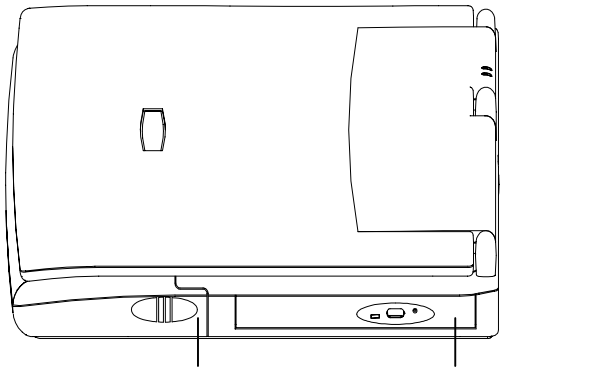
In this system, the floppy disk drive is a fixed by one screw and it can be released by screw drive, and swap hard disk drive in inside of HDD bay. Please maintain and contact by your dealer or supplier.

Hard Disk

Your system has an exchangeable hard disk. If you need to upgrade or change your hard disk drive, Please contact your dealer or supplier.

Right-side Description

The right side houses a battery and a CD-ROM drive.



Removable Battery Pack

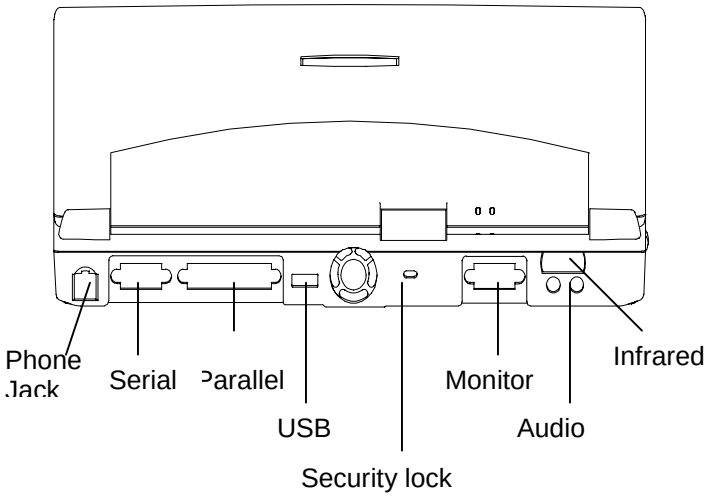
The removable battery can be installed with a Lithium-Ion (Li-Ion) battery pack. The battery is rechargeable, and a fully charged battery can run the notebook from two to four hours.

CD-ROM drive

The CD-ROM can be used to load programs and data from data CDs, play audio CDs, or display video from video CDs..

Rear Side I/O Ports

The rear side has a full range of I/O ports that allow you to connect a variety of peripheral devices to your system.



Note: To connect a serial, parallel, or USB device, we recommend that you power down the system, connect the device, and then restart the system. If necessary, you can make changes to the IRQ (interrupt

request) and I/O address of the port, by using the system setup utility.(See Chapter 3)

Using the Serial Port

The 9-pin serial port can be used to connect your notebook to serial devices such as a serial mouse, an external fax/modem, and so on. This serial port is identified by your notebook same as COM1. Your notebook also runs the infrared transceiver through a serial port called COM2, and, if the optional fax/modem is installed, it is identified as either COM3 or COM4.

Using the Parallel Port

The 25-pin parallel port is usually used to connect your notebook to a parallel device such as a printer or a plotter. When you add a printer to your system, you usually need to load a driver for the printer from the original Windows CD or diskettes. The *Printer* icon in the *Control Panel* has an *Add New Printer* icon to help you install a printer. The parallel port is identified by your notebook as LPT1.

The parallel port can support advanced parallel communications such as ECP (Extended Capabilities Port) or EPP (Enhanced Parallel Port). If your notebook is connected to a device that supports these standards, use the setup utility to change the parallel port to support ECP or EPP for better performance. See Chapter 3 for more information.

Using the USB Ports

The USB (Universal Serial Bus) port is a new interface for computers. It is designed for use by devices which do not require very high rates of transmission, such as a mouse, a keyboard, etc.

The advantage of the USB interface is that it can support many devices all connected to a single cable (or series of connected cables). All the devices can connect to the notebook through a single USB port. Devices on the USB port do not have the problem of conflicting with each other by using the same IRQs.

To connect a USB device, we recommend that you power down the system, connect the device, and then restart the system.

Security Lock Anchor

The rectangular hole can be use by a wire cable of security lock. To secure your notebook to a desk or some other immovable object, to help prevent theft.

Using the External Monitor Port

The external monitor port can be used to connect an external CRT (cathode ray tube) or flat panel monitor to your notebook. When you have an external monitor connected, you can display the notebook video on the built-in screen, on the external monitor, or even a simultaneous display on the screen and monitor together.

If your external monitor has the capability, you might be able to use the external monitor to display greater resolutions than are possible on the built-in screen. See Chapter 4 for more information on using the video utilities and hot keys with an external monitor.

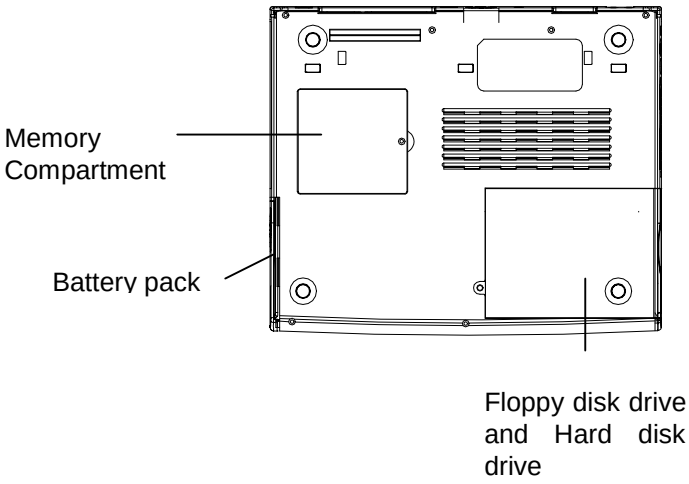
Using the other Ports

The use of the Infrared port, and how to set it up, is fully explained in Chapter 4.

The Telephone jack, for use with the optional Fax/Modem, is explained in Chapter 5.

Features on the Unit Base

The base of the notebook has a compartment for adding memory and allows you to remove the battery pack and the hard disk drive.



Memory Compartment

The memory compartment can be used to add SODIMMs (Small Outline Dual In-line Memory Modules) to your notebook. The memory compartment has space for two SODIMMs.

Battery Pack

You can remove and change the battery pack in the right side battery compartment by opening the battery door.

Hard Disk Drive

You can change the hard disk drive by removing the floppy disk drive locking screw on the base of the unit. But we recommend you contact your dealer or supplier, if you need to change your hard disk drive.

CHAPTER 2: GETTING STARTED

Getting Started

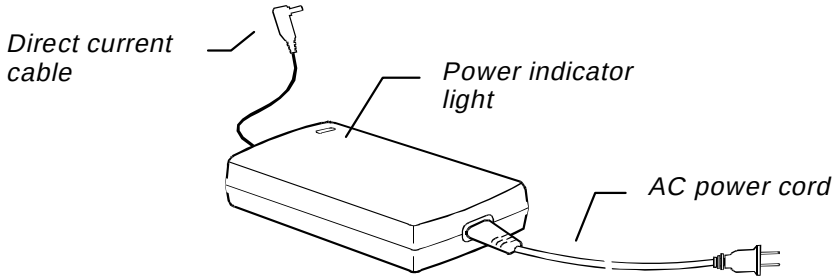
Before you begin to use your notebook, read this chapter to become familiar with some of the procedures and operations that are used with the system.

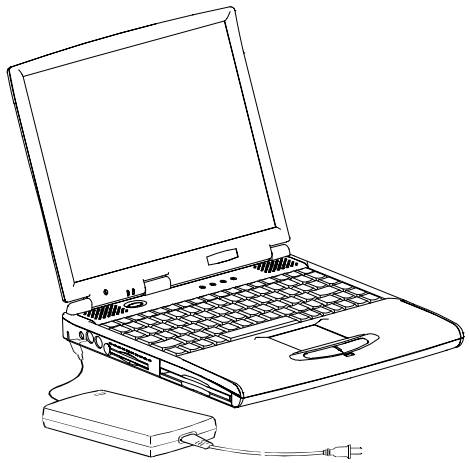
Connecting Power to the System

Your notebook can operate through the AC adapter connected to a wall outlet, or it can operate from the removable, rechargeable battery installed in the left side of the unit.

When you are using your notebook for the first time, it is essential that you use the AC adapter connected to a suitable power supply. The battery in a newly purchased system is usually fully discharged or has just a little charge remaining. When you first use the notebook, you must have sufficient power to complete the Windows initialization process without running out of power.

The AC adapter is auto-sensing so it can use any available power supply from 100 volts through to 240 volts (± 10%VAC) with a frequency ranging from 50 to 60 Hertz. The AC adapter will automatically convert the AC power to a 20-volt (± 1V) direct current supply that your notebook can use. The AC adapter is also used to recharge the rechargeable battery.





1. Plug the power cord into a regular AC power supply outlet.
2. The power indicator on the AC adapter will turn on to show that it is connected to AC power.
3. Plug the direct current cable from the AC adapter into the AC adapter jack on rear side of the notebook.
4. The right side indicator on the front edge of the notebook will begin flashing with a green light. This indicates that the AC adapter has begun charging the internal battery.

First Time Start Up

When you have connected the notebook to a suitable power supply, and you are familiar with the operation of the keyboard and touchpad, you are ready to begin using your computer.

Note: *It is particularly important that you give your battery a full charge the first time that you use it. We recommend that you leave the system connected to*

the AC adapter until the battery is fully charged. The right indicator lamp on the front edge of the notebook will stop flashing when the notebook is fully charged.

Warning: *The description below applies to notebooks that have been pre-installed with an OEM version of Windows 95 or Windows 98. If your system has not been pre-installed with an OEM Windows, install your own operating system using retail versions of the operating system software and following the instructions given with the software.*

The installation is completed when you turn on the computer for the first time. At that point, Windows will run a setup program which gathers important information about you and your computer preferences, so that Windows operates the way you want it to.

Throughout the setup procedure, Windows will present dialog boxes on the screen. When you have read the dialog box and wish to proceed with the installation, use the touchpad to point to the Next button and then click it. If you wish to review a part of the installation procedure, click on the Back button.

1. Turn on your notebook by pressing the power switch down and holding it down for about one to two seconds.
2. When Windows starts, you may see a Safe Recovery message. This means that the notebook has been turned on at least once since the partial installation of Windows, and Windows has registered the fact that the final installation was not completed at that time. You can ignore the safe recovery message and proceed.
3. The setup program will ask for the language and layout of your keyboard. Select the appropriate items from the list provided and proceed.
4. Setup will then ask for your name and company name if applicable. Type in the information and proceed.
5. Setup will then display the Windows license agreement. This document details the terms and condition under which you are licensed to use the Windows software. You must read this

information and then click on the “I accept the agreement” check box in order to proceed.

6. Setup will then ask you to type in the registration number on the Certificate of Authenticity (COA). The COA is generally pasted on the front cover of the Windows 95 manual that is shipped with this system.
7. Setup will then begin to configure your computer. After some time, you will be required to restart the computer.
8. When the notebook has restarted, setup will ask you to select a printer for your system. You can select a printer at this time, or leave it till later if you prefer.
9. Setup will then display a Time Zone window. Use the touchpad to select the correct time zone for you location, and reset the time and date.
10. At the end of the setup session, a backup utility appears which allows you to make backup diskettes of the Windows operating system. This requires two or more boxes of diskettes. If you have a Windows CD disks, or Windows diskettes, you can cancel this procedure, or delay it to a later time.

That completes the Windows setup program. Your notebook is now installed with your own personal copy of Windows.

System Setup and Installation

On most configurations of this notebook, the hard disk drive is installed with a standard edition of the Windows 95/98 operating system. In addition, a special partition has been set aside so that the system can suspend using a “save to disk”. Then special drivers and utility programs have been installed so that the system has the software it needs to run non-standard components such as the infrared port, the CD-ROM drive, the video and audio systems, and so on.

At some time, you may need to re-install the software on the hard disk drive. For example, you may upgrade your notebook with a larger capacity hard disk drive, or you may be forced to format your hard disk drive because of a virus infection, or a hard disk drive failure.

If you maintain a regular backup of your hard disk drive, then you can handle these kinds of problems by doing a restore to your new or newly

formatted drive. If you don't have a backup, you can use the information in this appendix to rebuild your drive.

Rebuilding the Hard Disk

In order to rebuild the hard disk drive, you will need a CD of your Windows 95 or 98 operating system, a diskette and a CD of the system software that ships with the system, and a boot diskette for your Windows operating system.

> ***Note:*** *This section describes a typical procedure for rebuilding a hard disk drive. You may not need to carry out every step on your own hard disk. Read all the README files that ship with the support software. They may contain important information that is not included here.*

1. Place a Windows or DOS boot diskette in the floppy diskette drive and turn on your system.
2. If you are creating new partitions on the drive, you must run the ØVMAKFIL utility first, in order to create a partition for the 'Suspend To Disk' feature on your notebook.
3. If you are creating new partitions on the drive, use the DOS/Windows FDISK program to create the partitions.
4. Use the DOS /Windows FORMAT program to format the new partitions.
5. If you cannot access the CD-ROM drive, install the CD-ROM driver from the support disk. Copy the files to a floppy diskette if necessary.
6. After you have access to the CD-ROM drive, install your Windows CD in the drive. The Windows installation should begin automatically. If it doesn't begin automatically, run the SETUP program on the disk.
7. Follow the instructions to install Windows.
8. After a successful Windows installation, place the utility software CD in the drive and start installing the drivers and utilities that you

need for the system. Depending on the configuration of your notebook, you may not need to install all the software on the utility CD.

9. The software is installed in separate folders, and there may be sub-folders which contain different language versions, or different versions for different operating systems such as WIN95, WIN98, WinNT and so on. The names of the folder will indicate what they contain.
10. Look for a README file inside the folder of the software that you are about to install. It may contain special installation instructions, or updated information that is not included in this section.
11. Look for the installation program and run it. This program is usually called SETUP or INSTALL. Follow the instructions on the screen to install the drivers and/or utilities.
12. You will probably need to install the following software from utility CD:

    Touchpad: Driver/Utilities

    Video: Drivers/Utilities

    Audio: Drivers/Utilities

    PC Card Drive: Drivers/Utility

    Fax/ Modem (option): Driver/Utilities

    CD-ROM: Driver/ Utility

Using the Drives

You can learn a lot about your computer by using the windows *My Computer* utility. If you click on this icon, it will show a graphical representation of the media devices on your system. Depending on the configuration of your system, your notebook will probably have the following devices:

Hard Disk Drive

The hard disk drive is an internal component and is identified by your system as drive C: The Windows operating system is stored on the hard disk drive, and when you install new software applications on your system, they will usually be stored on the hard disk drive. The hard disk drive provides very fast access to your data and applications.

Floppy Disk Drive

The floppy disk drive is a module that is fixed in the left-side device bay. On this version of the notebook, the floppy disk module is fixed and cannot be changed for another component. The floppy disk drive uses low capacity, (1.44 MB/1.2 MB/720K), inexpensive, removable diskettes. Your system identifies the floppy disk drive as drive A: Access to the floppy disk drive is quite slow but floppy diskettes are very useful for storing and transferring small files.

CD-ROM Drive

The CD-ROM drive is a module installed on the right side of the notebook. On this version of the notebook, the CD-ROM drive module is fixed and cannot be changed for another component. CD-ROM discs can store over 600 MB of audio, video, or data. Usually your system identifies the CD-ROM drive as drive D: or E: depending on the configuration of your notebook. Access to a CD-ROM is quite fast. CD-ROM is used to distribute large software applications, and audio and video files that require a lot of capacity. You can play audio and video files using the Windows media player.

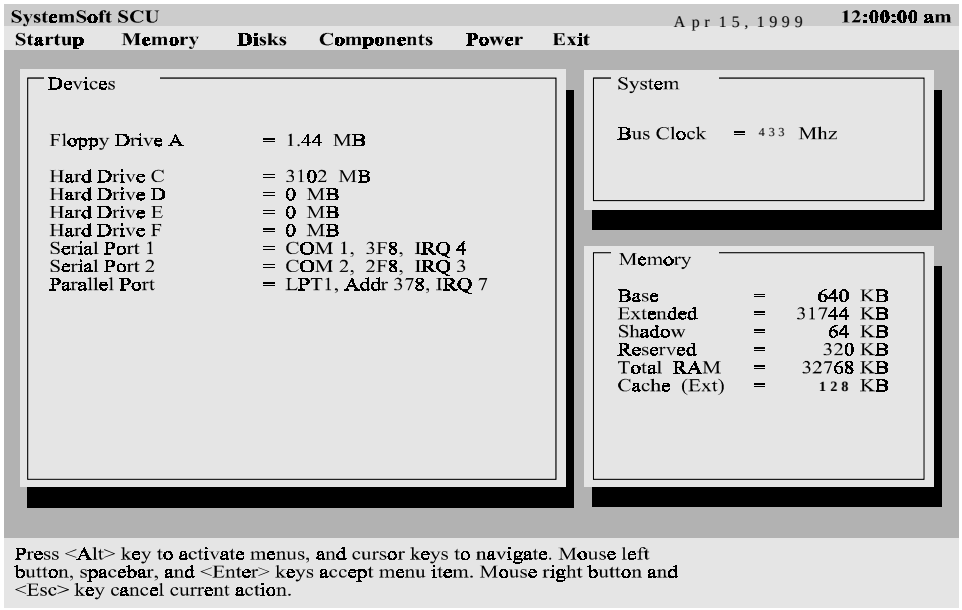
CHAPTER 3: CONFIGURING THE NOTEBOOK

System Configuration Utility

The System Configuration Utility lets you use the firmware installed on the notebook to configure your system according to the kind of hardware that you install. Using setup, you can define drive specifications, control power management, and so on.

Using the System Configuration Utility

You can only display the setup utility by pressing the **[Ctrl] + [Alt] + [s]** key combination shortly after the system is turned on. A prompt appears on the screen that reads *"<CTRL – ALT – S> to enter System Configuration Utility"*. When you see this prompt, press the key combination and the setup utility will display the main page of the System Configuration Utility program.



Navigating

The main screen of the utility program is divided into three major sections.

The top section holds a menu bar.

The middle section shows three windows, i.e. *Devices, System* and *Memory*. These windows provide a quick overview of the current setup settings of your system. Some values are detected automatically while other values are set to a default value and can be changed through the menu bar at the top of the screen.

The third section, at the bottom of the screen, displays hints and help messages relevant to the topic highlighted at the moment.

[Alt]: Press the Alt key to activate menus.

Cursor arrow keys: Lets you move and highlight through the header list of setup windows.

[Enter]: When the option you need is highlighted, press this key to select an option.

[Esc]: Cancels the current action, closes a menu, returns you to the main menu, and/or exits the System configuration Utility program.

Startup, Memory, Disks, Components, Power, and *Exit*, are the principal options in the main menu bar for system configuration. When you select one of these options, the screen displays a list of items in a drop down menu. Some items you can only enable or disable. Others bring up a separate dialog box once you select them.

_ or **V**: Items that can only be enabled or disabled

▸: Items that hide a separate dialog box.

Within a dialog box you can use:

[Tab] to select a control.

[OK] or **[Enter**] to confirm an entry.

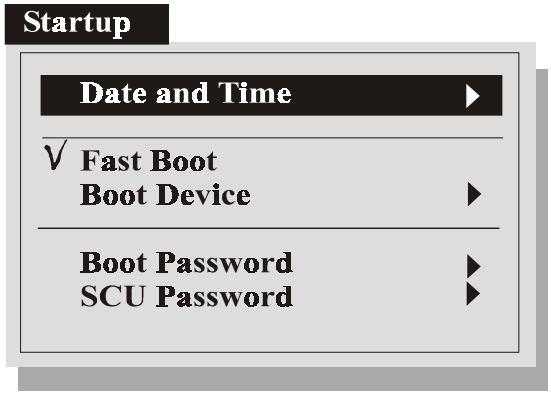
[Cancel] or [Esc] to cancel an entry.

To change the value of a field, use the cursor keys, space bar, and/or numeric keys.

At any given point, you can use the **[Alt]** key in combination with a letter, highlighted red, and use it as a shortcut to jump directly to that function.

Startup

This option displays basic information about your system and hardware.



Date and Time

When you select this option, a dialog box will pop up allowing you to customize the date and time to be used by the system clock.

Fast Boot

You can either enable or disable this option. If enabled you allow the system to boot fast without first testing all functions.

Boot Device

When you select this option, a dialog box will pop up allowing you to customize the order of devices the system tries to boot from consecutively. You can choose from three devices: *Hard disk C, CD-ROM Drive*, and *Diskette A*. Set the most important boot device in the *1st Boot Device* box, and continue with the second and third box. The system will only move on to the alternative boot devices after a previous one failed.

Boot Password

When you select this option, a dialog box will pop up allowing you to set or customize a boot password.

Enter old Power-On Password

This field will be available if you return to this dialog box after previously having set a boot password. You will need to confirm your old password again before you can change it to a new one.

Enter new Power-On Password

This field allows you to enter a new password to be used every time the system starts. The password can be up to eight characters long, consisting of both letters and numbers.

Verify new Power-On Password

After you have entered a new password, you'll need to retype it in this field to confirm it.

Enable Password to Power-On

After you have set a password in the previous fields, you can either enable or disable it. If this field is enabled, you need to type in the password every time the computer is turned on. If you do not type the correct password, the computer does not start.

SCU Password

When you select this option, a dialog box will pop up allowing you to set or customize a password to enter the System Configuration Utility program.

Enter old Setup Password

This field will be available if you return to this dialog box after previously having set a SCU password. You will need to confirm your old password again before you can change it to a new one.

Enter new Setup Password

This field allows you to enter a new password to be used every time one tries to enter the System Configuration Utility. The password can be up to eight characters long, consisting of both letters and numbers.

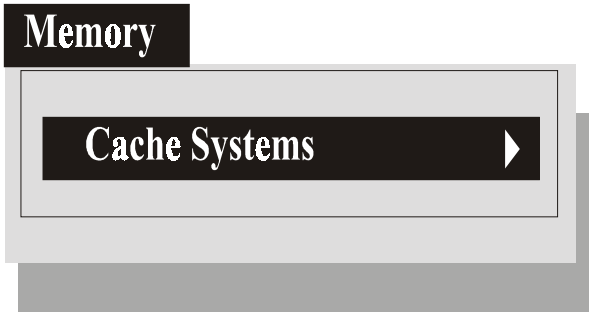
Verify new Setup Password

After you have entered a new password, you'll need to retype it in this field to confirm it.

Enable Setup Password

After you have set a password in the previous fields, you can either enable or disable it. If this field is enabled, you need to type in the password every time you try to enter the System Configuration Utility. If you do not type the correct password, you will not be able to enter the System Configuration Utility program.

Memory



Cache Systems

When you select this option, a dialog box will pop up allowing you to customize the system's use of Cache memory.

L1 Cache/L2 Cache

These boxes allow you to enable (*Write Back*) or disable Level 1 and/or Level 2 Cache.

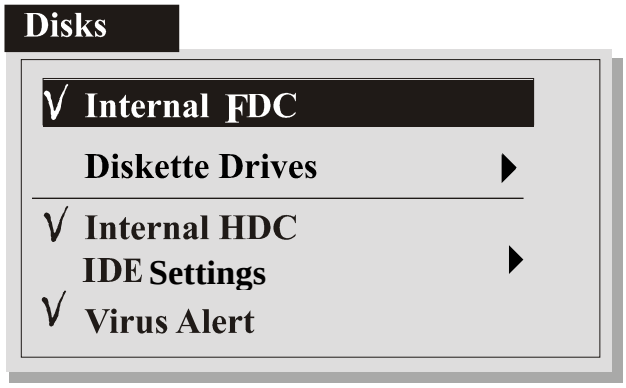
BIOS Shadow

This field allows you to enable or disable BIOS shadow memory caching.

Video Shadow

This field allows you to enable or disable Video shadow memory caching.

Disks



Internal FDC

You can either enable or disable this option. Set this option to enable in order to use the internal Floppy disk drive.

Diskette Drives

When you select this option, a dialog box will pop up allowing you to set the types of diskette drives used with your system. You can set the diskette drive type to *None or 1.44 MB* . The internal diskette drive is by default referred to as Drive A.

Internal HDC

You can either enable or disable this option. Set this option to enable in order to use the internal hard disk drive.

IDE Settings

When you select this option, a dialog box will pop up allowing you to set the IDE setting with HDD timing and transfer rating.

HDD Timing

This field allows you to select HDD timing with Standard, Fast PIO, Multi word DMA or Ultra DMA-33 HDD timing.

I/O 32 Bits Transfer

This field allows you to enable or disable I/O 32 Bits Transfer setting.

HDD Block Transfer

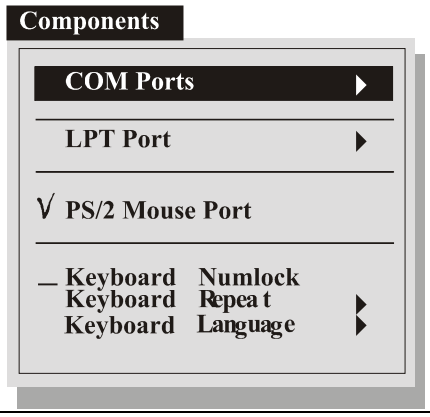
This field allows you to enable or disable HDD Block Transfer setting.

Virus Alert

You can either enable or disable this option. When this option is enabled, your computer will be protected to some degree against computer viruses, which try to infect the boot sector of disks and diskettes. If you ever need to create a new partition structure on your disk drive, you might need to set this option to disabled.

Components

Use the components item on the menu bar to configure some of the peripheral devices found in your notebook.



COM Ports

When you select this option, a dialog box will pop up allowing you to enable/disable and to modify the settings of the different serial (COM) ports.

COM A I/O Settings

This option box allows you to enable or disable (*None*) serial port COM A. If you decide to enable this serial port you should allocate a serial and interrupt address to it.

COM B I/O Settings

This option box allows you to enable or disable (*None*) serial port COM B, by default used for the infrared port. If you decide to enable this serial port you should allocate a serial and interrupt address to it.

Mode Setting for COM B

This option box allows you set an infrared mode for serial port COM B.

DMA Setting For Fast IR

This option box allows you to allocate a DMA address to COM B when using Fast IR mode. If you are not using this infrared mode, this box will be grayed out.

LPT Port

When you select this option, a dialog box will pop up allowing you to customize the parallel port located on the rear of the notebook.

Port Address

This option box allows you to enable/disable (*None*) the parallel port in the back of the notebook. If you decide to enable the parallel port you should allocate an LPT and interrupt address to it.

Port Definition

This option box allows you to set a port mode for parallel communications.

EPP Type

This field allows you to set an EPP type for the parallel port. If you are not using EPP mode, this box will be grayed out.

DMA Setting for ECP Mode

This option box allows you to allocate a DMA address to the parallel port when using ECP mode. If you are not using ECP mode, this box will be grayed out.

PS/2 Mouse Port

You can either enable or disable this option. If disabled you will not be able to use the internal touchpad.

When you use the external Intellimouse® produced by Microsoft®, you must leave the PS/2 Mouse Port disabled.

Keyboard Numlock

You can either enable or disable this option. If enabled the keyboard Numlock function will always be on by default when you start your system.

Keyboard Repeat

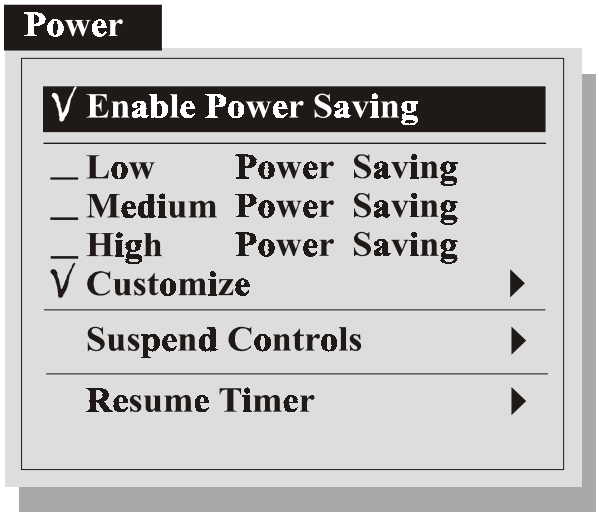
When you select this option, a dialog box will pop up allowing you to customize the keyboard auto repeat rate and repeat delay. These options set the reaction speed of your keyboard to your typing.

Keyboard Language

This option let you choose most suitable keyboard language including English • German • Italian • Japanese...etc.

Power

Use the power item on the menu bar to define the progressive power reduction of your computer when it is not being used.



Enable Power Saving

You can either enable or disable this option, which acts like a master switch for all the other powerdown functions on this menu. If you disable this field, none of the other system powerdowns in the setup program will function and will thus be grayed out. If it is enabled, you are able to set more specific power saving functions through the other options on the menu.

Low Power Saving

You can either enable or disable this option, which will be grayed out if the *Enable Power Saving* option above is not enabled. Enabling this option will set the power saving function of your system to a preset level that allows maximum performance and minimum power saving management.

Medium Power Saving

You can either enable or disable this option, which will be grayed out if the *Enable Power Saving* option above is not enabled. Enabling this option will set the power saving function of your system to a preset level that strikes a balance between performance and power saving management.

High Power Saving

You can either enable or disable this option, which will be grayed out if the *Enable Power Saving* option above is not enabled. Enabling this option will set the power saving function of your system to a preset level that allows maximum power saving. If you take your notebook on the road, it is recommended you use this aggressive level of power saving to ensure the longest possible battery life.

Customize

When you select this item, a dialog box will pop up allowing you to manually customize some power down timeouts.

Video Timeout

Since the screen of your notebook consumes a lot of power, this field allows you to set a separate timeout value for the screen. You can set this field to either *Always On*, or a timeout between 30 seconds and 30 minutes. The screen will blank if the system has been idle for the selected period of time. Screen activity will be restored immediately when system activity is detected.

Disk Timeout

Since the hard disk of your notebook consumes a lot of power, this field allows you to set a separate timeout value for the hard disk. You can set this field to either *Always On*, or a timeout between 30 seconds and 2 minutes. The hard disk will be powered down if there has not been any disk access for the selected period of time. Hard disk power will be restored immediately when the disk is accessed again.

Global Timeout

This field allows you to set a timeout value for the entire system to reduce power consumption. You can set this field to either

Always On, or a timeout between 1 and 16 minutes. System power will be restored when system activity is detected.

Suspend Controls

When you select this item, a dialog box will pop up allowing you to manually customize some Suspend timeouts.

Lid Switch Function

This field is used to set the activity linked to pressing the lid switch, as in closing the notebook screen cover. If the field is set to *Suspend,* closing the screen cover will suspend the system to RAM. If the field is set to *Blank LCD*, closing the screen cover will merely blank the video screen.

Suspend Type

This box allows you to choose the type of suspend mode the system should enter when a suspend event or demand occurs.

Suspend To Disk – This is really another way of turning off your computer. When you suspend to disk, the contents of your computer's memory are copied to your hard disk drive as a file. When the contents of the memory have been safely stored to disk, your computer turns off. The next time the computer is turned on after a suspend to disk, the file on the hard disk is quickly read back into memory. In just a few moments, your computer appears exactly as it was when you last suspended to disk.

Suspend To RAM – In a suspend to RAM, the contents of your computer's memory are held intact, while practically all the rest of the components in your computer turn off completely, or reduce power consumption to a minimum. In a suspend to RAM, your computer remains active but with the minimum possible power consumption. You can return the computer to full power by pressing the Space Bar. If you are operating your computer on battery power, a fully charged battery can maintain a suspend to RAM for many hours.

Suspend To Disk on Battery Low—You can enable or disable this option. If this field is enabled. When your notebook with a low battery condition around 5% of total charge, at this point, without warning, the notebook will automatically save to hard disk and turn off the system.

Suspend Timeout

This value sets the timeout for the system Suspend mode. If the system has been idle for the selected period of time, the system will enter the user defined suspend mode. The value can be set to either *Never*, or to a value ranging from 1 to 30 minutes.

Resume Timer

When you select this item, a dialog box will pop up allowing you to set a specific date and time for the system to wake up from suspend mode.

Alarm Resume

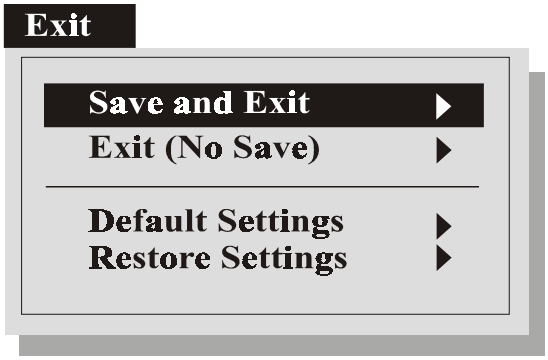
You can either enable or disable this option. If this field is enabled, the system will wake up from suspend mode at the date and time set below. If the field is set to disabled, the date and time set in the fields below will have no effect.

Resume Month/Resume Day/Resume Hour/Resume Minute

These fields allow you to set a specific date and time for the system to wake up from suspend mode.

Exit

When you have made changes to the setup utility, either press the [Esc] key, or highlight the Exit option on the menu bar.



Save and Exit

When you select this item, a dialog box will pop up asking you to confirm your choice to save the changes you just made and restart the

computer. This dialog box will also appear if you press the [Esc] key in the main screen area of the system configuration utility.

Exit (No Save)

When you select this option, a dialog box will pop up asking you to confirm your choice to discard any changes you just made and restart the computer. The computer will then restart using the old values.

Default Settings

When you select this option, a dialog box will pop up asking you to confirm your choice to load the default values for all fields. The computer does not restart. You must use the Save and Exit option above to restart the computer using the default values.

Restore Settings

When you select this option, a dialog box will pop up asking you to confirm your choice to restore the current setup values to the original custom values. The computer does not restart. You must use the Save and Exit option above to restart the computer using the default values.

CHAPTER 4: WORKING WITH YOUR NOTEBOOK

Using Your Notebook

This chapter describes some of the built-in hardware and software features of your notebook. You can use these functions to enhance the usefulness of your notebook, and make changes to the way that they operate as well. The software drivers and utility programs are pre-installed on your notebook, and are integrated into the Windows environment. If you ever have to rebuild you hard disk drive, you can use the support software supplied with this system to re-install the programs.

Note: This section assumes that your notebook has shipped with an installed OEM version of Windows 95 or 98, and the support software has been pre-installed. If your notebook has not been pre-installed with these items, you can install a retail version of Windows and then install the support software from the support diskettes/CDs provided with the notebook.

Video Display

The video system on your notebook comprises the flat-panel screen, the video controller and video memory circuitry, the video ports, and the video software.

Flat-panel Screen

The flat-panel screen is a large, color liquid crystal display panel. The screen uses a technology called TFT (Thin Film Transistor) which provides a very high contrast display. You can adjust the brightness of the display by using the video hot keys.

FN + F9		Press these keys to increase the screen brightness
FN + F10		Press these keys to decrease the screen brightness

Resolution and Color Depth

The screen is designed to display a video resolution of 800 pixels by 600 pixels. This is called SVGA resolution, and it is common to most high-end computers. It displays a maximum of information without making the screen fonts too small to read.

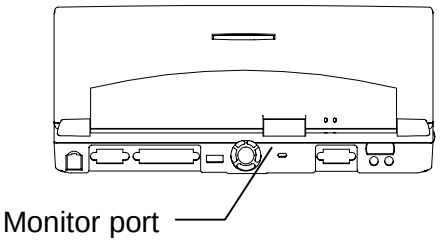
However, when you change to a lower resolution, by default the system will stretch the display in order to use the full size of the screen. This causes some distortion to the video image, particularly to the screen fonts. This distortion at a lower resolution will not show when exporting the video image to an external monitor. You might be able to disable the stretching function by using the video software utility described in the following section.

The color depth refers to the number of colors that the screen can display simultaneously. Color depth is limited by the properties of the built-in screen, the resolution of the screen, and the amount of video memory available.

Your notebook has a very high resolution and 2.5 MB or 6.5 MB (option) of video memory. This means that you can display over 16 million colors. In Windows' Display Properties utility, this is called True Color (24-bit).

Video Ports

Your notebook is installed with two video ports:



Monitor Port

The 15-pin external monitor port allows you to connect an external computer monitor to your notebook. You should ensure that the external monitor is capable of supporting an XGA resolution of 1024 x 768. When the monitor is connected to your system, you can elect to display the notebook's video output on the built-in screen or on the external monitor. You can even generate a simultaneous display on the screen and monitor.

Note: Some monitors are now shipping with a USB (universal serial bus) interface. This notebook does not allow you to switch the display to a monitor connected to a USB port.

To change the video output when an external monitor is connected, use the hot keys Fn + F4. Each press of the keys cycles the video output to the monitor port, to both the built-in screen and the monitor port, and then back to the built-in screen only.

FN + F4		Press Once: Video to monitor port only Press Again: Video to LCD & monitor port Press Again: Video to LCD

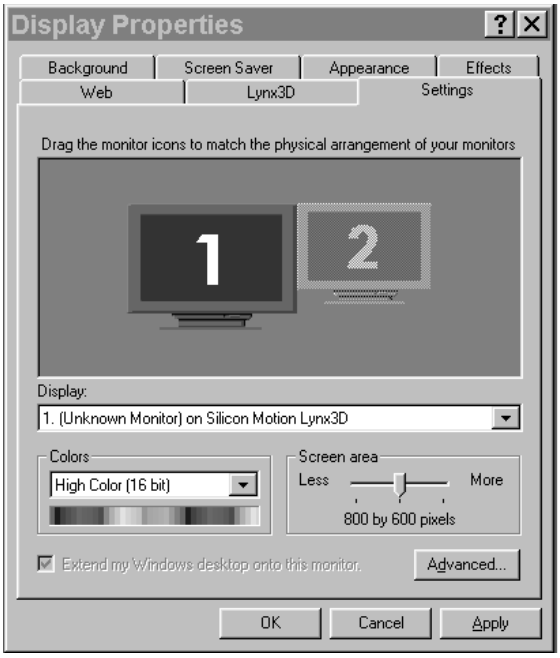
Note: You can also assign additional keyboard hot key combinations for switching the display, using the video software described below.

If you are displaying the video on an external monitor (but not on the built-in screen), you might be able to change to higher resolutions than XGA if the monitor supports them. However, if you use higher resolutions, you will first have to reduce the color depth down from 24-bit to 16-bit or less.

Video Software

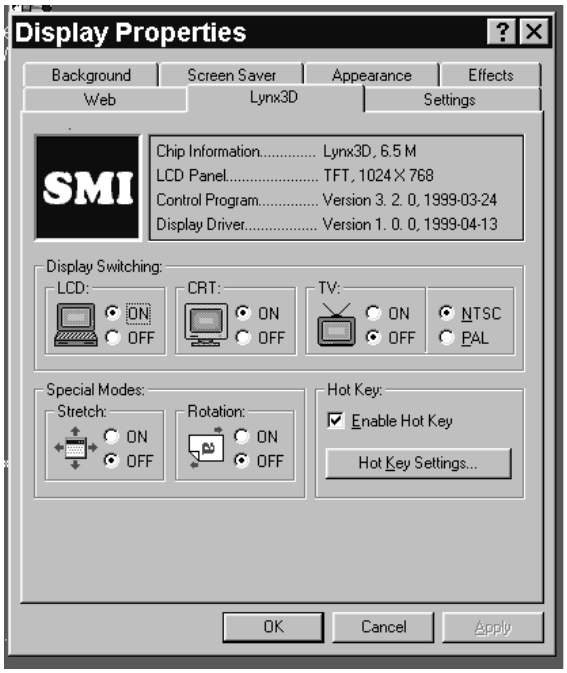
The video software has been integrated into the standard Windows video utility. You can access the utility by moving the screen pointer over a clear area of desktop on the Windows display and clicking the right touchpad button. When the pull down-menu appears, click the left button on the item Properties. This will open the Display Properties window. You can also find the Display Properties in the Control Panel folder.

You can use this Windows utility to make all kinds of changes to the video display. The two major areas of interest here are the Settings and Lynx tabs.



Settings

Left-click on the settings tab to display the basic display settings of your notebook display. Here you can set the color depth and screen resolution. The Advanced Properties button allows access to the video graphics software driver, monitor settings and performance.



Lynx 3D

Left-click on the Lynx 3D tab to display the custom display features embedded in the Lynx 3D graphics chip set used by your notebook. The top margin of the Lynx 3D page shows some information about the video system and software.

Display Switching

This area allows you to customize some settings for the video-switching feature. You can choose which devices are to be switched on and thus available for possible video display.

Special modes

DualApp – allows you to assign a specific application to a specific display. This way you can concurrently show different screens on different displays.

DualView – allows you to capture a portion of the LCD display and display it on the secondary display, either an external monitor or a TV receiver.

Stretch – allows you to turn off the stretching of the screen display when using a screen resolution lower than the default XVGA. You first need to lower the resolution on the Settings page before you can enable this option. When the Stretch option is marked, you will not be able to export the video display to an external device since it may not support this feature.

Virtual Refresh – allows you to set a virtual refresh rate for the built-in LCD. All other display devices must be disabled in order to use this feature.

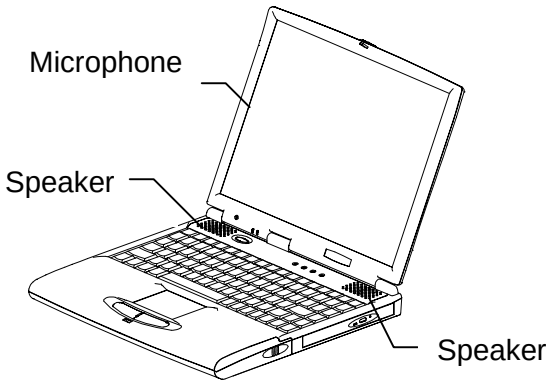
Hot Key

Here you can assign keyboard hot key combinations for display switching and other video features mentioned above.

Click on OK when you are finished with the Lynx options window.

The Sound System

The sound system includes the built-in microphone and speakers, the audio circuitry, the sound ports, and the audio software.



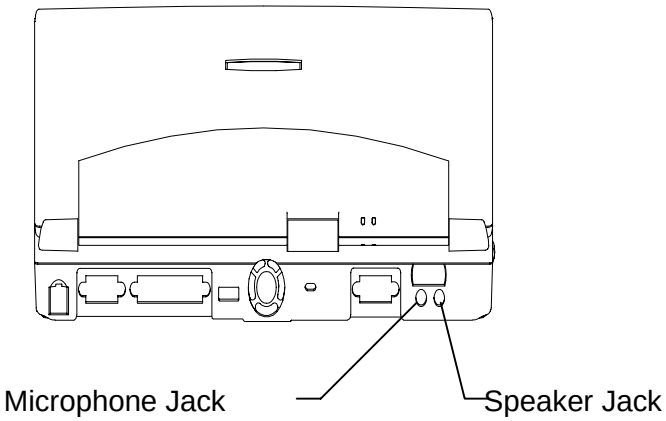
When a sound file is playing, you can use the audio hot keys to turn the speakers on or off, or raise and lower the volume of the speakers.

FN + F6		This key combination turns off the built-in speakers, and any speakers that are connected to the speaker sound port.
FN + F7		This key combination increases the volume of the speakers, and any speakers attached to the sound port.
FN + F8		This key combination decreases the volume of the speakers, and any speakers attached to the sound port.

Note: The audio volume hot keys only affect the audio file currently playing. If you want to change the notebook's default sound volume, use the Windows audio utilities described in the following section.

Sound Ports

The built-in speakers and microphone ensure that you can record and play sounds at any time. However, you can improve the sound quality by connecting higher fidelity components to the sound ports on the rear side of the computer.



Microphone

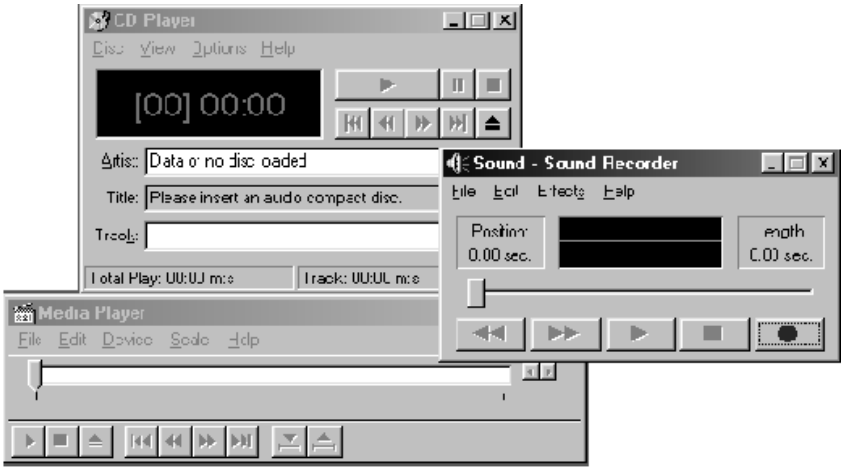
Use the microphone jack to connect an external microphone to the notebook. When an external microphone is connected, the built-in microphone is disabled.

Stereo-out

Use the speaker jack to output the notebook's sound to external loudspeakers, headphones or other audio device. When the jack is used, the built-in speakers are disabled.

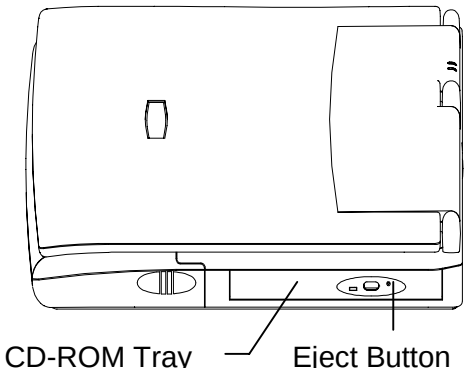
Audio Software

Windows is installed with a useful set of audio utilities. Click on the Start button, point to Programs, then Accessories, then Multimedia, to display the audio utilities. They include a CD player (for audio CDs), a media player (for video CDs and audio/video files), a sound recorder, and a volume control.



Using the CD-ROM Drive

The CD-ROM is installed in the right side of the notebook. The CD-ROM can read data CDs, play audio CDs, and run video CDs.



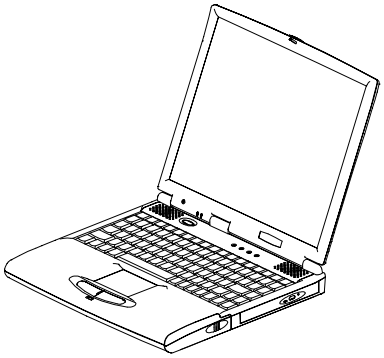
To play a compact disc:

Press the eject button on the front of the drive.

When the disc tray opens, carefully pull it all the way out of the drive.

Place the CD in the drive tray with the label side up. Press the disc down carefully so that the central spindle on the CD tray inserts into the hole in the center of the CD.

Windows can usually recognize an audio or video CD and open the appropriate player.



If you are playing a data disc, use Windows Explorer to log on to the CD-ROM drive. If you are playing an audio CD, go to Programs/Accessories/Multimedia and start the CD-player. If you are playing a video CD, go to Programs/Accessories/Multimedia and start the Active Movie Control program.

PC Card Slots

This notebook is installed with one PC card slot on the left side of the system. PC cards are very similar to the expansion cards that you can install in full-size desktop computers, except that they are no bigger than a credit card, and they can be plugged into the notebook even when the notebook is turned on.

PC cards are usually used to provide new functions or features to your notebook, such as a fax/modem card, a network adapter, or a SCSI host adapter. They can also be used as storage devices using memory chips or miniature hard disks. If you are using PC card storage devices, they will be assigned drive letters (for example E: or F:).

PC Card Standards

This system supports type-I or type-II PC cards. If you are using type-I or type-II cards (which are usually about 3mm to 5mm high).

Zoomed Video (ZV) cards

Your notebook supports cards that use the new Zoomed Video (ZV) standard. ZV provides fast access from the PC card to the notebook's graphics system. ZV cards usually provide video-related services such as video capture, or a digital camera interface.

CardBus

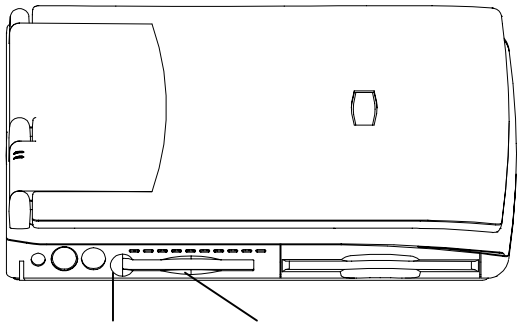
CardBus is a 32-bit extension of the original 16-bit PC card specification. CardBus cards provide higher performance.

Using PC Cards

You can install or change PC cards while your notebook is turned on.

Orient the card correctly. The label side of the card faces up. One of the narrow edges has a double row of pinholes. This edge inserts into the slot.

Insert the card into the slot. The slot is protected by cover. The covers will fold out of the way when you insert the card. When the card is nearly all the way inserted, press quite firmly to ensure that the card mates properly with the connector inside the slot.



Your notebook will emit two beeps (in rising tones) to let you know that the card has been recognized by the system. If Windows has the appropriate drivers to use the card, they will be loaded automatically. For some cards, you may have to install drivers or software, supplied by the card manufacturer.

Before ejecting a CardBus card, it is important that you tell Windows to stop using the card. Click on the card icon on the right side of the Windows task bar. When the stop button appears, click on it. Windows will display a message that the card can now be safely removed.

When you insert a card, the card eject button will be forced outward from the edge of the case. To eject a card from the slot, press the eject button back into the notebook. The card will disconnect from the internal connector and you can remove it from the slot. The notebook will emit two beeps (in falling tones) to let you know that the card has ejected.

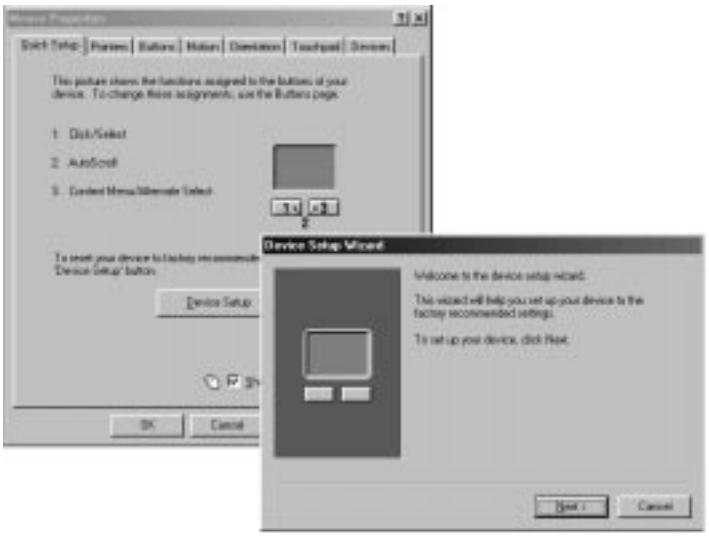
Touchpad/Mouse Utility

The notebook's Touchpad, already introduced in Chapter 1, can be customized using the Touchpad/Mouse driver utility program. This program can be found in the Control Panel folder (Start/Settings/ Control Panel).

Double click the Mouse icon. This will start the Mouse Properties window. Here you can see different tabs that allow you to set up your Touchpad/mouse features.

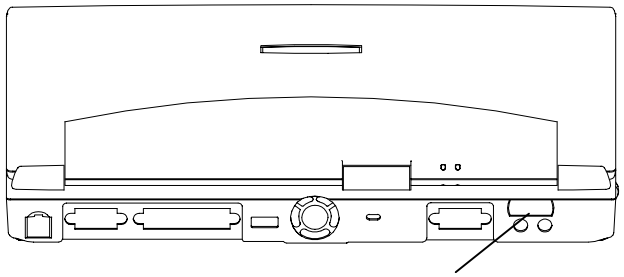
If you press the Device Setup button on the Quick Setup page of the Mouse Properties, a wizard will let you set up your pointing device.

Clicking on the Buttons tab brings up the Button Assignment window, which allows you to customize your pointing device's button action. You can choose which button combination will invoke a certain action within the Windows environment.



The Infrared Port

The transmitter and receiver of the infrared port are located behind a dark plastic lens on the right side, at the back of your notebook. You can use the infrared port to establish a wireless connection between your notebook and other devices that are equipped with an infrared port. A growing number of computers, printers, and Hand-held digital devices are now shipped with infrared ports.



Infrared Port

Establishing an Infrared Connection

1. Make sure that your infrared port is set to the same protocol as the target infrared device. You can change the infrared port in the setup utility (see chapter 3).
2. Place your notebook so that the infrared port is directly facing the infrared port of the target device. If the angle between the ports exceeds about 15 degrees in any direction, you might fail to establish communication. The infrared ports should be no more than 1 meter (38 inches) apart. If the separation is greater than 1 meter, you might fail to establish communication.
3. If you have utility software that supports infrared communication, such as TranXit or IntelliSync, use the software to make the infrared link, and follow the instructions of the software.
4. If you don't have infrared software, use the infrared software included with the Windows operating system, as described below.

Using Infrared with Windows

You can use the Windows 95 operating system to operate your infrared port as follows.

If you have not already set up your system for a Direct Cable Connection or for file sharing, you will need to do this first.

Direct Cable Connection

In the Control Panel, select the Add/Remove Programs utility by double- clicking on it. When the Add/Remove Program Properties window opens, click on the Windows Setup tab. Click on Communications and then the Details button. Click on Direct Cable Connection. If you have not already set up the Dial-up Networking option, you will be asked to establish this as well. The Dial-up Networking activates certain network options of Windows 95 that are necessary for using the Direct Cable Connection. Click OK to activate the new option(s). Windows 95 will load installation files that are stored on your hard drive. If you did not already have network functions established, you will be asked to select computer and workgroup names that will be used to identify your machine when it is part of a network. Windows 95 will configure your files and then ask you to restart your system so that the effects can take effect.

You have now established the Direct Cable Connection for your system. A machine that shares its files is a host, a machine that accesses files is a guest. In a Direct Cable Connection session, one machine will serve as the host and one as a guest. If you want the connection to work both ways, you will have to establish a separate connection for file transfer in each direction. If you do not want to allow sharing of your files or printer via your notebook, you can continue on to the section on Making the Connection. You will still be able to access files and printers that are set up for sharing.

Sharing

If you want to make files on your notebook available to another computer, or if you want to allow another system to print to a printer attached to your notebook, you will need to set up your system for sharing. You can set this up by double- clicking on the Network icon in the Control Panel. This will bring up the Networking window. Click on the File and Print Sharing button.

You will be asked to decide if you want to allow file sharing, printer sharing or both click on the appropriate check boxes. You have now established the file and print sharing for your notebook. You can click OK to exit the Network utility, you might be asked to re-boot. If you want to allow access to certain files on your system, you will need to designate those files for sharing. Open the Windows Explorer program (Start/Programs/Windows Explorer) and the drive containing the folders

that 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.

You will now be asked to establish the kind of access you want to allow to this folder. You should consider who will be using the access and why, and establish the necessary password. Keep in mind that shared folders will be accessible to any machine that establishes an IR connection.

Making the Connection

To establish the IR connection between your notebook and another system, you will use the IR as if it were a direct cable connection between the systems. The other machine will also need to have the software to support this connection. If the other machine is not set for Direct Cable Connection, please repeat the steps above with the other machine.

Start the IR software as described above. Once the machines alert you that they have recognized the presence of another IR system, launch the Direct Cable Connection program (Start/Programs/Accessories) and set up the connection between the two machines.

If this is the first time you are using this connection, you will be asked if the machine will be serving as a host or guest. You will need to set the machine that will be receiving files or sending information to the printer as the guest. The machine that will be sending files or allowing printer access should be set as the host.

When you have selected the status of the machine, you will be asked to designate a port for the connection. For a connection between machines, you should select Serial cable on COM4. When you select a machine as the host, you will be asked to establish whether or not a password should be required of the guest machine before completing the connection.

When both machines have established a connection via the IR, you will receive information on the connection.

In subsequent sessions, your notebook will default to the host/guest status that it had in the last session. You can change this by clicking on the Change button. You will then be asked to establish the port for the connection. If you want to maintain the same status as the last session, just click the Listen button if your notebook is the host, or the Connect button if your notebook is the guest.

When the connection is in place, the guest machine will have an open window showing the folders on the host machine that are available for sharing. You can copy the files in those folders as you would any files in any drive window on your notebook.

Printing

You can use your IR port to print by connecting to a printer with a built-in IR, a printer with an IR adapter connected to its parallel port, a network printer available via an infrared network node, or a 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 1 for information on setting up a printer, To test the printing capability of an application over an IR link to an IrDA compliant printer, 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.

Battery and Power Saving

About the Battery Pack

The battery pack is a plastic package, which contains Lithium-Ion (Li-ION) cells. Currently, Lithium-Ion cells store most charge for a given volume and weight. The battery pack can be installed in the right device bay.

Caution: Only use the battery pack that is supplied with this notebook. If you need a replacement battery, ask your system vendor for a replacement. Never try to use a battery pack that is not designed and approved for use in this notebook.

The Li-ION battery pack can monitor how much charge it has available, and share this information with the Windows operating system, so that your notebook can display the Windows battery gauge with accurate data.

Note: If your notebook will not be used for a long spell or if you always use your notebook with the AC adapter, you can remove the battery and store it in a dry, cool place. However, you might want to keep the battery in the notebook where it can act as a UPS (un-interruptible power supply).

Battery Charging

When the battery pack is installed in the right device bay and the notebook is connected to a power supply with the AC adapter, the battery pack automatically gets charged.

If the notebook is turned on, charging is quite slow and a fully discharged battery pack will take over four hours to get fully charged.

If the notebook is turned off, a fully discharged battery pack will take around three hours to get fully charged.

You can check on the charging status of the battery using the right side power indicator, located on the front edge of the keyboard area.

Right-side Indicator

Steady green light	Battery is fully charged
Flashing green light	Battery is charging

Battery Discharging

When your notebook is turned on and not connected to a power supply, it will operate by discharging the battery. A fully charged battery will power the notebook for about two hours. Battery life is reduced if your notebook is consuming a lot of energy; for example playing sound files and frequently accessing disk drives. Battery life will also be reduced if your battery is not in good condition.

Battery Low Warnings

Your notebook will alert you to a low battery condition by emitting a continuous beeping sound. This warning happens when the battery has only 10% of total charge remaining.

If you can't use the AC adapter to connect to a power supply when you hear the battery low warning, you should save your work to disk and turn off your computer. Even if your battery is in very poor condition, you will have sufficient power to save even long files to disk or diskette.

If you continue using your computer after the battery low warning, the notebook will continue to operate normally until the charge level drops

to around 5% of total charge. At this point, ***without warning***, the notebook will automatically save to disk and turn off the system.

After this occurs, you cannot restart your notebook until you have connected the AC adapter, or installed a new charged battery. The save to disk procedure ensures that no data is lost. When your notebook is restarted, your work will appear exactly as it was when the save to disk procedure occurred.

Battery Conditioning

In everyday use, you will probably charge your battery every time you are using AC power. This is convenient, but each time you charge the battery before it is fully discharged, it causes the battery to store slightly less charge than is possible. Irregular charging and discharging also causes the calibration of the Windows battery gauge to become inaccurate.

To correct these problems, carry out the battery conditioning sequence described below. Try to do this at least once or twice a month.

Install the battery pack in the right device bay.

Connect your notebook to an AC power supply. With the notebook turned on or off, allow the battery to become fully charged. Disconnect the AC adapter and leave the notebook turned on until it completely discharges and saves to disk.

Reconnect the AC adapter, and allow the battery to fully charge.

You might need to repeat steps 1 to 3 again in order to fully calibrate the Windows battery gauge.

Even if you maintain the battery in good condition, it will slowly deteriorate, and store less and less charge. You might begin to notice this after about 500 cycles of charging and discharging. We recommend that you replace your battery when it no longer stores a useful amount of charge.

Using Power Management

When you are running your notebook from the internal battery, it is important that you use the power management routines to reduce the system power consumption. You can also adopt some simple practices in your use of the notebook that can help to extend the useful computing time you get from a charged battery.

The power management routines consist of a series of power saving modes; suspend to RAM mode, and suspend to Disk mode.

In addition to the power saving modes, you can reduce power consumption by turning off the built-in screen and forcing the hard disk drive to power down.

All these power saving procedures are controlled from the system setup utility as explained in chapter 3. If you plan to run your notebook on battery power, use the setup utility to create an aggressive power management routine that puts your notebook into a power saving mode after very short periods of inactivity.

Standby and Suspend Modes

Your computer can either suspend to RAM or suspend to disk. You can use the Setup Utility to program your computer so that is suspends to RAM or disk.

Standby Mode

In Standby mode, your system turns off and reduces the power consumption of a range of devices in order to save battery charge. The system will turn off the back light of the LCD display, stop the hard disk drive, and put the CPU into doze mode. You can instantly return to full power by pressing the Fn + F2 key combination.

Suspend-to-RAM

In a Suspend-to-RAM, the contents of your computer's memory are held intact, while practically all the rest of the components in your notebook turn off completely, or reduce power consumption to a minimum. In a Suspend-to-RAM, your computer remains active but with the minimum possible power consumption. You can return the computer to full power by pressing [Fn] + [F2]. If you are operating your notebook on battery power, a fully charged battery can maintain a Suspend-to-RAM for many hours.

Suspend-to-Disk

Suspend-to-Disk is really another way of turning off your computer. When you suspend to disk, the contents of your computer's memory are copied to your hard disk drive as a file. When the contents of the memory have been safely stored to disk, your computer turns off. The next time the computer is turned on after a Suspend to disk, the file on

the hard disk is quickly read back into memory. In just a few moments, your computer appears exactly as it was when you last suspended to disk.

Suspend to disk is very useful for Windows users who like to have many different programs open on the Windows desktop. You can take quite a few minutes to get a busy Windows desktop up and running, and then you have to shut down each program one by one when you want to turn off your computer. With Suspend-to-Disk enabled, you can simply press the Suspend hot key combination, [Fn]+[F3], and your custom Windows environment is saved to disk.

Suspend-to-Disk Partition

Suspending to disk requires a special disk partition set up for that purpose. If a Suspend to disk partition has not been installed on your notebook's hard disk, use the support software program ØVMAKFIL to create a partition on your hard disk drive. See the System setup section in the chapter 2 for more details.

Initiating Standby or Suspend Mode

Your notebook will suspend under five conditions:

You can click on the Suspend button in the Windows Start menu. The system will suspend to standby mode.

You can press the hot key [Fn]+[F3] combination. The system will suspend to disk.

You can press the hot key [Fn]+[F2] combination. The system will suspend to RAM.

After an automatic suspend time out, set in the setup utility, elapses.

The screen cover of the notebook is closed and no alternative display has been connected to the system. The system will suspend to RAM.

Reducing Power Consumption

You can reduce the power consumption of your system by adopting some simple practices.

Turn down the screen brightness to the lowest level that you can comfortably use.

Restrict your access to drives. Save your work at longer intervals, and turn off or extend the intervals of applications that have an auto-save feature.

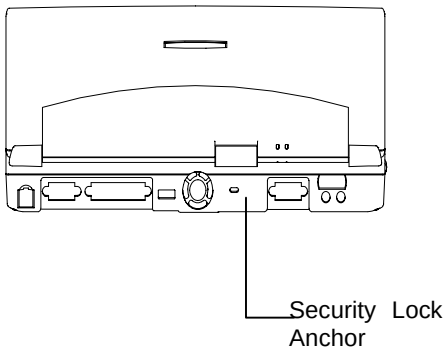
Turn off the speakers if you don't need sound.

Remove unused PC cards from the PC card slots. Many PC cards draw some power even when they are not in use.

Using a Security Locking Cable

When you take your notebook on the road, and use it in unfamiliar locations, you might like to invest in a notebook locking cable. This is a strong flexible cable that has a lock at one end and a loop at the other. You can loop the cable around an immovable fixture, and then lock the other end of the cable into your notebook.

Your notebook has an anchor point for the locking mechanism on standard notebook security cables. It is located on the left side of the notebook.



When a security cable is secured in the notebook it will also secure the hard disk module in the cabinet.

Going Mobile

Your notebook computer is slim and light, so that you can take it with you on business trips, to conferences, in fact wherever you go. The AC adapter supplied with your system is designed to accept a wide range

of voltages so that you can use the power supply in most locations. The removable, rechargeable battery lets you operate your system even if no power supply is available.

Useful Travelling Tips

When you take your notebook on the road, the following tips may help you avoid problems.

Take your Windows (or alternate OS) CD or diskettes with you. You may have to use new equipment such as printers, scanners, fax/modems, etc., and you will need drivers for the new peripherals.

Backup your hard disk before you go, and create an emergency recovery disk to take with you.

If you are visiting another country, check if the local power supply will be suitable for your AC adapter, and if you will need an adapter for the power socket.

If you will be using an Internet provider or other on-line service, call ahead to find out local access numbers for your destination.

Use the system setup utility to install password protection for your system.

Brand your notebook for easy identification by making an unobtrusive physical marker somewhere on the cabinet.

Be aware that notebook computer is a popular target for theft. Take particular care in airports and train and bus stations.

Safety and Operation

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

Do not use the notebook in an unstable location. Serious damages could result if the system should fall.

Avoid rough handling of your notebook. Jolts to the system can damage components or result in data loss.

Avoid high and low temperatures when shipping or storing your notebook. Do not place the system in close proximity to a source of heat or dust.

The batteries will not operate as well under extremes of temperature. If a battery is left in the sun and gets quite hot, it is apt to fail to charge. Once it cools down, you will be able to charge it again.

Protect your modem. It is designed to work on an analog phone system. Before you hook up your modem, check to find an analog line.

CHAPTER 5: EXPANDING THE NOTEBOOK

Upgrading and Options

> ***Caution:*** *We recommend that you contact your dealer and ask them to install any additional components or optional modules. Installing these components yourself may cause damage to your system.*

This chapter gives short descriptions of how to add devices to your computer using the ports, connectors, and devices of the notebook. Your notebook is designed to provide the best technology currently available, but recognizing that computer hardware and software change quickly, your notebook can easily be upgraded and expanded to meet your changing computing needs.

Nowadays, many devices support Plug and Play technology. This means that Windows 95/98 can automatically detect the device when it is connected to your system. If the device requires a driver, Windows will load it automatically. If Windows does not have the device driver stored on your notebook, it will ask you to supply either the original Windows CD or diskettes, or a CD or diskettes from the device manufacturer so that the device driver can be installed.

Troubleshooting Devices

If you have problems getting a device to operate, it may be because the device requires resources that are already being used by another device, for example an IRQ (interrupt request) or an address space.

1. You can identify this kind of problem by running Windows *Device Manager*.
2. Click on the *Start* button. Point to *Settings* and click on *Control Panel*.

3. Double-click the *System* icon and then select the *Device Manager* tab in the *System Properties* window.
4. Click on the device that you are interested in, and then click on the *Properties* button.
5. For many items, the *Properties* window will have tabs for *Drivers* and *Resources.* You can use these windows to identify if the device is conflicting with resources used by other devices, and perhaps resolve the problem.
6. You may be able to resolve some conflicts by making changes to the port configurations by using the system setup utility (see Chapter 3).

Installing Memory

This notebook has a memory compartment, which contains two sockets for industry standard SODIMMS (Small Outline Dual In-line Memory Modules). These modules are readily available from numerous third-party manufacturers.

> ***Warning :*** *Before any memory is installed, it must select the correct speed rating. If the memory has an incorrect speed, it can affect the performance of your machine or even damage the system. We recommend that you obtain approved memory modules from your system vendor.*

The memory compartment is located in the base of the notebook. Install extra memory as follows:

1. Before you begin, turn off your computer, disconnect the AC adapter, and remove the internal battery.
2. Take precautions to prevent static electricity causing damage to your memory card as follows:

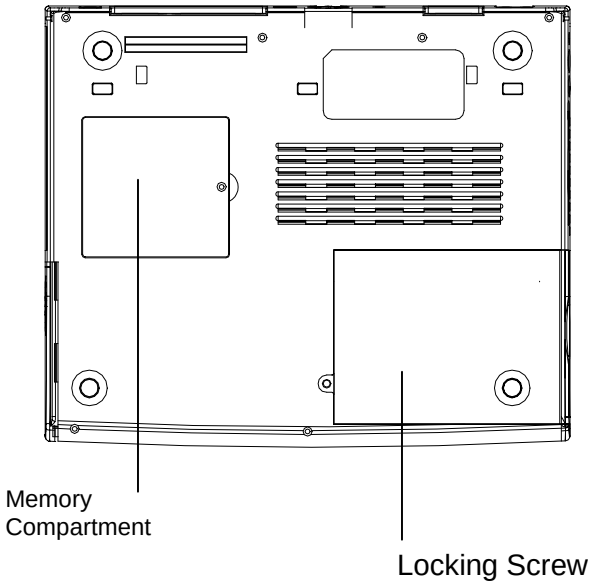
   If you can, wear a grounding wrist strap that's connected to a safely grounded connection during the installation.

   Discharge any accumulated static electricity by touching the metal case of a safely grounded device before beginning the installation.

Leave all electronic components inside their static-proof packaging until they are required for the installation.

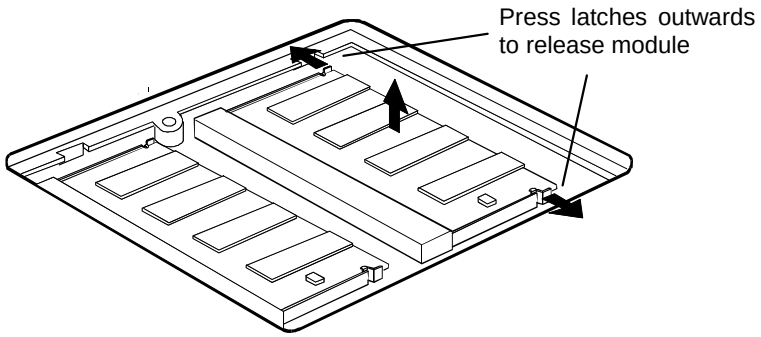
Handle all circuit boards and electronic components carefully. Hold boards by the edges only. Do not flex or stress circuit boards.

3. Locate the memory compartment cover and remove the locking screw. Use a narrow-bladed screwdriver to pry the cover out of the base by levering the cover upward.

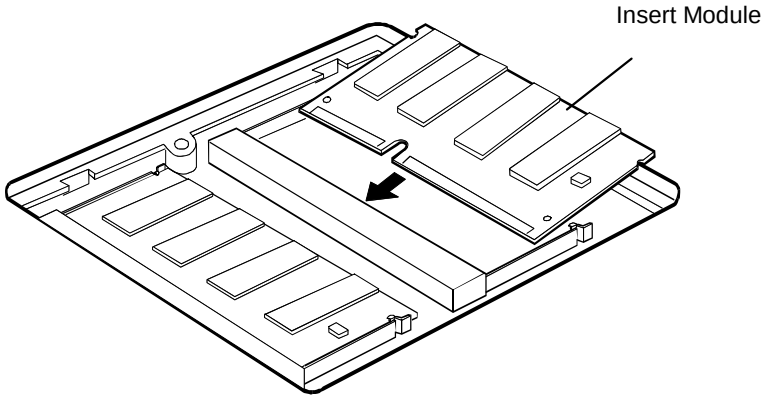


4. Inside the memory compartment, you will see two sockets for the SODIMMs. In some configurations of this notebook, one of the socket will be occupied by a 32MB module. You can install another SODIMM into the second socket. You can install any size of SODIMM from 16 MB up to 128 MB in any of the free sockets.
5. If both sockets are occupied by SODIMMs, and you want to change one or both of the SODIMMs for a higher capacity module, locate the locking latches at each side of the socket. Pull these locking latches outwards. This will allow the socket and module to pop up

to an angle of about 20 degrees. You can then slide the module out of the SODIMM socket.



6. Hold the new module at the same angle as the socket and slide the edge connector side of the module into the socket. The edge connector has a cut-out and the socket has a notch so that it can only be installed in the correct way. Press the module into the socket until you can no longer see the gold-teeth of the edge connector.



7. Press the module down into the memory compartment so that the locking latches on either side of the socket engage, and hold the card down flat inside the compartment.
8. Replace the memory compartment cover and secure it with the locking screw.

9. Reconnect the AC adapter and/or replace the internal battery. Restart your notebook. When the system POST (power on selftest) appears, you can verify that the system has automatically recognized the new memory configuration.

Optional Fax/Modem

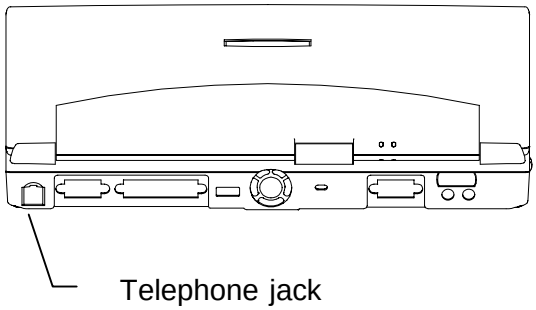
This notebook can be optionally installed with a fax/voice/data/modem. The modem can transmit data at up to 56Kbps. It also supports full-duplex voice transmission.

> ***Note:*** *The fax/modem is optional and may be not pre-installed in your system. The fax/modem may not be available in some countries due to local regulations on the use of telephone equipment.*

The fax/modem can be an invaluable tool when you take your notebook on the road. With appropriate software installed, you can use your notebook as a speakerphone or an answering machine. You can make a remote connection to your office computer or Local Area Network. Using the Internet, you can send and receive E-mail, and use the World Wide Web to gather data and resources.

Using the Fax/modem

The fax/modem is an internal module that can be easily installed and/or removed from the bottom of the notebook. You connect the fax/modem through the telephone (RJ11) jack on the rear-side of the computer.



Use a modem cable to connect the notebook to a wall telephone outlet. Or you can disconnect the cable from a telephone, and connect it to your notebook temporarily.

Fax/Modem Software

To make full use of the fax/modem, you should install a good communications program that supports voice, fax, and data modem transmissions. However you can get useful communications capabilities by using the communications features that are supplied with the Windows operating system.

Faxing

Your modem can allow the computer to send and receive faxes. Any Windows application, which has a print command, can be used to generate faxes. 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 as you would to your printer.

Modem Communications

If you purchased the modem, you can use it to connect to other computers with a modem, or to log into networks that allow modem access. Your modem, if purchased, 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 the Windows operating system.

You should always try to connect at the highest rate of connection available. Your modem will automatically negotiate the connection and establish the actual rate of transmission of information.

To connect to anything with your modem, you will usually need to sign on with some provider or dial-in to another computer already set to receive such connections. Since such electronic connections are an important resource for computer users, Windows comes with its own software for making such connections, as well as with software from some other major service providers.

You can also use your modem in conjunction with financial software to perform your banking and pay your bills electronically.

Keep in mind that your modem is a phone, but unlike other phones, it is very sensitive to noise. If you find that your modem has a lot of disconnect problems, you might see if you can reduce the noise in your phone lines.

Internet and the World Wide Web

One of the most useful functions of your modem is to allow you to connect to the Internet or to browse the World Wide Web. The Internet is not a network, but a vast interconnection of networks. The Internet provides a connection to the world. You can send messages to anywhere on Earth. You can log-in and use library catalogues. World Wide Web browsers, such as the Microsoft Internet Explorer browser built into Windows, allow you to have access to text, images, sound and video stored on the Internet. To enter the Internet, you will need to log your computer into one of these networks.