

XP5 Manual

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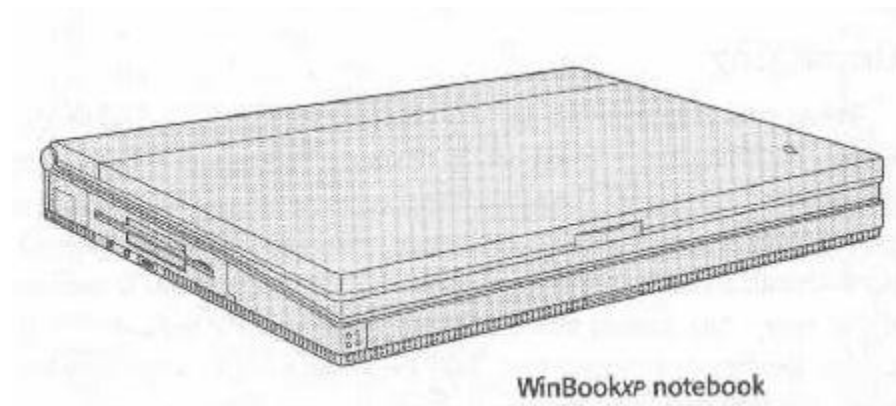
Chapter One: The Guided Tour

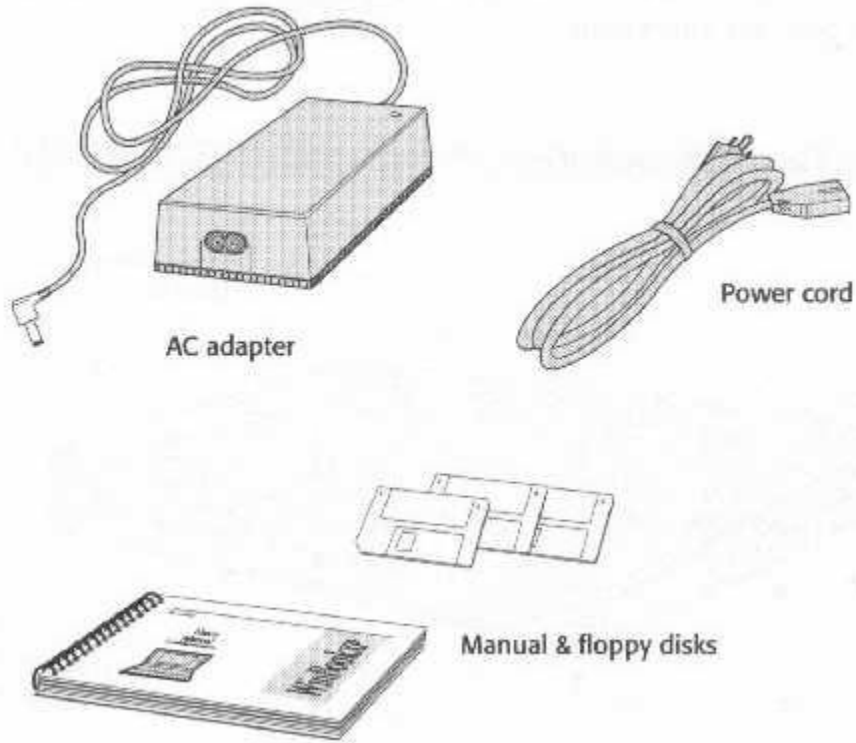
This chapter contains everything you need to get started using your WinBookXP5. Take a look at it before you go racing for the power switch and we'll save you a little time. We'll go over what you'll pull out of the box, what everything is, and how to connect things so you can be up and running in no time. You can use your WinBookXP5 right out of the box after you do just a few things, so, here we go.

Unpacking

When you open your WinBookXP5 shipping carton you'll find several items - including this manual, which of course you looked at before you did anything else, right? The rest of the goodies are all carefully packed to protect them during shipping - and reshipping - so go easy on the packing materials in the box and don't throw anything away. You'll need the whole setup later should you ever need to ship your computer for upgrades, service, or anything else. Take everything out to make sure that what should have come with the computer is there. There's a quick visual guide on the next pages, for you to refer to. In addition to the computer and its AC adapter and power cords, if you purchased a WinBook model with software pre-installed, you will also receive the software disks and manuals. Once you're sure everything's there, go ahead and take a look at the computer. If anything is missing, contact the number listed on the "Read-me-first" sheet which is packed with the WinBookXP5. This sheet has the information you'll need to contact your Customer Service representative for your version of the WinBookXP5.[XP5 1-1]

When you unpack your computer
you should find the things shown
on these two pages.





* WinBookxp5 notebook computer [NIMH or Lithium Ion battery installed - see note on Pg. 71

AC adapter

Power cord

PS/2 port duplex adapter

This manual

PCMCIA Reference Manual

Utility floppy disks

Additional floppy disks and manuals for sound card and fax modem options, if installed

A Walk Around The Block

Now that you've got everything unpacked, let's take a quick look at where things are on the exterior of the computer. The following illustrations point out what's what.

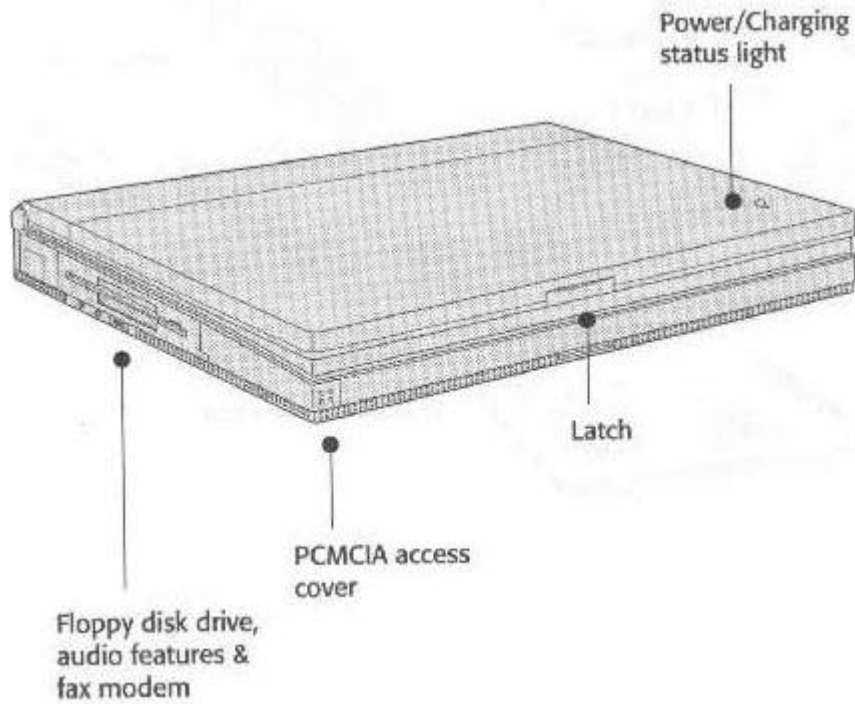


Figure 2: Front-left View

Don't plug the notebook in yet!

See page 1-7 about preparing the battery first

[XP5 1-4]

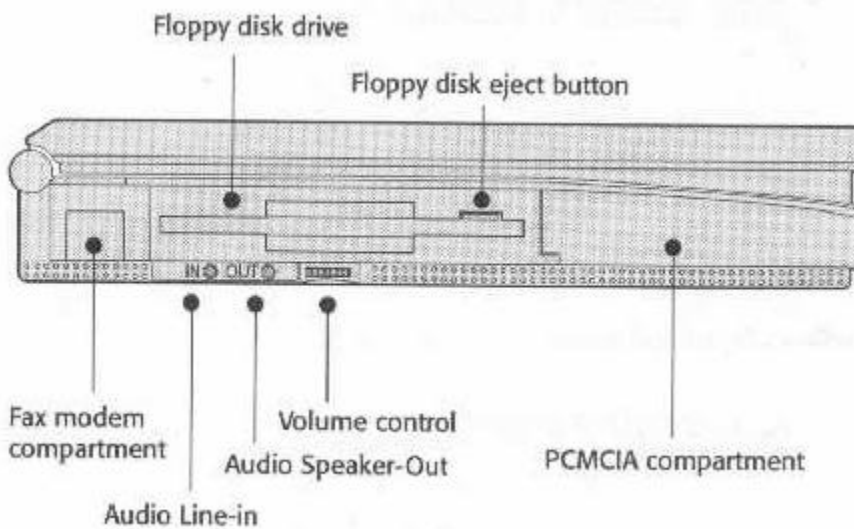


Figure 3: Left View Close-up

The floppy disk drive has an eject button. The button pops out when you put a disk in the drive. Push it in to eject the disk. When the drive is active, the activity icon on the LCD status panel flashes. The audio connectors and volume control work with the optional audio card. The fax modem port is covered by a small panel that slides out from the bottom.

[XP5 1-5]

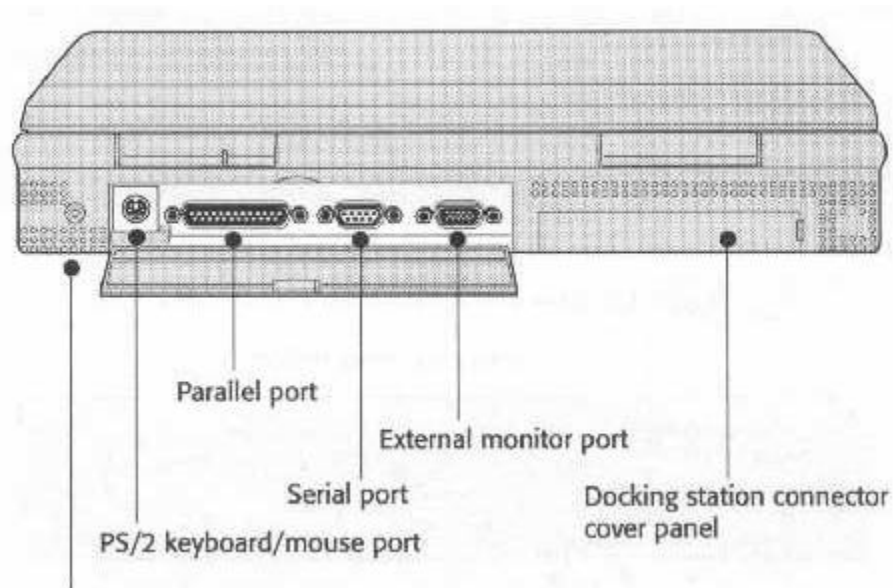


Figure 4: Rear View

The rear ports are covered by a hinged access panel that drops down. The Docking Station connector has a removable cover that pulls off.

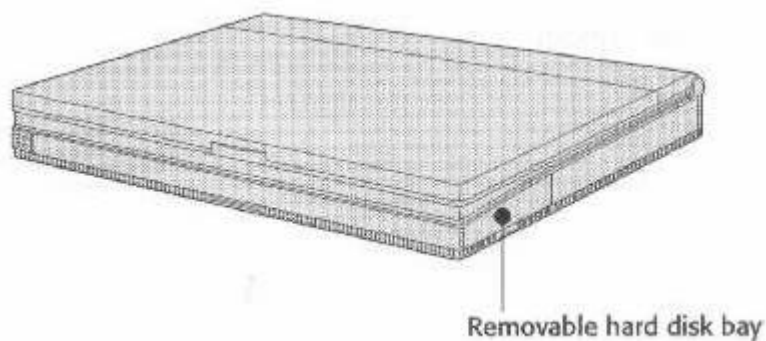


Figure 5: Right Side View

[XP5 1-6]

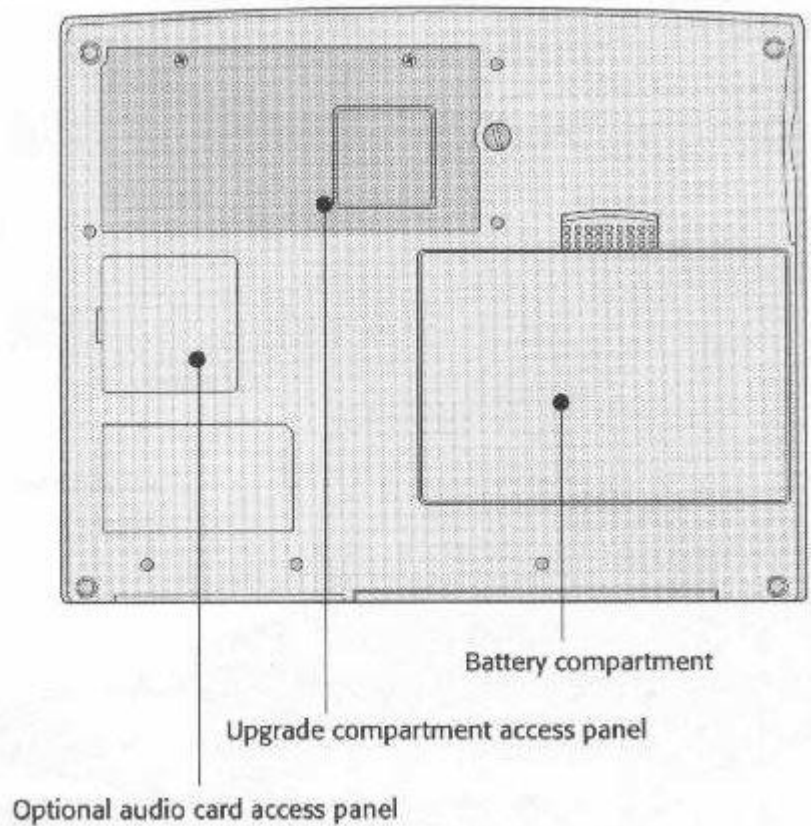


Figure 6: Underside View

The battery, audio card, and memory compartments are on the underside of the computer. For more information, see Chapter 4 regarding the audio card and Chapter 5 about memory and hard disk upgrades.

[XP5 1-7]

The WinBookxP5 opens like most other notebook computers; there's a hinge at the back edge and a latch at the front. Push in on the latch release bar at the front and raise the top half. The following illustrations show where things are.

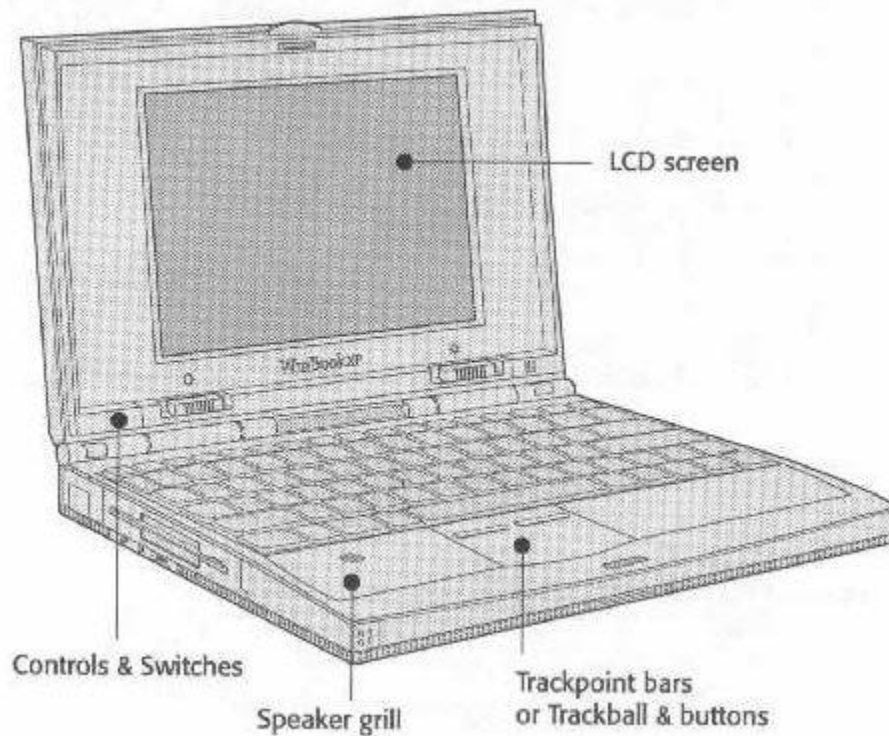


Figure 7: Open View

If you have the trackball model of the WinBook, the panel with the TrackPoint bars in this illustration is replaced by the trackball/button assembly shown below. The buttons function as the left and right buttons of a Microsoft-compatible mouse.

If you have the TouchPad model of the WinBook, the panel with the TrackPoint bars in this illustration is replaced by a TouchPad/button assembly. The bars function as the left and right buttons of a Microsoft-compatible mouse.

[XP5 1-8]

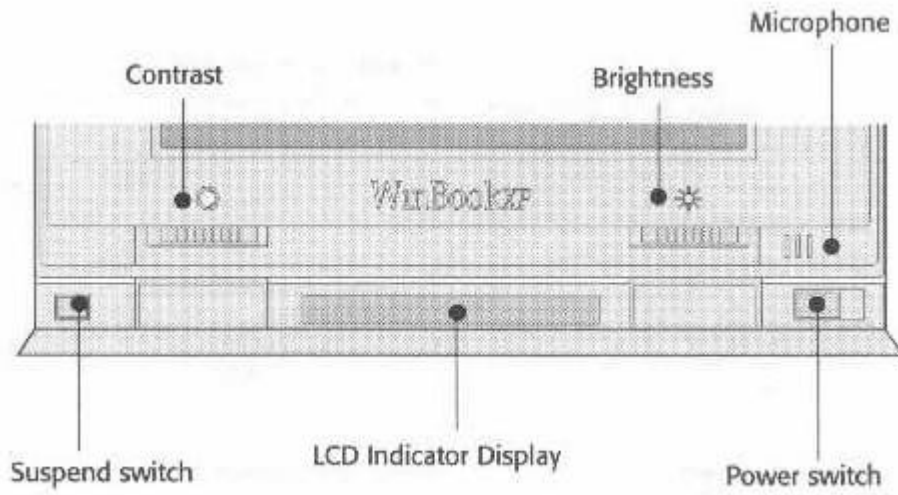
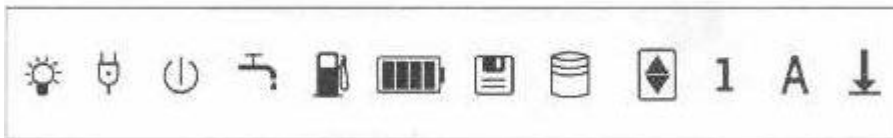


Figure 8: Hardware Controls and indicators



[XP5 1-9]



Power on

Indicates the computer is turned on, using either AC or battery.



AC adapter connected

Indicates the computer is connected to an AC power source.



Suspend state activated

Indicates the computer is in Suspend-to-RAM mode.



Power Management

Indicates power management is enabled on the Power Management Setup page of the Setup program.



Battery charging

Indicates the battery is in the process of charging.



The Battery Gauge

Four bars and the cap show the charge level. With AC adapter connected, it indicates charge progress. Running on battery power, it indicates the remaining charge.

[XP5 1-10]



Floppy disk drive active
Flashes when the floppy drive is in being accessed.



Hard disk drive active
Flashes when the hard drive is in being accessed.



PCMCIA indicator
Arrows show PCMCIA slots in use. Arrows indicate upper and lower slots. Only the bottom arrow displays for Type 3 cards.



Num Lock
Indicates the embedded numeric keypad is turned on. Press the 'Num Lock' key once to turn it off.



Caps Lock
Indicates that caps lock is active. Press the 'Caps Lock' key once to turn it off.



Scroll Lock
Indicates that scroll lock is turned on. Press Fn and the Insert/ScrLk key to turn it off.

[XP5 1-11]

The AC Adapter

The AC adapter converts the alternating electrical current from your wall outlet to the direct current the computer uses. There is a cord permanently attached to the adapter, with a connector jack that plugs into the computer. A power cord comes with the adapter. One end is designed to plug into the adapter; the other is a standard plug for your wall outlet or power strip. We recommend using a surge protector. The AC adapter is not designed to protect the computer from power spikes and surges. Use a surge protector to protect against power fluctuations.

You can use the AC adapter with any AC source from 90 to 260 Volts and 50 to 60 Hz. It is an auto-switching adapter; with the proper plug adapters you can use it anywhere that the electricity falls within these electrical specifications.

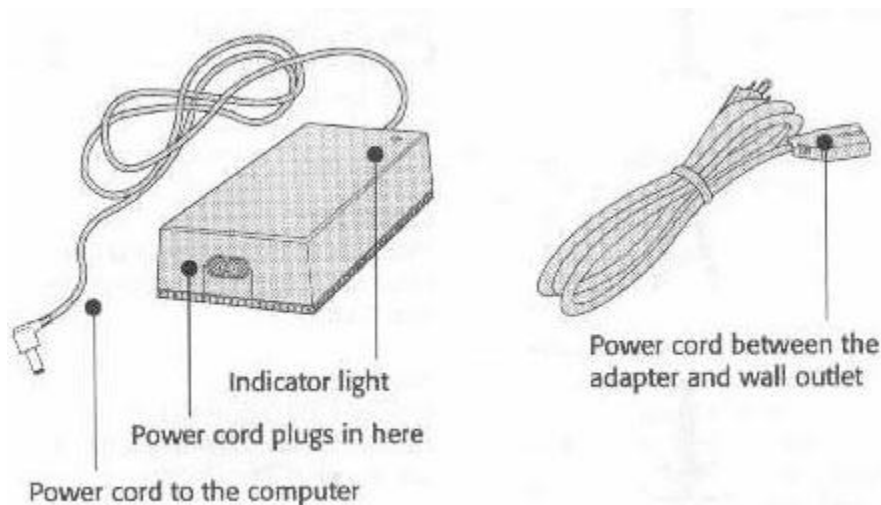


Figure 10: Adapter and Power Cord

The adapter power light should come on when you connect the adapter to an AC power source. If the light doesn't come on, there's either a problem with the adapter or the power outlet.

[XP5 1-12]

Ready To Go

Now you're ready to start using the computer. This section covers how to charge the battery, use the computer controls, including keyboard commands, and the software configuration.

First Step - Charge The Battery

When you get your system, the removable battery pack is already installed in the computer. We strongly recommend that you charge the battery before you use the computer the first time. Although the battery is conditioned at the factory, both battery options (NIMH and Lithium Ion) perform best if you fully charge them before you use them. You may need to run through 2 to 3 charge/ discharge cycles to condition the battery to work at its full potential if it has not been charged for a long time. We recommend the following procedure:

Connect the AC adapter to the computer.

Charge the battery for two to three hours with the computer off, until the top cover status light stops blinking.

You can charge the battery while you are using the computer on AC power, but it will take much

longer, and you must make sure to fully charge the battery the first time. The easiest way to do it is just to charge the battery first before you use the computer. [XP5 1-13]

Hit The Switch

Turn on the computer by sliding the power switch to the right. Some icons on the indicator panel will light or flash as the system powers up.

What You'll See

When the system starts up, some text appears on the screen while the computer tests itself. When the test is done, Windows will load automatically, after which you should see the standard Windows desktop.

If you purchased your WinBook without software, the system will report 'Missing Operating System when you turn on the computer. Please refer to the special instructions included with models without software for information about how to proceed.

If There's A Problem

It's not likely, but in the event that you encounter a problem when you turn the computer on, the solution will probably be relatively simple. There are a few suggestions here of what to look for. If these aren't enough, refer to the Troubleshooting section in Appendix A to see if you can work out what the problem is. If you can't solve the problem alone, contact the number listed in the "Read-me-first" sheet which came with the system.

When you turn the computer on, it does two things. It checks itself (the Power-On Self Test) and then loads Windows. You can interrupt as it is loading by pressing the F8 key. This will produce a list of start-up options from which you can choose.

If the computer doesn't complete the process and successfully load Windows, or you get error messages, try turning the computer off then on again to see if the problem clears up. Also, check to make sure the screen contrast and brightness controls are adjusted so you can see the screen clearly. If you're using the AC adapter, make sure the connections in the chain from the electrical outlet to the computer are secure. If you're using battery power, make sure the battery is charged.

And remember, at this point you should already have fully charged the battery for at least two to three hours.

[XP5 1-14]

Pointing Devices

A mouse is the pointing device most people are familiar with. The WinBookXP5 has alternate devices which perform the same function. It comes with a TrackPoint pointing stick as the

standard configuration. A Trackball or TouchPad are available as options. In the standard configuration, there is a TrackPoint pointing stick in the center of the keyboard and two "mouse" buttons mounted in the center of the palm rest. If you also have one of the options, there will either be a Trackball or TouchPad and buttons installed in the center of the palm rest. You can configure the pointing devices via the mouse icon in the Windows Control Panel. Click on the Windows 'Start' button and then point through the hierarchal menus to 'Settings' then 'Control Panel'. The Control Panel will open. Click on the 'Mouse' icon to display the pointing device configuration options.

Trackball Use

You control the trackball by rolling the ball around to direct the movement of the cursor on the screen. Use the two buttons as the left and right mouse buttons.

Using the TrackPoint

To use the TrackPoint control stick, direct the mouse cursor by gently pressing the stick in the direction you want the cursor to go. It doesn't require much force. The two buttons in the center of the palm rest are equivalent to the left and right mouse buttons.

The TrackPoint has a replaceable rubber cover. You get spares with the computer so you can replace the cover if it wears out or if you want to use a black cover instead of the standard red one.[XP5 1-15]

The Keyboard

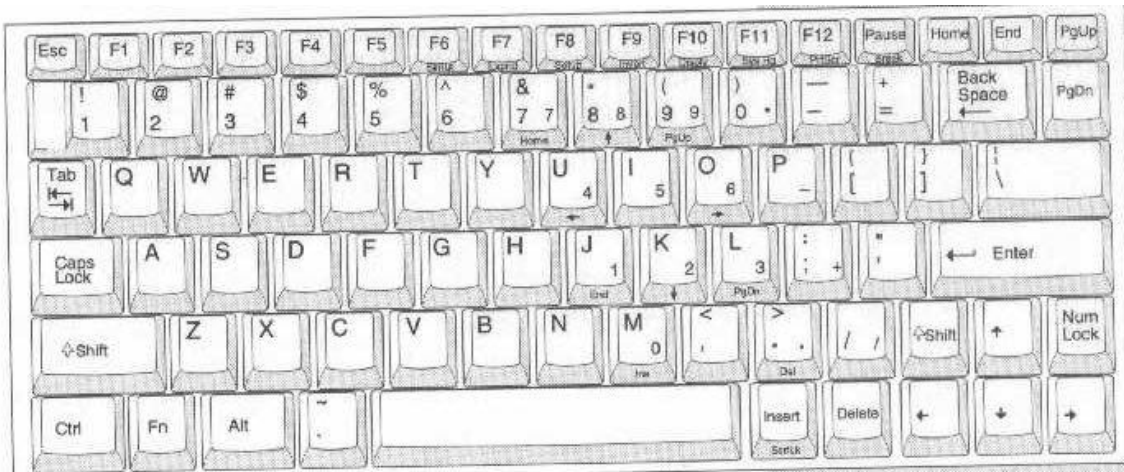
The keyboard has all the standard computer typing and control keys. It also has a numeric keypad and some other key functions "embedded." The standard letter, number and symbol keys are printed in white on the key-tops. The computer control and cursor keys are printed in yellow. The embedded keys are printed in gray or teal.

The embedded numeric keypad characters are printed in gray on the lower right-hand corner and the front of the keys used. They reproduce the functions of the numeric keypad on an IBM 101-type keyboard, which has a dedicated keypad. To use the embedded keypad, turn on Number Lock by pressing the 'Num Lock' key once. With Num Lock on, the numeric keys are active. If you hold down either Shift key as well, the keypad cursor control functions, printed in gray on the front of the keys, are activated.

There are also some additional Fn-key activated functions printed in Teal on the front of some keys. These include screen controls and a key to call up the power management setup screen.

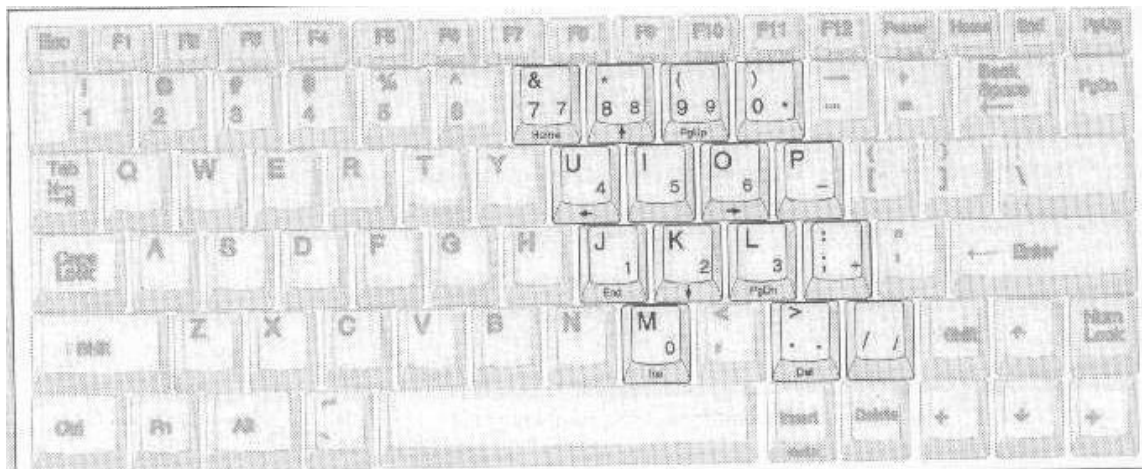
The following figures show the keyboard layout and which keys are used by the embedded keypad. There is more information on specific key functions in Appendix B.

[XP5 1-16]



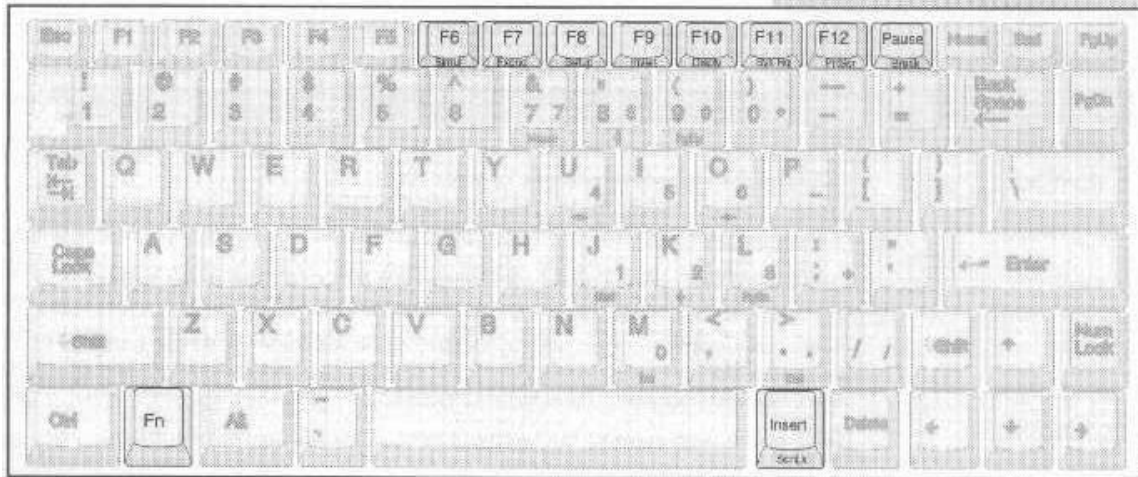
Key Color Coding Scheme

Color	Function
White characters	Standard typing keys
Yellow characters	Computer & cursor control keys
Gray characters	Embedded keypad keys
Teal characters	Special computer functions activated by the Fn key



Key Combination Effects – Embedded Keypad

Status	Effect
NumLock On	Gray numeric keys active
Shift pressed	Gray cursor control keys active
NumLock Off + Fn	Gray cursor control keys active



Key Combination Effects – Special Functions	
Status	Effect
Fn key pressed	Special functions printed in teal on key fronts are active

So Now What?

Now you're up and running and you can start using your computer. Let's briefly go over the software that came with your system. If you purchased your WinBook with pre-loaded system software, the hard disk has already been set up and all the software installed. If you purchased a model without pre-loaded system software, refer to the 'Read-me-first' setup and initialization guide for further instructions.

The Software You Get

Most WinBookXP5 systems come with pre-loaded software, including Windows, configured so that you can start using them right away. You don't have to do anything unless you need to change the configuration, so you can install whatever application software you plan to use right away. We recommend backing up the hard disk first, so that if the software installation gets corrupted, you can restore the original configuration. You do get the floppy disks for all the software installed on the hard disk, so you could reinstall from master disk copies. Backing up, however, is preferable to doing a generic installation from the software floppies because you don't have to re-configure the system.

Windows comes with a back-up utility you can use to backup your hard disk onto floppy disks. To access the backup program, click on the 'Start' button and then point through the menu hierarchy. Point at 'Programs' and a submenu will pop up. Point at 'Accessories' and another submenu will appear. Point at 'System Tools' and then click on 'Backup' in the submenu that appears to run the Backup utility. The program has Help files that explain how to use it.

[XP5 1-21]

Windows display drivers for your WinBook are already installed and there are also display drivers for various DOS programs installed in subdirectories on the hard disk. Video display drivers are explained in more detail in Chapter 6.

You can use PCMCIA cards under Windows, which includes the necessary support software. You may need to update your system configuration for some cards. If this is necessary, you will need your Windows system disks, so you should probably check any cards you will use. To use a PCMCIA card in a Windows DOS session, you need to have any necessary software configured in a CONFIG.SYS file so that it will load when you start the DOS session. For more information, you should refer to the PCMCIA Card Reference Guide that comes with your computer.

If you purchased either the audio card or fax modem option, their software and manuals are packed with them. If you specified either of these options when you got your computer, the hardware will already be installed and the software installed on the hard disk drive. If you got them separately you will need to install everything yourself. Refer to the manuals that come with them for instructions on how to install the hardware and software. The audio card comes with Windows sound drivers and utility software. The fax modem comes with WinFax Lite. There is more information about these options in Chapter 4.

[XP5 1-22]

Installing More Software

To install applications or utility software, follow the instructions that come with the software. Most Windows programs install from within Windows. Install DOS programs from the MS-DOS mode command line. Many programs have "Install" or "Setup" utility programs that explain in detail how to install the program and often allow you to customize the installation according to your preferences, or by selecting which parts to install.

Some Windows and DOS programs request information about your System hardware during the installation process. Refer to the specifications below for information you're likely to need.

Hardware Specifications for Installing Software

Hardware	Specifications
Audio	I/O Port 220-22F DMA Channel 1 IRQ 5 or 7 (set in the System Setup; default is IRQ7) (SoundBlaster compatible)
PCMCIA	Vadem VG-468 chip
Mouse	Logitech PS/2 pointing device
Floppy disk	3.5" High density floppy (1.44MB)
Display	VGA, 640 x 480 resolution, 256 colors

[XP5 1-23]

[XP5 Chapter 2](#)

Chapter 2: On The Road

This section covers running your computer on battery power, using the power management features, and some general precautions you should take when using your computer on the road.

Battery Operation

The battery pack inserts in the underside of the computer, and is already installed when you get it. The pack is a set of batteries encased in a plastic shell, the bottom of which forms part of the bottom of the computer. This section explains how to charge and exchange the battery, and contains information on operating the computer on battery power.

Charging The Battery

You must charge the battery completely the first time you use it. This is explained in Chapter One, so please go back and refer to that explanation if you missed it. Before you start, don't forget to remove the protective insert in the battery compartment. The NIMH battery takes two and a half hours and the Lithium Ion battery about three hours to charge with the computer turned off, and charging stops automatically when the battery is fully charged. The battery gauge will show full when you first turn on the computer after having charged the battery.

[XP5 2-1]

Normally, you should try to charge the battery when you aren't using the computer. When you use the computer with the AC adapter, the battery charges automatically. You can charge it while the computer is turned on, but it can take as much as five hours to charge completely. The charge icon will display in the LCD status bar while the battery is charging. After the battery is fully charged and the charge icon goes out, the charger still provides a small amount of current to the battery, so that as you use the computer, the battery stays fully charged.

Changing the Battery

If you buy an extra battery, you can replace the installed one when it runs out, and recharge it later. To remove the battery pack, turn off the computer and unplug the AC adapter. Turn the computer over and slide the retaining latch away from the battery pack. The battery will pop up and you can pull it out. Put the replacement battery in the way the original came out. Make sure the latch secures the battery in place so it won't fall out when you turn the computer right-side up.

If you are using a replacement battery for the first time, make sure you charge it fully, just you did the original battery when you first got the computer. You can refer to Chapter One for a reminder of the details.

The Battery Gauge

When you run the computer on battery power, the battery gauge displays the amount of charge left. It's best to recharge the battery when the gauge reaches the last bar.

If you charge the battery while the computer is turned on, the battery gauge will not display

while charging is in progress. When the battery is fully charged, the entire icon will come on.

[XP5 2-2]

Battery Operation - What You Can Expect

The amount of time you can operate the computer on battery power will vary considerably depending on your work habits, your software, and your use of the power management features. The WinBook has a power management scheme that, if used effectively, will greatly increase the amount of operating time you can expect from one charge.

In general, any program that makes extensive use of the disk drives will use more power. Even Windows can be a power-drain if you use too many programs at the same time, so it is better to only run programs you are actively using.

Another influential factor is the hardware configuration of the model you purchased. Power consumption will depend on which LCD screen and CPU you have, and whether you have the optional audio card and fax modem installed. A dual-scan color screen uses the least power, while TFT color screens use substantially more. Likewise, the faster your CPU, the more power it will use at full speed. Adding either fax or audio options also adds to the overall load.

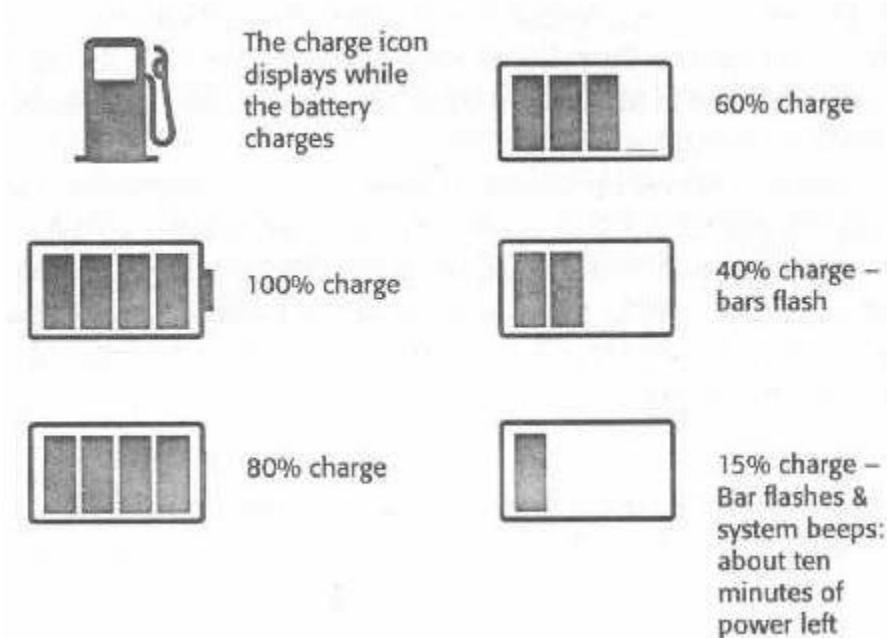
From all of this you can see that it's something of a problem to arrive at a useful figure for how long one battery charge will last, but we'll do it anyway. If you're an average user, you'll probably have the power management default settings active, be using the hard disk 50% of the time, and be using the display 80% of the time. These figures are typical for word processing work.

If that is the case, you can probably expect one charge to give you three to four hours for dual-scan color, and two to three hours for an active matrix color (TFT) screen. You can expect about 30% less than these figures if you are using the NIMH battery.

[XP5 2-3]

From this, by the way, you can see that the LCD type is the most influential factor. If your normal computer use exceeds the averages assumed, you are likely to get less from one battery charge than the figures listed here. However, if you are careful to conserve power, you can expect one charge to last longer.

The battery gauge in the LCD status panel indicates approximately how much charge is left in the battery.



[XP5 2-4]

Power Management

Power management can be divided into two categories, the part the computer manages and the part you take care of. First we'll take a look at how the computer's end of it works and then look at what you can do.

Setting Up Power Management

The WinBook uses power management software permanently stored in the computer to conserve power in a variety of ways. You use Page 2, Power Management Setup, of the system Setup program to set up the power management features. We'll explain how to use Page 2 in this section. For information on how to use the other two Setup pages, refer to Chapter Six.

The basic idea behind power management is to reduce the time the system's most power-consuming devices operate at full power. This is accomplished in several ways. The hard disk drive, the LCD display panel and its backlight, and the microprocessor (CPU) consume the most power of any components in the computer. The floppy disk drive also uses a lot of power, but since it isn't generally in constant use, and you have more control over it, we won't consider it here. The innards of the computer use power in a variety of ways, too.

The power management scheme automatically reduces power consumption of major components when they are not actively in use. This means, for instance, that the CPU will slow down or suspend processing temporarily, or the hard disk drive will stop spinning for a while. They then return to full activity when needed.

[XP5 2-5]

You can call up the Power Management screen in two ways. In DOS sessions, you can run System Setup by holding down the 'CTRL' and 'ALT' keys and typing an 'S'. This brings up Page 1, Standard Setup. Then press the 'PgDn' key to switch from Page 1 to Page 2, Power Management Setup. You can also type 'enter system setup' before Windows loads when the system is booting or from the 'F8' Windows boot option screen.

You can access the Power Management Setup screen (only) at any time under DOS or Windows. When you use the "Setup" 'Fn' + 'F8' command, the Power Management Setup screen will appear. You can use this command to tailor your power management settings on-the-fly without having to leave Windows or re-boot the computer. When you're finished, you can exit Power Management Setup and return to where you left off by pressing the 'Esc' and then the 'F4' key. In this situation, the system will Resume, rather than reboot, as it would if you were running a System Setup session.

There are sixteen items in the Power Management screen. We'll explain them here in order, then talk about how to configure the options to produce either more power savings or faster performance. For average users, the WinBook default power management settings should provide a good trade-off between snappy performance and long battery life.

The power management scheme allows you to configure each feature independently. You can set the interval of time after which a feature will activate for many of the items. The following chart lists the items on the Power Management screen. We've shown a chart here rather than the screen, because the chart allows us to show you all the options for each field, rather than just one. There are instructions at the bottom of the Setup screen explaining how to navigate within the program.

[XP5 2-6]

Power Management

This line is the master switch for all the power management features. You have to enable power management here for any of the features to work. There are three options for this feature. "Always" enables power management while you're using either battery or AC power. "Battery only" means power management will only be active if you're running the computer on battery power. The third option is to disable power management.

If you enable power management, you can load default settings for all items by pressing the 'Esc' and then the 'F5' key.

Note: If you accessed Power Management Setup only, by using the 'Fn' + 'F8' key command, when you press 'F5', it will load only the defaults for Power Management. If, however, you accessed the entire Setup program using the 'CTRL' + 'ALT' + 'S' command, then 'F5' will load the system defaults for all the Setup program pages.

CPU DOZE TIMEOUT

This is an automatic timeout. With this feature enabled, the CPU will automatically switch speeds to lower power-demand speeds after 30ms of system inactivity. In practice, this means the CPU is conserving power a large part of the time you are using the computer, since the interval is short enough for the CPU to enter this mode even between keystrokes.

Sleep Timeout

This sets the interval of time after which the system will enter "Sleep" mode. The default setting is "02 minutes." You can change the interval in one minute increments. You can also disable this feature.

[XP5 2-8]

Sleep mode shuts the CPU down to its minimum power consumption state, where it consumes almost no power. The CPU will resume full speed operation as soon as any system activity takes place.

Suspend Timeout

This sets the interval of time after which the system will enter Suspend mode. The default setting is "Disabled." You can change the interval in one minute increments. You can also disable this feature.

The Suspend feature has two modes, Suspend to RAM and Suspend to Disk. They are explained in the next item. If you have activated the suspend timeout option and selected Suspend-to-RAM, the system will automatically suspend to RAM after the timeout period. If, however, you have selected Suspend-to-Disk, the system will automatically suspend to disk after the timeout period.

Suspend Data To

This assigns which method is used when the system enters the Suspend mode. The default setting is "RAM." The alternate settings are "DISK" and "Disabled." The system will not suspend automatically if the Suspend Timeout field is set to "Disabled." You can use the Suspend button to put the system into the selected suspend mode at any time.

The Suspend feature saves the current system state using the method selected. It does this under both Windows and DOS. You can then "Re-

[XP5 2-9]

sume" to the exact state the system was in when it was suspended, and continue working. The two Suspend methods are sufficiently different that you can almost think of them as two different features.

Suspend-to-RAM is quick and simple and allows almost instant Suspend /Resume. It does, however, continue to consume power, although significantly less than the Doze or Sleep modes. You can use it to minimize power consumption when you take even a short break from actively using the computer. If you get in the habit of suspending the system whenever possible, you will greatly extend the usable length of one battery charge. This feature also works with the automatic Modem Ring and Alarm Resume features described later in this section.

Suspend-to-Disk is a bit more complicated and not as fast as Suspend-to-RAM, since the system information must be written to the hard drive. The advantage is that you can save the system state for an unlimited period, without using any battery power. The system state and your data are stored in a dedicated hard disk partition, separate from the main partition used by the rest of the computer. Setting up this feature requires using a utility program, PHDisk, that comes with your computer. We've detailed its use in a section in Appendix B.

nce you've set up the special partition, and enabled Suspend-to-Disk in the Power Management Setup, the rest is easy. When you want to suspend, simply press the suspend switch and the system will save the system state to disk. Note that this takes time - how long is determined by the amount of RAM memory you have in your WinBook. After the data is stored on disk, the computer will automatically turn itself off. You can

[XP5 2-10]

restart later either by pressing the Suspend button or by pushing the On/ Off switch to OFF, and then ON. You can also leave the computer turned off until the next time you use it, when it will start from the suspended state rather than the usual start-up.

Hard Disk Timeout

This sets the interval of hard disk inactivity after which the hard disk drive motor will turn off. The default setting is "02 minutes." You can change the interval in one-minute increments. You can also disable this feature.

The hard disk timeout will save power, but it reduces performance because it delays access after the hard disk has powered down. When disk access is required, the drive motor has to restart, so there is a delay of about ten seconds before the disk is available again.

Display Timeout

This sets the interval of system inactivity after which the LCD screen will turn off. The default setting is "02 minutes." You can change the interval in one-minute increments. You can also disable this feature.

Unlike the hard disk timeout, where you must wait for the drive to ,spin up,' the LCD will come back on instantly when there is any system activity. Refer also to the Auto Dim feature described later.

FDD Timeout

This sets the interval of floppy disk inactivity after which the floppy disk controller shuts down. The default setting is "02 minutes." You can

[XP5 2-11]

change the interval in one-minute increments. You can also disable this feature.

This feature, used in concert with the other features similar to it, helps maximize overall power conservation. There is no noticeable performance disadvantage when you enable the floppy

timeout option.

Modem Timeout

Fax modems - whether built-in, or on a PCMCIA card - use a lot of power, even when they're not in use. For the internal fax modem, we have provided an inactivity timeout that significantly reduces power-consump_ tion when it powers down the modem. The modem will automatically restart when your communications software accesses it, so you should use this feature. If you're like most people, you'll use the fax modem infrequently, so you can increase battery life by leaving the default setting at "60 seconds." You can change the interval in ten-second increments. You can disable this feature, but you will barely notice any effect on modem performance with the option enabled.

You should note that some communications software written in the days before power management or portable computers were available cannot tolerate timeouts like this. If you have software with this problem, don't use this feature while you're running the software. Also, if you use your modem for file transfers - for example, downloading files from a BBS try disabling this feature if you experience communication problems. If the problem clears up, leave the timeout disabled.

Audio Timeout

This sets the interval of inactivity after which the optional audio card will enter low-power mode. The default setting is "02 minutes." You can

[XP5 2-12]

change the interval in one-minute increments. You can also disable this feature.

Normally you will want to use this, but you could possibly experience audio problems with some games and multimedia programs under Windows and DOS. If you have an audio problem while using a program, try disabling this feature. If the problem clears up, leave this disabled while you're using that program.

Auto Dim

The default setting for this is "Enabled." When enabled, and the computer is operating on battery power, at maximum brightness the backlight will be 30% dimmer than its actual maximum intensity. This has the same effect as reducing the screen brightness using the manual control, but it does it automatically, and to a fixed degree. The backlight will automatically operate at full intensity while using AC power with the Auto Dim feature enabled.

CPU Clock Throttle

Clock throttle is a special hardware feature which automatically stops the CPU clock at routine intervals regardless of system activity. Although it decreases CPU performance by about 10%, it results in a 10% power saving. If you want the highest performance possible, disable this feature. If you want to extend battery charge-life, enable it.

[XP5 2-13]

The clock throttle sometimes effects floppy disk drive performance and may, in some instances cause problems with floppy transfers. These problems may occur when formatting or booting from a floppy disk and are very dependent on other system settings and which operating system is in use. For compatibility reasons, we have left the default set to "Disabled". However, if you, like most users, use the floppy drive infrequently, you may want to enable this feature.

Battery Low Suspend

The default setting for this is "Disabled." When enabled, the system will automatically suspend when the battery has about ten minutes of usable operating time left. The system will suspend using the method you have specified in the "Suspend Data to" field.

The purpose of this option is to ensure that you don't lose work, by giving you time to connect the AC adapter while the system is in a minimum power consumption mode. The idea is that once in suspend mode, the remaining time before the battery fails is significantly extended, giving you time to decide what you want to do. If you want to, you can reactivate the system from Suspend-to-RAM by pressing the Suspend button. You will still have enough time to immediately save your work, quit, and turn off the computer.

If you have set the computer to suspend to the hard disk, you won't be able to return to the active system state without first completely suspend-

[XP5 2-14]

ing to disk and then restoring. Restoring the active system state is very disk-intensive and could use up the battery before the system fully restores. Because of this, you should definitely connect the AC adapter before you reactivate the system.

A better approach is to keep your eye on the battery gauge, and recharge or replace the battery before time gets critical. If you don't want to use this feature, leave it disabled.

Modem Ring Resume

When you enable this, the system will automatically 'wake up' (Resume) from Suspend-to-RAM if the fax modem detects an incoming call on the telephone line connected to it. The default setting for this is "Disabled."

Alarm Resume

This works like an alarm clock. When enabled, the system will automatically 'wake up' (Resume) from Suspend-to-RAM at a time you set in the "Alarm Time" field that follows it. The default setting for this is "Disabled."

Alarm Time

This is where you set the alarm for the "Alarm Resume" feature. The time format is 24-hour or "military" time. The alarm will activate and wake up the system at the next point the system clock reaches the time you set.

[XP5 2-15]

This will either be during the same day, or on the next day if the time you set has already passed on the day you set the alarm.

For example, if at the end of the day you want to set your computer to wake up at 8AM the next morning, you would enable "Alarm Resume" and then set the Alarm Time to 08:00. As you can see, you can also use this feature with the AC adapter connected.

To set the time, select either the hour or minute field and use the plus or minus keys to scroll to the setting you want.

Be A Conservationist

At your end, there are many things you can do to extend the usable period of one battery charge. First of all, try to use AC power whenever possible. It may be tempting not to bother, but a little extra effort will leave you with a full battery when you really need it. Otherwise, you should use the power management software. Set it up to match your work habits and preferences. If your habits and preferences don't contribute to conserving power, you can consider adopting habits that do.

[XP5 2-16]

For example, many people use a 'screen saver' nowadays. These are fine for a desktop computer (where they are intended to prevent wear on the desktop monitor) or for when you are using the AC adapter to power the computer, but a screen saver still requires that the LCD screen operate at full power. A better solution for battery operation is to use the setting that turns the LCD off when you don't use the computer for more than two minutes - or whatever length of time you set.

You should also try to minimize the amount you use the floppy disk drive. It consumes a lot of power, and generally speaking, you can probably wait until you have access to AC power before using it.

Care & Handling

Obviously, one of the main points of having a notebook computer is so you can easily carry it around with you. But because it is so easy and convenient to transport, it's easy to forget that any computer is a somewhat delicate piece of electronic equipment and requires some care handling and usage.

Cautionary Notes

Rough Handling

While your WinBook computer is sturdily constructed, it wasn't designed to travel around by itself. WinBook offers a range of carrying case options for your computer. It is a good idea to always transport your WinBook in a case. If you don't use one of WinBook's cases, make sure to put the computer in a safe transport container - which might or might not be your briefcase, depending on its design and contents. If you like a bigger case with more storage space, WinBook offers cases that cover a full range of designs and features.

[XP5 2-17]

The most important thing to remember is, DON'T DROP IT! Sounds silly and obvious to say, doesn't it? Nonetheless, many people still tend to treat their notebook computer as if it could take a lot more punishment than one should reasonably expect. This simple precaution will save you and everyone else a lot of headaches.

A corollary to this is Don't Check It As Luggage. Always carry-on your computer when you fly. We can tell you right now, it quite likely will not come out fine if you put it in that hard shell suitcase. And certainly never check the computer in its carrying case. Commercial baggage handling equipment, and often bag handlers, are not gentle on luggage, so protect your investment.

X-Rays, Metal Detectors and Grief

One of the most common hazards facing your travelling notebook is modern-day security equipment. While the staff at airports and elsewhere will usually assure you that their X-Ray equipment is safe for your computer, it is difficult to be absolutely sure, especially outside the USA. If in doubt, the safest bet is not to put your computer through X-Ray inspections and to ask for a hand inspection. Be prepared for the security staff to ask you to turn the computer on to prove that it works and isn't hiding something. You may not always be able to do this, and many, or even most, X-Ray machines are probably safe. You'll have to make your own appraisal of the risk on a case-by-case basis.

Metal detectors project a powerful magnetic field that can wipe credit and other magnetic cards, and can damage the information on your hard

[XP5 2-18]

disk (they won't hurt the hardware) as well as any PCMCIA memory or storage devices you might have installed in your computer (or your pocket). While you wouldn't normally carry your computer through one in an airport, you might encounter them elsewhere. Never carry or pass your computer through a metal detector. Pass it around the outside of the detector.

Some Common Sense Precautions

Here are a few additional precautions you should take to ensure the long life of your computer. Many computer problems can be traced to sources outside the computer rather than to component malfunction. If you are careful to avoid the things most likely to cause trouble, you are much less likely to experience problems with your WinBook.

Liquids - Computers don't like them. They don't get thirsty, so don't give them anything to drink. If you're like many people who like to work with a beverage around, keep it to yourself and well away from your notebook. It's pretty simple really: if you spill liquid in your computer while it's turned on, you will quite probably either damage it beyond repair or cost yourself a bundle. It's your call.

Temperature - Computers, like you, like to be cool. Don't use yours in high heat and humidity if you can avoid it. And especially do not put your computer someplace where it will be subjected to extreme heat while it's turned off - the seat or shelf of a car in the sun, for example. You know what happens to dogs when you do that.

[XP5 2-19]

In addition, the WinBookXP5 has a thermostatically controlled cooling fan that cools the CPU when the computer is turned on. Make sure you don't block the fan's air vent on the underside of the computer.

Dirt - Computers, particularly notebook computers, are fastidious. They don't like to get dirty (they don't like baths either so don't get ideas.) Don't let dirt or dust build up, or you're asking for at best fitful performance, and more likely, outright malfunction. There are a number of places that will allow dirt and dust and who-knows-what into the computer. The trackball assembly, keyboard, microphone orifice, floppy disk drive, PCMCIA compartment, and audio jacks are all particularly susceptible to contamination. Try to keep the computer in the case (or at least closed) when you aren't using it, and keep your work space clean.

Electricity - It's fickle. It runs through a lot of things in your computer, including things you probably don't know about, so avoid temptation. Except for PCMCIA cards and the AC adapter, never connect or disconnect anything from your WinBook while it is turned on or is in the Suspend-to-RAM state. You may get away with it once in a while, but unless Russian Roulette is your favorite parlor game, err on the side of caution and you won't have to pay for it.

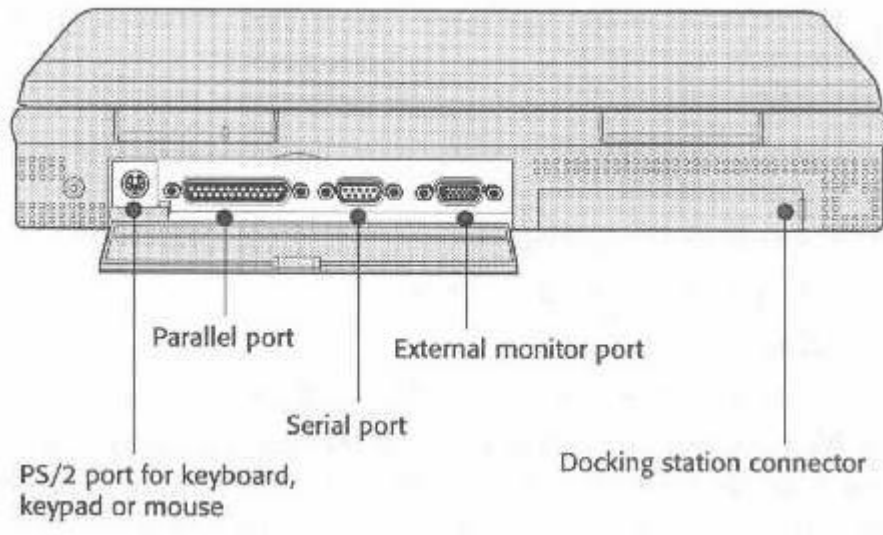
Also, you should always plug the AC adapter into a protected outlet strip rather than directly into an electrical outlet.

[XP5 2-20]

[XP5 Chapter 3](#)

Chapter 3: Desktop Connections

When you use your WinBook at a base location, you're likely to want to connect various peripherals to the computer. This section covers how to do it. The connection ports are shown again below for your reference.



[XP5 3-1]

Connecting Common Peripherals

When you use your WinBook at an office or at home you may want to take advantage of the option to use desktop peripherals. Doing this has two advantages. You may find that a desktop keyboard and monitor are more comfortable for extended use for some kinds of work. In addition, using these whenever you can, along with the AC adapter, will prolong the life of the less easily replaced components built into your WinBook.

Connecting Peripherals - The Basic Procedure

To connect any peripheral device to your computer, you should always follow this basic procedure:

1. Make sure everything is turned off, and better yet, unplugged.
2. Set up the peripheral according to the instructions in the manual that comes with it.
3. Connect the device to the computer with an appropriate cable.
4. Plug in the device and the computer.
5. Turn everything on.
6. Configure the device or other software if required.

Remember, never connect or disconnect anything other than a PCMCIA card from your computer if *anything* is turned on. Turn the power to both the computer and the peripheral device off before you connect them.

[XP5 3-2]

Connecting A Printer

You will most likely use at least a printer with your notebook. You may even have purchased a portable model to take along with the computer. Whatever kind of printer you have, it is almost certainly going to connect to the parallel port. You'll need a standard parallel cable to connect the printer, unless your printer comes with a special cable connector for the end that plugs into the printer. Connect the end of the cable that matches the parallel port on the computer and secure the cable to the computer by tightening the thumbwheels attached to the cable connector.

The standard configuration for the parallel port on the WinBookXP5 is LPT1 at address 378. Refer to section six for more details.

To use a printer, you must configure a printer driver in Windows by using the 'Add Printer' Wizard. To do this, click on the 'Start' button and then point through the hierarchical menus to reach the 'Printers' printer setup window. Point to 'Settings' and then to 'Printers' (or, to 'Control Panel' and then double-click on 'Printers' to bring up the 'Printers' window.) Double-click on the 'Add Printer' icon and follow the 'Add Printer Wizard' instructions. This process is illustrated on the next page.

The WinBookXP5 comes with the HP Laserjet 11 printer driver installed as the default printer driver on the LPT1 port. This should allow you to at least print text for test purposes on most laser printers since most laser printers are compatible with the Laserjet 11. For dot matrix or inkjet printers you must install a different driver. Printer drivers are located on the Windows disks or on a disk that came with the printer. To test the connection, connect the printer to the Printer port, test print some text from the Windows text editor.

[XP5 3-3]

Connecting A Monitor

The on-board video supports a broad range of CRT monitors. You can connect a standard, multifrequency desktop monitor to the external monitor port on the computer. It is a standard 15-pin VGA port. Though the LCD maximum resolution is 640 x 480 x 4096 colors, on an external monitor CRT, it can produce resolutions up to 1024 x 768 x 256 colors. In practice, this means you should be able to use any VGA or Super VGA monitor up to 21" inches with the WinBookXP5, as long as it can support the resolutions the display controller produces. Any standard multifrequency SVGA monitor can do this.

To connect an external monitor do as follows:

- 1.** Turnoff the computer.

- 2.Plug the monitor cable into the VGA port.
- 3.Plug the monitor power cord into a power source.
- 4.Turn on both the monitor and the computer, and run the system Setup and Preferences.

Display Switching

You can switch active displays modes in DOS mode or Windows, by using one of two hot-key commands.

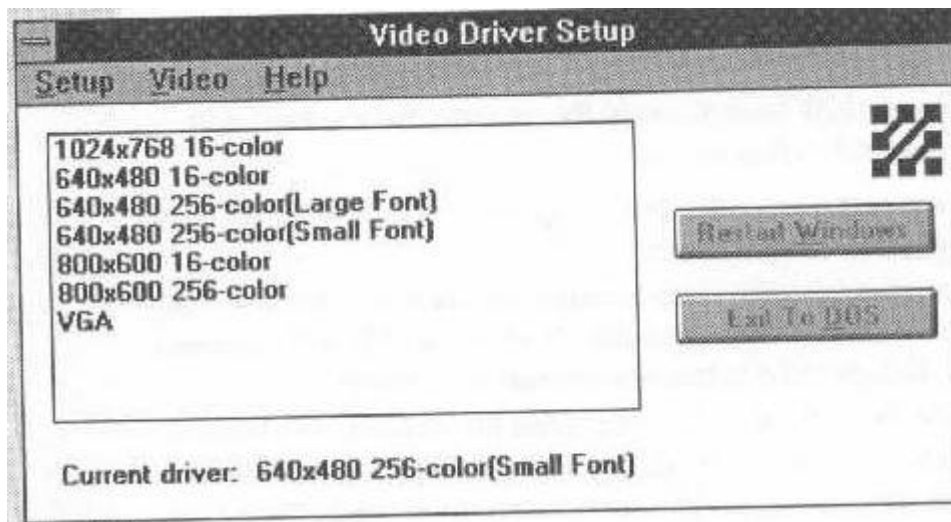
If you want to set the screen image to display on just one screen, use the 'Fn' + 'F10' key command to select between the LCD and the external monitor. The command toggles the selection between the two.

Typing 'Fn' + 'F6' simultaneously turns the Simulscan function on or off. Simulscan displays an image on both the LCD and the external monitor. There are some display limitations in this mode. See the "Video Display Drivers" section at the end of Chapter Six for more information.

[XP5 3-5]

An external monitor will work in standard resolution (640x480x16 color VGA mode) in DOS mode without using a video driver, but you must have a video driver for Windows installed in order for Windows to run.

You can use the pre-installed Windows video driver with an external monitor. Refer to the "Video Display Drivers" section at the end of Chapter Six for more information about video drivers. The default video driver supports the colors and resolutions shown below.



[XP5 3-6]

Connecting An External Keyboard

You can connect a full-size keyboard to the PS/2 mini-DIN keyboard port. Just plug it in and it will work. If your desktop keyboard uses the larger type of connector, get a PC-to-PS / 2 adapter.

You can also plug an external keyboard and a mouse into the PS/ 2 port at the same time by using the PS/ 2 port duplex adapter explained in the mouse section later on.

Connecting An External PS/2 Keypad

Embedded keypads on notebook computers provide a modified keypad, which, although fully functional, is not identical to the IBM 101 keyboard layout, because the keys rows are on a slant. For this reason, several suppliers make PS/ 2 keypads you can use with your notebook. These keypads are ideal for numeric data entry, as they reproduce the familiar layout of the IBM 101 keyboard. You can use this kind of keypad by connecting it to the PS / 2 keyboard / mouse port, as you would an external keyboard. You can connect a keypad with or without the duplex adapter.

[XP5 3-7]

Connecting A Mouse

You can use either a serial or PS/ 2-type Microsoft-compatible mouse with your WinBook. Both will work under Windows or in a DOS session, but, since the computer has a built-in pointing device, you must change system settings if you want to use a serial mouse. The WinBook is shipped with a mouse driver which loads automatically when you turn on the computer. The driver works with most PS/ 2 or serial mice, but you may want to substitute the driver that came with your mouse.

Serial Mouse

We have provided a simple way to allow you to use a serial mouse. Call up the system Setup program using the 'CTRL: + 'ALT' + 'S' key command and select Page 3, the Advanced Setup screen. Select "PS/ 2 Pointing Dev", and set it to "Disabled." Save the configuration and the system will automatically reboot and find the serial mouse.

PS/2 Mouse

To use a PS / 2 mouse, plug it into the PS / 2 port. When you are using a PS / 2 mouse, the WinBook will detect an external PS / 2 mouse is plugged in and switch to it automatically when you turn on the computer. The computer automatically disables the internal pointing device whenever it detects at power-up that an external PS/ 2 mouse is plugged in.

[XP5 3-8]

Using The PS/2 Adapter

If you want to connect both an extended PS / 2 keyboard and a PS / 2 mouse to your WinBook, you must use the duplex adapter supplied with the computer. The adapter has two PS / 2 jacks on

one end and a PS / 2 plug on the other. The upper jack is for the mouse, the lower is for an extended PS/ 2 keyboard. To connect the devices, do as follows:

1. Turn off the computer.
2. Plug the PS/2 mouse into the adapter's upper jack.
3. Plug the PS/2 keyboard into the adapter's lower jack.
4. Plug the adapter into the PS/2 port on the computer.

Never connect or disconnect a mouse or keyboard while the computer is turned on. When you connect a PS/ 2 mouse to the computer, the builtin pointing device(s) will automatically be disabled.

Never connect or disconnect a pointing device or keyboard while the computer is turned on.

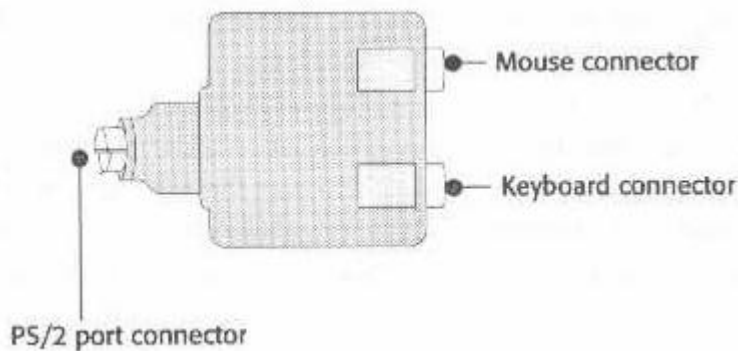


Figure 17: PS/2 Duplex Port Adapter

[XP5 3-9]

The Optional Docking Station

The WinBookXP5 is compatible with the WinBook XP series docking station models D3 and D3i. These docking stations provide a number of expansion capabilities. They have space for two half-height 5 1/4' devices and there are two 16-bit ISA expansion slots in the docking station. The back panel has one AC power port, one parallel port, one serial port, and one external monitor port. There are also connectors for an AT-type keyboard and mouse, as well as audio jacks for the optional sound card.

The manual that comes with the docking station explains how to dock and undock the notebook. You will also find information about using it with other hardware.

Connecting Sound Equipment

The WinBookXP5 has Line In and Speaker Out mini phone jacks on the left-hand side of the

case. You can connect any external audio source that uses a standard mini phone plug to the computer's Line In port. You can plug most any external microphone into the Line In port, including a stereo microphone. You can plug either self-amplified speakers, non-amplified speakers or headphones into the Speaker Out jack.

The system automatically configures itself when the Stereo audio board is installed, provided the audio option is enabled in the Setup program. When you use the built-in speakers, you will get stereo output. External speakers or headphones will receive stereo output. The internal microphone records in mono only.

[XP5 3-10]

Connecting Other Hardware

To connect any other devices that use a standard port, follow the directions that come with the device on how to connect it to your computer. This notebook comes equipped with a number of ports, some of which have additional capabilities.

The parallel port supports both EPP and ECP transfer modes, which significantly increase parallel port transfer speeds. ECP significantly speeds up transfers to one-way parallel devices such as printers. EPP accelerates two-way transfers such as when using pocket LAN adapters or scanners.

The WinBookXP5 also has high performance 16550 serial ports, which provide superior performance, especially within Windows.

[XP5 3-11]

[XP5 Chapter 4](#)

Optional Hardware

This section briefly describes two major WinbookXP5 options you may have gotten with the computer, or may decide to get later on. These are the Fax Modem and the Audio Card. A third section covers PCMCIA card basics. All of these come with their own documentation, so the goal here is to give you an overview.

The Fax Modem

The fax modem option includes the internal fax modem hardware and software to go with it. The fax modem hardware is dual function. It is a 14.4K bps fax with voice capability and also a 14.4K bps data modem. The software includes WinFax Lite, a program that lets you send and receive faxes. Because the WinFax driver installs like a printer driver, the fax capability is available, by selecting the WinFax driver as the active or default printer, to any Windows application that can print.

The fax modem installs in a small compartment at the left rear corner of the computer. If you got your WinBook with it installed, there will be a standard telephone jack at that corner. If you buy the fax modem later, you can install it yourself using the instructions that come with the hardware.

[XP5 4-1]

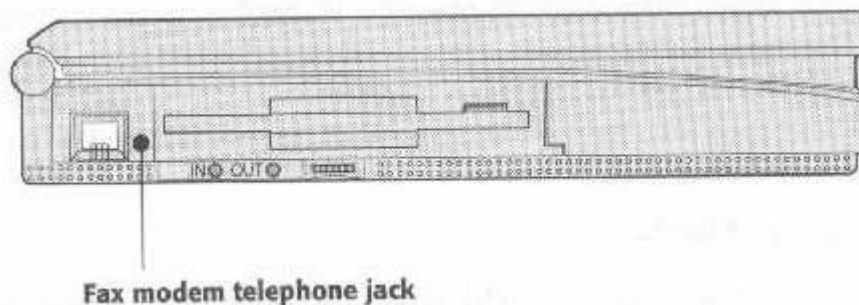


Figure 17: Fax Modem Telephone Jack

All the software that comes with the fax modem comes with its own documentation that explains how to install and use it. We install the software for you when you order the fax modem with your WinBook, so if the fax modem is already installed in your system, you'll find the software for it installed and configured on your hard disk, in addition to the manuals and software disk.

[XP5 4-2]

The Audio Card

The audio card option includes the audio card hardware and software to go with it. The audio card is a 16-bit stereo card. The computer automatically configures its built-in audio hardware

when the card is installed. The internal speakers produce stereo output. External speakers or headphones will receive stereo signals. The built-in microphone records in mono.

The audio software includes the ESS Windows sound programs and drivers. Under DOS, the audio card is Business Audio and Sound Blaster™ compatible, so you can run DOS-based games and multimedia programs.

The audio card installs in a small compartment on the underside of the computer. If you buy the audio card later, you can easily install it yourself using the instructions that come with the hardware.

Audio cards can enhance:

- **Presentations**
- **Game audio**
- **CD-ROM soundtracks**
- **System sounds**

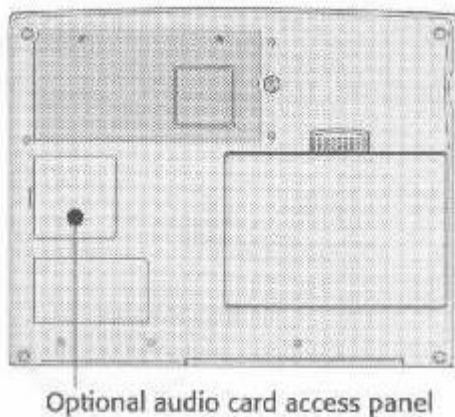


Figure 18: Audio Upgrade Compartment Access

[XP5 4-3]

All the software that comes with the audio card comes with its own documentation that explains how to install and use it. We install the software for you when you order the audio card with your WinBook, so if the card is already installed in your system, you'll find the software for it installed and configured on your hard disk.

Audio System Setup Options

The Setup program allows you to enable or disable the internal audio function and select which IRQ line the audio card will use. The BIOS will default to the IRQ7 setting. In some instances, this may cause a conflict with other hardware. If you have problems getting the audio card to

work correctly, you may need to set the audio board to use IRQ5. You can set the IRQ on Page 3, Advanced Setup, of the Setup program.

Although no special software or drivers are required to run DOS games and multimedia software on your computer, programs like this will normally have setup options when you install them. When you're installing them, you should select the "SoundBlaster™" option. Most newer software will automatically configure itself so you won't need to worry about port settings, etc. Older software may ask for setup parameters at installation. For these programs, select "SoundBlaster™" with port settings at 220, IRQ set to 7, and DMA channel set to 1.

[XP5 4-4]

Connecting Audio Equipment

The microphone and line-in ports on the WinBookXP5 only function when the Stereo Audio Card is installed. Without the Stereo Audio Card installed, the line-out and built-in speakers will only provide PC audio and modem sound. There are Line In and Speaker Out mini phone jacks and a volume control dial on the left-hand side of the computer below the floppy disk drive. You can plug any external audio source that uses a standard mini phone plug into the Line In jack, including most any stereo or mono external microphone.

You can connect the Speaker Out jack to either self-amplified speakers, non-amplified speakers, or headphones. To avoid hurting your ears, be sure to first set the audio volume to minimum when you plug in headphones, and then adjust the volume to a comfortable level. The internal amplifier can produce volumes which can damage your ears, so use care when adjusting the volume.

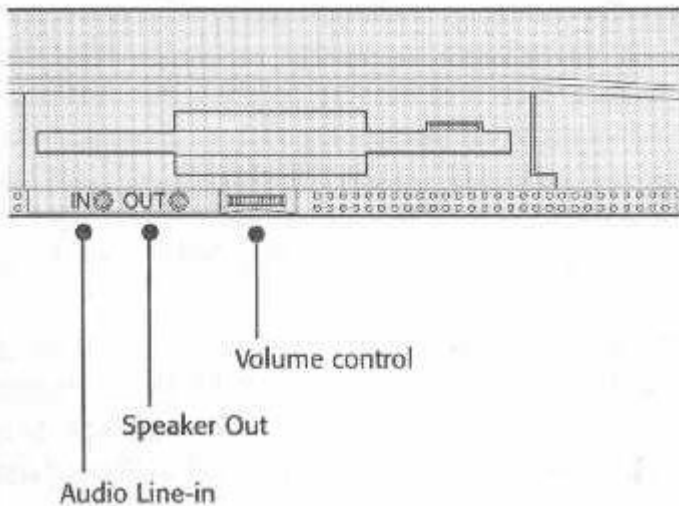


Figure 19: Audio Jacks & Volume Control

[XP5 4-5]

PC Cards

The WinBookXP5 can use a range of PCMCIA (PC) Cards. At the left front corner of the

computer there are two Type 11 slots, into which you can also insert one Type III card. They are in a compartment covered by an access door. The door swings open by gently pressing on the front-left corner of the computer and pushing the door to the side and back.

PC Cards slide into the slots from the side. When you insert a card into a slot, an eject button, which is at the front side of the compartment opening, will pop out. To eject a card, press the button in again and the card will come out enough for you to pull it out of the slot. A Type III card is twice the height of a Type 11 card, so it occupies both slots. However, you can only insert it in the bottom slot, so the bottom eject button will pop out. You can use both Type I and Type 11 cards individually in the slots. Cards insert face up.

The PC Card compartment door is removable to allow for oversized cards, or cards with special connectors needing extra room outside the computer. The door hinge is a flexible pressure fitting with nubs at the top and bottom that fit into corresponding receptacles in the housing. To remove the door, open it all the way, until you feel some resistance, then twist the door slightly to the right to pop it out. To reinstall the door, insert the hinge end at the same angle you removed it and pop it into place. The nubs must snap into their receptacles, and you may need to squeeze the pressure fitting slightly to retract a nub in order to get the door to snap into place.

To use PC Cards in Windows '95, just insert the card. If the system needs to be reconfigured to use the card, a message will appear informing you of this. Follow the instructions displayed to do this. You only have to do this once, after which the system will be set up to use that card from then on.

[XP5 4-6]

You can check the status of a resident card via the PCMCIA section of the Control Panel. Click on the panel's PCMCIA icon to bring up the status screen. The PCMCIA Card Reference Manual that comes with your High speed modem cards computer explains in detail how to set up your WinBook to use PC Cards.

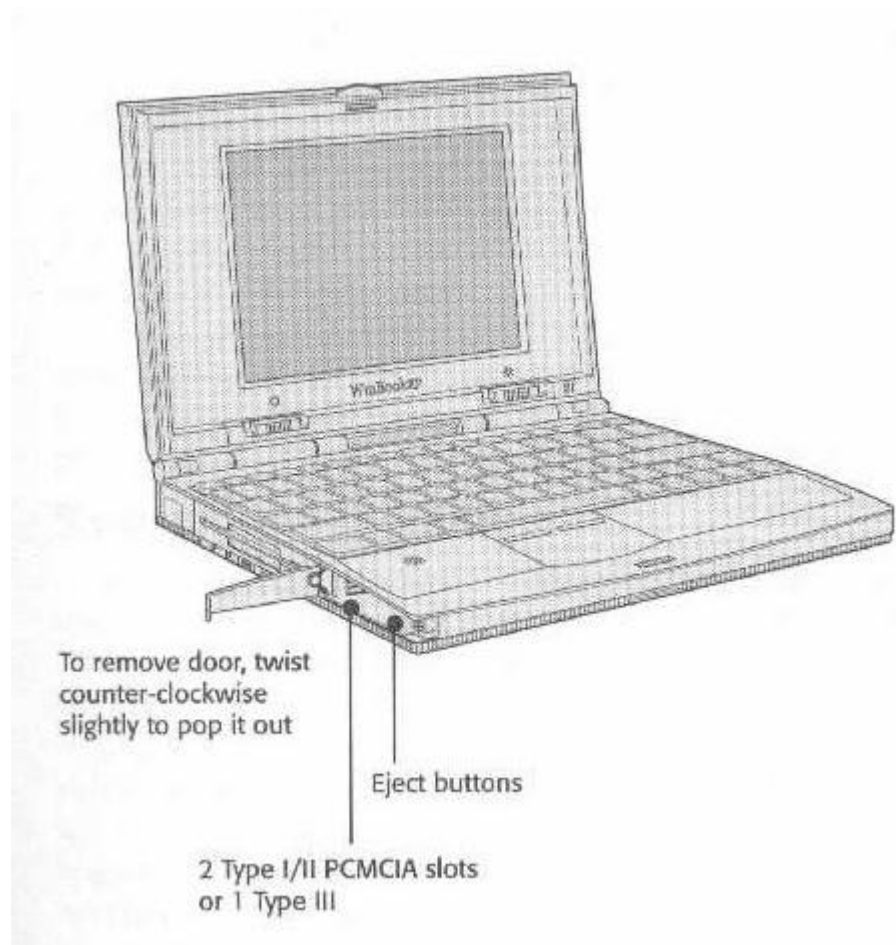


Figure 20: PC Card Compartment

[XP5 4-7]

[XP5 Chapter 5](#)

Hardware Upgrades

In Chapter Four we described options you can buy when you get your WinBook or install yourself. This chapter covers the upgrades you can get for your WinBook. These options are also available when you buy the computer, so you may already have some. If you didn't opt for any of them at the outset or you want to upgrade further, contact the number listed on the "Read-me-first" sheet that came with your system.

You can add more memory and an additional hard disk drive to either supplement or replace the one you got with the computer. First we'll look at the upgrades you can install yourself.

System Memory

You can upgrade your system DRAM memory from the base memory configuration of 8MB (Megabytes) to a total of 16MB, or 32MB. Upgrading system memory lets you run more programs at one time and in many situations will speed up the system.

There are two ways you can upgrade the memory in your system: install it yourself, or have it installed for you through a customer service upgrade. If you are familiar with installing memory SIMMs in a computer, upgrading the WinBook memory follows the same procedure and you'll have no problem with the installation. If you are unfamiliar with this process or don't feel confident about doing the upgrade yourself, please contact the telephone number on the "Read-Me-First" sheet which came with your computer.

[XP5 5-1]

To install a memory upgrade module yourself, follow the procedure below. Don't forget to take static electricity precautions.

1. Turn off the computer and disconnect all cables.
2. Turn the computer upside down.
3. Remove the three Phillips-head screws that secure the plastic compartment cover panel and remove the cover panel.
4. Remove the four Phillips-head screws that secure the metal heat sink panel and remove the panel.
5. Remove the existing memory module by holding it at the edges and gently pulling it out of the sockets and out to the right.

Slide the left edge of the upgrade module under the compartment lip so that you can line up the connectors on the underside of the module with the sockets in the compartment. Press the module connectors into the sockets.

Replace the heat sink and cover panels.

Turn on the computer. The system will automatically detect the additional memory, beep and

prompt you to press 'F2' to run the Setup program. Do this. When the program comes up, press 'Esc' and then 'F4' and the new memory configuration will be recorded.

The system will automatically reconfigure itself for the additional memory. If you check in the Setup program, you should see that the extended memory total listed on Page 1 has increased.

[XP5 5-2]

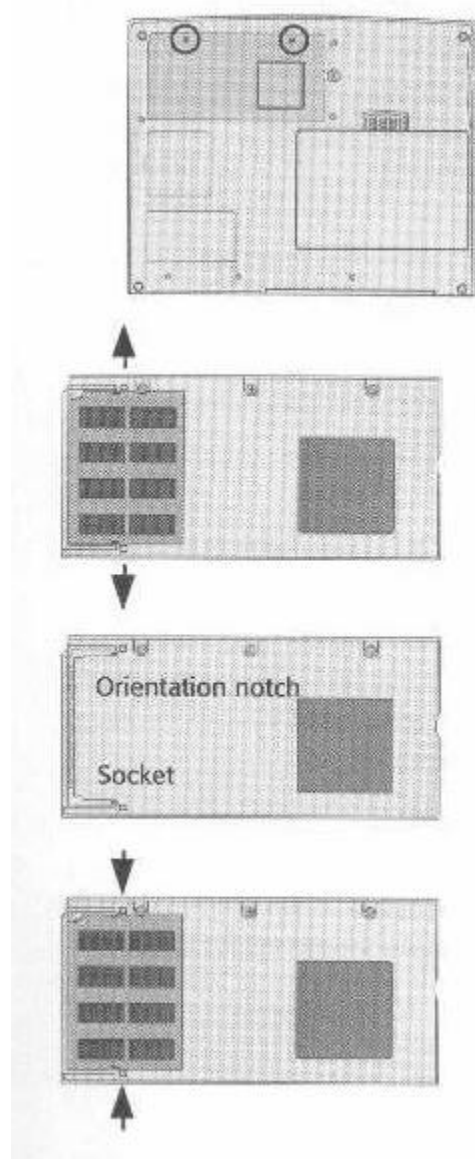


Figure 21: installing a Memory Upgrade

Replacing The Hard Disk Drive

If you decide you need more storage space, you can get a hard disk drive with more storage capacity. There are a variety of drive sizes available. If you decide you want to upgrade, call the

number listed on the "Readme-first" document for the latest options. The upgrades come installed in replacement mounting frames that fit in the computer's hard disk compartment.

You can install a hard disk upgrade yourself in a few steps.

Turn off the computer and disconnect all cables.

Turn the computer upside down.

Remove the large retaining screw that secures the hard disk housing inside the computer.

Turn the computer right-side up.

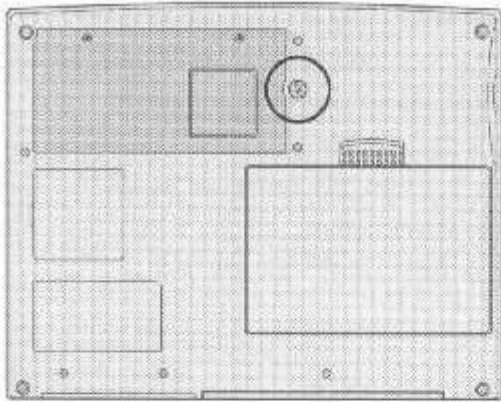
Pull the hard disk out of the compartment and put it on an anti-static surface.

Remove the new hard disk/ mounting frame assembly from its packaging and slide the assembly into the hard disk compartment. Press the assembly into the compartment so that you can feel its connector insert in the compartment socket.

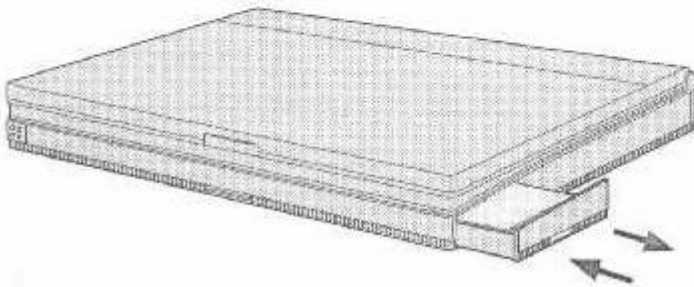
Turn the computer over and replace the retaining screw to secure the new drive in the compartment.

The system BIOS will detect the new hard disk when you next turn the computer on and will automatically configure the system for it. You will then need to prepare the hard disk for use if it has not already been formatted, and then install whatever software you plan to use, such as DOS, Windows and application software. Refer to your software documentation for instructions on how to do this.

[XP5 5-4]



Unscrew and remove the hard disk assembly retaining nut



Slide the hard disk assembly out and insert the new drive assembly

Figure 22: Installing an Alternate Hard Disk Drive

Chapter 6: Configuring Your System

This chapter explains how to use the system Setup program and the special Video Display drivers that come with your WinBookXP5.

The Setup Program

You need to understand how to use the system Setup program even if you got your WinBookXP5 ready-to-roll when it came out of the box. The program isn't difficult and you don't have to be a computer whiz to use it.

The Setup program creates a configuration record that gets stored in the computer hardware. Every time you turn on the computer the system refers to this record. If the entries are incorrect, your computer may not function properly.

As we've already seen in Chapter Two, to access all three pages of the program you have to run it from the screen prompt in DOS-only mode. You can not access the Setup program in Windows or a Windows DOS session. You must shut down Windows and select option 3 from the shutdown screen to restart in DOS-only mode. To run Setup hold down the 'Ctrl' and 'Alt' keys and press the 'S' key. The Setup program will come on screen. The program has three 'pages.'

Page 1: Standard Setup

Page 2: Power Management Setup

Page 3: Advanced Setup

Page 1 displays first. You can switch to the next page by pressing the 'PgDn' key. To return to previous page, press the 'PgUp' key. Use the keyboard arrow keys to move between items on the page. The field for the currently selected item will be highlighted. You can select the field option you want by using the plus and minus keys to change the displayed entry to another option.

[XP5 6-1]

The 'Esc' (Escape) key brings up a menu with a list of F-key commands, the commands displayed are:

Esc; Goes back to Setup

F4; Saves any changes you've made, exits Setup and reboots the computer

F5; Loads default settings for all pages, including a set of power management settings

F6; Exits Setup without saving any changes

Page 1: Standard Setup

Page 1 configures the basic system hardware. Most of the entries are defined by the hardware in the computer. The entries must be the same as the hardware present. The chart on the next page shows the items listed on the screen in the order they appear, with the default setting and the options for each item.

[XP5 6-2]

Menu Item	Default	Options
System Time	00:00:00AM(PM)	
System Date	MM/DD/YY	
Diskette A	3.5", 1.44MB	Not installed
Diskette B	Not installed	3.5", 2.88MB 3.5", 1.44MB 3.5", 720K 5.25", 1.2MB 5.25", 360K
Hard Disk 1	Auto-detect	Not installed User defined
Base Memory	640KB	
Extended Memory	3072KB	
CPU Speed	Fast	Slow
Quick Boot	Enabled	Disabled
Boot Drive Order	C:, A:	A:, C:
Password	Disabled	
Boot Display	Auto-detect	Simulscan

Note: System Time is shown in 12-hour format, with hours, minutes, and seconds displayed. System Date is shown with months, days, and years designated by either one- or two-digit numbers. Extended Memory will vary depending on how much system memory your computer has.

System Time & System Date You can set the correct date and time in the "System Time" and "System Date" fields if the current system clock setting is incorrect.

Diskette A & B

Leave "Diskette A:" set to "3.5", 1.44" setting. Set "Diskette B:" to "Not Installed" unless you have the optional docking station and it has a floppy disk drive in it, in which case set "Diskette B:" to the correct type.

Hard Disk 1

Hard Disk 1 will be set to Auto Detect. Don't change the setting

Base Memory & Extended Memory

These are automatically detected by the system.

CPU Speed

The default setting for "CPU Speed" is "Fast." You can set it to "Slow" to simulate the performance of the original IBM PC AT computer. Some older applications are speed sensitive and may not run correctly at the Pentium CPU's faster operating speed. The slow setting should allow these applications to run.

[XP5 6-4]

Quick Boot

This setting eliminates the BIOS memory test, which can take quite some time to run, when the system is first powering up. We recommend that you leave this enabled unless you think your system is experiencing a memory-related problem. If you upgrade your system memory, disable this temporarily to test the new configuration and then enable it afterwards.

Boot Drive Order

"Boot Drive Order" is set to "C:, A:" which causes the system to go to the hard disk first to load the operating system. If you want it to check the floppy disk drive first, so the computer will boot from it if a system floppy is in the drive, switch this to the "A:, C:" setting.

Password

The Password feature allows you to password protect access to WinBook. When you set a password in this field, the computer will not complete the boot process without the password, effectively preventing unauthorized access.

To use this feature, highlight the "Password" field and follow the instructions that pop up to guide you through the process of creating and saving a password.

If you reach the point where you are supposed to type in your password and you decide you want to stop, type any key, press 'Enter' and then press 'Enter' again **without typing ANYTHING when it asks you to confirm the new password**. This will send you back to the beginning.

[XP5 6-5]

You must use the F4 command to exit Setup and save the new password setting, or it will not work even if you set a password.

You can change or remove the password by highlighting the "Password" field, typing in the existing password at the prompt, and following the instructions.

Boot Display

The "Boot Display" field defines which display the system will use when you turn the computer on. There are two options:

Auto-Detect - The default. If no CRT is connected, the system will use the LCD display. If a monitor is connected to the VGA port, the system will default to CRT-only mode and disable the LCD screen.

Simulscan - Both LCD and CRT are active, whether or not a monitor is connected to the VGA port. Since this setting slows display response a little, use the default Auto-detect mode for maximum performance.

[XP5 6-6]

Page 2: Power Management Setup - Control Central

Page 2 of the Setup program is for the power management features. You can disable all the features together, enable power management and adjust the features individually, or load a default set by loading all the BIOS defaults with the F5 command. There is a full explanation of how to use the power management features in Chapter Two.

The options table is listed here again for your convenience.

Page 2: Power Management Setup			
Menu Item	Default	Options	
Power Management	Always	Battery only	Disabled
CPU Doze Timeout	Enabled	Disabled	
Sleep Timeout	02 minutes	(increments of 1 minute)	Disabled
Suspend Timeout	Disabled	(increments of 1 minute)	Enabled
Suspend Data to	RAM	DISK	Disabled
Hard Disk Timeout	02 minutes	(increments of 1 minute)	Disabled
Display Timeout	02 minutes	(increments of 1 minute)	Disabled
Floppy Disk Timeout	02 minutes	(increments of 1 minute)	Disabled
Modem Timeout	60 seconds	(increments of 10 seconds)	Disabled
Audio Timeout	02 minutes	(increments of 1 minute)	Disabled
Auto Dim	Enabled	Disabled	
CPU Clock Throttle	Enabled	Disabled	
Battery Low Suspend	Disabled	Enabled	
Modem Ring Resume	Disabled	Enabled	
Alarm Resume	Disabled	Enabled	
Alarm Time	00:00		

[XP5 6-7]

Page 3: Advanced Setup

The Advanced Setup section of the Setup program is for additional hardware configuration settings. These include settings for some of the optional hardware.

Page 3: Advanced Setup

Menu Item	Default	Options			
Internal Audio	Enabled	Disabled			
Audio IRQ	IRQ7	IRQ5	Off		
External Cache	Disabled	Enabled			
COM Port	3F8h	2F8h	3E8h	2E8h	Disabled
Internal Modem	2F8h	3F8h	2E8h	3E8h	Disabled
LPT	378h	278h	Disabled		
PS/2 Pointing Device	Enabled	Disabled			
HDD Block Mode	Disabled	Enabled			

Note: Disabling the PS/2 pointing device disables both the internal and the external PS/2 devices.

Note: Disabling the PS/2 pointing device disables both internal and external PS/2 devices.

[XP5 6-8]

Internal Audio & Audio IRQ

If you have an optional audio card, you must set "Internal Audio" to "Enabled."

You can use the default IRQ setting of IRQ 7 for the audio card, or you can select IRQ 5 instead. IRQ selection is explained in detail in "Audio System Setup Options" in Chapter Four.

External Cache

External cache refers to the Level 2 cache. With the cache installed, you must set this line to "Enabled" for the cache to work.

Com Port, Internal Modem, & LPT

The settings for these entries are the standard address assignments used for these ports. The Internal Modem Port, which normally is COM 2, is reserved for the fax modem even if you don't have it installed. Do not change the addresses unless you have a specific reason to, and you know what you are doing. Normally, there should be no need to change them.

LPT Mode

The LPT Mode entry sets the protocol for the Printer port. The port operates as a standard parallel port with the default setting. The default may not work if you attach a device that requires an extended mode. If so, try the Extended setting.

PS/2 Pointing Device

This enables the built-in pointing device (either the trackball or the TrackPoint) and mouse

support for the external PS/ 2 port. The default setting is "Enabled." If you disable this setting none of them will work.

[XP5 6-9]

HDD Block mode

HDD Block Mode accelerates disk transfers. A performance improvement is especially noticeable with applications that utilize the multiple sector transfers for reading and writing large files. Some older applications may not tolerate this acceleration technique, so the default setting is "Disabled" for compatibility purposes. If you are using Windows applications, you can enable this to accelerate disk transfers.

Thermal Monitor

The default setting is "Disabled." If you use your computer in a very warm environment and it has either a high-speed Pentium installed or power management disabled, enable this feature to prevent the Pentium processor from overheating. In a normal environment with power management enabled, use the default to maximize system performance.

[XP5 6-10]

Video Display Drivers

This section explains the function and use of the WinBookXP5 video display software options and controls.

Display resolution and the number of colors displayed is governed by software video display drivers that work with the display controller circuitry in the computer. Your WinBookXP5 uses a display controller and drivers from Chips and Technologies Inc. Drivers for both Windows and selected DOS applications come with the computer. The LCD screen on your computer can display a maximum resolution of 640 pixels horizontally by 480 pixels vertically with a maximum of 4096 colors (12-bit color). In practice this means that the display drivers will fully display 16 colors (4-bit color) or 256 colors (8-bit color) on the LCD screen, but will only display 4096 colors out of the Hi Color (65,000 color) or True Color (16 million color) color palettes. The Windows display driver will display all the Run... command in the supported resolutions and colors on any suitable external monitor connected to the monitor port at the rear of the computer.

The Windows Driver

The C&T Windows display driver supports four screen resolutions and five color depths as well as enhancements for both the LCD and external CRT (monitor) displays. This results in a number of possible resolution/color depth/ feature combinations. To simplify selecting the combination you want to use, you can change the display settings from the 'Settings' portion of the 'Display Properties' section of the Windows Control Panel.

[XP5 6-11]

The Windows Display Properties Control Panel

To change the display driver setup you should use the 'Display' section of the Control Panel. To access it, do as follows:

1. Run the Windows Control panel. Click on the 'Start' button. Point at 'Settings' and then 'Control Panel' in the sub-menu that pops up and click on 'Control Panel' to bring it up.
2. Find the 'Display' icon double-click on it to run the Display Properties control panel. Click on the 'Settings' tab so that the display options appear.

[XP5 6-12]

The Display Properties control panel has sections to set the number of colors, screen size, system font size and to change the display driver. You can access Help information on these by clicking on the question mark at the upper right-hand corner of the box. You must restart Windows for any driver configuration changes to take effect.

[XP5 6-13]

'color palette'

This section sets maximum number of colors displayed. The options

listed represent the following:

16 Color 4-bit color, the standard VGA color setting which displays up to 16 colors simultaneously.

256 Color 8-bit color, which displays up to 256 colors simultaneously.

High Color 16-bit color, displays up to 64,000-plus colors simultaneously.

True Color 24-bit color, displays up to 16 million-plus colors simultaneously.

To set the color depth, click on the down arrow to display the list of options and then click on the option you want.

Anything higher than the "256 Color" setting will only display completely on an external monitor. The LCD will work at any setting, but the controller ignores what the LCD cannot display and displays at most 640 x 480 x 4096 colors whatever the Display Properties Settings are. This means you can leave the 'Color palette' setting selected for the configuration you use with an external monitor while you are using only the LCD screen. When you connect an external monitor, the selected resolution and number of colors will display on the monitor screen, even when both screens are active.

[XP5 6-15]

'Desktop area'

This section of the control panel lists the screen resolution options supported by the display driver. Not all color depths are supported for all resolutions. If the amount of video memory needed to display a particular color depth at a certain screen resolution exceeds the 1MB of onboard video display memory, that color depth will be unavailable.

Select the screen resolution you want by clicking on the Less/ More slider bar and holding down the left "mouse" button. Slide the bar left or right to set the resolution. The image on the monitor graphic will change to reflect the effect of the setting you make.

Any resolution higher than 640 x 480 will only display fully on an external monitor. The LCD will work at any setting, but the LCD displays at most 640 x 480 pixels whatever the Display Properties Settings are. If you select a higher resolution, eg 600 x 800 pixels, a 640 x 480 pixel portion of the screen image will display. To see the rest of it you have to 'pan' to the off-screen portion by directing the pointer to the edge of the screen. The 640 x 480 pixel 'window' then moves over to that part of the screen. You can leave the 'Desktop area' setting selected for the configuration you use with an external monitor while you are using only the LCD screen.

'Font size'

There are two options in this section, Small Fonts and Large Fonts are the font options common to Windows display drivers. These options control the size of the screen font in the Windows and Windows applications. At higher screen resolutions, using the Large option will make program menus, etc., much easier to see. By default, the 640 x 480 and 800 x 600 resolutions use the Small setting and the higher resolutions use the Large setting. You can change the default manually if you prefer a different configuration.

[XP5 6-16]

'Change Display Type'

You can change the active display driver and the set the external monitor settings from a box that pops up when you click on the 'Change Display Type' button.

Do not change the 'Adapter Type' unless you update the C&T driver with a newer one. You can set which external monitor you want to connect by clicking on the 'Change' button and selecting from the list that comes up. If your external monitor is "Energy Star" compliant, click on the box beside that item to indicate this.

[XP5 6-17]

DOS-Mode Display Drivers

High resolution display drivers for a number of DOS programs also come with your WinBook. The DOS-mode display drivers are on the display driver floppy disk which comes with your

WinBook. If you have a system with pre-loaded software, they are also on your hard disk in the DRIVERS directory. If you are not using any of the supported DOS applications, you can delete the drivers from your hard disk. If you need them later, you can install the drivers from the floppy disk.

VESA Drivers

A set of generic VESA DOS-mode display drivers are included with the DOS-mode drivers for use with DOS applications that require them.

[XP5 6-18]

[XP5 Appendix A](#)

Appendix A: Troubleshooting & Maintenance

This Appendix is designed to help you solve problems you may encounter while using the WinBookXP5. If you have a problem that's not listed here, please call the Technical Support number listed on the "Read-Me-First" document that came with your computer.

Solving Problems Yourself

Following is a list of some commonly experienced problems, and their possible solutions. If nothing you do helps the situation, call the Technical Support number listed on the WinBook "Read-Me-First" sheet. 	

Error Messages During 'Boot' Process

1. Problem:BIOS setup or configuration error, type 'F1' to continue.

Action: Enter setup program and use the default setup configuration.

If a new option has been added, be sure to run the Setup program.

Unplug any external keyboards and/or pointing devices and retry.

If you are using a docking station, unplug WinBook from dock and retry.

2. Problem:Invalid CMOS error message, type'F1'to continue.

Action: Enter setup program and use the default setup configuration.

[XP5 A-1]

3. Problem: System reports an error message on screen that is not related to any setup problems.

Action:If you are using a docking station, unplug WinBook from dock and retry.

Write down the error message and call the Technical Support number listed on the WinBook "Read-Me-First" sheet.

4. Problem:System prompts for password at boot time.

Action:Boot password has been enabled, type in password to continue.

If you have lost the password, call the Technical Support number listed on the WinBook "Read-Me-First" sheet.

Message indicates missing operating system.

Action:o Hard drive type is not selected correctly:

A)Enter setup program;

B)Select IDE drive C: to be "Auto-detect".

Hard drive needs to be re-initialized, check with the service center first. Try booting from a floppy disk with an operating system installed on it and then access the hard drive. Re-install the boot files and operating system.If problem persists, call the Technical Support number listed on the WinBook "Read-Me-First" sheet.

[XP5 A-2]

6. Problem:Computer cannot locate startup device.

Action:Enter setup and make sure the boot devices are active.

A)Drive A: (floppy drive) should be set for 1.44 MB, 3.5";

B)Drive C: should be set for "Auto-detect";

C)Your drive "boot sequence" should be set to "C:, A:".

7. Problem:System stops partway through boot process, after single beep is heard.

Action: Hard disk boot sector is defective or has virus Boot from write-protected floppy disk or WinBook support floppy disk and run an anti-virus program. 9 System Setup hard disk type is incorrect - Enter Setup, select default settings option, save and reboot. o If you just installed an expansion option, make sure it is correctly installed. If the problem persists, remove it, set system back to original configuration and reboot. o If WinBook is connected to a docking station, remove it from the dock and reboot.

If problem persists, call the Technical Support number listed on the WinBook 'Read-Me-First' sheet.

8. Problem:Computer does not come on when power switch is pressed.

Action:Be sure the AC adapter connectors are fully plugged into the wall outlet, the computer, and the AC adapter.

Run the computer from the AC adapter. When done, turn it off and use AC adapter to fully charge the battery. o Make sure the wall outlet is not defective, by plugging something else (e.g., a lamp) into the outlet to check it.

[XP5 A-3]

Internal Or External Display-Related Problems:

1. Problem: There is a blank display, no beeps were heard, and the LCD indicator is blank.

Action: If you are running on AC power, make sure the adapter is plugged in and the green power indicator is lit.

If you are running on battery power, make sure a charged battery is installed in your system.

If you are using the docking station, unplug your WinBook from the dock and retry.

If failure persists, call the Technical Support number listed on the WinBook "Read-Me-First" sheet.

2. Problem: There is a blank display, no beeps were heard, and the LCD indicator panel is active.

Action: Make sure the WinBook power switch is turned on. If using battery power, make sure battery is charged. If using AC power, see that AC power indicator is on. Unplug all external connections except for the AC power and try again.

If you are using a docking station, unplug WinBook from dock and retry.

If failure persists, call the Technical Support number listed on the WinBook "Read-Me-First" sheet.

3. Problem: The power switch is on, but there is a blank display, no beeps, and the LCD indicator panel is activity

Action: System is in suspend, check to see if the suspend icon is displayed on the indicator panel. Press suspend switch to reactivate.

[XP5 A-4]

If you are using a docking station, unplug WinBook **Display problems** from dock and retry.

External display may be selected. Press 'Fn' + 'F6' to set display to Simulscan mode.

If failure persists, call the Technical Support number listed on the WinBook "Read-Me-First" sheet.

4. Problem: The display is blank and a single beep was heard.

Action: Check to make sure brightness and contrast controls are at their midpoint settings.

Check that the active display option has been set to LCD or Simulscan:

Press the 'Fn'+ 'F10' keys simultaneously to change the active display type setting;

B) Enter setup screen to select display type.

C) Press 'Fn' + 'F6' to force display to Simulscan mode.

If failure persists, call the Technical Support number listed on the WinBook "Read-Me-First" sheet.

5. Problem: There is a blank screen and a series of beeps, or a long continuous beep.

Action: If an option has just been installed, remove the newly installed option:

A) Check to be sure memory expansion card is correctly installed;

B) Check to be sure audio card is correctly installed;

C) Check to be sure modem is correctly installed.

[XP5 A-5]

Display problems If you are using a docking station, unplug WinBook from dock and try again.

If failure persists, call the Technical Support number listed on the WinBook "Read-Me-First" sheet.

6. Problem: Display is on, but system will not display any messages (blank screen)

Action: If an option has just been installed, remove newly installed option:

A) Check to be sure memory expansion card is correctly installed;

B) Check to be sure audio card is correctly installed;

C) Check to be sure modem is correctly installed.

If you are using a docking station, unplug WinBook from dock and try again. If failure persists, call the Technical Support number listed on the WinBook "Read-Me-First" sheet.

7. Problem: The screen is not readable.

Action: If an option has just been installed, remove newly installed option: A) Check to be sure memory expansion card is correctly installed; B) Check to be sure audio card is correctly installed; C) Check to be sure modem is correctly installed. If failure persists, call the Technical Support number listed on the WinBook "Read-Me-First" sheet.

[XP5 A-6]

8. Problem: Incorrect display image.

Action:Be sure operating system is installed correctly.

Hard disk boot sector is defective or virus-infected. Boot system from a write-protected floppy disk or WinBook support disk. Run an anti-virus program.

If a new hard drive has been installed, remove it and insert old one.

When using LCD display, be sure S / W has correct driver (VGA) installed.

If failure persists, call the Technical Support number listed on the WinBook "Read-Me-First" sheet.

9. Problem:Display has vertical or horizontal stripes on it when it is powered up.

Action:Call the Technical Support number listed on the WinBook "Read-Me-First" sheet.

10. Problem:Display has small, colored dots which are always present.

Action:If you have a TFT panel with more than a few colored dots, call the Technical Support number listed on the WinBook "Read-Me-First" sheet.

[XP5 A-7]

Display problems

11. Problem:Display brightness is poor.

Action:Adjust contrast and brightness for optimum viewing. Relocate system away from direct light sources or high ambient light.If running on battery power, go into setup and deselect "Auto-Dim" function.If brightness control is set at maximum, backlight may need replacing, call the Technical Support number listed on the WinBook "Read-Me-First" sheet.If contrast must be set at maximum while operating at room temperature, call the Technical Support number listed on the WinBook "Read-Me-First" sheet.

12. Problem:

Cannot get external display to work.

External CRT will not activate.

Action:

A)Use the Setup program to select the (default) Auto or the Simulscan display mode;

B)Press 'Fn'+ 'F10' to switch active display;

C)Make sure you plugged in the CRT monitor before
you powered up the WinBook.

D)Press 'Fn' + 'F6' to force display to Simulscan mode.

13. External display is not working in the high resolution mode.

Action:

High resolution drivers are not in use:

A)In Windows, switch to a higher resolution;

B)In a DOS session, install a high resolution driver for
the DOS application you want to use.

[XP5 A-8]

Keyboard Or Pointing Device Problems

1. Problem: Internal keyboard keys are not working or are only working intermittently.

Action:If an external keyboard is plugged in, remove it.

If problem persists, call the Technical Support number listed on the WinBook "Read-Me-First" sheet.

2. Problem:External keyboard is not working.

Action:Keyboard is defective.

Duplex adapter is defective, contact the service center. o If other PS/ 2 device is plugged in, disconnect it.

Keyboard is incompatible with PS/ 2 specifications.

WinBook is defective, call the Technical Support number listed on the WinBook "Read-Me-First" sheet.

3. Problem:External PS/2 pointing device is not working.

Action:Setup program has disabled PS/ 2 pointing device:

A)Enter the Setup program at boot-up;

B)Select Advanced Setup screen (screen 3);

Enable PS/ 2 pointing device.

Check if any external PS/2 devices are plugged into the duplex adapter.

Check if the external PS/ 2 device is defective, by unplugging it and retrying. a If the system is plugged into the docking station, unplug and retry.

[XP5 A-9]

4. Problem:

Internal pointing device is too sensitive, or not sensitive enough.

From Windows Control panel open the Mouse controls: A) Readjust tracking and sensitivity as appropriate.

Cursor disappears when moved rapidly.

- Move pointing device more slowly.
- Open Windows Control panel and select mouse icon:
 - A)Readjust tracking and sensitivity as appropriate;
 - B)Enable large cursor or mouse trails options.

Internal trackball operation is intermittent.

Trackball may be dirty. Clean trackball according to instructions at end of this chapter.

If problem persists, Call the Technical Support number listed on the WinBook "Read-Me-First" sheet.

Communication Port Problems

1. Problem:External serial port is not working.

Action: Port is not enabled:

- A)Enter the Setup program at boot-up;
- B)Select Advanced Setup screen (Page 3);
- C)Enable External COM port for 3F8 (COM1 default).Incorrect cable, purchase correct cable.

[XP5 A-10]

2. Problem: Internal modem not functional.

Action:Port is not enabled:

- A) Enter the Setup program at boot-up;
- B) Select Advanced setup screen (Page 3);
- C) Enable Internal modem port for 2F8 (COM2 default)
- D) Make sure your communications software is set to use COM2.

Refer to Modem Installation Guide for more details.

Printer Port Problems

1. Problem: External parallel port or printer is not working.

Action:Port is not enabled:

- A) Enter the Setup program at boot-up;
- B) Select Advanced Setup screen (screen 3);
- C) Enable LPT port for 378 (LPT1 default).

Incorrect cable, purchase correct cable.

Correct printer driver not installed, open 'Printers' in the Windows Control Panel and then use 'Add Printer'.

Follow the 'Add Printer' Wizard's directions.

Make sure correct printer port is selected in Windows (LPT1).

2. Problem: Printer doesn't print correct characters.

Action:Incorrect cable, purchase correct cable.

Correct printer driver not installed, open 'Printers' in the Windows Control Panel and then use 'Add Printer'. Follow the 'Add Printer' Wizard's directions.

[XP5 A-12]

PCMCIA (PCcard) Problems

1. Problem:No beeps when you install PC card under Windows.

Action:PCMCIA driver not enabled in Windows:

A) Open 'System' in the Control Panel, click on 'Device Manager' and double-click on'PCMCIA socket'. The driver listed should be'PCIC or compatible PCMCIA controller'. Any other entry should be removed.

B) Open 'PC Card' in the Control Panel. Check that the Socket Status for both cards. With no cards installed both should be 'Empty'. If you haven't run this before, follow the instructions to enable PCMCIA.

Incorrect PCMCIA driver selected:

Open 'System' in the Control Panel, click on'Device Manager' and double-click on'PCMCIA socket'. The driver listed should be'PCIC or compatible PCMCIA controller'. Any other entry should be removed.

Card not recognized by Windows PCMCIA driver:

Card may not be completely compatible with PC Card standard and may require additional driver or "enabler".

Consult card documentation or manufacturer to see if this is necessary.

WinBook audio volume turned all the way down:

Turn up volume sufficient to hear beep tones.

[XP5 A-12]

PC Card Sound Effects are disabled:

Open 'PC Card' in the Control Panel. Click on'Global **PCMCIA problems** Settings' and see if the 'Disable PC Card sound effects' line at the bottom of the window has a check in the selection box. If so, click on it to deselect it.

Check for WinBook PC Card icon in LCD indicator:

If the icon for the card slot with the card in it does not display in the LCD indicator panel, either the card or the WinBook slot is defective. Call the Technical Support number listed on the WinBook "Read-Me-First" sheet.

2. Problem:Single beep when PC Card installed under Windows.

Action:Incorrect PCMCIA driver selected:

Open 'System' in the Control Panel, click on 'Device Manager' and double-click on 'PCMCIA socket'. The driver listed should be 'PCIC or compatible PCMCIA controller'. Any other entry should be removed. o Card not recognized by Windows PCMCIA driver: Card may not be completely compatible with PC Card standard and may require additional driver or "enabler". Consult card documentation or manufacturer to see if this is necessary.

- Either the card or the WinBook slot is defective. Call the Technical Support number listed on the WinBook "ReadMe-First" sheet.

[XP5 A-13]

3. Problem:No beeps when PC card installed while running in MS-DOS-only

mode.Action:PCMCIA driver not included in CONFIG.SYS file or CONFIG.SYS file is missing:Copy existing CONFIG.SYS to CONFIG.BAK then copy CONFIG.XP5 from WinBook support floppy disk to CONFIG.SYS on hard disk. If you don't know how to do this call the Technical Support number listed on the WinBook "Read-Me-First" sheet.Card not recognized by DOS PCMCIA drivers:Card may not be completely compatible with PC Card standard and may require additional driver or "enabler". Consult card documentation or manufacturer to see if this is necessary.Card not recognized by DOS PCMCIA drivers or not found in PC Card database files:Consult WinBook PCMCIA guide on how to create or modify a new card library file.WinBook audio volume turned all the way down:

Turn up volume sufficient to hear beep tones.

PCMCIA events audio notification disabled in driver: Consult WinBook PCMCIA guide on how enable PC Card sounds in DOS.

Either the card or the WinBook slot is defective. Call the Technical Support number listed on the WinBook "Read-Me-First" sheet.

[XP5 A-14]

4. Problem:Single beep when PC card installed while running in MS-DOS-only mode.

Action:Card not recognized by DOS PCMCIA drivers: Card may not

be completely compatible with PC Card standard and may require additional driver or "enabler". Consult card documentation or manufacturer to see if this is necessary.

Card not recognized by DOS PCMCIA drivers or not found in PC Card database files:

Consult WinBook PCMCIA guide on how to create or modify a new card library file.

Either the card or the WinBook slot is defective. Call the Technical Support number listed on the WinBook "ReadMe-First" sheet.

[XP5 A-15]

Miscellaneous Problems

Floppy disk drive problems

1. Problem: Floppy disk drive is not working correctly.**Action:**Setup configuration is incorrect:A)Enter Setup;B)Make sure Floppy drive A: is set to 1.44 MB, 3.5".Disable CPU Clock Throttle in Power Mangement setup to see if problem stops. If so, leave it disabled. Be sure diskette is formatted for a Windows computer. Be sure diskette is installed correctly.If using docking station, remove computer and retry. Make sure the CPU is set to 'Fast' in the Setup.2. **Problem:Diskette will not eject when eject button is pressed.****Action:**Label may have become detached and is obstructing diskette exit:A)Check for condition by looking inside slot;B)Call the Technical Support number listed on theWinBook "Read-Me-First" sheet for further instructions. 9 Make sure the CPU is set to 'Fast' in the Setup.

3. Problem:Cannot boot from floppy disk.

Action:Boot sequence is set to boot from C: first.

A)Enter setup

B)Set boot sequence to "A:, C:".

Disable CPU Clock Throttle in Power Management setup to see if problem stops. If so, leave it disabled. Floppy does not have correct operating system on it. Floppy is defective.Make sure the CPU is set to 'Fast' in the Setup.

[XP5 A-16]

4. Problem:Internal audio not functioning or malfunctioning.

Action:The audio volume is turned all the way off.

Headphones/ external speakers plugged in but not on. o Internal audio is not enabled; enable it on Setup Page 3. o Internal audio IRQ is not enabled; use Setup Page 3 to set this to IRQ7 (default) or IRQ5.

Int. audio power management is interfering (disable it).

Audio card incorrectly installed, see Installation Guide.

Application or drivers are not configured correctly:

A) Select SoundBlaster option (or ESS 1688 if available);

B) Select I/O port 220h;

C) Select DMA channel as 1;

D) Select either IRQ7 or IRQ5 (on Setup Page 3).

If docking station is in use, detach it and retry.

If using a PCMCIA Multimedia card, remove and retry.

Audio board is defective, call the Technical Support number listed on the WinBook "Read-Me-First" sheet.

5. Problem: WinBook is interfering with radio or TV reception.

Action: Unplug external cables and verify that they are at fault. Use only shielded cables and be sure they are attached properly.

Reposition WinBook away from these devices.

If problem persists, call the Technical Support number listed on the WinBook "Read-Me-First" sheet.

[XP5 A-17]

Power Management Problems

System won't operate from the battery.

Battery not charged correctly, plug in AC adapter and turn system off to allow the battery to fully charge. Full charge should take about two (NIMH battery) or three (Lithium Ion battery) hours.

Battery is not correctly inserted, or the contacts are broken. You can check by removing battery from compartment and examining the contacts in the computer to see if they are broken or bent.

Battery pack is defective, call the Technical Support number listed on the WinBook "Read-Me-First" sheet for details on ordering a replacement battery.

Battery life is too short.

Battery is not charged correctly; plug in AC adapter and turn system off to allow the battery to fully charge for two (NIMH battery) or three (Lithium Ion battery) hours. The battery is sensitive to extreme temperatures and should only be charged between 20°C and 30°C for best operation. Also, there is a safety mechanism in the WinBookXP5 that stops the charging process when the temperature exceeds 400C, regardless of whether the battery is fully charged or not.

Power management is not turned on. Press 'Fn'+ 'F8', to run the setup program and then enable it. Device power-down options are disabled. Load defaults in the Power Management setup screen.

[XP5 A-18]

Battery pack is defective, call the Technical Support number listed on the WinBook "Read-Me-First" sheet for details on ordering a replacement battery.

Enable Windows power management. Open 'Power' in the Control Panel. Select "Advanced" under 'Power

management' for best balance between battery life and system performance.

3. Problem: System won't suspend to disk.

Action: Suspend to disk is not enabled in the power management setup. Using the 'Fn'+ 'F8' key combination, enter the Power Management setup screen and change the selection for "Suspend to" from Suspend-to-RAM to select Suspend-to-DISK.

There is no partition for suspending to disk, or the partition is too small to suspend to disk. Use the PHDisk utility (on the WinBook support floppy disk) to check for the presence of a disk partition. If you don't find one, or the partition is corrupted, refer to page B-18 for information on using PHDisk.

4. Problem: Resume from disk error message.

Action: The most common cause of this error comes from using more than one hard disk with the WinBook. If you suspend to disk, you must always power the system back up with the disk that was in the WinBook when it was put in Suspend mode.

[XP5 A-19]

The suspend-to-disk partition has somehow become corrupted. You can use the PHDISK /REFORMAT command to reformat the partition.

There is a bad sector on the hard disk, causing you to lose information when you enter suspend mode. Try using the PHDISK /REFORMAT command to reformat the partition. PHDISK will automatically map out bad sectors if they are found.

5. Problem: Battery charge LED never stops flashing.

Action: Ambient temperature is too hot for the battery to completely charge. Battery is not correctly inserted, or the contacts are broken. You can check by removing battery from compartment and examining the contacts in the computer, to see if they are broken or bent.

Battery pack is defective, call the service number listed on your "Read-Me-First" sheet for details on ordering a replacement battery.

The battery charge circuit inside the WinBook is defective. Call the Technical Support number listed on the WinBook "Read-Me-First" sheet.

[XP5 A-20]

6. Problem: Battery fuel gauge indicator icon is inaccurate. Power management

Action: The battery fuel gauge is a *rough approximation* of the **problems**

actual battery capacity and is highly dependent on the amount of energy you are using. As with an automobile, the heavier you are on the accelerator, the fewer miles you can travel before you hit Empty. Likewise, the more you use the WinBook's power-hungry devices (hard disk, floppy disk, or display) the less time you'll have on the gauge.

Note that we have set the fuel gauge to reflect an average user profile, with power management set to the default settings. *If you have power management disabled, the battery gauge will perform differently.*

The battery pack is nearing the end of its usable life, and cannot sustain a full charge. The usable life of a either battery option is approximately 500 cycles (depending on operating, charging, and storage temperatures). You can order a spare battery by contacting the service number listed on your "Read-Me-First" sheet.

Battery pack is defective, call the service number listed on your "Read-Me-First" sheet for details on ordering a

replacement battery.

The battery gauge circuit inside the WinBook is defective. Call the Technical Support number listed on the WinBook "Read-Me-First" sheet.

[XP5 A-21]

Error Message Handling

Power-on self-tests are the system tests and component initialization processes performed by the computer's AT-compatible ROM BIOS. The self-tests first initialize, and then test the central hardware. The central hardware must function properly before further system tests can be run. In general, a failure in a test of the system board or its components halts the test and causes a beep. Each time the system boots, the BIOS performs diagnostic testing of the various system components. During a standard implementation, if the BIOS detects an error, one of the following events occurs:

A message displays informing you where the error occurred. Following the message, the prompt "Press F1 to continue," or "Press F2 to enter setup," displays. The system pauses until you press F1 or F2.

The following section lists the messages that may appear while booting up the WinBook. Where applicable, possible solutions are included.

Message: Gate A20 failure

Description: System gate A20 cannot run.

Action: Call the Technical Support number listed on the WinBook "Read-Me-First" sheet.
Message: Memory failure at read expecting

Description: System memory read failure at **** bank, where is a memory address.

Action: Check if Memory card is properly seated in socket.

Follow instructions in Chapter 5 to re-install it. Take precautions against static-electric discharge!

Call the Technical Support number on the WinBook "Read-Me-First" sheet to replace the memory card.

[XP5 A-22]

Message:No timer tick interrupt

Description:System controller failure.

Action:o Call the Technical Support number listed on the WinBook "Read-Me-First" sheet.

Message:Shutdown failure

Description:System controller failure.

Action:o Call the Technical Support number listed on the WinBook "Read-Me-First" sheet.

Message:Timer 2 failure

Description:System controller failure.

Action: Call the Technical Support number listed on the WinBook "Read-Me-First" sheet.

Message:Keyboard controller clock line or data line failure

Description:The keyboard failed the self-test command.

Action:Unplug external keyboard, if installed.

Call the Technical Support number listed on the WinBook "Read-Me-First" sheet.

Message:Keyboard controller stuck key failure

Description:Press 'F1' to continue.

Action: o Check to see if a key has actually become stuck.

o Refrain from pressing keys during boot process. o Unplug any other PS/ 2 devices connected to the computer.

o Call the Technical Support number listed on the WinBook "Read-Me-First" sheet.

[XP5 A-23]

Message:Diskette drive failure

Description:The floppy controller failed to respond to the reset command.

Action:Run system Setup and check floppy drive setting.

o If the problem persists call the Technical Support number listed on the WinBook "Read-Me-First" sheet.

Message:Pointing device failure

Description:The pointing device does not respond during the power on self test.

Action:If external PS/ 2 device is plugged in, unplug it. o Try re-installing the pointing device software. o If the problem persists call the Technical Support number listed on the WinBook "Read-Me-First" sheet.

Fixed disk configuration error

The drive parameters stored in the CMOS setup do not match the hard disk detected in your system.

Press 'F2' to enter CMOS setup, and make sure the hard disk parameter is set to Auto-detect.

Fixed disk controller failure

The hard disk controller failed to respond to the reset command.

o First check the drive parameters, then turn off the power to check all appropriate connections. Make sure the hard drive is installed, and check to make sure the locking screw is secure.

Action:If the problem persists, you may need to replace the hard disk; call the Technical Support number listed on the WinBook "Read-Me-First" sheet.

Message:Realtime clock failure

Description:CMOS RAM lost power and needs to be re-initialized.

Action:Re-enter configuration settings in the Setup program. o If the problem persists, call the Technical Support number listed on the WinBook "Read-Me-First" sheet.

Message:System halted

Description:Password is incorrect.

Action:Restart your computer and enter the correct password. If you can't remember the correct password, call the Technical Support number listed on the WinBook "ReadMe-First" sheet. Be sure to have the serial number and registered owner's name to insure correct identification when you call.

Message:No cache found

Description:The system can not locate the Level 2 cache card.

Action: Check if the cache card is properly seated in its socket. Follow instructions on page 5-2 to open the CPU compartment. Press down on the cache card to make sure it is properly seated in the socket. Be sure to take precautions against static-electric discharge!

Call the Technical Support number on the WinBook "Read-Me-First" sheet to replace the memory card.

[XP5 A-26]

Care & Maintenance

There are a few things you can do to help insure that your WinBook provides you with trouble-free service for an extended period. The computer is designed so that most of the vital components are protected from external contamination. The main things you should do are to keep the exterior of the computer clean and free from accumulated dust and dirt, and protect it from electrical and physical shock hazards. We've already talked about electrical and physical precautions elsewhere, so this section focuses on how to minimize contamination and how to deal with dirt related problems.

Cleaning the Computer

It is a good idea to keep your computer clean. If it gets dirty, you should use a clean, lint-free, nonabrasive cloth to wipe it. You can use a dampcloth - just make sure that it isn't so wet that any liquid can get into the computer. Be particularly careful not to scratch the LCD screen.

There several places on the WinBook where dust & dirt can get inside the computer. You should do what you can to prevent this. Here's a list of the sensitive areas and what you can do:

Rear Ports

If dust and dirt get in the rear ports and affect the contact pins or receptacles, you may experience problems when you connect devices to the ports. To prevent this, keep the port cover door closed when you aren't using the ports. If you have cables connected to some, but not all of the ports, try to keep the area behind the computer clean. Always keep the Docking Station connector covered when not in use.

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Fax Modem Port

The internal fax modem compartment is covered by a two-piece cover if you don't have the fax modem, leave the cover in place. If you have the fax modem, the telephone connector jack replaces the compartment cover.

Audio Jacks & Volume Control

The audio jacks and volume control thumbwheel have no cover, and since they are close to the base of the computer are more easily contaminated. Be especially careful not to let them get clogged up, Floppy Disk Drive

The hinged panel that covers the drive opening will keep out most dust and dirt as long as it is completely closed. The thing you need to be more careful of is the floppy disks themselves. It won't matter if the panel keeps dust out if you put dirty disks in the drive.

PCMCIA Card Compartment

Always keep the compartment door shut when you aren't using any cards. If you have a card installed in only one slot, be careful not to let the compartment get contaminated.

The Keyboard

Try to keep the keyboard as clean as possible. Don't eat or drink over it and remove any dust or dirt that builds up, especially between the keys.

The Trackball

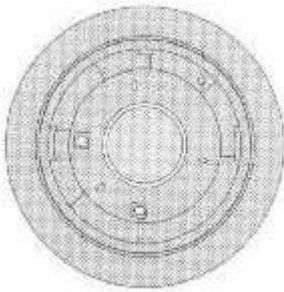
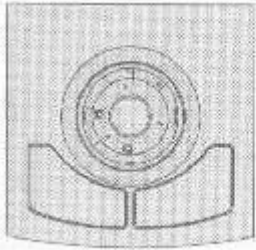
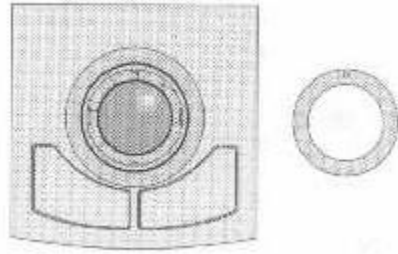
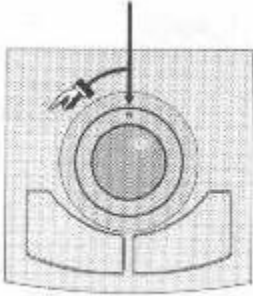
The trackball is susceptible to contamination inside its housing, just like a mouse is. You will need to clean the housing occasionally. When the ball starts moving less easily and your control of the

cursor becomes less precise, you know it is time to clean it. The next section explains how to do it.

Cleaning the trackball is actually a two-part operation. You have to clean both the trackball and the housing it sits in. Follow this procedure to do it:

1. Remove the trackball retaining ring. There is a small hole in the ring at the 12 o'clock position. Stick the tip of a straightened paper clip in the hole, press down slightly and rotate the ring counter-clockwise until the hole is at the 11 o'clock position. The ring will pop up a little and you can take it off.
2. Remove and clean the trackball. With your hand covering the housing, remove the ball by turning the computer over so the ball falls out into your hand. Rinse the ball in hot water then use a clean, lint-free cloth to dry the ball. Wrap it in the cloth until you are ready to replace it.
3. Clean the housing. There are several bearings and rollers built into the side of the trackball housing. Gently use a computer cleaning swab moistened with 91% isopropyl alcohol to clean the bearings and the inner surface of the housing. Don't overdo it. Use as little pressure as will get the job done. You can use more than one swab if necessary.
4. Replace the trackball and retaining ring. Drop the ball back into the housing and replace the retaining ring so that the hole in the ring is at the 11 o'clock position. Insert the tip of the paper clip in the hole, press down slightly and rotate the ring clockwise to the 12 o'clock position.

When you're finished, turn on the computer and test the trackball to make sure it's working properly.



[XP5 Appendix B](#)

Specifications

This appendix lists hardware and environmental specifications for the WinBookXP5. It also contains additional system-use information.

Hardware Specifications

Dimensions

Width Depth Height

Color STN 292mm (11.68") 220mm (8.66") 51mm (2")

Color TFT 292mm (11.68") 220mm (8.66") 51 mm (2")

AC Adapter 36mm 60mm 20mm

Weight

Pounds Kilograms

WinBook

& Battery 6.12.7

AC Adapter

& Power Cord 0.80.367

to

CPU

Intel Pentium P54C, 75MHZ, 90MHZ, 100MHZ or 120MHZ

L2 Cache Options

(64-bit bus, 3.3V SRAM)

256KB Asynchronous

256KB pipeline, synchronous, burst

System Memory

8MB, 16MB, 32MB

Video Controller

C&T 65545 controller with graphics acceleration VESA local bus interface 1MB Video RAM

CRT output resolutions up to 1024x768x256 colors

HiColor modes at 640x480 and 800x600 resolutions

ROM BIOS

Phoenix Notebook Miser BIOS, 128KB Flash ROM

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Battery

Removable pack consisting of either:

Ten 2500ma / h NIMH cells, total capacity of 30 W / hr

Nine 1250ma / h Lithium Ion cells, total capacity of 40.5 W / hr

Example Lithium Ion Battery Capacity

Raw Average Use

TFT, Pentium175 2 hrs 3 hrs

Suspend-to-RAM:24 hrs on fully charged battery

Note:

Raw = all power management disabled; *powerexe* at off setting; running the PC Magazine 8.0 Battery Rundown test

Average = default power management enabled; running test applications which have 50% display utilization and 20% disk utilization

Display Type

*Color Screen***10.3" STN10.4" TFT**

Response Time 160ms/35ms

Pixel Pitch 0.33 x 0.318mm/0.33 x 0.3mm

Contrast Ratio 2050

Brightness 70 cd /M/270 cd /M2

Hard Drive

12.5mm, 15mm, 17mm, or 19mm IDE

340MB, 540MB, 810MB, 1.2 GB

Optional fast transfer and block mode support

Floppy Drive

Internal 3.5" high density drive (1.44MB)

PCMCIA

Card types supported:

2 Type I 2 Type II 1 Type III

PC Card '95 compliant

AC Adapter

90-264 V, 47-63 Hz, two-wire AC input cable

Output: 37W (1.85A max.)

LED indicator: Power on

Pointing Device

Either 19mm Trackball,

TrackPoint 2 pointing stick or

TouchPad

Audio

Optional internal stereophonic audio module;

Business Audio and SoundBlaster™ compatible.

FAX Modem

Composite 14.4K bps Send/Receive Fax, 14.4K bps data modem,
including voice capability

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Ports

IO Port Assignments:

Device Address

Fixed Disk1FO - 1F8

Audio220 - 22F

Parallel Printer Port 2278 - 27F

Serial Port 22F8 - 2FF

Parallel Printer Port 1378 - 37F

Serial Port 1 3F8 - 3FF

PCMCIA 3E0 - 3E1

App(Rnd@K B.- Sp(Bdflcalgons

DMA ChannelAssignments:

Channel No.Function

0Available

1Opt. Audio Bd.

2Floppy Disk

3ECP Support

4[Cascade]

5Available

6Available

7Available

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IRQ Assignment5:

InterruptFunction

IRQ 0System Timer

IRQ 1Keyboard

IRQ 2[Cascade]

IRQ 3COM2, COM 4

IRQ 4COM1, COM 3

IRQ 5Parallel Printer Port 2 (Optional Audio)

IRQ 6Floppy Disk

IRQ 7Parallel Printer Port I (Optional Audio)

IRQ 8Clock/Calendar

IRQ 9Cascaded to INT OAH (IRQ 2)

IRQ 10Available

IRQ 11Available

IRQ 12Internal or External pointing device

IRQ 13Coprocesor

IRQ 14 Fixed Disk Controller

IRQ 15 Available (Used for Docking Station CD-ROM)

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Port Descriptions

Parallel: EPP, ECP support

Serial: Dual 16550 UARTS

PS / 2: Keyboard / Mouse combination port

VGA: supports up to 1024x768x256 color

Audio Line In: Microphone

Speaker Line out: Self-amplified speakers, or Headphones

Microphone: Built-in

High quality internal speaker with volume control

Docking Station connector

Keyboard

82-key Lexmark keyboard, 3mm travel, 19mm pitch

Environmental Specifications

Temperature

Operating: +5° - +30° C (41 - 87° F)

Non-operating: -20° - +60° C (5 - 131° F)

Gradient: not to exceed 20° C / h (35.66° F/h)

Humidity

Operating: 10% - 85% (non-condensing)

Non-operating: 10% - 85% (non-condensing)

Altitude

Operating: 0 - 10,000 ft (0 - 3280 m)

Non-operating: -200 - 30,000 ft (-65.6 - 9840 m)

Shock

Operating: 2G, 11ms, half sine

Non-operating: 60G

Vibration

Operating: .25G 5 - 500 Hz, 1 / 2 oct. / min sweep, 1 hr duration

Non-operating: 1G 5 - 500 Hz, 1 hr duration

Noise

35dB max at 1 meter

Key Color Coding Scheme	
Color	Function
White characters	Standard layout typewriter keys
Yellow characters	Computer & cursor control keys
Gray characters	Embedded keypad keys
Teal characters	Special functions used in combination with the Fn key

The Typewriter Keys

The typewriter keys are arranged in a standard typewriter layout. The Caps Lock key corresponds to the Shift Lock key on a typewriter, with one important exception. The Caps Lock key only affects letter keys. In order to use the symbols above the number keys and the alternative punctuation marks, you must still press the Shift key.

Note that when the Caps Lock key is engaged, the Caps Lock status indicator icon comes on. Pressing the Shift key and typing a letter at this time will result in a lower case, rather than an upper case letter.

Key Color Coding Scheme

White characters Standard layout typewriter keys

Yellow characters Computer & cursor control keys

Gray characters Embedded keypad keys

Teal characters Special functions used in combination with the Fn key

The Function Keys

There are 12 dedicated function keys located across the top edge of the keyboard. They are labeled F1 to F12. These keys are used in many different ways, depending on the operating system and software in use. They are also programmable. See your operating system and software user's manuals for detailed information.

The Control Keys

There are a number of non-typing keys that issue commands or enable functions as listed below.

Escape

Command:'Esc'

Many applications use this key to cancel a command or exit the application. Refer to your application manual for details.

Simuiscan

Command:'Fn'+F6'

Overrides the current BIOS setup selection governing whether both the LCD and CRT screens are active at the same time. Changes are temporary, and revert to BIOS setup settings when the system is rebooted. Command is active under DOS and Windows.

Expand

Command:'Fn'+F7'

This command will force the image to fill the entire LCD screen, and is only used in DOS applications. The changes are saved so the system will remember the setting when rebooted. Only active under DOS or in DOS applications.

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Setup (Power Management screen only)

Command:'Fn'+F8'

This command calls up the power management Setup Utility page (page 2). When you finish your modifications and exit, the system is restored. Note that while the system is in power management Setup, your DOS or Windows application's state is also saved. When you leave Power Management Setup, you automatically resume your application. The key is active no matter which application or operating system you are using.

Invert - Normal/Reverse Video (monochrome only)

Command:'Fn'+F9'

This command toggles the display between Normal and Reverse modes in text mode. In most cases you will probably want to leave it on Normal. Command is active under DOS and Windows.

Display - Active Display

Command:'Fn'+'F10'

This command sets the active display. The options are the LCD or a CRT monitor. Command is active under DOS and Windows.

ScrLk

Command:'Fn'+'Insert'

Some applications use this function to control cursor movement.

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SysRq

Command:'Fn'+'F11'

This key may be used in conjunction with other keys for other specific functions within an application program. Consult your software user's manuals for information.

Print Screen

Command:'Fn'+'F12'

Pressing this key will print a text rendition of whatever is on the screen at the time. This only works in MS-DOS.

Pause

Command:'Pause'

This key temporarily halts a program or command-in-progress under DOS.

Break

Command:'Fn'+'Ctrl' +'Pause'

This will cause some DOS operating programs to terminate.**You must also press the 'Ctrl' key to activate Break.**

Num Lock

Command:'NumLock'

This key activates the embedded numeric keypad.

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Cursor Control Keys

These include arrow keys, page keys, Ins, Del.

Arrow Keys

These cursor control keys move the cursor in the direction indicated.

They are also available as Fn key combinations:

'Fn'+ '8' - up

'Fn'+ 'U' - left

'Fn'+ 'O' - right

'Fn'+ 'K' - down

Page Keys

Home, End, PgUp (Page Up) & PgDn (Page Down)

They are also available as Fn key combinations:

'Fn'+ '7' - Home

'Fn'+ 'J' - End

'Fn'+ '9' - PgUp

'Fn'+ 'L' - PgDn

The Page Up and Down keys move the cursor a page, or sometimes a screen, at a time. The Home and End keys move the cursor to either the beginning or end of

the file or line you're working on.

Insert

Command:'Ins'or'Fn'+ 'M'

The Ins key is used in editing and word processing programs. It inserts material into a text passage so that it overwrites text to the right of the insertion point. Some software packages under Windows assign other functions to this key.

Delete

Command:'Del'or'Fn'+ '>'

The Del key deletes text or graphics in a wide variety of software programs.

Embedded Numeric Keypad

Command:'NumLock'

This turns on the embedded keypad, which replicates the functions of the numeric keypad on an extended keyboard. The assignment for each function is printed on the lower right of the key. The cursor control functions are printed on the front faces of the keys.

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Suspend-To-Disk - Using the PHDisk Utility

The PHDisk utility creates a dedicated partition on your hard disk drive that the Suspend-To-Disk feature uses to store the system state when you suspend the system to disk. *Do not run PHDISK.EXE on a pre-loaded hard disk drive before you back it up, or you will end up erasing the whole drive!* As noted earlier, all pre-loaded drives come with a Suspend-To-Disk

Your WinBook comes with a partition large enough for a system with 16MB of memory. If you install **16MB Suspend-to-Disk partition**.more than 16MB in your system you must increase the size of the dedicated partition. In doing this, you eliminate the old partition and erase the entire hard disk. Therefore, before you use the program, you must back up the entire hard disk drive.

After you create a new partition you can restore, you system configuration from the backup.

You can back up your hard disk either by copying your data to floppy

disks, to another computer on a network, or to a stand-alone desktop PC. **disk drive, so you must back up** Here's a sample of the procedure for using PHDisk: **your system first, as all data on it** 1. Back up everything on the hard disk using a commercial back-up

will be destroyed in the process. utility (purchased separately.)

If you purchased your WinBook

with 32MB of system memory, 2. Make a bootable floppy disk using the 'Startup Disk' section of

the partition will already have 'Add/ Remove Programs' in the Windows Control Panel. **been set at the factory.**

PLEASE CALL WINBOOK 3. Set the boot drive order

TECHNICAL SUPPORT BEFORE Run the system Setup program and on Page 1 Standard Setup,

ATTEMPTING TO USE PHDisk. select the "Boot Drive Order" to be "A: C:". Press 'Esc' and the 'Alt' + 'F4' to save the new configuration.

4. Place XP5 Support floppy disk in drive and reboot from Drive A: Shut down Windows to the DOS command line then hold down the 'Ctrl' and 'Alt' keys and type 'Del' to reboot the computer and boot from the floppy disk in Drive A:.

5. Run PHDisk, delete old Suspend-To-Disk partition if necessary

Type "PHDISK" at the A: command line. A list of options will SYOM

appear. Delete the Suspend-To-Disk partition, delete it by typing **Use this procedure to access the**

"PHDISK /DELETE" and pressing 'Enter'. **system Setup program: 1. Turn on the computer.**

6. Create a new Suspend-To-Disk partition **2. When you see the 'Starting**

Type this command: **Windows' message**

"PHDISK /CREATE /VRAM 1024" **immediately press the F8 key**

Press 'Enter'. The program will automatically determine the re-**to bring up the Windows . '95** required size for the partition. It will take some time to complete the **boot options screen.**

task. When complete, you will be back at the drive A: DOS prompt. **3. Press the Cntri-Alt-S key**

combination to bring up the

7. Use FDISK to partition the rest of the hard disk **Setup program.**

Reboot the computer as before. The system will reboot to the A: **Don't enter Setup from Windows**

prompt. or a Windows DOS session.

Type "FDISK" and 'Enter' to run the standard FDISK disk partitioning program. Select "1" to create a new partition and then press

'Enter' in response to the series of questions that pop up on screen.

When FDISK is complete, it will automatically reboot the computer from the floppy drive.

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8. Format drive C:

Type "FORMAT C: / s / u" and press 'Enter'.

9. Copy the floppy files back to a hard disk DOS directory Type "MD C: WINDOWS \ COMMAND" and press 'Enter'. Type "COPY C:\WINDOWS\COMMAND" and press 'Enter'. Remove the floppy disk after there is no more drive activity and reboot your computer. You should see the C: prompt.

10. Configure the system for Suspend-To-Disk

Run the system Setup program by pressing 'Ctrl' + 'Alt' + 'S'.

Change the "Boot Drive Order" line back to 'C: A:'.

Press 'PgDn' to go to Screen 2.

Select the "Suspend to" line and press the "+" (plus & equal sign) key until "Suspend-to-Disk" appears.

Press 'Esc' and 'F4' to save and exit. The system will reboot.

go to the next step. If there is **automatically detects if the** problem, try repeating steps 5 through 11.

Suspend-to-Disk partition exists 12. Restore your hard disk from the backup you made.

and if it is big enough. if there is

no partition or it is too small the

BIOS will not allow you to select To make sure that you are not using any power at all after you have **the Suspend-to-Disk option.** suspended to disk, be sure to turn the computer OFF.