INSTALLING THE VGA DEVICE DRIVER

Following is the procedure for installing the Video Accelerator 3D Adapter VGA driver to your computer:

Installing VGA device driver for Windows XP

1. Click the **Start** button, then point to **Run**. The **Run** dialog box appears.

2. Click the **Browse** button and specify the directory as.
   "E:\Drivers\WinXP\VGA\Graphics\Setup.exe".

3. Click **"OK"** to execute the setup program. The **Setup** box appears.

4. Click **Next** to install this driver when screen displays this command.

5. Click "**Yes**" to accept the License Agreement .

3. Tick the option **"Yes, I want to restart my computer now.",** and press **Finish** to restart your system.

INSTALLING THE AUDIO DEVICE DRIVER

Your notebook computer uses the Realtek Audio controller.

Installing Audio device driver for Windows XP

1. Click the **Start** button, then point to **Run**. The **Run** dialog box appears.

2. Click the **Browse** button and specify the directory as.
   "E:\Drivers\WinXP\Audio\Setup.exe"
   where the audio driver is located.

3. Click "**OK"** to implement the setup program to install this driver.

4. Click **"Next"** to continue the following steps.

5. Tick the option **"Yes, I want to restart my computer now.",**

and press **"Finish"** to restart your system.

INSTALLING THE MODEM DEVICE DRIVER

Please follow the procedures below for installing the Agere System AC'97 Modem driver:

Installing Modem driver for Windows XP

1. Click the **Start** button, then point to **Run**. The **Run** dialog box appears.

2. Click **Browse** button and navigate to the directory as **"E:\Drivers\WinXP\modem\setup.exe"**

3. Click **"OK"** to implement the setup program to install this driver.

4. Click **"OK"** to install the modem driver.

INSTALLING EZBUTTON UTILITY

Following is the procedure for installing the Internet, e-mail button utility.

Installing EzButton Utility for Windows XP

1. Click the **Start** button, then point to **Run**. The **Run** dialog box appears.

2. Click **Browse** button and specify the directory as **"E:\Drivers\WinXP\EzButton\EzButton System.exe".**

3. Click **"OK"** to implement the setup program.

4. Click **Next** twice to continue the installation.

5. Click **Yes** to create the specified directory.

6. Click **Next** twice to complete the installation.

7. Press **Finish** to restart your computer.

INSTALLING THE WIRELESS LAN DEVICE DRIVER AND UTILITY

INSTALLING THE WIRELESS LAN DRIVER

Please follow the procedures below for installing the Intel Pro Wireless LAN 2100 3B Mini PCI Adapter driver:

Installing Wireless LAN driver for Windows XP

1. Click the **Start** button and then click **Run**. The **Run** dialog box appears.

2. Click **Browse** button and specify the directory as **"E:\Drivers\WinXP\Wireless\SetupWLD.exe"**

3. Click **"OK"** to continue installing the WLAN driver.

INSTALLING THE WIRELESS LAN PROSET UTILITY

Installing WLAN-PROSet Utility for Windows XP

1. Click the **Start** button, then point to **Run**. The Run dialog box appears.

2. Click the **"Browse"** button and specify the directory as **"E:\Drivers\WinXP\PROset\PROSet.exe".**

3. Implement the setup program to install this driver. The **Welcome** dialog box appears.

4. Click **"Next"** to process the further step continuously when screen displays this command.

5. Tick the option **"I accept the terms in the license agreement"**,

   and click **"Next"** for further step processing.

6. Tick the option **"Typical"**, and click **"Next"** again.

7. Press **"Install"** to setup the program.

8. Press **"Finish"** to finalize the installation

INSTALLING THE LAN DEVICE DRIVER

Please follow the procedures below for installing the LAN driver:

Installing LAN driver for Windows XP

1. Click the **Start** button, then point to **Settings,** and click **Control Panel.**

2. Double-click the **System** icon, point to **Hardware** tab, then click the **Device Manager** folder tab. You will find the **Network Adapters.**

3. Double-click **Realtek RTL8139 Family PCI Fast Etherent NIC** under the **Network Adapters**, then select the **Driver** tab.

4. Choose **Update Driver**.

5. Tick the option **Install from a list of specific location (Advanced)**. You will find another two options appear.

6. Tick only the option **Include this location in this search.**

7. Click **Browse** button and point to the LAN driver location as **"E:\Drivers\WinXP\Lan"**.

8. Click **Next** to search and install the driver.

9. Click **Finish** to complete the LAN driver installation.

INSTALLING ALPS - TOUCH PAD DRIVER

Installing ALPS - Touch Pad driver for Windows XP

1. Click the **Start** button, then point to **Settings**, and click **Control** Panel.

2. Double-click on the **System** icon, **Hardware** and then click on the **Device Manager** folder tab.

3. Click **Mice and other pointing devices** on this folder tab to show the **Standard PS/2 Port Mouse**, then double-click it.

4. Select **Driver** and then choose **Update Driver.**

5. Select **Install from a list of specific location (Advanced)** and then click **Next**

6. Click the **"Don't search, I'II choose the driver to install"**, then click **Next**.

7. Click the **Have Disk** tag, then click **Browse** button to navigate the Touch Pad driver location as **"E:\Drivers\WinXP\Touch Pad"**. Click "**OK**" for confirmation.

8. Click **Next** to search the driver.

9. Click **Finish** to complete the Touch Pad driver installation.

INSTALLING GV3 DRIVER

Installing GV3 driver for Windows XP

1. Click the **Start** button, then point to **Settings**, and click **Control** Panel.

2. Double-click on the **System** icon, **Hardware** and then click on the **Device Manager** folder tab. You will find a series of processors appear on the list box.

3. Double-click **Intel® Pentium® M processor …**

4. Select **Driver** and then **Update Driver.**

5. Select **Install from a list of specific location (Advanced)** and then click **Next.**

6. Click the **"Include this location in the search"**, then press **Browse.**

7. Navigate the **GV3** driver location as **"E:\Drivers\WinXP\GV3"**. and click **"Next"** to for further processing.

8. Click **Finish** to finalize the installation.

2.6 Turning off Your Computer

If you are not going to use the computer for a while, it is best to turn off the power of the computer for longer use. Before turning off the power, you need to close first all application programs and shutdown the operating system.

After turning off the computer, make it a habit to leave the LCD panel open for a while whenever used for an extended period of time. This allows the inside parts of the computer to cool off. Closing the panel will force the heat up against the LCD screen, which may degrade the LCD when done regularly. More importantly, never close the LCD panel for a long period of time when computer is on and power saving features are disabled.

3   Using Your Notebook

This chapter describes how to operate the standard built-in features of the notebook that you normally would use in your day-to-day computer work. If you are new to computers and to your operating system, you also need to read the manual for the operating system on how to work with your computer. It is very important to familiarize yourself well with the operating system. The succeeding chapters not only guide you to go beyond the basics, but also try other exciting features.

3.1   Starting Your Operating System

The operating system is a must ingredient in using your computer. Without an operating system, it is like playing chess without the chessboard. It is the platform for all your software application programs to run on. The most popular operating system today is Microsoft Windows. You should have installed one operating system by your dealer unless you are an expert computer user and would need a more powerful operating system. If you have an operating system already installed in your computer, then you would be up and running after you power on your computer and boot up the system. Check your operating system manual on how to run it.

3.2   Understanding the Keyboard Functions

Your notebook computer is equipped with an 88 keys keyboard that provides all the functionality of a full-sized 101 or 102-key IBM keyboard. Aside from the standard typewriter-layout keyboard of your computer, there are a number of extra features and function controls on the built-in keyboard including Windows system hot keys.
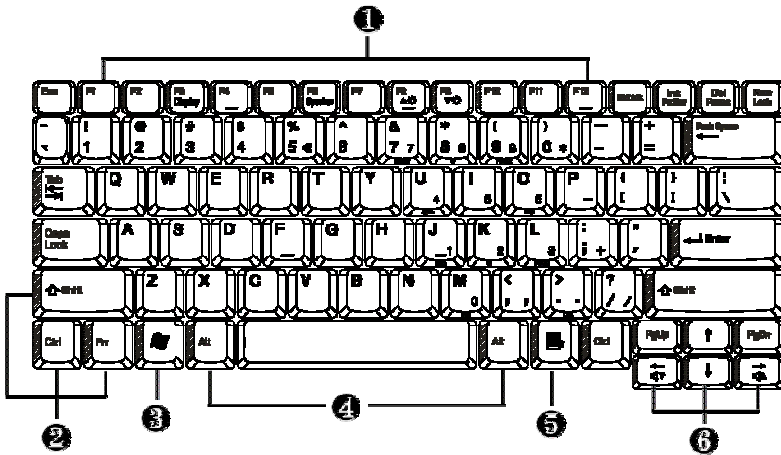
1. Function Keys   2. Control Keys
3. Windows Start Menu Key   4. Control Keys
5. Windows Shortcut Key   6. Cursor Control Keys

Keyboard

Key features and operations are described below:

- **Function Keys**

   Function keys are application-driven, like **F1** through **F12** can be found on the keyboard. These keys work together with the **Fn** key to activate special functions. Some keys (printed in blue on keypad) are preprogrammed with dual functions.

- **Control keys** — **Ctrl**, **Alt**, **Fn**, and **Shift** are controls used in conjunction with other keys to change their functions. To use control keys, press and hold the control key while pressing another key. For example, "Press **Ctrl-C**" means to hold down the **Ctrl** key and type the letter **C**. Key combinations work especially to the application you are running.

Notebook User Guide

- **Windows keys**
  Use the following two keys to facilitate your work:

  → Start Menu key
    Displays the Start menu.

  → Shortcut/Application key
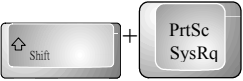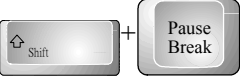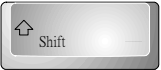   Provides quick access to shortcut menus. This key acts like a right
    mouse button.
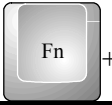
- **Cursor Control keys**
  Cursor control keys let you position the cursor on the screen where you
  want. In the screen, the cursor is a blinking underline, block, or vertical
  bar depending on the application. The cursor indicates where the next text
  typed is inserted.

- **Typewriter keys**
  Typewriter keys (also called *alphanumeric* keys) are used to enter text and
  characters. Keys with blue print on them behave differently when
  combined with control keys.

BASIC KEYBOARD FUNCTIONS

Keypad	Function Description
Enter	<Enter> key. Execute a command. Within many text editing application programs, the <Enter> key inserts a hard carriage return, just like what ordinary typewriter does.
Esc	<Esc> key. Press this key to cancel or escape from a command or function.
Insert NumLk	<Ins> key. Known as the Insert key. Press this key to toggle the keyboard data entry from insert to type over mode.
Shift + PrtSc SysRq	Shift +<PrtSc> key. Known as the Print Screen key. Press this key to map the whole screen to share memory for your specific usage.
Delete ScrLk	<Del> key. Known as the Delete key. Press this key to delete the character to the right of the cursor, or delete marked texts or items.
Shift + Pause Break	Shift +<Pause> key. Press this key to temporarily halt execution of a command. Pressing any other key to resume execution of a command.
Backspace	<Backspace> key. Press this key to delete the character to the left of the cursor.
Shift	<Shift> key. Press this key in combination with alphabet letters to produce uppercase letters in typing. Use this key in combination with those two-character keys (found on the second row of the keyboard) to produce the upper marked keys. Also used in most application program in

Keypad	Function Description
	combination with other keys to execute a certain command.
Tab	<Tab> key. Press this key to move the cursor to the next tab stop on the right. This key works much the same as in ordinary typewriter.
Ctrl	<Ctrl> key. Known as the Control key. Used in most application program in combination with other keys to execute a certain command.
Alt	<Alt> key. Known as the Alternate key. Used in most application program in combination with other keys to execute a certain command.
Fn + Insert NumLk	Fn +<Num Lock> key. Activates the embedded 15-key numeric keypad. The keys are color coded blue.
Caps Lock	<Caps Lock> key. Used in most application program to always activate uppercase alphabet characters.
Fn + Delete ScrLk	Fn +<Scroll Lock> key. Used in most application program to scroll the screen without having to move the cursor.

CURSOR CONTROL KEYS

Keypad	Function Description
↑	**Up arrow key.** Moves the cursor up one line at a time.

Keypad	Function Description
↓	**Down arrow key.** Moves the cursor down one line at a time.
←	**Left arrow key.** Moves the cursor to the left one space at a time.
→	**Right arrow key.** Moves the cursor to the right one space at a time.

SCREEN CONTROL KEYS

Keypad	Function Description
Home	<Home> key. Moves the cursor to the beginning of a screen or line.
PgUp	<PgUp> key. Moves the cursor up one screen at a time
PgDn	<PgDn> key. Moves the cursor down one screen at a time
End	<End> key. Moves the cursor to the end of a screen or line.

WINDOWS HOT KEYS
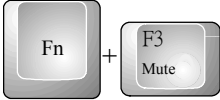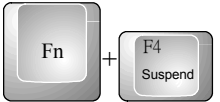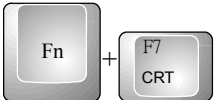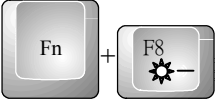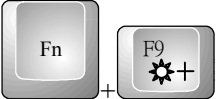
Keypad	Function Description
	\<Start\> key. Pulls up the Windows Start menu.
	\<Right Click\> key. Performs a mouse right-click function for Windows system.

SPECIAL FUNCTION KEYS

The notebook has special system function keys that activate key serving dual functions. When pressed in conjunction with the **\<Fn\>** key, these keys set specific system parameters and are sometimes referred to as "hot keys".

Keypad	Function Description
Fn + F3 Mute	Enable or Disables the built-in system speaker.
Fn + F4 Suspend	Press this key to activate the system into the suspend mode.
Fn + F7 CRT	Switches display between LCD, CRT, or LCD and CRT simultaneously.

Keypad	Function Description
Fn + F8 ☼−	Decreases the brightness of LCD display incrementally.
Fn + F9 ☼+	Increases the brightness of LCD display incrementally.

3.3   Using the Glide Pad Pointing Device

Your computer comes with a built-in Glide Pad pointing device that is found on the center of the palm-rest surface.

The Glide Pad offers a number of options that let you customize how it functions. To access these options, locate the **Control Panel** and double click on the **Mouse** icon. The options let you control the size and color of the cursor, cursor speed, the accepted double-click speed, and selection button orientation.

The Glide Pad works a mouse pointing device replacement that is used under Windows-based operating system. You can use the standard Microsoft driver that is compatible with the Glide Pad device and is normally used under Windows-based operating system. However, if you want to utilize the added features of the Glide Pad, you may want to try installing its own device driver that comes with added utilities for enhancing the function of the device.
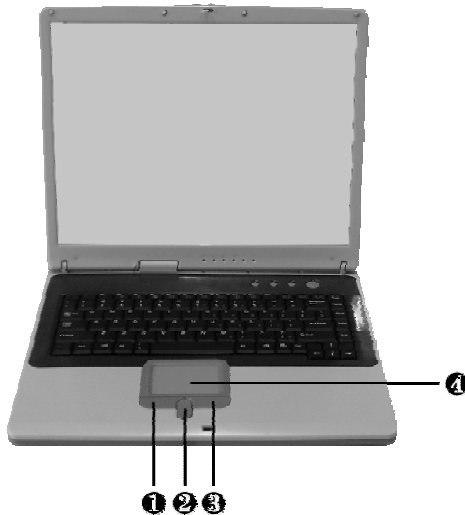
1. Left Selection Button   2. Scroll Button
3. Right Selection Button   4. Glide Pad

Glide Pad Features

Here how to use the Glide Pad pointing device:

1. The rectangular surface acts like a miniature duplicate of your display screen. To move the mouse cursor, place the finger lightly on the sensor pad and move in the desired direction. If you reach the end of the pad, lift your finger and place it back down on the other side of the pad.

2. To select an item, click on the item by pressing the left button control or by simply tapping on the surface once. A light, quick tap always works best. To execute an item, click the left button twice or do a quick double tap on the surface.

3. To simulate holding the mouse button down (dragging an icon or selection), use the tap-and-drag gesture. This feels much like a double-click, except that the finger remains on the pad after the second tap: Tap, lift, tap, hold and move. The simulated button remains held as long as the finger remains on the pad.

4. To scroll up or down the screen, just slide up or down the scroll button to move the screen up or down.

☞ *Avoid spilling any liquid on the Glide pad surface and always keep the Glide pad surface and pointing finger dry from sweat built-up. Also do not expose Glide pad to any magnetic source object.*

3.4   Configuring Your Screen Display

The VGA display function of your notebook is based on a high performance AGP local bus controller and is fully IBM VGA compatible. This controller offers a large set of extended functions and higher resolutions especially useful when you are connecting an external high-resolution and high-frequency CRT or LCD.

Please Refer to Section 5 "Installing the Notebook Device Drivers" of Chapter 2 in this manual for the procedures on how to install the VGA device driver under Windows. After installing the VGA driver, you would then configure the display resolution or screen size to match your LCD display panel. This notebook computer model provides 1024x768 as well as 1280x1024 LCD panels. You would also probably want to set the amount of color output to display sharper images and photos.

POSSIBLE DISPLAY CONFIGURATIONS

The table below shows you the possible display resolution you can set when using either the LCD display or the external monitor (CRT):

Display	Possible Resolution	Maximum Colors
1024x768 XGA LCD	640x480	16 million colors
	800x600	16 million colors
	1024x768	16 million colors
1280x1024 SXGA+ LCD	640x480	16 million colors
	800x600	16 million colors
	1024x768	16 million colors
	1280x1024	16 million colors
CRT Only	640x480	16 million colors
	800x600	16 million colors
	1024x768	16 million colors
	1152 x 768	16 million colors
	1280x1024	16 million colors
	1400x1050	16 million colors
	1800x1440	

☞ *65,536 or 64K colors is also equivalent to 16-bit high color while 16 million or 16M colors is equivalent to 32-bit true color.*

☞ *You can use the <Fn> + <F7> hot-key to switch the display between LCD only, CRT only, or both LCD and CRT display.*

CHANGING THE DISPLAY PROPERTIES UNDER WINDOWS

To change the display properties of your screen under Windows system, just right-click on the desktop area and select Properties or go to the Control Panel

and click on the Display icon. The Display Properties dialog box will appear on your screen. Click on the Settings tab to set your desired configuration. Make sure to follow the configuration table above.

☞ *If you cannot configure the display properties, change the display driver first as mentioned on Section 5 "Installing the Notebook Device Drivers" of Chapter 2 in this manual. Consult your dealer for the latest Windows VGA driver.*

3.5   Knowing the Power Saving Features

One of the great features in your notebook computer aside from its superior performance is the ability to save energy power. Your computer is designed to incorporate intelligent and advanced power management functions that turn off power of most components when system is idle or not in use. This does not affect the performance of your system as it monitors the activity of your computer and resumes power and operating speed when activity is detected. This feature not only gives you longer battery hours but cooler systems and components as well. For more information on how to control the power management features of your computer, refer to Power Management function in Control Panel of Windows.

The definitions of power management mode are depicted as follows:

Full-On Mode

No device in the system is executed in power management, the system can respond to all applications at maximum performance.

Suspend to RAM mode

All devices are powered off except the other supporting components and system memory where your working files are stored. You can activate this either pressing the power button or setting the Suspend timer on the Power Management function of the Control Panel in Windows. To resume full-on state, press the power button.

Suspend to Disk mode

When this mode is activated, the context of the entire system is saved to disk and all components and devices are powered off, while all clocks are also stopped (except Real Time Clock or RTC). You can activate this by setting the Hibernate (Windows 2000/XP) mode on the Power Management function of the Control Panel in Windows. To resume full-on state, you can press the power button.

Mechanical off Mode

All power, except the RTC (real time clock), has been turned off from the system. This includes external AC power source and battery power source.

3.6 Working with the Built-in HDD

Your notebook computer is equipped with a built-in large capacity 2.5 inch IDE hard disk drive where you store or install your computer operating system and all application software programs. You need to format the hard disk before using. The internal hard disk is normally assigned as Drive C after formatting. Sometimes divided into two partitions, adding a Drive D. Since your computer supports different hard disk capacities (up to 60 GB), you also need to setup the disk type first on your computer's BIOS SETUP program

before formatting the disk drive. Your computer supports Auto-detect hard disk type, so you do not need to set it manually. Your dealer should already have done all of this for you. You can refer to **Chapter 6** on how to run the BIOS SETUP program.

You can increase the system's storage capacity by replacing the standard hard disk drive with a drive of greater storage capacity.

☞ *If you wish to replace your hard disk, contact your local dealer for more information about this dealer-installable device.*

☞ *Always turn off your computer first before removing the hard disk drive. Failure to do so will damage the computer and the hard disk. Avoid jarring or moving the computer while the hard disk is still being accessed.*

3.7   How to Access the Optical Disk Drive

Your system ships with an optical disk drive installed on the right side of your computer. You would normally use the drive for installing operating system and software application programs.

To insert and remove a disc on the drive:

1.   Make sure the computer is turned on. Press the eject button found on the door cover of the optical disk drive. The CD tray mechanism will pop-out slightly and slowly pull out the whole length of the tray.

2.   Place the disc on top of the CD tray with the label side facing up. Gently press the compact disc onto the center spindle to secure the disc.

3. To remove the disc, press on the center spindle and pull up the disc from the side until the disc snaps out of the spindle lock.

☞ *If the eject function is disabled by software or a power failure occurs, the Emergency Eject Hole allows you to manually remove a CD from the reader.*

4. To close the optical disk drive, simply push the CD tray inside. The optical disk drive LED will activate when the disc is detected. Wait until the LED has turned off and then start to read the disc.

How to care the CD

When you handle CDs, pay attention to the following guidelines:

- Always pick up the CD by its edges.
- Avoid scratching or soiling either side of the CD.
- Do not write with the hard ball-point pen or apply labels on either side of the CD.
- Keep the CD away from direct sunlight or high temperatures.
- Clean fingerprints or dust from the CD by wiping it with a soft cloth.

The above points also apply to other optical storage media.

☞ *The optical disk drive is a Class 1 Laser Product.*

3.8 Using PCMCIA Cards

WHAT IS PCMCIA?

PCMCIA or Personal Computer Memory Card International Association is a non-profit trade association that defines the industry standard for the PC Card technology. The goal of PCMCIA is to ensure that any PC Card can work in any mobile computer built with a PCMCIA slot.

To allow manufacturers to add functions and technologies in the PC Card form factor, PCMCIA has defined two PC Card types:

Type	Thickness	Sample Devices
Type II	5.0 mm	Fax/Modem & Network Cards
Type III	10.5 mm	Hard Disks (ATA Cards)

Type II Cards

Type II card has a thickness of 5.0 millimeters (mm). Type II cards are often storage or communications devices such as Flash Memory, LAN, and Small Computer System Interface (SCSI). Typical Type II cards include input/output (I/O) features such as modems and LANs. The features for Type II Cards include following characters:

- Type II Extended Cards
  Many PC cards are Type II extended cards. The extended card has an additional physical component that protrudes beyond the traditional card size. The extension can be as large as 40 mm deep by 9.65 mm high. This extension provides room for additional electronics as well as a location for external connectors. The GPRS card is an example. The extended part is for additional electronics and antenna.

- Communication Cards
  Both network PC cards and fax/modem cards can use with your notebook computer. However, if you use built-in LAN/Modem module of this computer, it is not necessary to use those cards.

- Storage Cards
  When you insert a storage PC card, PC card Adapter for other memory card (i.e. Compact Flash card, Smart Media card...) or small hard drive card in the notebook computer, it appears as a unique drive depending on the type of card you are using.

  The following table provides sample drive designations.

Sample Drive Designations	
Drive letter	Location/Device
C:	Internal hard disk
D:	Internal hard disk, 2nd partition
E:	CD/DVD/RW/optical disk drive
F:	Slot 0, high-speed memory card

Type III Cards

Type III cards are thicker (10.5 mm) than Type II cards and allow no extensions. This notebook does not support Type III Card.

WHAT IS CARDBUS?

CardBus is the high-performance 32-bit PCI bus master interface from PCMCIA. It runs up to 33MHz clock speed and operates at only 3.3V. Your notebook computer incorporates the CardBus inside the PC card slot. Aside from 3.3V CardBus PC cards, you can also insert 5V 16-bit PC cards that can also be detected and used by your computer.

INSERTING AND REMOVING A PCMCIA CARD

Your computer includes hot swapping capability, that allows you to exchange cards while the computer is turn on and start using it immediately.

Inserting PC Cards

To insert a PC card into the PCMCIA slot:

1. Locate the PC card slot cover on the left side of the computer.

2. Insert the side of PC card with the 68-pin socket into the PC slot. The face label of the card should also be facing up.

3. When the full length of the card is almost inside the slot, push firmly but slowly, to ensure full connection with the computer. The PC card will be detected and once the needed driver is installed, it will generate a beep sound to indicate that the card is detected.
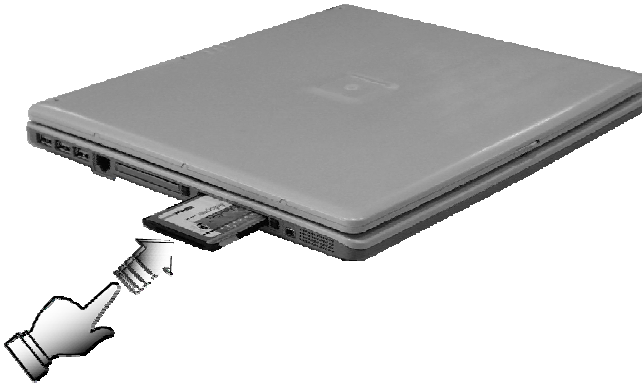
Removing PC Cards

To remove a PC card from the PCMCIA slot, you should first disable the
PCMCIA card setting in the system as described followings:

1. Double click the **PC card** icon on the right bottom side of the task bar.

2. Select the socket from the list that you want to remove, and click **Stop**
    button. The system then disables the function of PCMCIA card.

3. Then you can remove the inserted PC card, push the button found on the
    right side of the PC slot to release the eject button. Then push it again to
    release the PC card.

4. When the PC card has moved out a space out of the slot, hold the edges
    of the card and slowly slide it out.
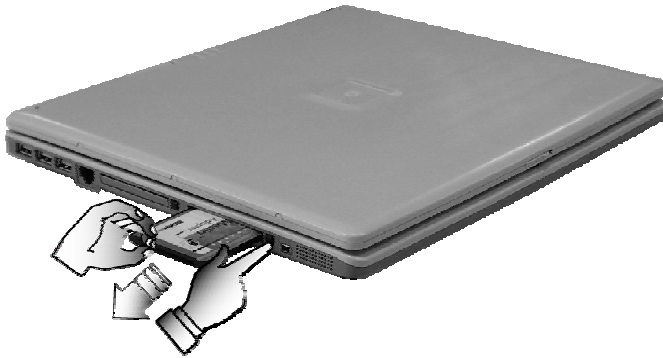
MAKING PC CARDS WORK

Since PC cards come in different types and brands, making every card work on your computer may not that be easy. PC cards like network, SCSI or multifunction cards (MFC) need additional driver installation and configuration in making the card work. This additional driver may already be built-in under Windows that Windows will try to detect and prompts you if you want to install the driver. If the driver is not included under Windows, you will need to insert the driver CD provided by the PC card manufacturer into the optical disk drive and install to Windows system. You need to read the manual guide of the PC card on how to configure and operate the card.

☞ *Some PC cards require additional system resources. Before inserting a PC card you may have to disable either the USB port, or the 56K internal modem. Check the Windows device manager to ensure that there are no conflicts of resource amount those devices.*
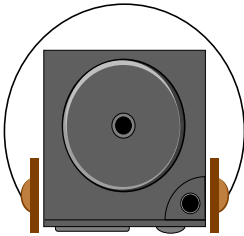
HOT SWAPPING PC CARDS

Just like floppy disk drive, your PCMCIA slots allow you to replace one PC card with another even while your computer is on. However, you need to remember the rule that if the PC card is in use, you must not remove it.

☞ *PC cards draw power even when not in use. To save energy, press the button to disconnect the card when it is not in use.*

4   Fun with Multimedia

This chapter lets you make full use of all the multimedia features of your computer in having fun and excitement during work or leisure. You will learn how to mix and match the built-in sound system, use optical disk drive in creating an exciting full multimedia presentation.

4.1 Notebook Multimedia Features

Your notebook computer is rich in multimedia features that make your computing fun, comfortable, exciting and easy. Your computer is well able to perform all multimedia tasks through the following:

- Intel® Pentium® M microprocessor powered by Intel® Centrino™ Mobile Technology

- Up to 1GB DDR SDRAM

- Optical disk drive for DVD/CD watching/playing and CD making

- Integrated Intel graphics engine.

- 16-bit Audio Sound System with built-in speaker and microphone.

4.2 Audio Sound System Features

Your computer has a built-in 16-bit stereo sound controller that allows you to record, store, and playback voice, music and other sound effects with built-in mixer controls. An integrated full-duplex microphone and twin mini-speakers are also built-in into your computer to allow you to record and playback sound anytime and anywhere.

On the right side of your computer, you will find the audio ports that include the following:

- External 1/8-inch microphone jack that connects external microphone for recording purpose.

- Earphone or headphone jack for personal listening.

- External thumb-wheel volume control.

4.3   Setting Up the Audio Driver Properties

Before you can start using the audio capabilities of your computer, you need first to setup properly the audio driver after installing Windows. If you bought your computer with Windows pre-installed, it is most likely that your dealer have configured the sound driver for you. If not, you must refer to Chapter 2 on how to setup the sound drivers for Windows.

4.4   Windows Multimedia Programs

Windows provides several multimedia programs that you can run with the built-in features of your computer. Pointing the **Start** button, **Programs**, **Accessories**, then **Entertainment**, you will find the Multimedia programs group. (The section below use Window XP as examples)
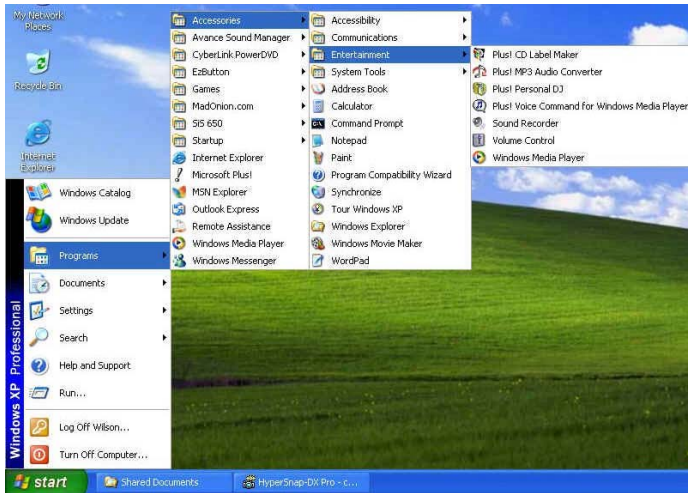
Notebook User Guide

Figure 4-1 Entertainment Programs Group

The standard multimedia components are as follows:

- Windows Media Player - for playing sound, video and animation files

- Sound Recorder - for recording sounds and playback

- Volume Control - for adjusting the volume of mixer

☞ *For more information on how to operate these multimedia components, run the program and click on the Help menu.*

4.5   Recording Sounds

Your computer allows you to record voice and other sounds in several ways and stores them as files on your hard disk. These voice or sound files can then

70

be played back through the internal speaker or earphone jack using an external speaker, headphone, or earphone set. You can also use the files as voice annotations on many applications for more real presentation. This section will describe briefly how you can record sounds under Windows operating system.

To record sounds, you need to run the Sound Recorder program from the Multimedia program groups. The control buttons of the Sound Recorder are simple to understand which comprise of the Fast Rewind, Fast Forward, Play, Stop, and Record buttons. Click the Help menu on how to operate the Sound Recorder.


Figure 4-2   Sound Recorder

The Sound Recorder also allows you to record sound from different input audio source like the following:

- From the external microphone

- From the optical disk drive

Since you could record sound from different input sources, you must first set the proper audio input recording device under the Recording Control panel. To do this:

1. Double-click on the Volume Control on the taskbar or click Start button, then point to Programs, Accessories, Entertainment and then click on Volume Control.

Notebook User Guide

2. Click **Properties** in the Options main menu.

3. Click the round button for Recording and tick off each component that list in the "Shows the following Volume Controls" box.
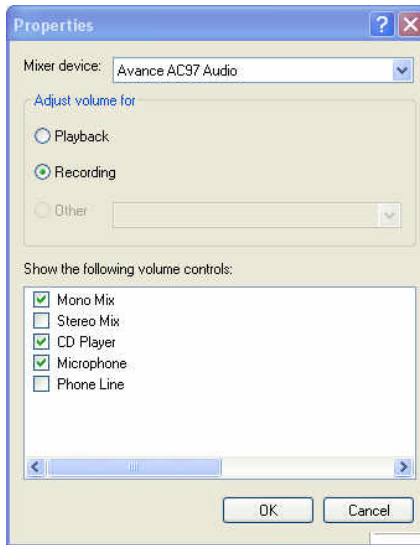
Figure 4-3   Audio Properties

4. Click OK and the Recording Control dialog box will appear. Here, you will select the input device for the recording source. If you want to record from the optical disk drive with audio music, you must click on CD Player.
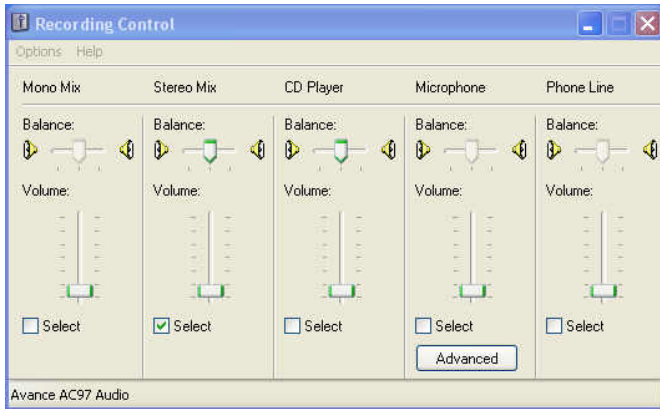
Figure 4-4 Recording Volume Control

USING AN EXTERNAL MICROPHONE

Your computer allows you to connect an external microphone for high quality recording. The external microphone jack is found on the right side of your computer. Use only microphone with 1/8-inch mini-jack connector. Follow the same procedure for recording voice.

USING THE BUILT-IN OPTICAL DISK DRIVE

You would normally use the optical disk drive for recording audio music from the Audio CD. Follow these steps:

1. Activate CD Player volume on the Recording Control as discussed earlier.

2. Run the Sound Recorder program.

3. Insert the audio CD into the optical disk drive. Unless you have disabled the CD auto-insertion notification for supporting Suspend mode, the CD Player should automatically run after you have inserted an audio compact disc and will start playing the audio CD.

Figure 4-5 Play Audio CD by Windows Media Player

4. Select the starting point where you want to start recording.

5. Switch to the Sound Recorder and press the Record button.

6. Switch immediately to the Windows Media Player and press the **Play** button. You can adjust the volume control so you can also hear the music while in recording.

4.6 Playing Audio and Sound

Your computer has built-in twin speakers to playback audio and sound. You can also adjust the volume manually by adjusting the thumb-wheel volume control found on the right side of your computer.

For more quality sound output, you can choose to connect an external amplified speaker or earphone from headphone jack. Always minimize the volume first before placing the phone set to your ear.

USING THE WINDOWS MEDIA PLAYER

The easiest way to playback multimedia media files is to run the Windows Media Player. Follow these steps:

1. Click on **Start**, point to **Programs**, **Accessories**, and then **Entertainment**.

2. Click on **Windows Media Player** to start program.

3. Click on the File menu and select the file you want to play.

4. When the file is recognized and open, click on the **Play** button to start playback.

4.7   Playing Video and MPEG Files

Your computer is capable of running video motion files as well as MPEG (Motion Picture Expert Group) files on CD, DVD, or CD-RW. By using software MPEG program, you can watch real full-motion picture on your computer. You can also run the Windows Media Player under the Entertainment programs group as well to show all media device programs.
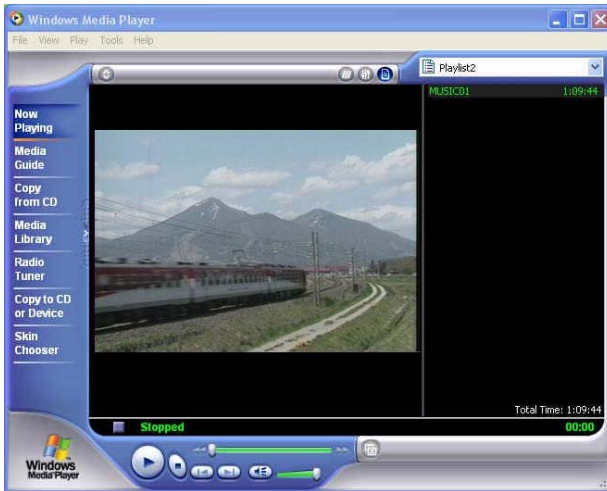
Figure 4-6 Windows Media Player

4.8   Using DVD

DVD is the breakthrough in superb full-motion picture playback. One disc can contain at least 4.7GB of information, capable of holding one full-length movie with soundtracks, subtitles, and different languages. Much more, the DVD-ROM drive of your computer is backward compatible with CD-ROM drive so it allows you to use any CD as well. It also works the same as the CD-ROM.

To playback DVD titles, you would need a software MPEG-2 program and the DVD-ROM, DVD/CD-RW Combo drive.

☞ **For best DVD playback, please enable the DMA function of this notebook, for how to enable the DMA channel on both optical disk drive and Hard Disk, please refer to driver installation on section 5 of chapter 2. Moreover, you can enable Hardware Accelerator if the software MPEG-2 player you are using has supported this function.**

4.9 Using Rewritable Optical Disk Drive Function

CD-RW drive is a device that can write digital data to CD-RW and CD-R compact disk (CD). With this device, you can backup your own data to CD-R or CD-RW disc for mass data storage and safely retaining. The CD-R disc can be written several times until the CD-R is full; the CD-RW disc, furthermore, can write and erase data repeatedly. Please refer to the related user manual about the CD-RW software.

☞ **Please pay attention to the copyright of the software or data you want to backup. Backup or distribute the software or data might be illegal according the restriction of the law.**