

Chapter 5

Exploring your Notebook

*This chapter gives an
in-depth description of
some of the built-in
software and hardware
features of your
notebook*

Introduction

The software drivers and utility programs are pre-installed on your notebook, and are integrated into the Windows environment. If you ever have to rebuild your hard disk drive, you can use the support software supplied with the notebook to re-install the programs.

Video Display

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

Flat-panel Screen

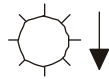
The flat-panel screen is a large, color liquid crystal display panel. The screen uses a technology called TFT (Thin Film Transistor), which provides a very high contrast display. You can adjust the brightness of the display by using the video hot keys.

FN + F7



This key combination increases the brightness of the built-in screen.

FN + F8



This key combination decreases the brightness of the built-in screen.

Resolution and Color Depth

The screen is designed to display a video resolution of 1024 pixels by 768 pixels. This is called XGA resolution, and it is common to most high-end computers. It displays a maximum of information without making the screen fonts too small to read.

You cannot display a higher resolution than 1024 by 768. You might be able to disable the stretching function by using the video software utility described below.

Video Ports

Your notebook is installed with two video ports:

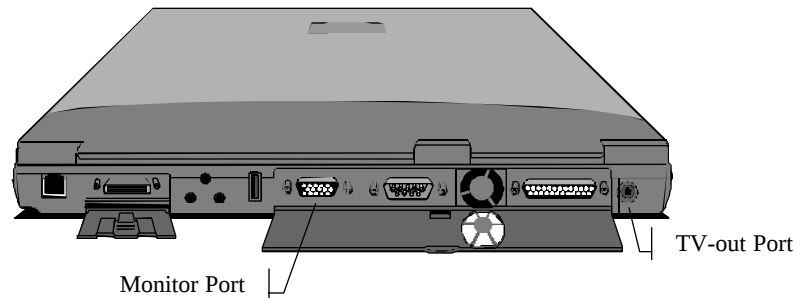


Figure 5-1: Video Ports

Monitor Port

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

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

To change the video output when an external monitor is connected, use the hot keys [FN] + [F3]. Each press of the keys cycles the video output to the monitor port, to both the built-in screen and the monitor port, and then back to the built-in screen only.

FN + F3



Press Once: video to monitor port only

Press Again: Video to LCD & monitor port

Press Again: Video to LCD

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

TV-out Port

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

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

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

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

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

Video Software

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

You can use this Windows utility to make all kinds of changes to the video display. The major area of interest here is the Settings tab.

Settings

Left click on the Settings tab to display the basic display settings of your notebook display. Here you can set the color depth and screen resolution.

The main area displays icons that represent your monitors. If more than one icon is displayed, double-click each one to enable or to set more advanced properties. Also, if more than one icon is displayed, you can drag them to the positions that represent the way you want to move items between monitors. With two monitors, say the built-in screen and an external monitor

attached to your notebook, you can bring the mouse cursor over to the other screen by moving it over the edge of the screen. For example, if you are using two monitors, and you want to move items from one monitor to the other by dragging over the left and right screen border, position the icons side-by-side. To move items between monitors by going over to top and bottom screen border, position the icons one above the other. The icon positions don't have to correspond to the physical positions of your monitors.

The **Advanced** button allows access to the video graphics software driver, monitor settings and performance.

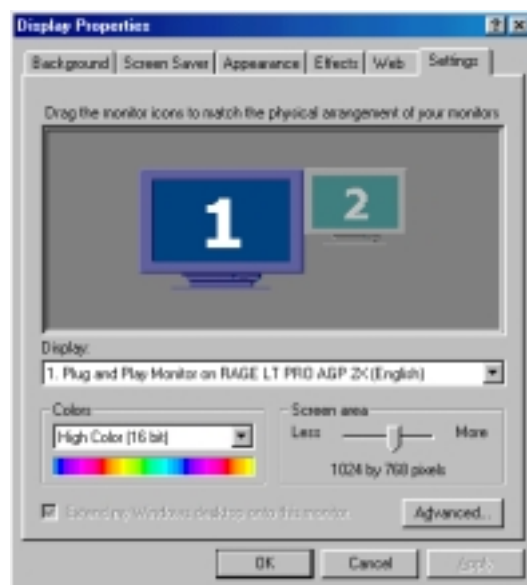


Figure 5-2: Settings Tab

Advanced

Left click on the Advanced button to display the custom display features embedded in the **ATI RAGE** graphics chipset used by your notebook. This will bring up a new window with two rows of tabs at the top.

The two major areas of interest here are the **Displays** and **Color** tabs.

Displays

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

If you want to direct the video to a TV, make sure the box is marked. Also use the proper check box to select the NTSC or PAL/SECAM TV format. When directing the video to the TV-out ports, go to the Settings tab and change the screen resolution



Figure 5-3: Displays Tab

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

Color

This area allows you to customize the color settings of your display.

Help

Both of the pages mentioned above have a Help button that brings up a new window with information on how to use the display properties on these pages.

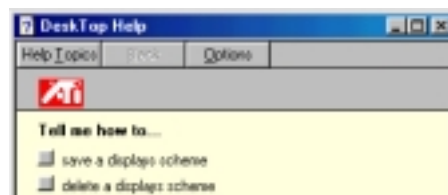


Figure 5-4: Help window

The Sound System

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

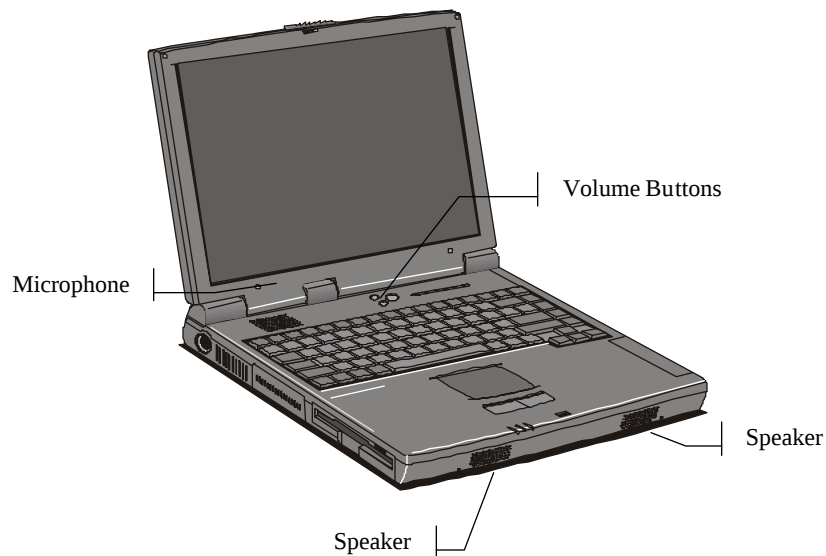


Figure 5-5: Microphone, Speakers and Volume Buttons

When a sound file is playing, you can use the volume buttons to turn the raise and lower the volume of the speakers.

The volume buttons are located just above the keyboard, next to the power switch. Pressing the top button increases the volume of the internal sound system, pressing the lower button decreases the volume level.

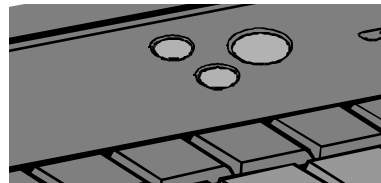


Figure 5-6: volume Buttons

NOTE: The audio volume buttons only affect the audio file currently playing. If you want to change the notebook's default sound volume, use the Windows audio utilities described below.

Audio Jacks

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

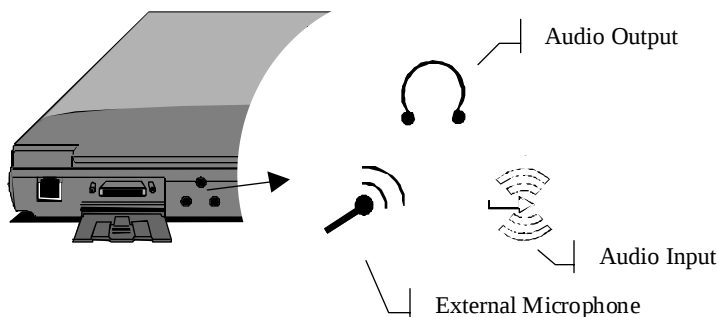


Figure 5-7: Audio Jacks

Audio Input Jack

You can use this jack to input stereo sound from other devices, such as a radio or tape recorder, into your notebook.

External Microphone Jack

You can use this jack to input sound from an external microphone into your notebook. When an external microphone is connected to this jack, the built-in microphone is automatically disabled.

Audio Output Jack

You can use this jack to output sound generated by your notebook to an external device, such as stereo loudspeakers or headphones. When an external device is connected, the built-in speakers are automatically disabled.

Audio Software

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

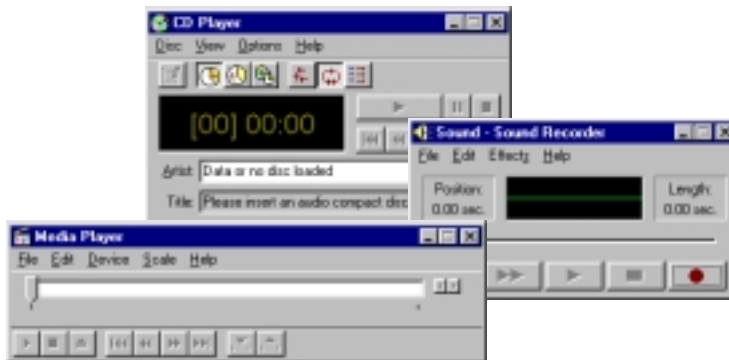


Figure 5-8: Audio Software

Using the CD-ROM Drive

This notebook is installed with a CD-ROM drive. This option is factory installed and cannot be easily switched. The CD-ROM drive is installed in the right side of the notebook. This drive can read data discs, play audio CDs and run video CDs.

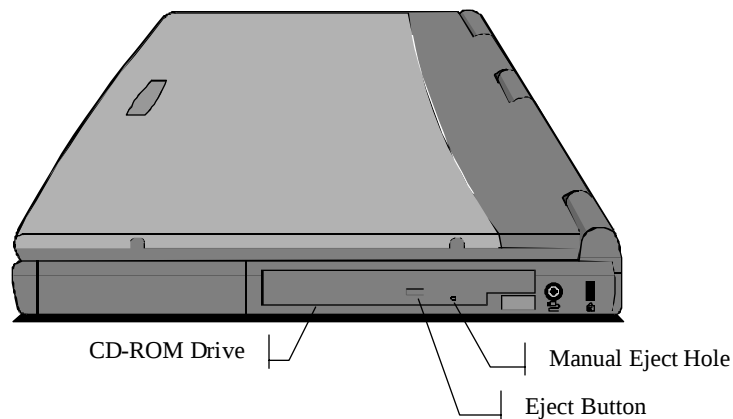


Figure 5-9: CD-ROM Drive

To play a disc:

1. Press the eject button on the front of the drive.
2. When the disc tray opens, carefully pull it all the way out of the drive.

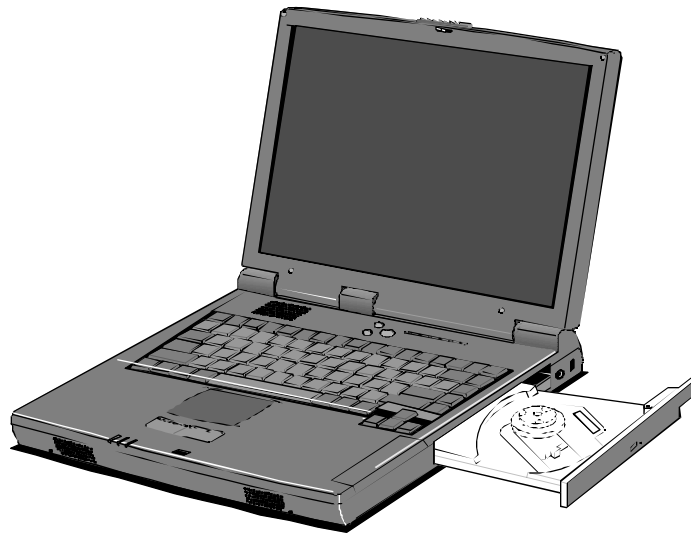


Figure 5-10: CD-ROM Drive Tray

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

NOTE: If your system is turned off, you can still open the tray by inserting a pointed object, such as a paperclip, in the manual eject hole. This will unlock the tray and allow you to slide it out.

Windows can usually recognize an audio or videodisc and open the appropriate player. If you are playing a data disc, use Windows Explorer to log on to the CD-ROM drive. If you are playing an audio disc, go to **Start/Programs/Accessories/Multimedia** and start the CD-player. If you are playing a videodisc, go to **Start/Programs/Accessories/Multimedia** and start the Active Movie Control program.

Using the Floppy Disk

The drive bay on the left side of the notebook is installed with a floppy disk. The Floppy drive uses removable 3.5", low capacity (1.44 MB), inexpensive, diskettes. Your system identifies this disk drive as drive A:. Access to the floppy disk drive is quite slow but floppy diskettes are very useful for storing and transferring files.

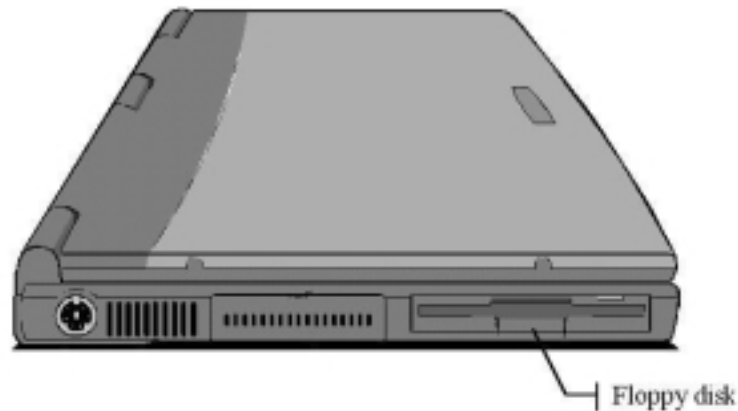


Figure 5-11: Floppy Disk Drive

PC Card Slots

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

PC cards are usually used to provide new functions or features to your notebook, such as a fax/modem card, a network adapter, or a SCSI host

adapter. They can also be used as storage devices using memory chips or miniature hard disks. If you are using PC card storage devices, they will be assigned drive letters (for example E: or F:).

PC Card Standards

This system supports type-I, type-II, and type-III PC cards. If you are using type-I or type-II cards (which are usually about 2.5mm high), you can install one or two cards at the same time. If you use a type-III card (which is usually about 10mm high), you must install it in the lower card slot, and you will not be able to use the upper slot.

Using PC Cards

1. You can install or change PC cards while your notebook is turned on.
2. Locate the PC card slot compartment on the left side of the notebook, and open the compartment door.

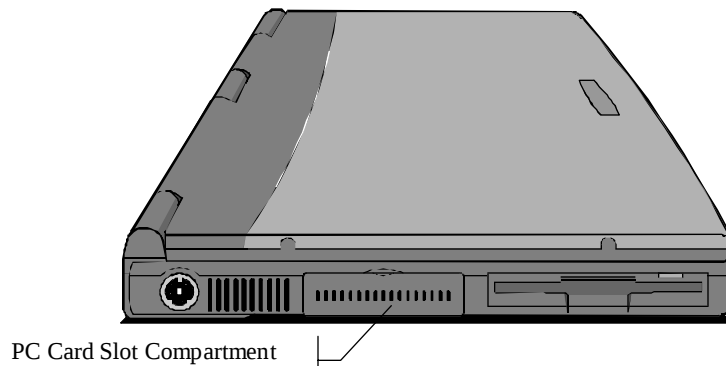


Figure 5-12: PC Card Slot Compartment

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

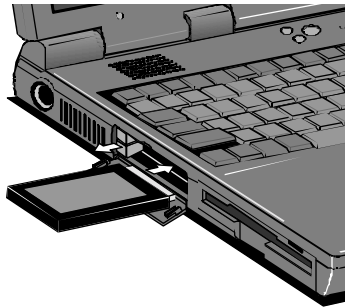


Figure 5-13: Inserting a PC Card

4. Insert the card into the slot. When the card is nearly all the way inserted, press quite firmly to ensure that the card mates properly with the connector inside the slot.
5. Your notebook will emit two beeps (in rising tones) to let you know that the card has been recognized by the system. If Windows has the appropriate drivers to use the card, they will be loaded automatically. For some cards, you may have to install drivers or software, supplied by the card manufacturer.
6. Before ejecting a CardBus card, it is important that you tell Windows to stop using the card. Click on the card icon on the right side of the Windows task bar. When the stop button appears, click on it. Windows will display a message that the card can now be safely removed.

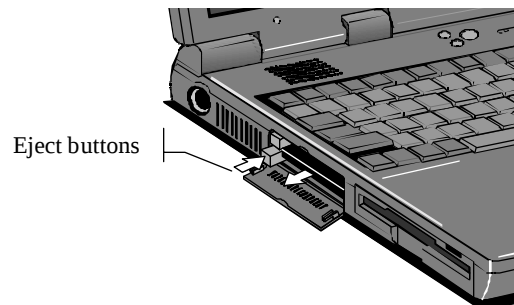


Figure 5-14: Removing a PC Card

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

Touch pad/Mouse Utility

The notebook's touch pad can be customized using the Windows mouse driver utility program. This program can be found in the Control Panel folder (**Start/Settings/Control Panel**).

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

You can change the button configuration and adjust it for right-hand and left-hand use, and also change the double-click speed.

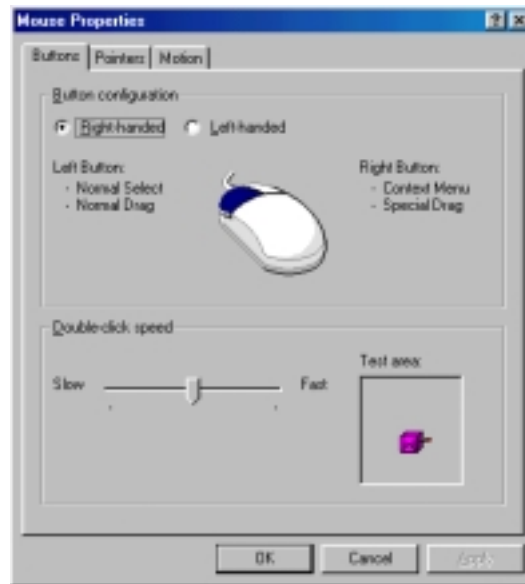


Figure 5-15: Mouse Properties

Infrared

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

The IR port is located behind the dark plastic square on the right-hand side of your notebook.

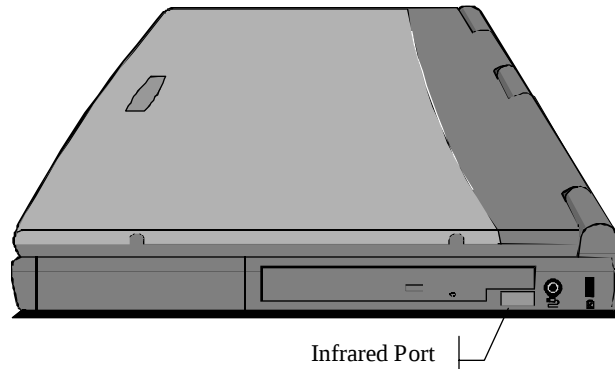


Figure 5-16: Infrared Port

To use your IR port, place the two IR ports within one meter, about four feet, of each other and either directly in line or at an angle of less than 30 degrees. Click on the **Infrared** icon in the **Control Panel (Start/Settings/Control Panel/Infrared)**.

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

For proper operation of an IR connection, you might need to set up the identification information in the IR software.

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

IR Connections between Computers

If you are going to use the IR port to send information between your notebook and another IR-capable computer, there are a couple of steps that you will need to perform before your notebook is ready to be used in this way.

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

Direct Cable Connection

In the **Control Panel**, select the **Add/Remove Programs** utility by double clicking on it. When the Add/Remove Program Properties window opens, click on the **Windows Setup** tab. Click on **Communications** and then the

Details button. Click on **Direct Cable Connection**. If you have not already set up the Dial-up Networking option, you will be asked to establish this as well. The Dial-up Networking activates certain network options of Windows that are necessary for using the Direct Cable Connection. Click **OK** to activate the new option(s). Windows will load installation files that are stored on your hard drive. If you did not already have network functions established, you will be asked to select computer and workgroup names that will be used to identify your machine when it is part of a network. Windows will configure your files and then ask you to restart your system so that the effects can take effect.

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

Sharing

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

You will be asked to decide if you want to allow file sharing, print sharing, or both, click on the appropriate checkboxes. You have now established the file and print sharing for your notebook. You can click **OK** to exit the Network utility, you might be asked to reboot. If you want to allow access to certain files on your system, you will need to designate those files for sharing. Open the **Windows Explorer** program (**Start/Programs/Windows Explorer**) and the drive containing the folders that you want to share. Find the folders that you want to share. Right click on the folder and click on the **Sharing** option of the pop-up menu.

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

Making the Connection

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

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

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

When you have selected the status of the machine, you will be asked to designate a port for the connection. For a connection between machines, you should select Serial cable on COM2. When you select a machine as the host, you will be asked to establish whether or not a password should be required of the guest machine before completing the connection.

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

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

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

Printing

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

Before proceeding, you must set up a connection for the printer via the IR port. See Chapter 6 for information on setting up a printer. To test the printing capability of an application over an IR link to an IrDA-compliant printer, click on the Infrared icon in the Control Panel (Start/Settings/Control Panel/Infrared). The IR software will detect the printer's IR port. Now try the Print option in an application.