

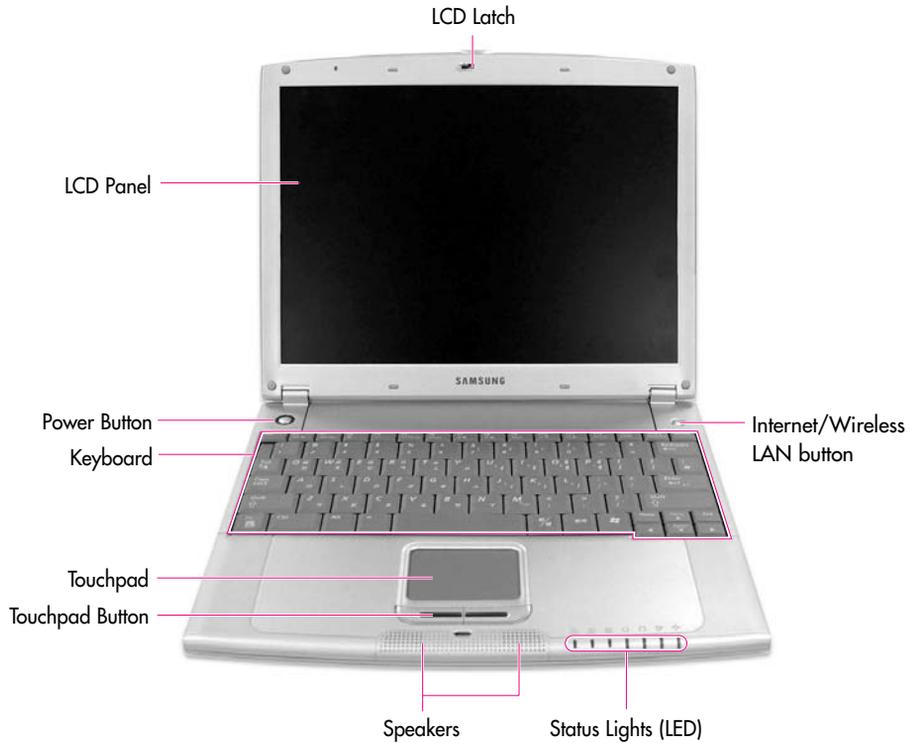
Chapter 1

Getting Started

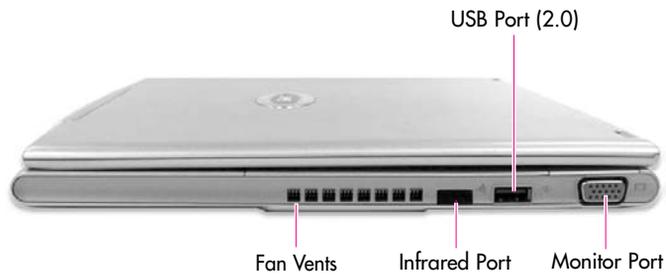
This chapter provides basic information for using this computer. System overview and methods for general use are provided.

Introducing The Computer

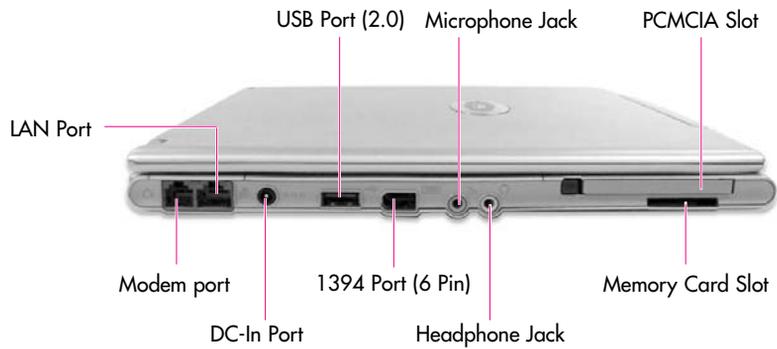
Front View



Right View



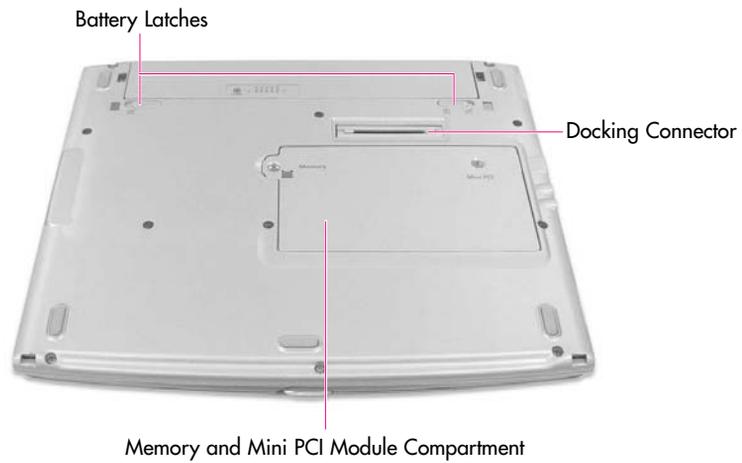
Left View



Rear View



Bottom View



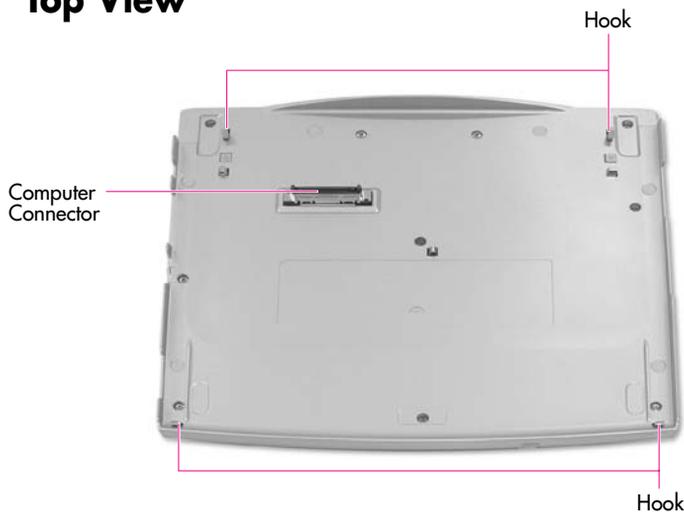
Note : Wireless LAN module (optional) is installed in the mini PCI compartment.

Introducing the Docking Station (optional)

Docking station is an extension device that connects with the computer and allows you to use additional functions including CD drive and various types of ports.

Caution : You cannot use the LAN port and monitor port on your computer when it is connected to the docking station. Use the ports on the docking station instead.

Top View



Front View



Right Side



CD-RW/DVD-ROM Combo Drive

Computer Release Lever

Left Side

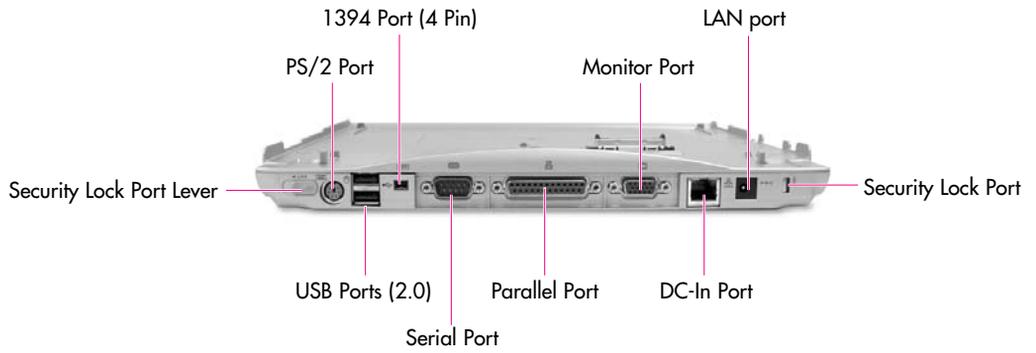


Computer Release Lever

S/PDIF Jack

Auxiliary Hard Disk Drive Compartment

Rear View



Bottom View



Turning the Computer On and Off

Turning On

1. Insert the battery and connect the power according to the supplied Installation Guide.
2. Lift up the LCD panel and open it to a comfortable angle.
3. Press and then release the power button to turn the system on.



Turning Off

1. Click the **Start** button on the Taskbar.
2. Select **Turn Off Computer**.
3. Click **Turn Off** from the [Turn Off Computer] window.



Caution : If the system is not turned off properly due to a system error, press and hold the power button for more than 4 seconds to turn the system off. After doing so, when you turn the system on, the system examination program is executed automatically.

Creating and Changing User Accounts

Multiple users can be registered in a single system so that each user may use their own customized working environment. Procedures to register and change user accounts are provided below.

■ Registering a new user

1. Click **Start > Control Panel**.
2. Click **User Accounts > Create a new account**.
3. Type a name for the new account, and click **Next**.
4. **Select the account type** and click **Create Account**.
The new user account has been created.

■ Changing users

1. Click **Start > Log Off**
2. Click **Switch User**.



3. In the [Windows Log On] window, select the desired **user name**.

Touchpad

Movement of the pointer (arrow) on the screen will correspond to movement made with a finger on the touchpad.



Touchpad buttons
the two buttons below the touchpad provide identical functions to buttons of a mouse.

■ Click (Select Function)

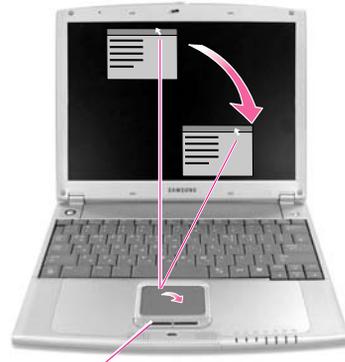
Place a finger on the touchpad, move the pointer on the screen to the icon or item to select, and tap the touchpad once. The click operation is also used to move the 'cursor' during document operations.

■ Double-click (Run Function)

Place a finger on the touchpad, move the pointer on the screen to the item to run, and quickly tap your finger on the touchpad twice.
Or double-click the left touchpad button.

■ Drag (Move / Select)

Click and hold the left touchpad button on the point to drag, and drag your finger to the desired location while holding down the touchpad button.



This button is held down Place the touchpad pointer on the title bar of the window.

■ Using the Touchpad Scroll Function

The touchpad has a scroll function, which can be used like the wheel dial of a wheel mouse. Move up and down along the right edge of the touch pad (scrolling up and down) or left and right along the bottom edge of the touch pad (scrolling left and right) to scroll the screen. However, this may not apply to some programs.

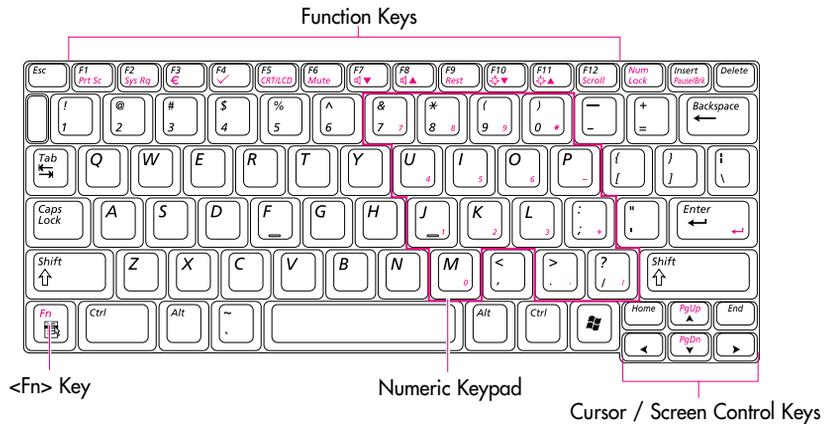


To use the scroll function included in the touchpad, the touchpad driver needs to be properly installed. If the scroll function does not appear to work, insert and run the system software CD, click 'Install Driver' in the Menu, select Touchpad Driver, and click **Install**.

Caution : Using other objects other than a finger for touchpad use will result in touchpad malfunction and damage. Only use bare fingers.

Note : To utilize the touchpad buttons for other more diverse functions, please refer to the Mouse icon in the Control Panel.

Using the Keyboard



Special Function Keys: The <Fn> key activates special functions when pressed in combination with other keys.

Key Combinations	Key Name	Function
	Print Screen	Saves an image of the current screen in clipboard.
	System Request	In DOS mode, calls another operating system. It does not have specific function in Windows, and executes predefined function in some programs.
	Euro	Used to type the symbol for Euro currency.
	User	Launches a user-defined program. The default setting is Windows Calculator. (P. 1-14)
	CRT/LCD	Switches the display between the LCD and external display device when an external display device is connected. (P. 6-8)
	Mute	Turns the audio output on and off.
	Volume Down	Decreases the audio volume.
	Volume Up	Increases the audio volume.
	Rest	Puts the computer into suspended mode. To use the computer again, press the power button.
	Brightness Down	Makes the LCD screen dimmer.
	Brightness Up	Makes the LCD screen brighter.
	Scroll Lock	Scrolls the screen up and down while the cursor position does not change in some applications.
	Num Lock	Enables the numeric keypad.
	Pause/Break	In DOS mode, pauses the scroll of the screen or exits a running program.
	Page Up	Move to the above screen.
	Page Down	Move to the below screen.

Key	Function
	<p>Screen Adjustment Key Moves up and down pages, or moves the cursor to the start or end of a line.</p>
	<p>Application Key Provides the right button function of the touchpad.</p>
	<p>Windows key Display start menu.</p>

Hot Keys



ⓘ Internet/  Wireless LAN button: Launches Internet Explorer or turn wireless LAN on and off.

✓ User Key <Fn>+<F4> : Launches a user-defined program. Calculator program is launched as default.

Note : About wireless LAN button (for models with wireless LAN)

For models with wireless LAN, you can use the Internet button to turn the wireless LAN on and off, by completing the following procedures.

1. Turn the computer on, and press <F2> to enter Setup.
2. In the Advanced menu, configure the Internet Button Mode item to Wireless On/Off. (In models without wireless LAN, the Internet Button Mode item does not appear.)

3. Press <F10> to save changes and exit setup.

Loading and unloading the wireless LAN driver takes about 5 seconds. Therefore, when wireless LAN is turned on or off using the Internet button, the Internet button will not work for about 5 seconds.

■ Changing the Hot Key Settings

You can change the program that will be launched when you press a hot key. As default, Windows Calculator is configured to launch when you press the User key. You can set the program by completing the following procedures.

1. Double click the **SENS Keyboard** icon () on the taskbar.
2. Click **Browse** in the **User** item.



Note : When the Internet button is configured to turn the wireless LAN on and off, the Internet item does not appear.

3. Select the desired program in [Open], and click **Open**. (Example, Windows Paint)
4. Click **OK** in [Key Settings] to save the changes.

Status Indicators



Icon	Name	Description
	Num Lock	Turns on when the numeric keypad is activated.
	Caps Lock	Turns on when all alphabet characters you type will be in upper case.
	Scroll Lock	Turns on when it is set to scroll the screen up and down while the cursor position does not change in some applications.
	Power	Turns blue - when the computer is turned on. Blinks - when the computer is in Standby mode.
	Hard disk drive	Blinks when the hard disk drive is in operation.
	Battery	Turns blue - when the battery is fully charged, or when the battery is not installed. Turns amber - when the battery is being charged. Blinks - when the battery is not properly installed.
	Wireless LAN	Turns on when wireless LAN function is enabled. (This light does not operate for the models without wireless LAN.)

Adjusting LCD Brightness

There are 8 levels of LCD brightness (1:Dimmest~8:Brightest).

Press <Fn>+<> or <Fn>+<> keys from the keyboard to adjust LCD brightness. When changed, the current LCD brightness is displayed on the top left corner of the LCD screen for a few seconds.



Whenever you turn the system on or change the power source the brightness level changes according to the settings.

- when operating on AC power: Brightness Level 8
- when operating on battery power: Brightness Level 1

Note : Maintaining your LCD brightness settings after turning the system off and on

1. Turn on the system, and enter Setup.
2. In the **Boot** menu, change the **Brightness Control Mode** option to **User Control**.
3. Save the settings and exit Setup.

To save the battery charge

When your computer is operating on battery power, adjusting the LCD brightness level to dimmer diminishes the battery power consumption.

Bad pixels in the LCD

The limits of the LCD manufacturing technology allow a maximum of 10 abnormal or bad pixels, which do not affect system performance. This system may have the same level of abnormal or bad pixels as any other company's products.

Caution : Maintenance Instructions

- When cleaning the LCD panel, use only computer specific cleaners on a soft cloth, and lightly wipe in one direction.

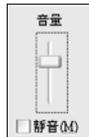
Adjusting the Volume

To adjust using keyboard

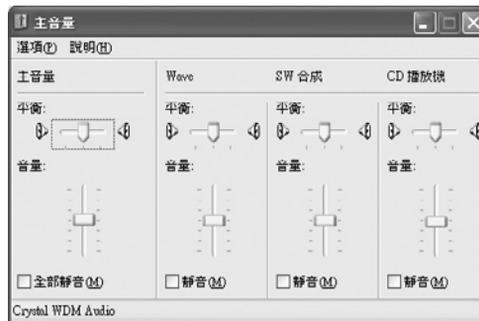
Press <Fn>+<  > or <Fn>+<  > from the keyboard.

Using the Volume Control Program

On the taskbar, click the **Volume** () icon, and adjust the **slide bars**.



For advanced volume control options, double-click the **Volume** () icon, and adjust the settings in the [Master Volume] dialog.



Proper Seating Posture During Computer Use

The proper seating posture during computer use is provided here. Maintaining proper posture during computer use enhances performance and prevents physical bodily harm.



If necessary, use a footrest to raise the level of your knees and ease the pressure on the thighs.



Seating Posture

- Position the chair so that the eyes are slightly higher than the display panel.
- Straighten the neck and back.
- Place the legs naturally.
- If necessary, use a cushion to provide extra back support.
- Avoid working postures that require twisting the body or neck.



Lighting

- Soft, indirect lighting is recommended.
- Position the display panel so that external light does not reflect off the screen. Use curtains, if necessary.



Work Habits

- Take periodic breaks and stretch out stiff muscles regularly.
- Look outside the window or at distant objects frequently to relieve strain on the eyes.

Chapter 2



Introducing Windows

This chapter provides basic information on using the computer's main operating system Windows.

Understanding the Desktop

The Desktop is the working area on the computer. It consists of the large workspace, which is more or less the entire the screen and a Taskbar at the bottom.



Start Button		Opens the Start Menu.
Taskbar		Displays programs that are currently running. Frequently used icons can be placed here.
Recycle Bin		Deleted files or folders are sent here.
Language Bar		Enables switching between English/other languages text inputs and provides other text input services.

Understanding the Start Menu

The Start Menu includes everything that is required to start Windows. From the Start Menu it is possible to run a program, open a file, assign system users with the Control Panel, receive support by clicking Help and Support, and search desired items from the computer or Internet by clicking Search.

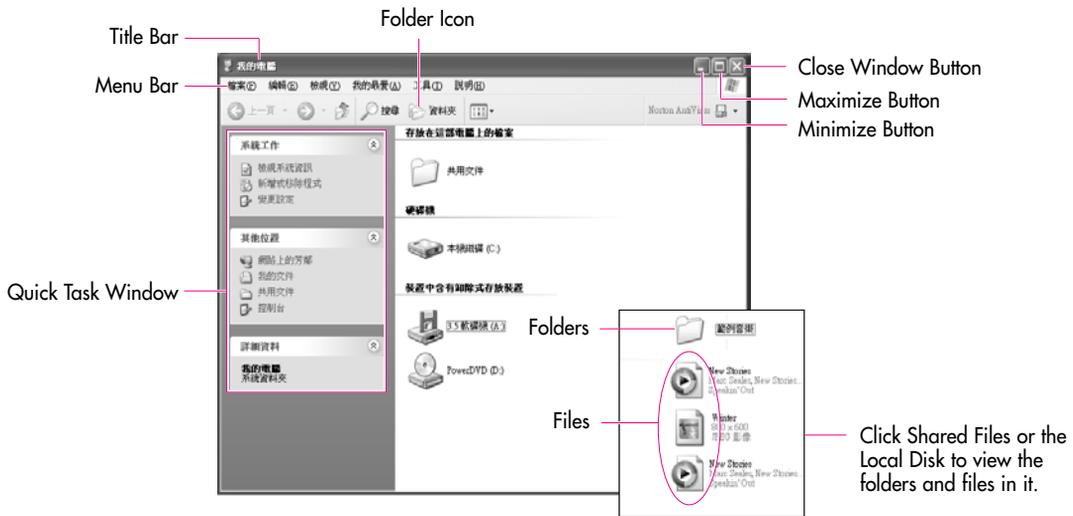


My Computer		Displays the contents of the hard disk, the CD-ROM drive, the network drive, and floppy disks. It can also be used to search and open files and folders.
Control Panel		Enables users to configure settings on the computer.
Help and Support		Provides on-line help, information on Windows and troubleshooting.
Search		Enables users to search for information in files or the Internet.
Run		Runs programs or documents.

Understanding a Window

A window is the basic component in working with the computer. The My Computer window, which is a window for the computer's hard drive, will be used as an example here to show the basic composition of a window.

Click **Start > My Computer**.



Double-click the hard drive (local disk) to view internal folders and files stored in it. If the contents do not appear, click Show Contents.

- Note**
- ▶ **What is a Drive?** A storage device in which files and folders are saved in, and read from.
 - ▶ **What is a Folder?** A folder is used to group and manage files systematically, and may include files in sub-folders. It is similar to a bookshelf.
 - ▶ **What is a File?** A file is a document or various kinds of material that is generated as a result of program operation. It is also called data.

To view the entire structure of the drive

Click the Folder Icon in the Toolbar to view the entire structure. Click again to return to the Quick Task Window.

Help and Support Center

Help and Support Center provides references and troubleshooting information regarding computer use.

Click **Start > Help and Support**.



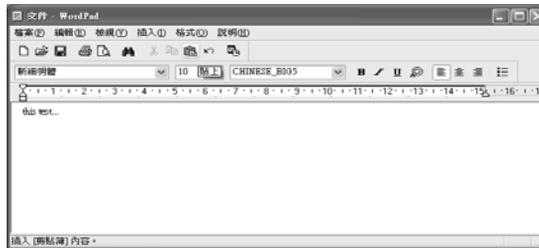
Document Operations

To create documents, WordPad or NotePad, which is included in Windows, or a separate specialized word processor program can be used, such as MS Word.

Instructions for creating documents using WordPad is provided here.

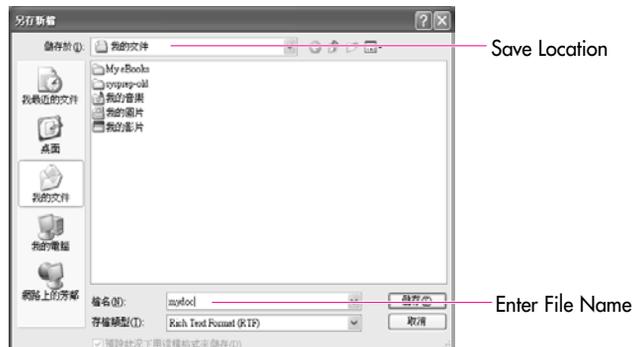
■ Creating a New Document

1. Click **Start > All Programs > Accessories > WordPad**
2. Create and edit your document. For more information about WordPad, refer to on-line Help.



■ Saving a Document

1. Select **File** from the Menu, and click **Save**.
2. Click on the Save in field to specify a folder to save the file in, enter the name of the file in the File Name field, and click **Save**.



■ Opening a Document

1. Click **Start** > **All programs** > **Accessories** > **WordPad**.
2. Select **File** From the Menu, and click **Open**.
3. Click on the Look in field and specify the folder in which the file is saved.
4. Select the file to open and click **Open**.

■ Printing a Document

To print a document, connect a printer to the computer.

For more information about connecting and configuring a printer, please refer to the printer manual.

To print a WordPad document

1. Turn on the printer, and insert paper.
2. Open the WordPad file to print.
3. Select **File** from the Menu and select **Print**.
4. Click **Properties**, adjust the printer options accordingly, and click **OK**.
5. In Print window, click **OK** to print the document.

Chapter 3



Using The Computer

This chapter investigates various different functions of the computer and provides information on using the related application programs for them.

Using the Docking Station (optional)

To dock your computer

You can dock your computer anytime whether your computer is turned on or off.

Caution : You cannot use the LAN port and monitor port on your computer when it is connected to the docking station. Disconnect the cables before docking your computer.

1. Place the front part of the computer on the hooks of the docking station.



2. Press the back part of the computer down until the computer clicks into the docking station fully.



Note : Using Q10's docking station

Q10's docking station is compatible with Q20 model. Q10's docking station only supports USB 1.1 and you cannot use the memory card slot when you are using the docking station. Change the setting as follows to use the USB port (1.1) of Q10's docking station.

1. Start the computer and press <F2> to enter Setup.
2. Change **USB 2.0 Controller** value in **Advanced** menu to **Disabled**.
3. Press <F10> to save changes and exit setup.

To undock your computer

■ To undock your computer with the power off

1. Turn off the computer.
2. Grab the two computer release levers on the docking station and pull them outward.



3. Separate the computer from the docking station.



■ To undock your computer with the power on

1. Push the undock button on the docking station or click Start > Undock Computer.



2. After docking release complete message is displayed on the screen, wait about 10 seconds, and separate the system.

Caution : If you push the undock button, when the remaining battery charge is under 10%, the computer automatically goes into standby mode.

Note : **Always separate the computer from the docking station after pushing the undock button on the docking station.**

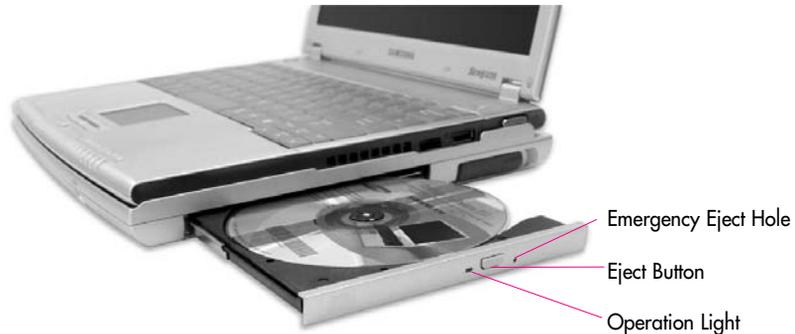
• If you push the undock button and do not separate the computer, there will be no sound output.

Using the CD Drive

CD-RW/DVD-ROM combo drive is installed in the docking station.

To Run a CD

1. Push the eject button on the CD drive.



2. When the tray slides out, place a CD onto it and push down until it clicks.
3. Push the CD tray in gently. The CD will run automatically.

Note : To eject a CD when the CD drive is out of order or the system is turned off, unfold a paper clip, and insert the unfolded end of the clip into the hole () and press until the CD tray opens.

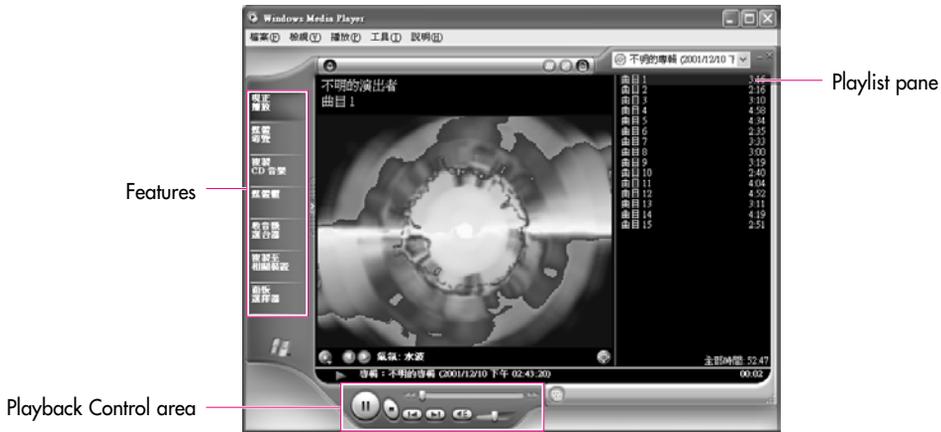
Caution :
• To clean a CD or DVD title, clean the disc with a soft clean cloth by wiping from the center outwards.
• Do not eject the CD while the Status Indicator is on.

Using the Windows Media Player

The Windows Media Player enables the user to configure and play video and audio files from the computer or the Internet.

Click **Start > Windows Media Player**.

Or click **Start > All Programs > Accessories > Entertainment > Windows Media Player**.



Note : Windows Media Player tour

- For more information about using the Windows Media Player, run the Windows Media Player and click Help and Support > Help Topics > Windows Media Player tour.
- If you maximize or restore down the window while playing a media such as an audio CD on Media Player, the screen may not displayed properly for a moment.

To Play an Audio CD

1. Insert an audio CD into the CD drive, and a list of all available players is displayed automatically.
2. Select **Windows Media Player**, and click **OK** to play the audio CD.



To Play a Video CD

1. Insert a video CD into the CD drive.
 2. When a video window appears, double-click the **MPEGAV** folder.
 3. Double-click the **DAT** file.
 4. When a warning window appears, click the **Open with** button.
 5. In the new window, click **Select Program from List** and click **OK**.
 6. Select the **Windows Media Player**, and click **OK**.
- The video will start playing.

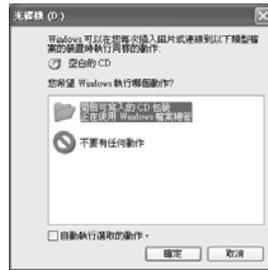


To Write Data in CD

If your computer has CD-RW functionality, you can copy data to a blank CD or create an audio CD.

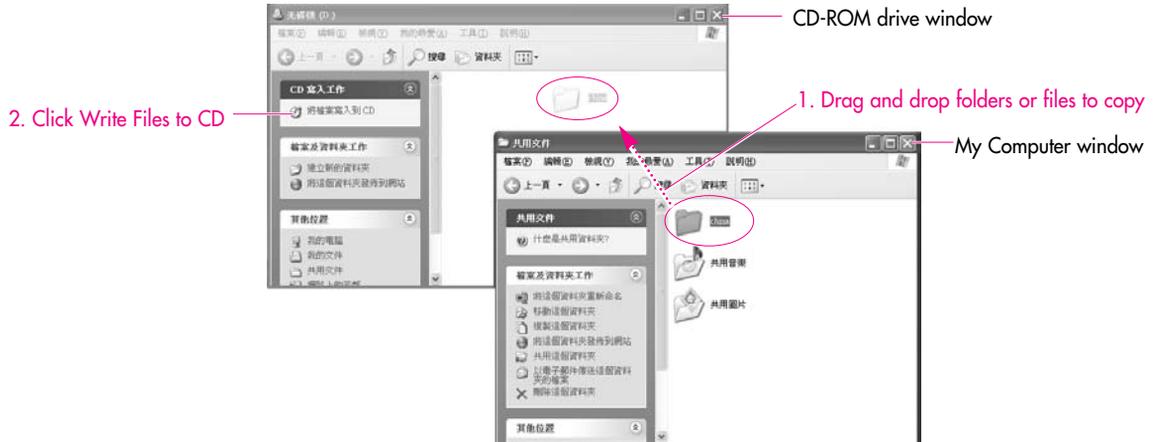
Note : An additional CD writing program is supplied in an additional CD. For information about use, refer to the supplied manual.

1. Insert a blank CD into the CD-RW drive.
2. Click **Open Writable CD Folder** and click **OK**. The CD-ROM drive window appears automatically.



3. Click **Start > My Computer**.

- Select, drag and drop folders or files to copy onto the CD-ROM drive window. Click **Write Files to CD** in the CD-ROM drive window.



- When the CD Write Wizard appears, enter the **CD label**, and click **Next**. The data will begin copying.
- When copying is completed, a 'completed' message will appear and the CD-ROM drive will open automatically.

Note : **For more information on copying CDs**

- Click Start > Help and Support. Enter [CD copy] in the search field, and click the Search button.

For more information on creating an audio CD

- Run the Windows Media Player, click the Help menu, and select [Using Windows Media Player > Using CDs > Creating your own CDs > To create your own CD].

Enjoying Home Theater

This product supports 5.1 channel output, which is a basic function for home theater systems, and DVD drives. It provides 3D surrounding sound and vivid screen.

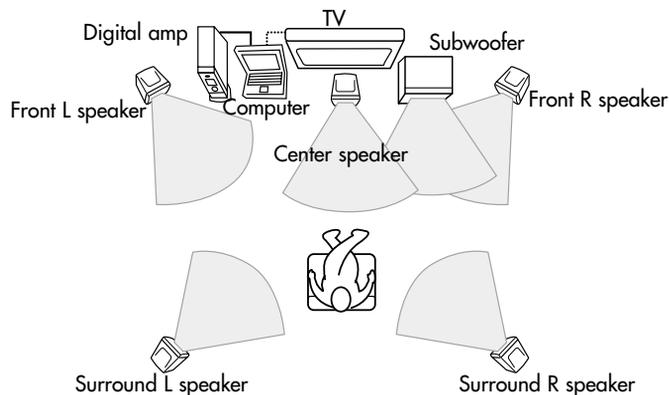
Note : Home theater system usually consists of a TV, DVD, 5.1 channel speaker, and digital amp and provides a high-resolution screen (MPEG2) and 3D surrounding sound (Dolby 5.1 or DTS). With a home theater system, you can enjoy a vivid screen and sound in your home as if you are in a movie theater.

The following devices are required to enjoy a home theater system.

- S/PDIF port on the docking station (Optional)
- 5.1 channel speaker system (amplifier, speakers, connection cables) (Purchased separately)
- DVD drive and DVD playing program on the computer
- DVD title that supports 5.1 channel (Purchased separately)

Step 1. Connect 5.1 channel speaker system to your computer

1. Connect amplifier to docking station's S/PDIF jack.
2. Connect speakers to the amplifier. (Refer to speaker system's manual.)



Note : You need a TV that supports VGA port to display through a TV.

■ Step 2. Configure digital sound output on the computer

1. Click **Start > Control Panel > Sounds, Speech and Audio Devices > Sounds and Audio Devices**.
2. In the Device volume field on the **Volume** tab, click **Advanced**.
3. In the [Master Volume] dialog, click **Option > Advanced Controls**.
Then **Advanced** button is displayed on the bottom of the dialog.
4. Click **Advanced**, select "1 SPDIF", then click **Close**.

■ Step 3. Enable S/PDIF on the DVD program

When using 5.1 channel speakers, you need to install the Power DVD program from the DVD Installation CD separately supplied and then change the settings as directed in these steps:

1. Run Power DVD and click the **Settings** button.



2. On the Audio tab, set the Output setting to '**Use SPDIF Output**'.



Now, you can enjoy home theater using DVD titles.

Caution : To control volumes for your 5.1 channel speaker, use the control on the digital amp. (Please, refer to the speaker manual.)

Using Memory Card Slot

Through the memory card slot, you can use memory cards such as memory stick, SD (Secure Digital) memory card, and MMC (Multi Media Card). You can use the memory cards as a removable disk, and use them to exchange data between your computer and digital devices such as a digital camera.



Memory Stick



SD (Secure Digital) Memory Card / MMC (Multi Media Card)

Caution : Restrictions on using Memory Stick/SD Memory Card

- You can use Memory Stick, SD Memory Card and Memory Stick Pro (256MB~1GB, approximately 1 MB/s) for storing data only. Copyright protection function is not supported.

■ To insert and use a memory card

- ### **Caution** :
- Before using the memory card slot, remove the slot protector.
 - Press the end of the slot protector
 - softly to pop it outward, then remove it.



1. Turn the memory card upside down and insert the card into the memory card slot.



Caution :

You should insert the memory card upside down.

Inserting wrong side up may cause damage in the memory card and the computer.

- Click **Start > My Computer**. The inserted memory card is displayed.



MemoryStick (E:)



SD / MMC (E:)

- You can write data to the memory card. If the memory card is not formatted yet, format the memory card before use.

Caution : Since the memory card may be easily mislaid when moving your computer, keep the memory card separately.

■ To remove a memory card

- Press the end of the memory card softly to pop it outward.
- Remove the memory card.

Caution : Do not remove a memory card for about 20 seconds after format, write, or delete operation in Windows 2000, Me, or 98SE. Removing a memory card immediately after the operations may cause damage to the memory card caused by the inherent problem of the Windows operating system.

■ To format a memory card

You can use a memory card after the format operation. The procedures to format a memory card are described below.

Caution : Since format operation deletes all data in the memory card, please make sure that there is no important data in the memory card before formatting.

Note : To protect the data in the memory card

Set the write protection tab of the Memory Stick or SD memory card to the Lock position.

- Click Start > My computer.
- Press the right touchpad button on the memory card drive, and select Format from the pop-up menu.
- Click Start to start the format operation.

Caution : To use a memory card in both the computer and other digital device such as digital camera, it is recommended to format the memory card in the digital device. If you format the memory card in the computer, you may have to format the memory card in other digital device again to use the memory card in the digital device.

Note : To format a Memory Stick in Windows 98SE/Me/2000

Install the Memory Stick Formatter included in the System Software CD.

To format Memory Stick Pro

You cannot format Memory Stick Pro using Windows XP or Memory Stick Formatter. Format it in other digital devices.

To use a Memory Stick Duo

Insert a Memory Stick Duo into the Memory Stick Duo adapter and insert the adapter into the Memory Stick slot of the computer.

Working with PCMCIA Cards

Various different functions can be added by inserting PCMCIA cards into the system. This system supports 16 / 32 bit, type I or II PCMCIA card types.

- Caution** : Before using the PCMCIA slot, remove the slot protector.
- Push the eject button of the PCMCIA card slot once to pop it outwards.
 - Push the eject button all the way in and the slot protector will be ejected.

1. Insert a card into the PCMCIA card slot on the side of the system.



2. When a card is inserted, Windows automatically installs the necessary driver for the card. If no available driver can be found by Windows, the driver has to be installed using the disk supplied with the card.

- Note** : To remove PCMCIA card.
- a. Double-click Safely Removes Hardware icon () in Taskbar.
 - b. Select the appropriate PCMCIA card and click Stop button.
 - c. When 'Safe to remove Hardware' window appears, click OK.
 - d. Press Eject button at PCMCIA card slot once, then the button pops out.
 - e. Press the projected button to eject the PCMCIA card.

- Caution** : You cannot use a ZV card and a PCMCIA III card through the PCMCIA card slot of the system.

Using Samsung Smart Screen

Use Samsung Smart Screen program to arrange desktop icons as desired and manage them effectively.

1. Click **Start > All Programs > Samsung > Samsung Smart Screen**.

Note : When you launch Samsung Smart Screen for the first time, a dialog box asking whether to register the program as a start program or not appears. If you select OK, the program is automatically launched when you start your computer.

2. Samsung Smart Screen appears. When you run the program for the first time, water drop image is displayed.



Click a water drop to open and close the group.

3. To move an icon, click a water drop to open it, then drag an icon to another water drop.

Note : **To return to Windows desktop**
 Right-click on Samsung Smart Screen and click Windows desktop. Windows desktop is displayed.
 To return to Samsung Smart Screen, double-click () icon on the taskbar.

To change background or skin
 Right-click on Samsung Smart Screen and select desired item.

Chapter 4

Connecting to the Internet

This chapter provides instructions on connecting to the Internet.

Connecting to the Internet

The following options show many ways to connect to the Internet. An appropriate option should be selected depending on the user's working environment and the user's system specifications.

Option 1 Connecting using a modem and a telephone line

Service has to be applied for and received from an Internet Service Provider (ISP) through an Internet service account.

Option 2 Connecting using a High-speed communication network service, such as ADSL and VDSL

Service has to be applied for and received from a High-speed communication network service provider. Receiving Internet service may require support from specific devices. Contact the service provider for details.

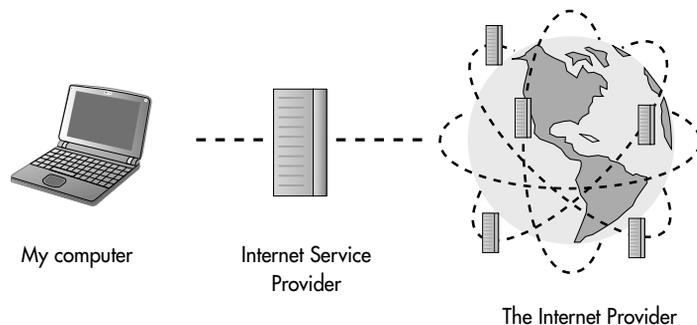
Option 3 Connecting using a wired LAN

Use a LAN cable that is already installed in your office or building,

Option 4 Connecting using a wireless LAN

The Internet can be accessed without a telephone line or a LAN cable if there is a Wireless LAN AP (Access Point) nearby.

Note : The Wireless LAN function is optional.



Connecting to the Internet Using a Modem

1. Connect the telephone line to the modem port. Do not use a digital telephone line.



2. To connect the modem to the Internet, and use e-mail, you have to apply to an Internet Service Provider (ISP) for an Internet service.

Note :

- For more account information, please contact your ISP.
- Ask your ISP about Internet fees and the disconnection procedure. If the Internet connection is not disconnected properly, additional telephone charges may incur.

Configuring the Network Environment Settings for Wired LAN Connections

A wired LAN environment is an environment where you can connect to the Internet using the company's LAN or with a broadband modem.

1. Connect the network (LAN) cable to the LAN port of the system.

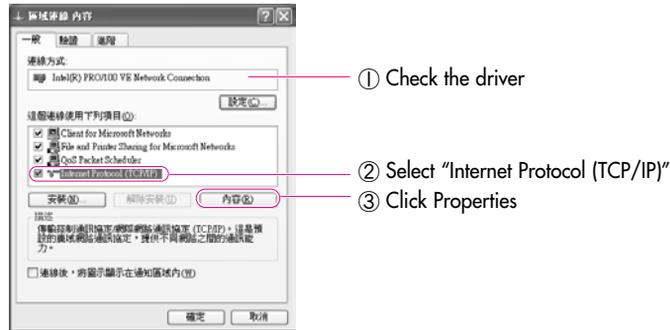


2. Click **Start > Control Panel**.
3. Select **Network and Internet Connections** in the [Control Panel] window.
4. Click **Network Connections** in the [Network and Internet Connections] window.
5. In the [Network Connections] window, point the mouse pointer to Local Area Network and click the right touchpad button. Select **Properties** from the popup menu that appears.



6. In the General tab of the [Local Area Connection Properties] window, check that the connecting device field includes the **Intel(R) PRO/100 VE Network Connection** driver.

- In the “This connection uses the following items” field, select **Internet Protocol (TCP/IP)**, and click **Properties**.



Note : In the above screen, necessary network components can be added by clicking the Install button.

- Enter the system’s IP and DNS server addresses on the General tab of the [Internet Protocol (TCP/IP) Properties] window. If DHCP is used, click “Obtain an IP address automatically” and “Obtain DNS server address automatically” on the **General** tab.



Note : IP addresses and other information necessary for configuration can be obtained from the network administrator.

- Once all of the information is entered in the [Internet Protocol (TCP/IP) Properties] window, click **OK** to finish.

Using Samsung Network Manager

Use Samsung Network Manager to configure network setting.

Using the program, you can do the following.

- You can save network settings (including IP address) according to network places such as office and home. When you change places, simply select a network place and the network settings will be automatically changed accordingly.
- You can easily find out your current IP.

■ To configure network setting

1. Connect LAN cable to the computer's LAN port.
2. Double-click Samsung Network Manager icon on the desktop.
Or click **Start > All Programs > Samsung Network Manager > Samsung Network Manager**.
3. When you are using DHCP, available IP's are displayed in the status dialog box. Click **Change**.



4. Click **Add**, click **Choose Icon** and select an icon. Enter a place name in **New Name** field and click Ok.



5. New place icon is displayed and full dialog box appears. Check your IP and click **Close**. Network setting is saved.



- Note** :
- To configure network setting of some place other than current place, click the place icon and configure each network device. If you are using DHCP, select 'DHCP' check box and click Save.
 - If you are using a static IP, clear 'DHCP' check box, enter appropriate network setting and click Save.
 - Ask ISP or network administrator for IP address.

■ To change network places

You can change network places as below.

1. Connect LAN cable to the computer's LAN port, and double-click **Samsung Network Manager** icon on the desktop.

- Note** :
- If you used static IP in previous place, previous static IP is displayed in the status dialog box.

2. Click **Change**, select a place icon then click **Change**.



3. On "Do you want to change the location setting?" dialog box, click Ok. Example) changing to Office
4. When the network place is changed, corresponding place icon is displayed in color and full dialog box appears. In the right area of full dialog box, network setting is displayed.
5. Click **Close** to close the dialog box.

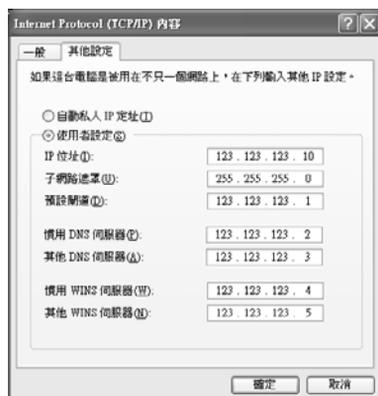
Using Both DHCP and Static IP Simultaneously.

When you are alternatively using networks with either DHCP or static IP addressing, you can use alternative settings that enable simultaneous configurations of DHCP and static IP to use both of the network connections without reconfiguring.

Note : This function is provided only when your operating system is Windows XP.

1. Click **Start > Control Panel > Network and Internet Connections > Network Connections > Local Area Connection**, press the right button of the touchpad, and then select Properties.
2. Select the **Internet Protocol (TCP/IP)** item, and then click **Properties**.
3. In the **Alternate Configuration** tab, click **User configured**, and then enter the appropriate values for the following:

(IP address, Subnet mask, Default gateway, Preferred and alternate DNS server, Preferred and alternate WINS server)



4. When the configuration has been completed, click **OK**.
Now you can connect to both networks using DHCP and static IP respectively.

Configuring the Network Environment Settings for Wireless LAN Network (WLAN)

A wireless network (Wireless LAN) environment is a network environment that enables communication between multiple computers at home or a small-size office through wireless LAN devices.

When a computer-to-computer network has been constructed, a computer that is not connected to the Internet can share the Internet by accessing another computer connected to the Internet. (See Page 4-18. Using Network Services)

- Note** :
- The description in this section concerns the Intel(R) PRO/Wireless LAN 2100 3B Mini PCI Adapter (hereafter referred to as a 2100 11b card) and the Intel(R) PRO/Wireless 2200BG Network Connection device (hereafter referred to as a 2200 11g card).
 - A wireless LAN interface is an optional device that you can select when you purchase this product. You can connect to the Internet over a wireless connection when your computer has a wireless LAN (WLAN) device.
 - To view the installed wireless LAN card, click Start > Control Panel > System > Hardware tab > Device Manager.
 - The actually displayed images may differ from the figures shown in this section according to the installed device and the connection state.

Wireless network connections can be classified into two categories.

1) Access Point

You can connect to an AP to use the network. This is possible only in an environment equipped with an AP. (See Page 4-10, 'Connecting to an Access Point (AP)')

- Note** :
- **What is an Access Point (AP)?**
 - An AP is a network device that bridges wired and wireless LANs, and corresponds to a wireless hub in a wired network. You can connect multiple wireless LAN installed computers to an AP.

2) Computer-to-computer (ad hoc)

This is also called a peer-to-peer or ad hoc network.

In computer-to-computer wireless networks, you can wirelessly connect 2 or more computers that have wireless LAN modules. (See Page 4-11, 'Connecting to computer-to-computer networks (peer-to-peer or ad hoc)').

Connecting to an Access Point (AP)

This section describes how to connect to an AP. You can use the network when you are connected to an AP.

Note : The connection setup is described for a computer running on Windows XP Service Pack 1. If you are using the Windows 2000 system, refer to P. 4-15 'Wireless Network Setup Using the Wireless LAN Setup Program'. For more detailed information such as the network key (encryption key), ask your network administrator.

1. Right-click on the **Wireless Network Connection** () icon on the taskbar, and select **View Available Wireless Networks**.



2. Select your desired AP (e.g. Test) to connect, and enter the encryption key for the AP in the Network key field, and click **Connect**.

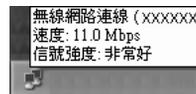


Note :

If the network key is not configured for the desired AP, select 'Allow me to connect to the selected wireless network, even though it is not secure'.

Now you are connected to the AP, and you can access the network.

Note : **Checking the connection status.**
 Move the mouse pointer over the **Wireless Network Connection** () icon on the taskbar, and the connection status is displayed.



Connecting to computer-to-computer networks (peer-to-peer or ad hoc)

In computer-to-computer wireless networks, you can wirelessly connect 2 or more computers that have wireless LAN modules.

Using this method, a computer that is not connected to the Internet can share the Internet by accessing another computer connected to the Internet. (Refer to “Sharing an Internet connection through a wireless network” (P.4-24).)

You can connect by completing the following steps:

- ▶ Step 1. Set up a computer-to-computer network on a computer.
- ▶ Step 2. Connect to the configured computer from other computers.

Note : The connection setup is described for computers running Windows XP Service Pack 1. If you are using the Windows 2000 system, refer to P. 4-15 ‘Wireless Network Setup Using the Wireless LAN Setup Program’.

■ Step 1. Setting up a computer-to-computer network

1. Right-click on the **Wireless Network Connection** () icon on the taskbar, and select **View Available Wireless Networks**.



2. Click **Advanced**.



3. On the Wireless Networks tab, click **Advanced**.
4. Clear '**Automatically connect to non-default network**' check box, if it is selected.
Select '**Computer-to-computer (ad hoc) networks only**', and click **Close**.
5. In the Wireless Networks tab, click **Add**.
6. Enter the network name (e.g. samsung), and unselect '**The key is provided for me automatically**'. Enter the encryption key in the Network key field, and click **OK**.



Note : To prevent a network connection from an unauthorized user, it would be better to configure a network key (encryption key). A network key consists of 5 or 13 alphanumeric characters (e.g. magic), or of 10 or 26 hexadecimal numbers (a hexadecimal number is represented by numbers '0' to '9' or letters 'a' to 'f').

7. Check that the configured network name (e.g. samsung) is in the 'Preferred networks item', and click **OK**.



Now your wireless network setup has been completed.

■ Step 2. Connecting to the configured computer

1. Right-click on the **Wireless Network Connection** () icon on the taskbar, and select **View Available Wireless Networks**.
2. Select the wireless network name (e.g. samsung) specified in 'Setting up a computer-to-computer network', enter the encryption key in the Network key field, and then click **Connect**.

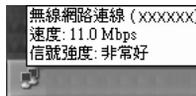


Note : If the network key is not configured in 'Setting up a computer-to-computer network', select 'Allow me to connect to the selected wireless network, even though it is not secure'.

The two computers are connected and are able to communicate with each other. When the computers are connected, the 'Wireless Network Connection' message is displayed for a short time over the **Wireless Network Connection** () icon of the two computers.

Note : **Checking the connection status.**

Move the mouse pointer over the **Wireless Network Connection** () icon on the taskbar, and the connection status is displayed.



Wireless Network Setup Using the Wireless LAN Setup Program

When the operating system of your computer is not Windows XP, you should setup the wireless network settings using an additional wireless LAN setup program (PROSet).

To use wireless network connection, complete the following procedures.

- ▶ Step1. Install the wireless LAN configuration program (PROSet).
- ▶ Step2. Configure wireless network settings through the wireless LAN configuration program.

■ Step 1. Installing the wireless LAN configuration program (PROSet)

You can install the wireless LAN client administrator program following the instruction displayed automatically when you insert the system software CD. Insert the system software CD into the CD-ROM drive, and install the wireless LAN configuration program.

Note : To not display 'Intel Configuration Service' window afterward
: After installing the wireless LAN configuration program, select "Do not show this
: again." check box, then click **Close**.

■ Step 2. Using the wireless LAN configuration program (PROSet)

Double-click the wireless LAN program () icon on the taskbar.
(Or, Click **Start > All Programs > Intel Network Adapters > Intel PROSet for Wireless.**)

Note : In some languages, some buttons on the window may not be displayed. Resize
: the window to use the program.

Configure wireless network settings in PROSet following the procedures below.

• To connect to an Access Point

To connect to an access point or existing computer-to-computer (Ad Hoc) network, refer to the following procedures. (To create a new computer-to-computer network, refer to the following **To create computer-to-computer (Ad Hoc) network** section.)

1. Click **Scan** in the **Networks** tab.
2. Select the name of desired access point or computer-to-computer network to connect from the searched available networks list, and click **Connect**.

Note : If your desired network does not appear, click **Refresh**.

- An access point is represented by (📶) icon, and a computer-to-computer network is represented by (🖥️) icon. An (🔒) icon is displayed in front of an access point or a computer-to-computer network with configured security settings.

3. Select **“Yes, create a profile for this Network.”**, and click **OK**.
4. Enter **Profile Name** and click **Next**.
5. Enter the network authentication, data encryption (WEP), key index, and password configured for the target access point or computer-to-computer network in the **Security Settings** window, and click **Finish**.

Note : The network authentication, data encryption (WEP), key index, and password of a access point are configured in the access point management program. For the information on the security information, check the security settings of the access point or ask your wireless network administrator.

To connect to an existing computer-to-computer (Ad Hoc) network, enter the password configured when creating the computer-to-computer network for the first time. You do not need to enter network authentication and key index.

Security Settings

- **Network Authentication** : The network authentication option includes **Open System** and **Shared Key**. When you select **Open System**, no authentication is applied (however, encryption is supported). When you select **Shared Key**, a WEP key is used for authentication. The default setting is **Open System**.
- **Data Encryption (WEP)** : The IEEE 802.11 WEP (Wired Equivalent Privacy) standard defines two levels of encryption, a 64-bit key (this is sometimes represented by 40bits) and a 128-bit key.
- **Key index**: Select the current encryption key index used by the access point out of 1 to 4.
- **To use pass phrase**: Click Use pass phrase to activate, and enter 5 (for 64-bit) or 13 (for 128-bit) alphanumeric characters (represented by 0-9, a-z, or A-Z).
- **To use WEP key**: Click Use WEP keys to activate, and enter a hexadecimal number (represented by 0-9 and A-F) of 10 (for 64-bit) or 26 (for 128-bit) digits in the WEP key field.

When a wireless connection to an access point is established, connection icon (📶) appears in front of the name of connected profile.

- **To create a computer-to-computer (Ad Hoc) network**

To create a new computer-to-computer (Ad Hoc) network or to connect to a hidden access point (Stealth/Closed Mode), refer to the following procedures.

Note : A hidden access point is an access point that exists, but is configured not to be detected by the scan operation to prevent access attempts from unauthorized users.

1. Click **Add** in the **Networks** tab.
2. Enter **Profile Name** and **Network name (SSID)**, select **Operating Mode**, then click **Next**.

Note : **What is a network name (SSID)?**

Network name (SSID) is a name that a wireless adapter uses for identifying connection. Enter the name of a computer-to-computer network (e.g. samsung) or the name of the access point to connect to. The network name identifies cases. (capital and lowercase) For the name of access point, check the settings of the access point, or ask your wireless network administrator.

Operating Mode:

Infrastructure - Connect to an Access Point - Select to connect to an access point.

Ad hoc - Connect directly to other computers - Select to create a computer-to-computer (Ad Hoc) network.

3. Configure password setting to be used for computer-to-computer network connection in the **Security Settings** window.
To connect to an access point, enter the network authentication, data encryption (WEP), key index, and password configured in the access point.

Note : It is recommended to configure data encryption for security purposes when creating a computer-to-computer network connection profile. For more information on security settings refer to the security settings in **Connecting to AP** or Help.

When you are creating a computer-to-computer network connection profile, the network authentication setting is disabled.

4. When a profile creation is completed, the new created profile appears in the profiles list in the **Networks** tab. Select corresponding profile, and click **Connect** to connect to the created profile.

When a wireless connection to the created profile is established, connection icon (📶) appears in front of the name of connected profile.

Using Network Services

While the computer is connected to the network, you can use network services to share files, folders, and printers. Using computer-to-computer wireless networks, you can access the Internet through a computer that is connected to the Internet even if your computer is not directly connected to the Internet.

Note : Network services are provided for the computers that are connected to the network through wired or wireless network connections. (See Pages 4-4, 4-9, **Configuring Network Environment Settings**)

Sharing files or folders

This section describes how to share files and folders between computers connected to the network.

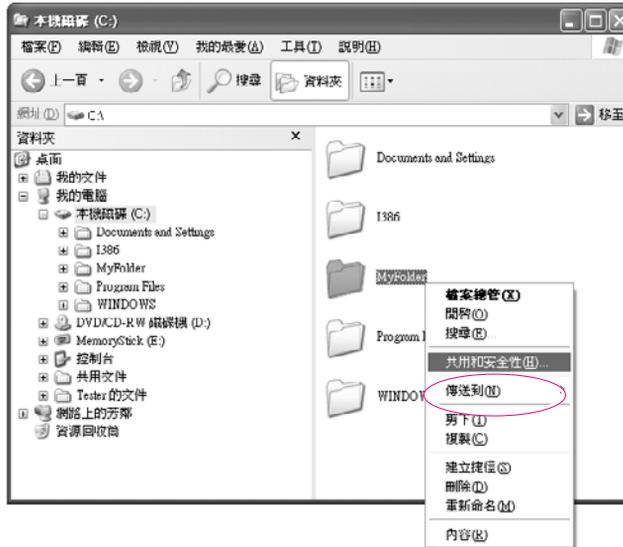
To share files, complete the following procedures:

- ▶ Step 1. Configuring the sharing of files and folders on a computer.
- ▶ Step 2. Accessing shared files and folders from another computer.

Caution : When a file or folder is shared, anyone connected to the network can open and delete the shared file or folder.
: Configure a file sharing network only when the network is secure, and do not share important data.

■ Step 1. Configuring Sharing

1. Right-click the target file or folder to share in **My Computer**, and select **Sharing and Security**.



2. Click '**IF you understand the security risks but want to share files without running the wizard, click here**'.

Note : It has the same security effect as that of the '**Network Setup Wizard**'.
: This screen does not appear if Internet Sharing Network Wizard has been
: installed in the computer-to-computer wireless network environment.

3. Select '**Just enable file sharing**', and click **OK**.
4. In the 'Network sharing and security' field, select '**Share this folder on the network**', enter the share name, and click **OK**.

Caution : Be cautious when selecting 'Allow network users to change my files' since other network users can change the files in the shared folder.

The file and folder sharing configuration has been completed.

Step 2. Using Shared Files or Folders

This section describes how to access shared files or folders if your computer is a member of the same workgroup.

1. Click **Start > My Computer**. Under **Other Places**, click **My Network Places** in your computer.
2. Click '**View workgroup computers**', and click the desired computer to access the shared file.



- Note** : If your computer is a member of another workgroup:
1. Click **Other Places > Microsoft Windows Network**.
 2. Click the desired workgroup.
 3. Click the desired computer to display the shared files or folders.

Sharing Printers

This section describes how to share a printer between computers connected to a network.

To share a printer, complete the following procedures:

- ▶ Step 1. Configure printer sharing in the computer connected to the printer.
- ▶ Step 2. Add and use the shared printer in other computers on the network.

■ Step 1. Configuring Printer Sharing

1. From the computer connected to the printer, click **Start > Printers and Faxes**.
2. Right-click the printer you want to share, and click **Sharing**.



3. Select **'Share this printer'**, enter a share name for the shared printer, and click **OK**.

- In the Printers and Faxes window, you will find the printer icon has been changed to another icon on a hand.



Step 2. Adding and Using a Shared Printer

- From a different computer that wants to use the shared printer, click **Start > Printers and Faxes**.
- Click **Add a printer**.
- In the **Add Printer Wizard**, click **Next**.
- Select **'A network printer, or a printer attached to another computer'**, and click **Next**.
- Select **'Browse for a printer'**, and click **Next**.
- Select the workgroup or computer, select the desired printer, and click **Next**.



If you cannot find the desired printer, try again after a while.

7. Read the warning about a shared printer, and click **Yes** to install the shared printer.
8. Select **Yes** for 'Do you want to use this printer as a default printer?', and click **Next**.
9. Click **Finish**.
10. When the printer sharing configuration has been completed, the shared printer appears in the Printers and Faxes window.



Now you can print using the shared printer even if your computer is not directly connected to a printer.

Sharing an Internet connection through a wireless network

By connecting your computer to another computer, which is connected to the Internet over a wired connection, through a wireless network (Peer-to- Peer), you can access the Internet from your computer.

Note : To share an Internet connection, the computers should be connected to a computer-to-computer (peer-to-peer) wireless network.
: (See Page 4-9, 'Connecting to computer-to-computer networks')
: Also, one of the computers has to be connected to the Internet (external network).
: The description for Sharing Internet access is for the operating system Windows XP Service Pack 1.

To share an Internet connection, complete the following procedures:

- ▶ Step 1. Configuring a Internet connection sharing from the computer connected to the Internet.
- ▶ Step 2. After completing the shared Internet connection configuration, check that the other computers can access the Internet through the shared Internet connection.

■ Step 1. Configuring Internet Sharing

Configuring a shared Internet connection on the computer connected to the Internet.

1. Click **Start > Control Panel > Network and Internet Connections > Network Connections**.
2. Right-click on the device connected to the Internet, the external network, and select **Properties**.

Note : If the computer is connected to the Internet through a wired LAN, select 'Local Area Connection'.



3. In the **Advanced** tab, select '**Allow other network users to connect through this computer's Internet connection**', and click **OK**.

Step 2. Checking the Shared Internet Connection

When the Internet connection sharing configuration has been completed, the network icon in the Network Connections window is displayed as follows: Click **Start > Control Panel > Network and Internet Connections > Network Connections**.

- A computer connected to the Internet.



- A computer sharing the remote Internet connection (other computer).



If the icon does not appear after a long time, restart the computer.

Note : Computers on the network can access the Internet through the shared Internet connection only when the computer connected to the Internet is turned on.

Infrared Communication (Optional)

Your computer may have infrared port. Using the infrared port, you can transfer data to computer, printer, camera and other devices through infrared communication.

Note : Restrictions in Use

- For infrared communication, the devices should have infrared communication capability, and should be located within 1 m of each other. In addition, there
- should be no obstacle between the infrared ports of the target devices.

■ To establish infrared connection

The procedures to communicate with another computer through infrared port are described below.

1. Locate the target computers so that the infrared ports face each other.
2. When infrared communication is available, a beep sounds and Send files to another computer icon () appears on the desktop.
You can now transfer data through infrared communication.

■ To transmit data through infrared communication

The procedures to transmit files to another computer are described below.

1. Connect the target computers through infrared communication.
2. Drag a file over the Send files to another computer icon in one of the computer.
3. [Wireless Link] dialog appears on the other computer screen. Click Yes.
4. When the file transmission is completed, click Close to close the [Receiving Files] dialog.

Note : To change infrared communication configuration

- To change the folder to save the received files, or to receive images from a digital camera, click **Start > Control Panel > Printers and Other Hardware > Wireless Link** and change the configuration.

Note : If you cannot use infrared communication

1. Check BIOS setup.
 - a. Start the computer, and press **<F2>** to enter System Setup.
 - b. Select **I/O Device Configuration** in the **Advanced** menu, and press **<Enter>**.
 - c. Select **Infrared**, and set the item to **Enabled** by pressing **<F5>** or **<F6>**.
 - d. Save the configuration, and exit the Setup.

2. Check Windows configuration.
 - a. Click **Start > Control Panel > Performance and Management > System > Hardware tab > Device Manager**.
 - b. Double-click the "Infrared device", and then double-click "IrDA Fast Infrared Port" item.
 - c. On the **Advanced** tab, select "Infrared Transceiver A" in the Properties field, then select "Vishay TFDS-6500" in the Value field.
 - d. Click **OK**.

Chapter 5

System Management

This chapter provides information on efficient computer management.

Managing Power

Use Power Options to save power consumption. You can switch Standby Mode while you are not using your computer or configure the system components to shut it down on a specified time.

Specifying Power Save Time

You can specify Turn Off Monitor, Turn Off Hard Disk, System Standby Mode, and Maximum Power Save Mode.

Select **Start > Control Panel > Performance and Maintenance > Power Options > Power** Schemes tab. Then specify time in each item and click OK.

Monitor Off

The LCD display goes into Power-Saving mode after the specified period of time.

Hard Disk Off

The Hard Disk goes into Power-Saving mode after the specified period of time.

Standby Mode

If the computer is not used for the specified period of time, the monitor and hard disk drives are turned off to reduce power consumption.



Hibernation Mode

Saves the current working status onto the hard disk and turns the computer off. Pressing the Power button restores the computer to the previous working status.

Note : Press Power button to use computer again in Standby Mode or Hibernation Mode.

Using the Power button

You can configure the function of the power button.

Click **Start > Control Panel > Performance and Maintenance > Power Options** and select the Advanced tab.



Configure the Power button function.

Configuring the function of the <Fn>+<  > key combination.

Caution : When the Power button is configured to put the system into Power-Saving Mode, manually shutting down the computer requires the Power button to be pressed and held for more than 4 seconds.

Using the Battery

Please refer to the following instructions when running the computer on battery power without connecting the AC power.

This computer uses smart rechargeable Lithium-Ion (Li-Ion) battery.

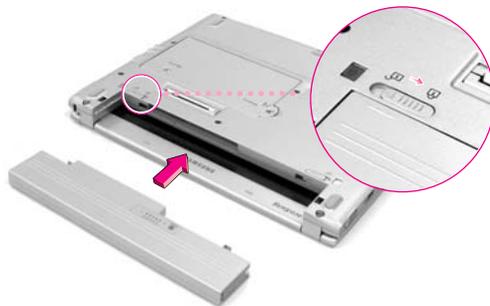
- Caution** :
- Please read the instructions on the battery before use.
 - Please refer to the system operation environment (Page A-2) of this manual and operate and store the battery at room temperature.

Ejecting and Attaching Battery

1. Shutdown system and close LCD.
2. Put the computer upside down.
3. First, slide the left battery latch to the left (Unlock position). Then, while holding the right battery latch to the right (Unlock position), slide the battery out of the compartment.



4. To attach the battery again, slide the battery into the compartment, and slide the left battery latch to the right (Lock position) to fix the battery.

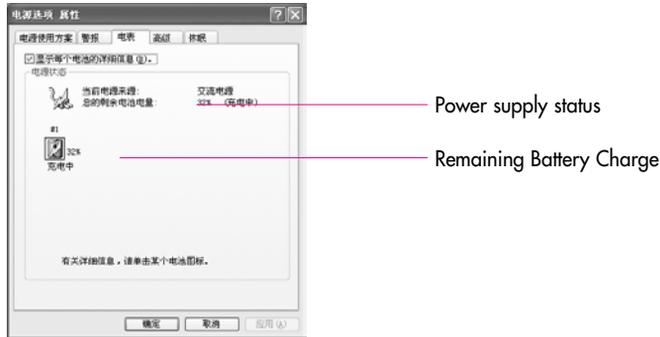


Monitoring the Battery Charge

You can check the battery charge status using one of the following two methods:

■ To monitor in control panel

Click Start > Control Panel > Performance and Management > Power Options > Power Meter tab. Power source and remaining battery charge are displayed.



■ To monitor on the battery

Press the PUSH button on the battery. The amount of remaining battery charge (%) is displayed.



Slightly press PUSH button.

Caution : Using the battery

- Battery is an expendable supply, so when you use it for a long time, the capacity/battery life is shortened. If the battery life time is reduced to under half of the initial time, we recommend that you purchase a new battery to use.

Note : Battery Warning

- You will hear an alarm when the remaining battery charge is under 10%. Connect the power cable or turn off the computer and install a fully charged battery.
- When the remaining battery charge is under 3%, the computer automatically saves current work and turns off. This may be different according to the settings in Control Panel > Performance and Maintenance > Power Options > Alarms tab.

Increasing Battery Life

■ Adjust LCD Brightness

<Fn> + < > : Dim the LCD display brightness.

■ Use Power Saving Mode

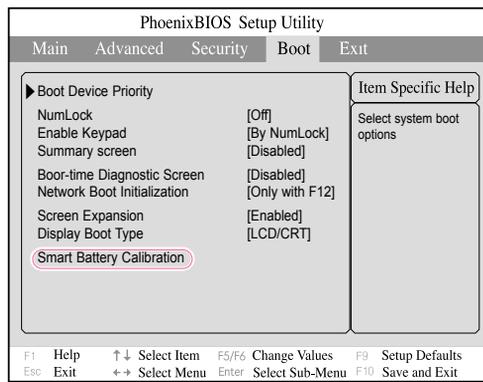
This function reduces power consumption when the system is not being used for a prolonged period of time.

■ Use Battery Calibration

When the battery is in continuous use without being completely charged or discharged, there may be a difference between the displayed battery charge and the actual battery charge, owing to the inherent characteristics of the battery.

Completely discharging the battery and fully charging it can correct this problem. Completely discharging the battery for this reason is called battery calibration. The procedure to calibrate the battery is described below.

1. Turn off the computer and disconnect the AC power.
2. Turn on the computer and press <F2> to enter into System Setup.
3. Select **Smart Battery Calibration** in the **Boot** Menu, and press <Enter> to start. The calibration process usually takes 3 to 5 hours depending on the remaining battery charge.



4. When the calibration process is complete and the battery is completely discharged, connect the AC power adaptor to fully recharge the battery.

Using the Security Lock

The security lock is a device used to physically 'fix' the system when using it in a public place. The locking device needs to be purchased separately. The shape and methods of use may differ depending on the manufacturer. Please refer to the manual provided with the security lock for proper use.

Connect the security lock cable to a fixed object (①), and to the security lock port (②).



To connect the cable on the security lock port of the docking station, slide the security lock port lever to the left and connect the cable.



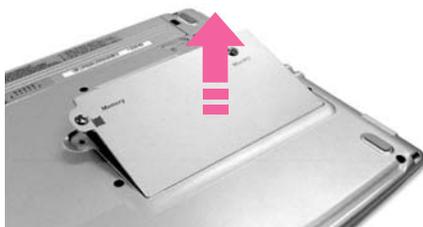
Note : When you use the security lock port of the docking station, the computer can not be separated from the docking station.

Upgrading Memory Module

Your computer has an installed 128/256 MB memory module depending on your model. There is an empty slot for an additional memory module in the memory compartment on the bottom of the computer. To add memory module, complete the following procedures.

Note : Before installing memory module, turn off the system completely. Do not install memory module when the system is in suspended mode.

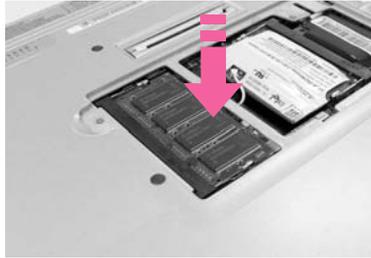
1. Using a screwdriver, open the memory compartment cover on the bottom of the system.



2. Align the new memory module connectors accordingly and slide it into the slot at a 30° angle.



3. Push the memory module in until the module clicks into place. If the memory module is not fixed completely, push the module while pushing the memory module latches outward.



4. Close and fix the memory compartment cover using a screwdriver.

Note : **To remove a memory module**

- After removing the memory compartment cover, push the memory module latches outward to pop the memory module outward. Pull out the module at about 30° angle.



Adding a Hard Disk to the Docking Station

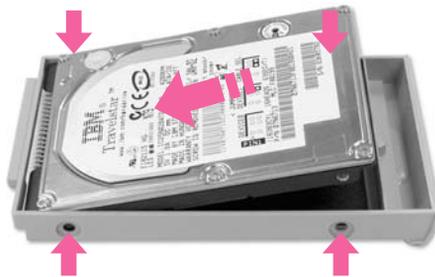
Your docking station has a room for an additional hard disk drive (HDD). If you need more storage, you can add a new hard disk by completing the following procedures.

■ To add a hard disk

1. Turn off and detach the computer from the docking station.
2. Place the docking station so that the bottom is up.
3. Remove the screw fixing the hard disk bracket, and pull out the hard disk bracket.



4. Insert a new hard disk into the bracket so that the labeled side is outside.



5. Fix the hard disk to the bracket using a screwdriver.

6. Insert the bracket into the hard disk compartment, and fix it using a screwdriver.



■ To format a hard disk

If necessary, format the hard disk before use.

Caution : What is format?

- Format is an initialization operation to use a hard disk drive. Since format operation
- deletes all the data in the hard disk, please make sure that there is no important data
- in the disk before formatting.

1. Click Start > My Computer.
2. Press the right touchpad button on the added hard disk drive (e.g. D:), and select Format from the pop-up menu.

Note : When you installed an initial state HDD

- An initial state HDD is not displayed on the [My Computer] window. Click Start >
- Control Panel > Performance and Maintenance > Administrative Tools > Computer
- Management. Select Disk Management under Storage item, configure a partition
- on the newly added HDD and format it.

Traveling with the Computer

- When traveling, keep the system and the AC adapter disconnected. Otherwise, it may affect the functions of the system.
- When traveling by plane, use a bag designed for notebook PCs and hand-carry the computer.
- Allow the computer and disks to pass through security X-rays but do not pass the computer and disks through metal detectors.
- Do not use the computer during take off and landing.
- Ask the airline about available adaptors for cabin use.
- Make sure the eject button of PCMCIA card slot is locked.

Chapter 6

Customizing your computer

This chapter provides information
how to use the system setup,
customizing screen settings.

Using System Setup

System Setup is a utility that enables the computer environment to be changed to suit the user. System Setup is used when changing the system password, booting priority, or when adding new devices. Please use extra care when configuring System Setup, as it may cause serious system error.

To enter System Setup

1. Turn on the computer.
2. When the booting screen appears, press <F2>.



3. The initial System Setup screen will appear in a moment.

The screenshot shows the PhoenixBIOS Setup Utility interface. At the top, there is a menu bar with options: Main, Advanced, Security, Boot, and Exit. The main display area is divided into two columns. The left column lists system settings such as System Time, System Date, Primary Master, Cpu Type, Cpu Speed, System Memory, Extended Memory, BIOS Version, and Micom Version. The right column is titled 'Item Specific Help' and contains instructions: '<Tab>, <Shift-Tab>, or <Enter> selects field.' At the bottom of the screen, there is a 'Navigation Keys' section with the following information:

F1	Help	↑↓	Select Item	F5/F6	Change Values	F9	Setup Defaults
Esc	Exit	←→	Select Menu	Enter	Select Sub-Menu	F10	Save and Exit

Annotations on the right side of the image point to the following elements:

- Setup Menu:** Points to the menu bar at the top.
- Help:** Points to the 'Item Specific Help' box.
- Setup Item:** Points to the list of system settings.
- Navigation Keys:** Points to the bottom navigation section.

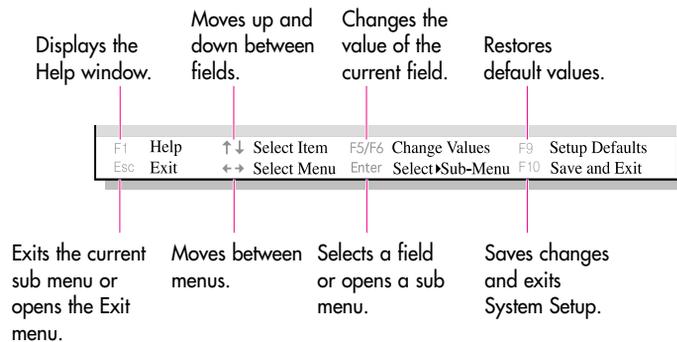
At the bottom left, there is a label **Sub-Menu** with the instruction: Press <enter> to display sub-menu.

System Setup Menus

Menu Items	Description
Main	Configures the basic system environment
Advanced	Configures OS and major chipset options of the system
Security	Configures system security options
Boot	Configures booting options
Exit	Exits System Setup

Note : For more information on System Setup menus or options, please refer to Help on the right side of the screen.

System Setup Navigation Keys



Note : Contents of System Setup may be changed due to functional improvement or other reasons.

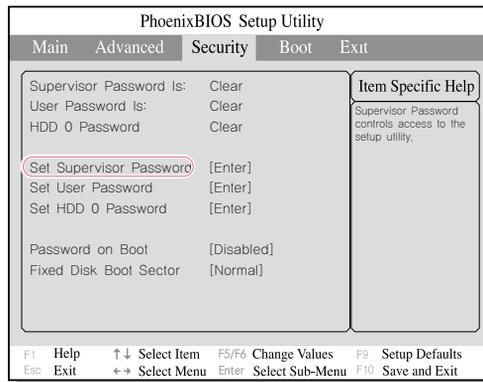
Configuring the Password

Setting the Supervisor Password

By configuring a supervisor password, you can restrict system access to authorized users only.

Note : Do not lose or forget your password. If you have forgotten your password, contact the Samsung service center.

1. Select the **Security** menu in the System Setup. (To enter into System Setup, see Page 6-2.)
2. On the '**Set Supervisor Password**' item, press <Enter>.



3. Enter a password, press <Enter>, re-enter the password for confirmation, and press <Enter> again.



4. When a message confirming the password configuration appears in the [Setup Notice] window, press <Enter>.

■ Setting the User Password

You can configure user passwords so that other users can use the system.

Note : Before configuring a user password, a supervisor password must have been configured.
: Users can start the system with their user password, but cannot enter into the System Setup.
: Deactivating the supervisor password also deactivates the user password.

On the 'Set User Password' item, press <Enter>, and complete step 3-4 of Configuring the Supervisor Password.

■ Activating the Booting Password

Note : Before activating the booting password, the supervisor password must have been configured.

Set the 'Password on boot' option to [Enabled].
From now on, you must enter the password to boot the system.

■ Activating the Hard Disk Drive Password

Activating the hard disk drive password prevents the currently installed hard disk drive from being used in other systems.

Note : Before activating the hard disk drive password, the supervisor password must have been configured.

In the 'Set HDD 0 Password' item, press <Enter>, and complete step 3-4 of Configuring the Supervisor Password.

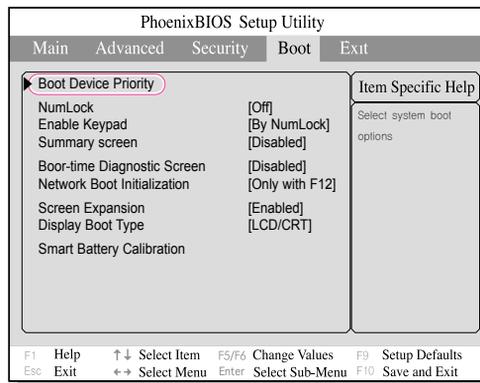
■ Deactivating the Password

1. On the password to delete, press <Enter>. (e.g. supervisor password)
2. Enter the current configured password, and press <Enter>.
3. Leave the 'New Password' and 'Confirm New Password' field empty, and press <Enter> to deactivate the password.

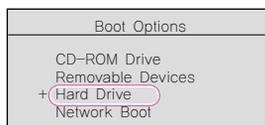
Changing Booting Priority

You can select the booting priority among the devices such as the hard drive, CD-ROM drive, etc. The following example describes how to configure the hard drive as the first booting device when the CD-ROM drive is configured as the first booting device by default.

1. Select the Boot Menu in System Setup.
2. Press <Enter> on **Boot Device Priority** item.



3. Use the < | > key to move to the **Hard Drive** item, and press <F6> key until it is at the very top.



4. Press <F10> to save the changed configuration, and exit System Setup.
Now you can boot the system with the hard disk drive as the first booting device.

Configuring Resolution and Color Depth

Screen resolution is the number of pixels displayed on the screen. High resolution makes the overall screen area large, although individual items appear small. Color quality is determined by the number of bits used to represent a pixel on the screen. High color quality displays more number of colors on your screen.

1. Select **Start > Control Panel > Appearance and Themes > Change the screen resolution**.
2. Make changes on the **Settings** tab of the [Display Properties] dialog.



To change the number of colors displayed on a monitor, select an appropriate color quality.

To change your screen resolution, move the slider to select an appropriate resolution.

3. When you have completed configuration, click **Apply**.

Note : It is recommended setting the resolution to 1024x768, and the number of colors to Highest (32bit).

Using External Display Devices

Using external display devices such as monitor or projector, you can view the screen images alternatively or simultaneously. You can extend the screen into two display devices to use larger workspace.

Using external display devices would be especially useful when you are giving presentations or watching a video file.

1. Connect a monitor or a projector to the monitor port of the computer or the docking station.
2. Right-click on the desktop, and select **Graphics Options > Graphics Properties**.



3. On the **Devices** tab, select your desired display device, and click **OK**. (The displayed device list is determined by the currently connected devices.)



Monitor	Displays on an external device such as monitor or a projector.
Notebook	Displays on the notebook LCD only.
Intel(R) Dual Display Clone	Displays the same screen on the notebook LCD, and an external device such as monitor or projector.
Extended Desktop	Extends the screen into the notebook LCD and an external device such as monitor or projector to use a 2 times larger workspace.

Note : To switch display devices using shortcut key

- You can switch display devices easily by pressing <Fn>+<  > shortcut key.
- Provided that the CRT monitor is connected, the display order will be LCD > CRT > LCD+CRT whenever the <Fn>+<  > key is pressed.
- You cannot use the <Fn>+<  > shortcut key in the full screen mode DOS prompt.

Note : To change display devices easily

- Right-click on the desktop, and select **Graphics Options > Output To** to change the current display device easily.



Note : To change the screen resolution and color quality

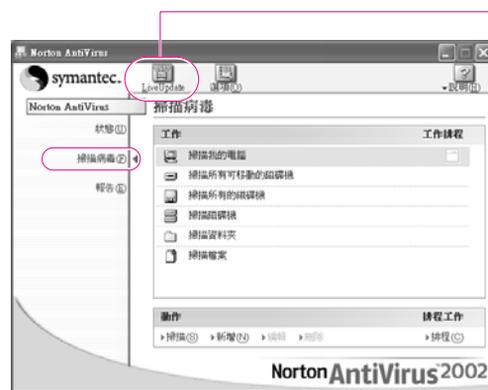
- If the screen does not appear clearly, please try to change the screen resolution and color quality. In the figure of step 3, select a device, and configure the color, screen area, and refresh rate.

Checking for Viruses

The Norton AntiVirus software is provided as the virus inspection program.

- Note** • When Norton AntiVirus is launched for the first time, the Norton AntiVirus configuration window will be displayed. Read the instruction carefully and proceed with each step. Live Update downloads the latest version of the program through networks. Once this is completed, the first virus examination will start.
- These steps must be completed in order for Norton AntiVirus to run properly.

1. Select **Start > All Programs > Norton AntiVirus > Norton AntiVirus 2002**.
2. Select drive to inspect, and click **Scan**.



Vaccines for the latest viruses can be downloaded by connecting to Symantec's homepage.

3. If a virus is detected, select Automatic in Norton AntiVirus, and click **Next** to delete the virus.

Chapter 7

Recovering the Computer

This chapter provides recovery procedures using the System Recovery CD when the computer is not operating properly.

Restoring the System

Note : This description is only for models running Windows XP.

The System Restore function allows you to restore your computer to an earlier copy (called restore point), and restores the settings if a problem occurs.

The System Restore function is provided by Windows XP to enable the resolution of various problems without reinstalling Windows XP completely.

You can use System Restore in the following cases.

- The system files are deleted or damaged by mistake.
- The system is unstable or a problem occurs in a device driver.
- A problem occurs after changing system files such as the registry.
- A problem occurs after installing a new program.

Creating a Restore Point

Restore points are created at predetermined times and at times of significant system events such as when a program or a driver is installed. You can also decide when to create your own restore points.

- Note** :
- There has to be more than 200MB of free space on the hard disk drive. If the disk space is insufficient, a saved restore point might be deleted.
 - You are recommended to create a restore point when you have purchased a new computer and before installing new programs or device drivers. Before creating a restore point, check that the computer is operating properly.

The procedures to create your own restore point are described below.

1. Click **Start > All Programs > Accessories > System Tools > System Restore**.
2. Select 'Create a restore point', and then click **Next**.



3. In the **Restore point description** box, type a name to identify the restore point, and then click **Create**. A restore point has been created.

■ Returning your computer to an earlier restore point

The procedures to return your computer to an earlier restore point when a problem has occurred are described below.

1. **Start > All Programs > Accessories > System Tools > System Restore.**
2. Select 'Restore my computer to an earlier time', and click **Next**.



3. Select the desired restore date (①) from the calendar restoration and select the desired restore point from the list (②), and then click **Next**.



Note : The date of the restore point is displayed in bold font.

4. Confirm the selected restore point and click **Next**. System Restore shuts down Windows, and starts the restoration processes.
5. After the restoration is complete, Windows restarts. In the [System Restore completed] dialog box, click **OK**. Your computer has been restored to the selected restore point.

■ Undoing the last restoration

The procedures to undo a restoration are described below.

1. Click **Start > All Programs > Accessories > System Tools > System Restore.**
2. Select 'Undo my last restoration', and click **Next**.
3. Confirm the restoration information to undo, and click **Next**. System Restore shuts down Windows and starts undoing the restoration.
4. After the undo restoration is complete, Windows restarts. On the [Undo the last restoration completed] dialog box, click **OK**. Your computer has been restored to the point prior to the last restoration.

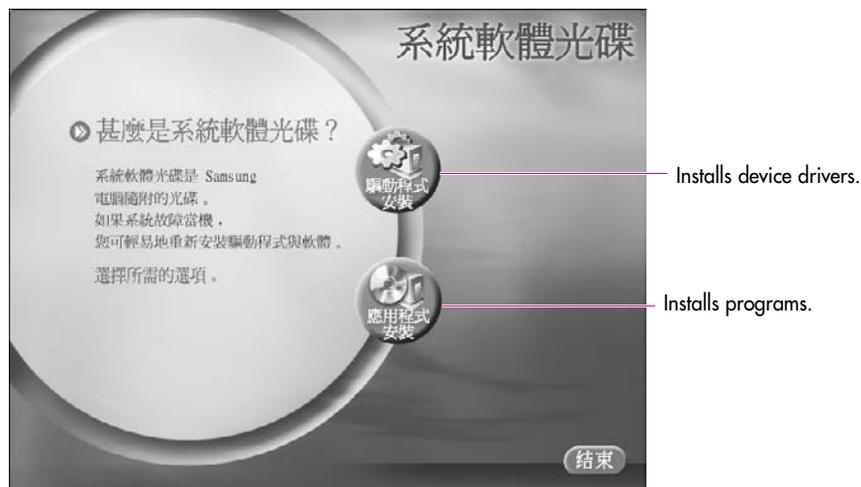
Reinstalling Software

If you have reinstalled the Windows operating system, or the system and program do not operate properly, you can re-install the driver and program using the system software CD.

- Note**
- The drivers and programs included in the system software CD are listed in the D:\ReadMe.htm file.
 - (Provided that the name of CD-ROM drive is "D".)
 - This computer is optimized for Microsoft Windows XP, therefore driver other than the ones included in the System Software CD are not provided.

Running the system software CD

Insert the system software CD into the CD-ROM drive. The initial screen appears automatically.



Installing drivers

1. In the initial screen, click **Driver Installation**.
2. Select the driver you want to install from the device installation screen, and click Install.



Driver Installation Screen

■ Installing programs

1. In the initial screen, click **Application Installation**.
2. Click **Standard installation** in the program installation screen (standard installation is recommended).



Program Installation Screen

Standard installation: Installs and recovers programs to the state of shipment.

User installation: You can select the program installation location, and other options for the program installation.

Reinstalling Windows XP

If the Windows XP does not operate properly due to an error in the system, or if you have replaced the hard disk drive, you can reinstall Windows XP using the system recovery CD.

Caution : With the system recovery CD, you can reinstall Windows XP only. To return the system to the state of shipment, reinstall the device drivers and programs with the system software CD after reinstalling Windows XP with the system recovery CD.

Reinstalling Window may delete the data on the hard disk drive such as files, programs, etc. In order to minimize damage from data loss, please remember to always back up data. Samsung Electronics is not liable for any compensation in case of data loss.

1. Insert the system recovery CD into the CD-ROM drive.
2. In the initial screen, click **Standard installation**.
(Installation with the standard installation option is recommended. The standard installation does not require steps 5 and 7.)



Standard installation: Installs Windows preserving the data saved on the hard disk drive. However, since personal data that is in the Windows folder may be deleted, please backup personal data.

User installation: Enables Windows installation after partitioning or formatting the hard disk drive. Note that all data on the hard disk drives may be deleted depending on your configuration.

3. The description for the standard installation appears. Click **Yes**.
The installation starts, and the system will be restarted after a while.
4. After the system has restarted, the message '**Press any key to boot from CD**' appears. Do not press any key at this time. After a while the partition configuration screen appears.
To not change the partition, press **<Enter>**.

Note : **What is partition configuration?**

Partition configuration is a function that divides the hard disk drive into one or several partitions. Note that changing the partition deletes all of the data on the hard disk drive.

5. Select the desired file system (format).
To maintain the current file system, press **<Enter>**.

Note : **What is Format?**

Format is an operation that initializes the hard disk drive. Since formatting operation deletes all content on the hard disk drive, use Format with great care.

6. Select the folder to install the Windows operating system.
To delete the previous version of Windows and install in the current folder, press **<L>** on the keyboard.

Note : Note that selecting **Use another folder to install...** creates a new windows folder and installs Windows in dual boot mode.

7. The Windows XP installation wizard appears. Proceed with the installation according to the instructions provided by the Windows XP installation wizard.
When the installation is completed, the computer will restart.
8. After the system has restarted, the message '**Press any key to boot from CD**' appears. Do not press any key at this time.
The Windows installation has been completed. Remove the system recovery CD, and insert the system software CD into the CD-ROM drive to install the device drivers and programs.

■ If You Cannot Run Windows

If you cannot run Windows, you have to boot the system with the system recovery CD, and reinstall Windows. If you boot the system from the system recovery CD, you can install Windows only with the user installation option. You cannot install with the standard installation option.

1. Insert the system recovery CD into the CD-ROM drive and start the computer.
2. If the following message appears on the screen, press any key from the keyboard.

Press any key to boot from CD.....

Note : This message appears only when the CD drive has booting priority.
: If the message does not appear, configure the **CD drive as the first booting device** referring to the **Changing Booting Priority** in the User Guide.

3. After a while, the partition configuration screen appears. Complete the installation referring to Page 7-6, Reinstalling Windows XP.

Q&A

This section provides information on possible problems, solutions and other references for system use.

Windows Related

Q1 The system does not shutdown properly.

A When the system does not shutdown normally, press and hold the Power button until the system manually shuts off. If the Power-Saving Mode is configured into the Power button, press and hold for more than 4 seconds to shut the system off. When the system is turned on after such manual shutdown, Scandisk will run to check errors in the system.

Q2 The system freezes during program operation

A1 There is an error with the program currently being used. Press the <Ctrl>, <Alt>, and <Delete> keys simultaneously and click 'End Task in the [Windows Task Manager] window.

A2 There is an error with the Windows OS. Reboot the system by using the Power button.

Display Related

Q1 The LCD screen is blank.

- A Adjust the LCD screen brightness. Use the <Fn> + , <Fn> + > keys.

Q2 The screen saver disturbs screen viewing during Media Player or video file operation.

- A Under the Media Player Options, in Player > Enable Screen Saver During Use, uncheck the box and restart the player.

Q3 In DOS mode, changing the full screen DOS mode by pressing ALT+Enter key displays a broken image for a short period.

- A The DOS mode which supports 2 Byte characters such as Korean and Japanese runs in graphic not in text mode. In this case, a broken image may be displayed while changing the video mode settings.

Q4 The screen blinks, displays noise for a short time, or the screen resolution is changed.

- A This problem may occur when you started the computer, enter or come out of standby/hibernate mode, pressed <Fn>+<F5 / CRT/LCD> keys, connect or disconnect your computer to/from the docking station, or performed tasks such as changing resolution or scanning new hardware. This may occur when you connected a projector and performed one of above actions.
After a short time, the screen displays normally. When the screen resolution is changed, configure the resolution in [Graphics Controller Properties] dialog box again. (Refer to "Using External Display Devices" (P. 6-8).)

Q5 When I connected a projector to the computer and pressed <Fn>+<> keys, display devices are not converted properly.

- A1 Press <Fn>+<> keys once more.
- A2 Convert display devices on [Graphics controller properties] dialog. (Refer to 'Using External Display Devices' (P. 6-8).)
- A3 Press <Ctrl>+<Alt>+<F1> keys to change the setting to CRT, or press <Ctrl>+<Alt>+<F3> keys to change to LCD.

Q6 Extended Desktop is not configured on [Display Properties] dialog. (Start > Control Panel > Appearance and Themes > Display > Settings tab)

- A Change the setting to extended desktop on [Graphics Controller Properties] dialog. (Refer to 'Using External Display Devices' (P. 6-8).)

Q7 I pressed <Fn>+< > keys, then the screen blinks.

- A This problem may occur when you pressed <Fn>+< > keys to convert display devices while there is no external display device connected.
Connect an external display device first, then convert display devices.

Q8 When I pressed <Fn>+< > keys to change display devices, the screen resolution is changed.

- A Change the resolution again on [Graphics Controller Properties] dialog. (Refer to 'Using External Display Devices' (P. 6-8).)

Q9 When I changed display properties setting and restarted the computer, the property is converted to the prior setting.

- A Change the setting on [Display Properties] dialog and apply immediately without restarting the computer.

Q10 When I played a DVD or an MPEG file while the display is set to Dual Display Clone, the video file is interrupted while playing or displayed only on one display device.

- A1 Set the display to Dual Display Clone as follows, then play a DVD or an MPEG file.
1. Press touchpad right button on the desktop.
 2. Click Graphic Options > Graphic Properties > Devices tab.
 3. Select Dual Display Clone, then select 'Same display configuration driven on both displays' check box.
 4. Click OK.
- A2 If above methods do not solve the problem, change the setting to display only on the LCD.

Q11 <Fn>+< > keys do not operate.

- A When you are playing a video file such as a video CD, an MPEG file, or a DVD, when no external display is connected, or when you are using the extended desktop mode or full screen DOS mode, you cannot change display devices.

Q12 Desktop is displayed abnormally or some icons disappear while the system is operating.

- A This problem may occur when you entered hibernate mode while using the Extended Desktop mode, removed the monitor and then pushed power button to exit hibernate mode.
When the desktop is displayed abnormally, press right touchpad button on the desktop and click Refresh. When the icons disappear, press <Fn>+<> or <Ctrl>+<Alt>+<F3> to change the display setting.

Q13 When I played DVD/MPEG/AVI in Windows 2000, the screen is not displayed properly.

- A1 When you play DVD/MPEG/AVI in Windows 2000 while the display setting is in Extended Desktop mode, the operation may be abnormal due to the limitations of the operating system. Press <Fn>+<> to change the display setting to Dual Display mode, then play the video clip.
- A2 If above method does not solve the problem, change the setting to display only on the LCD.

Q14 When I played DVD or Video CD in Dual Display Clone mode or Extended Desktop mode, actions such as changing display setting or volume operates slowly.

- A Playing DVD or Video CD requires separate data handling. When you are using Dual Display Clone mode or Extended Desktop mode, problem may occur because the data exceeds the capacity of the video chip. Change the display device to display only on LCD or only on CRT.

Q15 When I turned off the computer in Extended Desktop mode, disconnected the CRT monitor and then restarted the computer, the computer does not recognize the CRT monitor properly.

- A1 Press <Ctrl>+<Alt>+<F1> keys to change the display device to CRT.
- A2 Change the display device to LCD, then disconnect the CRT monitor and turn off the computer.

Modem Related

Q1 I cannot hear the modem sound.

A1 Check that the telephone line is properly connected to the modem.

A2 Check that the modem driver is installed properly.

1. Click **Start > Control Panel > Performance and Maintenance > System**.
2. Select **Hardware** tab > **Device Manager > Modems** in the **System Properties** window, and check if there is a yellow exclamation mark on the installed modem icon. If there is, delete the modem device driver and reinstall the driver, because the yellow exclamation mark represents a not properly installed driver.
3. If there is no yellow exclamation mark, double-click the installed modem, and click **Diagnostics** tab > **Query Modem** in the **Modem Properties** window to diagnose the modem.

No message in either of Command and Response in the **Diagnostics** tab means that the modem is not operating properly.

Diagnose the modem again after restarting the system or reinstalling the driver. (You have to exit all programs using modem in the advance of diagnostics of the modem).

A3 Although I can make a connection with the modem, I cannot hear the dial tone and modem connection sound. In this case check the following list:

1. Click **Start > All Programs > Accessories > Entertainment > Volume Control**.
2. Clear the **Mute** check box in the Telephone Line item.
(Depending on the sound driver, it may be displayed as another name such as Modem, Phone, Mono. If there is no corresponding item, click **Options > Properties > Volume Control**, select 'Playback', and select the 'Telephone Line' under the **'Display the following volume controls'**. Click **OK**.)

Q2 I cannot make a call using an extension line.

A In general, the dial tone of a PABX or a digital phone switching system is not a continuous one, unlike that of a trunk line.
Therefore, the modem may not make a call because the modem mistakes the dial tone from a PABX or a digital phone switching system as a busy tone.
In this case, complete the following procedures.

• Using an AT command

As an initialization command, use the command, ATX3.

Otherwise, enter the ATX3 command manually before making a call. It can correct this problem by skipping the dial tone check step.

• **Configuring the Modem through the Control Panel**

1. Click **Start > Control Panel > Network and Internet Connections**
2. Under **See Also**, click **Phone and Modem Options**.
3. In the **Modems** tab, select the installed modem, and click **Properties**.
4. In the **Modem** tab of the **Modem Properties** window, clear the '**Wait for dial tone before dialing**' check box.
5. When the configuration is completed, click **OK**.

Q3 How do I use my modem when dialing from overseas?

A1 Check that the modem is correctly configured according to the current country. Because the values for communication may differ according to the country, you may not be able to connect via the modem due to an incorrect modem configuration.

1. Click **Start > Control Panel > Network and Internet Connections**.
2. Under **See Also**, click **Phone and Modem Options**.
3. In the **Dialing Rules** tab, click **Edit**.
4. In the **General** tab in the **Edit Location** window, select the current country from the **Country/region** radio box, specify the **Area code**, and click **OK**.

A2 Because the shape of the telephone plug may differ according to the country, you have to purchase and use the appropriate telephone plug for that particular country.

Q4 How do I receive a fax while the system is in power saving mode (Rest mode) (For Windows XP and 2000)?

A To receive a fax when the system is in power saving mode, and the operating system is Windows XP or 2000, configure the system as follows:

1. The automatic fax reception function of the fax program needs to be activated. (For more information, refer to the corresponding fax program manual.)
2. Click **Start > Control Panel > Network and Internet Connections**.
3. Under **See Also**, click **Phone and Modem Options**.
4. In the **Modems** tab, select the installed modem, and click **Properties**.
5. In the **Power Management** tab of the **Modem Properties** window, select the "**This device activates the computer in power saving mode**" check box, and click **OK**.

The above setting enables the modem to turn on the system and receive a fax when in power saving mode.

Wired LAN Related

Q1 <Wake On LAN> Function.

A <Wake On LAN> is a function that activates the system in rest mode when a signal (such as **ping** or **magic packet** commands) arrives from network(wired LAN).

• To use <Wake On LAN> function

1. Click **Start > My Computer > My Network Places > View network connections**.
2. Click the right button on the touchpad over **Local Area Connection**, and select **Properties**.
3. Click **Configure...**, and select **Power Management** tab. Select '**Allow this device to bring the computer out of standby**', then click **OK**. Restart the system.

- If the system in rest mode is activated when there is no received signal, use the system after disabling <Wake On LAN> function.
- Connecting wired LAN while using wireless LAN may not execute <Wake On LAN> function. Configure wireless LAN to '**Disable**' to use <Wake On LAN> function.

Q2 When I connected 100Mbps wired LAN and the computer exits standby/hibernate mode, a message informing 10Mbps wired LAN connection appears.

A When the computer exits standby/hibernate mode, restoring the network takes about 3 seconds. When the network is restored, it operates in 100Mbps.

Wireless LAN Related

Refer to "Configuring the Network Environment Settings for Wireless LAN Network (WLAN)" (P.4-9) for the basic uses of a wireless LAN.

Q1 The Wireless LAN device is operating properly, but I cannot connect to the Internet or to another computer.

This is due to an inappropriate configuration. Check the following check lists:

- A1 If you are using a computer-to-computer (Ad Hoc) network connection, check that the name of the configured network (SSID) is correct. The network name (SSID) is case sensitive.
- A2 If you are using a network key (encryption key), you have to use the same network keys for an AP (Access Point) or a computer-to-computer network (Ad Hoc). The network key of the AP is configured in the AP management program. Ask your network administrator or AP manager for more detailed information.
- A3 Check that the device driver is properly installed. If the driver is not properly installed, you will find a yellow exclamation mark on the network icon by clicking **Start > Control Panel > Performance and Maintenance > System > Hardware tab > Device Manager > Network adapters > Wireless LAN adapter**. If there is a yellow exclamation mark, please reinstall the device driver with the system software CD.
- A4 Referring to A2 of Q3, check that the network bridge configuration is correct.

Q2 The signal strength is excellent, but I cannot connect to the network.

Even if the signal strength is excellent, the network connection may not operate properly if the TCP/IP properties are not properly configured, or the network key (encryption key) is incorrect.

- A1 Check that the TCP/IP properties are configured properly. When you connect to an AP, click the **Wireless Network Connection** icon () on the taskbar and select the Support tab. If the IP is not allocated properly, the IP address will be displayed as follows. (e.g. 169.254.xxx.xxx)
If the network does not provide DHCP, you have to specify the correct IP address by asking your network administrator.
Even if the network provides DHCP, the server may not allocate an IP address to the client properly, and the client station cannot connect to the network.
- A2 Referring to A2 of Q1, check that the network key is correct.
- A3 Referring to Q4, check that AP is operating properly.

Q3 I cannot share an Internet connection.

A1 It may require some time to synchronize the computers to share an Internet connection after the Internet connection sharing configuration is completed. If you cannot share Internet connection even after a longer period, restart the computer.

A2 Check if the connection between the network adapters is configured to bridge. If there is a configured bridge connection between the network adapters through the network configuration wizard, remove the network bridge, and reconfigure the Internet connection sharing.

A bridge connection is created when you ran Network Setup Wizard from the [Network Connections] window, and selected both the internal connection adapter and another adapter in the wizard.

Q4 I cannot connect to the AP.

Check the Computer Settings

A1 Verify whether the wireless LAN function of the computer is on by doing the following. If the wireless LAN function is off, turn it on.

- For Windows XP, verify that the wireless network connection has been set to "Enable" in Start > Control Panel > Network Connections.
- When a wireless LAN button is present, verify that the wireless LAN button has been switched on. (Refer to "Hot Keys" (P.1-14).)

A2 Verify whether the same network key (encryption key) has been entered in both the AP and the computer.

The network key is an encryption key for encrypting data transmitted between the AP and the computer. It is recommended setting the network key manually.

Check the AP Settings

For the AP settings, refer to the User's Guide provided by the AP manufacturer.

A3 Verify whether the environment is suitable for using a wireless LAN.

The use of a wireless LAN may be restricted according to the environment and distance. Obstacles such as walls or doors affect the use of a wireless LAN.

Please install the AP in a high and open location, which is far from the interference of other electric waves.

A4 Verify whether the AP is operating properly.

- When the AP is not operating normally, turn off the AP and after a short while turn it on again.
- Verify whether the AP's firmware is the most recent version. (Contact the AP manufacturer or the place where you purchased the AP for details of the AP firmware.)

A5 Verify whether the AP has been properly connected to the network.

Verify whether the network is operating normally by connecting the wired network cable, which has been connected to the AP, to your computer.

A6 Check the network key settings (encryption key).

When automatic code conversion (a passphrase function) has been selected and data communication is not functioning even with a normal wireless connection, it is recommended entering the network key (encryption key) manually.

A7 Check the AP settings as follows. (The following is recommended for a standard environment and thus may differ according to the specific wireless network environment.)

- When several APs are present simultaneously, check the channel setting for each AP. When different APs are using nearby channels, interference may occur between electronic waves. Set the APs' channels further apart from each other. (Ex: Ch1, Ch5, Ch9, Ch13)
- When an AP's SSID (Service Set ID) option is set to "Hide", you cannot search for that AP on the computer. We recommend canceling the "Hide" option for an AP. The SSID is a name for distinguishing one wireless LAN from another wireless LAN.
- It is recommended using Long Preamble. Preamble is a signal for data transmission synchronization. Short Preamble may be supported by some types of APs but may cause compatibility problems.
- It is recommended using a static IP.
- Since static channel selection is more reliable than auto channel selection, it is recommended setting a static channel.

Q5 In the Windows XP 'Available wireless networks' window, the Wireless Network Connection is displayed as 'Not Available'.

- A1 When there is a Wireless LAN button, ensure that the Wireless LAN button is turned on. (Refer to "Hot Keys" (P. 1-14))
- A2 Check if there is additional program for a wireless LAN connection installed. Windows XP supports wireless LAN connections through the Wireless Zero Configuration (WZC) service. Therefore, an additional program for wireless LAN connection is not required, unless the network requires a specific program. However, installation of some wireless LAN related programs may sometimes disable the [View Available Wireless Networks] window supported by WZC service. Exit the wireless LAN related program then check whether the window is enabled.
- A3 Initialize the device driver.
Click **Start > Control Panel > Performance and Maintenance > System > Hardware tab > Device Manager > Network adapters**, and select the wireless LAN adapter. Right-click the network adaptor and select 'Disable' from the popup menu. Then right-click over the network adaptor and select 'Enable' after a short wait to check that the device is operating properly.
- A4 Right-click the My computer icon, and select **Manage**. When the Computer Management window appears, double-click **Services and Applications** on the left, and then click **Services** from the sub menu tree. Select the Standard tab in the right pane, double-click **Wireless Zero Configuration** and check that Startup Type is configured to **Automatic**, and the Service status is **Started**.
- A5 In the case of Windows XP, click Advanced in the [Wireless Network Connection] dialog box (see p.4-10 'Connecting to an AP') and make sure that 'Use Windows to configure my wireless network settings' is selected. This may happen when a third-party wireless network setup program (e.g. PROSet) other than Windows XP default program is installed. For setting up a wireless network using the Windows XP program, this option should be selected.

Q6 The Wireless network connection operates properly, but the Wireless Network Connection () icon on the Taskbar displays the “Disconnected” message.

- A This is one of the known problems when you are using a wireless LAN connection after installing Windows XP service pack 1.
For more information, refer to the following link for known problems with Microsoft.
<http://support.microsoft.com/default.aspx?scid=kb;en-us;Q328647>

Q7 When connecting to a computer-to-computer (Ad Hoc) network, I cannot connect to another computer connected to the same computer-to-computer network.

- A1 Make sure that the security settings and network name of the computer-to-computer (Ad Hoc) network is correct.
- A2 Check the TCP/IP properties of the computers to be connected through the computer-to-computer (Ad Hoc) network. All of the computers to be connected through a computer-to-computer (Ad Hoc) network should be configured so that their IP addresses are within the same subnet range.
- If the IP address is configured to DHCP (Obtain an IP address automatically) in TCP/IP properties, IP address is configured within the same subnet range automatically.
 - If the IP address is configured to static IP in TCP/IP properties, select **Use the following IP address** in the TCP/IP properties of the wireless adapter, configure IP address: 10.0.0.1~10.0.0.254, and Subnet mask: 255.255.255.0, and then try again.

Q8 When using a computer-to-computer (Ad Hoc) network, sometimes I cannot search the access point.

- A It may happen occasionally when you are using a computer-to-computer (Ad Hoc) network connection. Even if you cannot find some access points, the computer-to-computer (Ad Hoc) network is operating properly. Click **Refresh** to view the latest search result.

Q9 Running Help file while running Profile Wizard in the wireless LAN program (PROSet) makes the PROSet window white.

- A It will be displayed properly when you finish the profile wizard. It does not affect the program operation.

Q10 The network does not operate properly when both the wireless and the wired network connections are simultaneously configured with the same IP address.

A You cannot use the wireless and the wired network connections using the same IP address simultaneously. To use either the wireless or the wired network in turn with the same IP address, you have to Disable whichever network device will not be using in the network connection of the Control Panel.

Q11 The wireless LAN does not operate properly when there are other products operating in the 2.4GHz band.

A1 Since IEEE 802.11b and IEEE 802.11g equipment uses a common frequency or the ISM band, channel interference may occur when a wireless video transceiver or a microwave oven is being used. If you experience channel interference from other equipment, it is recommended changing the channel to connect to the AP.

A2 IEEE802.11g equipment operates in hybrid mode when there is active IEEE802.11b equipment. This may result in data rate degradation.

Q12 An established wireless LAN connection is disconnected after 2~3 minutes, and the connection is not recovered.

A1 This may be caused by channel interference. Change the channel of the AP, and reconnect.

A2 This may be caused by selecting the 'Use IEEE 802.1x network authentication' option when IEEE 802.1x authentication is not available.
Check the properties of the AP in the wireless network settings. If the 'Use IEEE 802.1x authentication in this network' option is selected, deselect the option on the Authentication tab.
For more detailed information about authentication server, ask your network administrator.

A3 If the AP is configured to 'Use network authentication (Shared Key)'
If the AP is configured to authentication shared mode, all computers to be connected should be configured as follows:

- If you are using Windows XP, select network authentication(shared mode) in the wireless network settings.

Click Start > Control Panel > Network and Internet Connections > Network Connections. Right-click the Wireless Network Connection icon, and click **View Available Wireless Networks > Advanced**. In the Wireless Networks tab, select an AP in the Available Networks field and click Configure and select Network Authentication (Shared Mode).

- If you are using Windows 2000, check that the network authentication mode is configured to Share in the security settings of the wireless LAN program (PROSet).
For more network authentication procedures, ask your AP (Access Point) administrator.

A4 For a model with an installed 2100 11b card, remove the security patch (Q815485) if it is installed.
The WPA Q815485 patch provided by Microsoft can be used only when there is 802.11x, RADIUS, or an authentication server as well as an AP and a driver that supports the function. The current version of the driver does not support the WPA function. Click Start > Control Panel > Add or Remove Programs > Add or Remove Programs and remove the Q815485 patch if it is installed.

Q13 After PROSet is installed, The “AEGIS Protocol (IEEE 802.1x) v2.2.1.0” appears in the [Local Area Connection Properties] window.

- A The AEGIS Protocol is a security authentication protocol that is automatically installed when PROSet is installed and does not affect the operation of other programs.

Game/Program Related

Q1 3D game is not executed, or some functions are not working.

- A Change the graphic setting of the game to '2D' or 'Software Renderer', then execute the program again.

Q2 I launched a game right after installing it, and the game is not executed.

- A This problem may occur when the game is not compatible with Windows XP. Launch the game again, and it will be executed properly.

Q3 When I play a game, the screen is displayed in reduced size.

- A1 Before executing a game, press touchpad right button on the desktop, and click Graphics Options > Panel Fit > Enable.
- A2 Change the display setting to extended desktop mode before executing a game.
1. Press touchpad right button on the desktop.
 2. Click Graphic Options > Graphic Properties > Devices tab.
 3. Select Notebook, then select 'Full Screen' check box.
 4. Click OK.

Q4 When I pressed <Fn>+<> keys to convert display devices while playing a 3D game, the computer does not operate.

- A Do not press <Fn>+<> keys while playing a 3D game, since it may cause a system error

Q5 When I pressed <Fn>+<> keys to convert display devices while playing a game, the screen is not displayed properly.

- A This problem may occur in some games. Use <Fn>+<> keys before launching a game, and not while playing the game.

Q6 The running speed of a game is too slow or fast.

- A Change the setting of Power Schemes to 'Always On'.
(Click **Start > Control Panel > Performance and Maintenance > Power Options > Power Schemes** tab, then configure the **Power schemes** field to 'Always On'.)

Q7 When I pressed <Fn>+<F10 or F11> keys while playing a game, the computer does not operate properly.

A Do not press <Fn>+<F10 or F11> keys while playing a game, since it may cause a system error.

Q8 When I played an audio file (Mid/Mp3/Wave) on Windows Media Player, the screen resolution is changed or the screen is not displayed.

A This problem may occur when you press <Fn>+<> keys or <Ctrl>+<Alt>+<F1 or F3> keys while using the Windows Media Player in full screen mode.

Do not use these keys while playing the Windows Media Player.

Note : <Ctrl>+<Alt>+<F1> keys change the display setting to CRT, and
: <Ctrl>+<Alt>+<F3> keys to LCD.

Q9 When I executed Mechwarrior4 game with a joystick connected to the computer, broken images are displayed.

A When you connect a joystick and play a game, an afterimage may be displayed on the screen, but the game still runs properly.

Q10 When I played 'The Sims: House Party' game in Dual Display Clone mode, a mouse afterimage is displayed.

A1 Press <Fn>+<> to change the display setting to Dual Display mode, then play the game.

A2 If above method does not solve the problem, change the setting to display only on the LCD.

Docking Station Related

Q1 I cannot replace the docking device when the system is in Standby or Hibernate mode.

- A Since removing a docking device when the system is in Standby or Hibernate mode causes the system to become unstable, the remove operation is not supported when the system is in this state. Please remove the docking device after the system is no longer in Standby or Hibernate mode.

Q2 The Undock button does not work properly.

- A1 When the system is turned on, you can release the docking station only if the remaining battery charge has more than 10 % capacity left.
- A2. Since a docking station requires a configuration time after pressing the Undock button, first wait a short while before separating the docking station.

Q3 A 'USB device recognition failure' error message appears.

- A This error may happen when removing a docking device when the system is in Standby or Hibernate mode. Please only remove a docking device when the system is no longer in Standby or Hibernate mode.

Q4 Multiple CD drives appear in the My Computer window.

- A This is a known problem in the Windows XP operating system. This may happen when a 1394 bus driver searches for a storage device. This problem is scheduled to be fixed in Service Pack 2.

Q5 I have connected a Samsung USB 2.0 HDD (Handy Q) to the system through a USB 2.0 hub when the docking station is installed, but the system does not recognize the storage device properly.

- A Please connect the Samsung USB 2.0 HDD (Handy Q) directly to the USB port of the system or the docking station.

Q6 A 'Delayed write failure' error message appears.

- A This error may happen when you have an auxiliary hard disk drive installed in the docking station. Since this error may happen when the file system of the hard disk is NTFS, format an auxiliary hard disk drive as FAT32.

Q7 Replacing a docking device after installing an external CD-ROM drive displays a Collision Sign in the Device Manager (Window2000).

- A To use an external CD-ROM drive, boot the system with the drive connected to it, or connect the drive when the docking station has been installed. If a problem arises, reboot your system to resolve the problem.

Appendix

Appendix

System specifications,
software types and
safety instructions are
provided here.

System Specifications

The following is the basic hardware specification for the purchased product. Variations may exist depending on the model type.

Item	Specification	Comment
CPU	Intel Pentium M LV 1.1~1.4GHz / Intel Celeron M ULV 800~900MHz, 1.0~1.1GHz	Optional
Cache memory	2MB / 1MB / 512KB L2 cache	Optional
Main memory	On board 256 DDR SDRAM (An additional 128/256/512/1024 MB module can be installed, 1DDR socket)	
Main Chipset	Intel 82855GME	
Hard Disk (HDD)	UltraDMA, S.M.A.R.T 9.5mmH	
Graphics	Intel 82855GME Integrated default : 1024x768 pixel, XGA memory(UMA) : 8MB(fixed) / Max 64MB (DVMT)	Optional Optional
Sound	AC'97 Audio CODEC (CS4202)	
Network Interface	Modem : SFM-3200LW ASKEY 1456VQL4A-4(INT) Wired LAN : Intel 82562EZ LAN PHY wireless LAN : 802.11b Intel Calexico / 802.11g Intel Calexico2 Infrared: FIR, 4Mbit/s	
PCMCIA Slot	Type I and II Compatible 1 slot	
Memory Card Slot	Memory Stick, SD(Secure Digital) Memory Card, and MMC(Multi Media Card) Supported	
Ports	Monitor, USB 2.0 x 2, Modem(RJ-11), LAN(RJ-45), IEEE 1394 (6 Pin), DC-In, Microphone, and Headphone	Maximum 128 MB
Options	Lithium-Ion smart battery	Width x Depth x Height
Dimensions (mm)	273 x 228.8(max: 234.3) x 19.3(max: 23.9)	
LCD Panel Size	12.1" TFT LCD	
Weight	1.3Kg (with standard battery)	
Battery	Lithium-Ion smart battery battery	
Operation Environment	Temperature for custody : -5~40°C for operation: 10~32°C Humidity for custody : 5~90% for operation: 20~80%	
Operation Voltage	100 - 240 VAC	
Frequency	50 - 60 Hz	
Standard Input	1.2A 100V ~ 0.6A 240V	
Standard Output	DC 12V / 3.5A	

* Please refer to the product catalog or consult your product provider for availability when purchasing optional accessories for this system.

* Some optional devices have to be selected at the point of purchase and cannot be upgraded or changed afterward.

Docking Station Specifications (optional)

Item	Specification	Comment
CD drive	CD-RW/DVD-ROM Combo drive	
Hard Disk Drive Space	For the installation of UltraDMA, S.M.A.R.T 9.5mmH	
Ports	Monitor, LAN (RJ-45), IEEE 1394 (4 Pin), PS/2, USB 2.0 x 2, Serial, Parallel, S/PDIF, and DC-In	
Dimension (mm)	274 x 238 x 14.9 (max: 19.6)	Width x Depth x Height
Weight	760g	
Operation Environment	The same as the system.	
Operation Power Voltage		
Operation Power		
Frequency		
Standard Input		
Standard Output		

Wireless LAN Specifications (Optional)

Intel(R) PRO/Wireless LAN 2100 3B Mini PCI Adapter

Item		Specifications
Physical Specifications	Dimensions	59.75 X 44.45 mm (Width X Height)
	operation temperature and humidity	Same as system operation specifications Temperature: 0 ~ 70°C, Humidity: less than 85%
Power Specification	Power Saving Mode	135mW
	Receiving Mode	1.0W
	Transmission Mode	1.6W
	Power	3.3V
Network Specifications	Compatibility	IEEE 802.11b
	Operating System	Microsoft Windows XP, 2000 - NDIS5 Miniport Driver
	Media Access Protocol	CSMA/CA (Collision Avoidance) with Acknowledgement (ACK)
	Security	Wired Equivalent Privacy support (WEP) 64bit /128bit

RF Specifications

R-F Frequency Band	2.4GHz (ISM band)
Support Channels	1~13 channel
Device Description	Transceiver
Power	5 mW
Transmission Method	DSSS
Data Rate (Mbps)*	11, 5.5, 2, and 1
Antenna Type	Internal Antenna 2 EA (Main/Aux)

* The data rate may differ from the actual data rate.

Intel(R) PRO/Wireless 2200BG Network Connection

Item		Specifications
Physical Specifications	Dimensions	59.75 X 44.45 mm (Width X Height)
	operation temperature and humidity	Same as system operation specifications Temperature: 0 ~ 70°C, Humidity: less than 85%
Power Specification	Power Saving Mode	135mW
	Receiving Mode	0.85W
	Transmission Mode	1.45W
	Power	3.3V
Network Specifications	Compatibility	IEEE 802.11g, IEEE 802.11b
	Operating System	Microsoft Windows XP, 2000 - NDIS5 Miniport Driver
	Media Access Protocol	CSMA/CA (Collision Avoidance) with Acknowledgement (ACK)
	Security	Wired Equivalent Privacy support (WEP) 64bit/128bit WPA*, CCX*

* This piece of equipment supports the Wi-Fi wireless LAN security standard, WPA (Wi-Fi Protected Access) and CCX (Cisco Compatible eXtensions). To connect to a wireless network consisting of the WPA and CCX certificates, Windows patch (KB826942) or PROSet may be required depending on the network settings. For information on the PROSet installation, refer to P.4-15 'Wireless Network Setup Using the Wireless LAN Setup Program'. For more information, ask your network administrator.

RF Specifications

R-F Frequency Band	2.4GHz (ISM band)
Support Channels	1~13 channel
Device Description	Transceiver
Power	5 mW
Transmission Method	11b mode: DSSS 11g mode: OFDM
Data Rate (Mbps)*	11b mode: 11, 5.5, 2, and 1 11g mode** : 54, 48, 36, 24, 18, 12, 9, and 6
Antenna Type	Internal Antenna 2 EA (main/aux)

* The data rate may differ from the actual data rate.

** 11g mode is supported only when the device is connected with an IEEE802.11g device (e.g. IEEE802.11g compatible Access Point).

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Safety Instructions



Instructions for Setup

- **Set up the system on a stable work surface.**
If the system is dropped it may be damaged or it may inflict injuries on the user.
- **Do not use loose power outlets or damaged power cables.**
There is a danger of electric shocks or fires.
- **Set up the system in a clean, dry and airy place.**
If the system overheats, it may be damaged or it may cause fires.
- **Use standard power voltage.**
High-voltage may result in product damage or cause fires.
- **Use grounded power outlets designed for computers.**
A grounded power outlet prevents electric shock from electricity leakage.
- **Set up the system away from magnetic objects.**
Contents of the hard disk drive may be deleted or the color of the monitor may be permanently distorted.
- **Dispose of moisture-reducing agents and plastic packaging properly.**
Consumption of moisture-reducing agents and placing plastic packaging over the head is fatal, especially for children.



Instructions for careful handling

- **Handle with care so as not to damage the data in the hard disk.**

- Since the hard disk is fragile and sensitive to external conditions, it may be damaged from temperature changes or impact during operation. Take extra care to prevent such damages.
- Loss of data due to external conditions or carelessness during use is the user's sole responsibility and the manufacturer shall not be held liable for any compensation.



In order to minimize damages from data loss, please backup data at all times.

- **Cases when the hard disk and data may be damaged:**

- External impacts while separating from or installing into the computer may cause disk or data damage.
- Power failure during hard disk operation resulting in resetting the computer may cause disk or data damage.
- Execution of delete (DEL) or format (FORMAT) commands by mistake may cause loss of data.
- Virus infection may cause unrecoverable loss of data.
- An abrupt power cut during program operation may cause disk or data damage.
- Moving the computer, or impacts to the computer during hard disk operation may cause data loss or bad sectors on the hard disk.



- **Be sure to make backup copies of important data.**

The Manufacturer is not liable for lost data.

- **Turn on peripheral devices before, turning on the computer**

Otherwise damages may occur.

- **Turn off the computer before turning off other peripheral devices.**

Otherwise damages may occur.

- **Do not touch the modem, telephone lines and exposed electrical terminals during a thunder storm**

There is a danger of electric shocks or fires.

- **Before disassembling the system, turn the power off and disconnect the power cable.**

There is a danger of electric shocks.



- **Use only authorized parts and do not disassemble, repair or modify the computer unless at an authorized dealer.**

Use authorized service centers as the system may be damaged.



- **Do not touch the power strip with wet hands.**

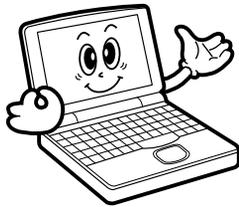
There is a danger of electric shock.

- **Place the computer away from heat devices (such as heaters).**

It may damage the system or cause fires.

- **Clean with cleaners specifically for computers**

Do not use benzene, paint thinner, or alcohol to clean the computer. It may damage the product.



SAMSUNG Notebook Computer Global Warranty

1. What is Global Warranty System (GWS) ?

Warranty Repair Service will be provided by Samsung Electronics Co., Ltd as required during Warranty period.

2. What is process ?

- a. The GWS service only applies to the regions mentioned below.
- b. Only products that are subject to GWS, and are within the guarantee period apply.
- c. When the computer unit is damaged (outside of the region purchased), please contact and receive repair services from the local SAMSUNG appointed service center (ASC). Since the repair methods may be different for products purchased locally, please check with the local ASC.
- d. Consultations made locally (outside of the region purchased) can be given in the local language.
- e. Whether a product can or cannot be fixed will be determined after a thorough examination, and the damaged product may not be repaired to its original state, as circumstances may dictate.
- f. When a product cannot be repaired locally (outside of the region purchased) please contact the national SAMSUNG appointed service center for further enquiries.
- g. The only warranty provided under GWS is repair where reasonably practicable, replacement or credit is not supported under this scheme.
- h. The length of time needed to obtain spare parts may depend on the type of part, and in some cases may not be replaceable.
- i. Accessories (such as the battery) or the AC cable, are excluded from the warranty.
- j. The User's Guide, drivers, and the operating system will not be provided and are not purchasable locally (outside of the region purchased).
- k. Software and operating system consultation and repair services will not be provided. When moving abroad (outside of the region purchased), please ensure that the Recovery CD, Software CD, and the User's Guide are taken along as well.
- l. All costs arising from customs duties when moving abroad (outside of the region purchased) are the user's responsibility.
- m. Malfunctions and damages caused by the user's abuse and neglect, or through other circumstances such as fires, earthquakes, floods, lightning, natural disasters, environmental pollution, and abnormal electricity currents will not be covered by the warranty. All other circumstances are subject to conditions in the warranty.

U.S.A.	Europe
InteliSol [Technical Solution for Intelligent Business] Add : 1001 NE Loop 820 Dock 5 Forth Worth, TX 76131, U.S.A. Tel : 1-817-230-5293 FAX : 1-817-230-5045 E-mail : SamsungPC.Support@Intelisol.com	A.R.I. Services Europe Ltd. Add : Raheen Business Park, Raheen, Co Limerick, Ireland Tel : 353-61-37-10-41 FAX : 353-61-49-29-29 E-mail : euro.support@arise-europe.com
Canada	Korea
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