Notices

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Microsoft Windows is a registered trademark of the Microsoft Corporation.

Product names mentioned herein are for identification purposes only, and may be trademarks and/or registered trademarks of their respective companies.

Macrovision Statement

If your computer has a DVD drive and an analog TV Out port, the following paragraph applies:

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

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Important Safety Information

Safety Instructions

Your system is designed and tested to meet the latest standards for safety of information technology equipment. However, to ensure safe use of this product, it is important that the safety instructions marked on the product and in the documentation are followed.



Always follow these instructions to help guard against personal injury and damage to your system.

Setting Up your System

- Read and follow all instructions marked on the product and in the documentation before you operate your system. Retain all safety and operating instructions for future use.
- Do not use this product near water or a heat source such as a radiator.
- Set up the system on a stable work surface.
- The product should be operated only with the type of power source indicated on the rating label.
- Ensure that the electrical outlet you are using to power your equipment is easily accessible in case of fire or short circuit.
- If your computer has a voltage selector switch, make sure that the switch is in the proper position for your area.
- Openings in the computer case are provided for ventilation. Do not block or cover these openings. Make sure you provide adequate space, at least 6 inches (15 cm), around the system for ventilation when you set up your work area.
 Never insert objects of any kind into the computer ventilation openings.
- Ensure that the fan vents on the bottom of the casing are clear at all times. Do not place the computer on a soft surface, doing so will block the bottom vents.
- If you use an extension cord with this system, make sure that the total ampere rating on the products plugged into the extension cord does not exceed the extension cord ampere rating.

Care During Use

- Do not walk on the power cord or allow anything to rest on it.
- Do not spill anything on the system. The best way to avoid spills is to not eat or drink near your system.
- Some products have a replaceable CMOS battery on the system board. There is a danger of explosion if the CMOS battery is replaced incorrectly. Replace the battery with the same or equivalent type recommended by the manufacturer. Dispose of batteries according to the manufacturer's instructions. If the CMOS battery requires replacement insure that a qualified technician performs the task
- When the computer is turned off, a small amount of electrical current still flows through the computer. To avoid electrical shock, always unplug all power cables, remove the battery and modem cables from the wall outlets before cleaning the system.
- Unplug the system from the wall outlet and refer servicing to qualified personnel if:
 - The power cord or plug is damaged.
 - Liquid has been spilled into the system.
 - The system does not operate properly when the operating instructions are followed.
 - The system was dropped or the casing is damaged.
 - The system performance changes.

Replacement Parts and Accessories

Use only replacement parts and accessories recommended by manufacturer.



To reduce the risk of fire, use only No. 26 AWG or larger telecommunications line cord.



Do not use this product in areas classified as hazardous. Such areas include patient care areas of medical and dental facilities, oxygen rich environments, or industrial areas.

Battery Disposal



Do not put rechargeable batteries or products powered by non-removable rechargeable batteries in the garbage.

Contact the Samsung Helpline for information on how to dispose of batteries that you cannot use or recharge any longer.

Follow all local regulations when disposing of old batteries.

Laser Safety

All systems equipped with CD or DVD drives comply with the appropriate safety standards, including IEC 825. The laser devices in these components are classified as "Class 1 Laser Products" under a US Department of Health and Human Services (DHHS) Radiation Performance Standard. Should the unit ever need servicing, contact an authorized service location.



Laser Safety Note:

Use of controls or adjustments or performance of procedures other than those specified in this manual may result in hazardous radiation exposure. To prevent exposure to laser beams, do not try to open the enclosure of a CD or DVD drive.

Power Cord Requirements

The power cord set (wall plug, cable and AC adapter plug) you received with your computer meets the requirements for use in the country where you purchased your equipment.

Power cord sets for use in other countries must meet the requirements of the country where you use the computer. For more information on power cord set requirements, contact your authorized dealer, reseller, or service provider.

General Requirements

The requirements listed below are applicable to all countries:

- The length of the power cord set must be at least 6.00 feet (1.8m) and a maximum of 9.75 feet (3.0m).
- All power cord sets must be approved by an acceptable accredited agency responsible for evaluation in the country where the power cord set will be used.
- The power cord set must have a minimum current capacity of 7 A and a nominal voltage rating of 125 or 250 volts AC, as required by each country's power system.
- The appliance coupler must meet the mechanical configuration of an EN 60 320/IEC 320 Standard Sheet C7 connector, for mating with appliance inlet on the computer.

Regulatory Compliance Statements

Wireless Guidance

Low power, Radio LAN type devices (radio frequency (RF) wireless communication devices), operating in the 2.4 GHz Band, may be present (embedded) in your notebook system. The following section is a general overview of considerations while operating a wireless device.

Additional limitations, cautions, and concerns for specific countries are listed in the specific country sections (or country group sections). The wireless devices in your system are only qualified for use in the countries identified by the Radio Approval Marks on the system rating label. If the country you will be using the wireless device in, is not listed, please contact your local Radio Approval agency for requirements. Wireless devices are closely regulated and use may not be allowed.

The power output of the wireless device or devices that may be embedded in your notebook is well below the RF exposure limits as known at this time. Because the wireless devices (which may be embedded into your notebook) emit less energy than is allowed in radio frequency safety standards and recommendations, manufacturer believes these devices are safe for use. Regardless of the power levels, care should be taken to minimize human contact during normal operation.

As a general guideline, a separation of 20 cm (8 inches) between the wireless device and the body, for use of a wireless device near the body (this does not include extremities) is typical. This device should be used more than 20 cm (8 inches) from the body when wireless devices are on and transmitting.

This transmitter must not be collocated or operate in conjunction with any other antenna or transmitter.

Some circumstances require restrictions on wireless devices. Examples of common restrictions are listed below:



Radio frequency wireless communication can interfere with equipment on commercial aircraft. Current aviation regulations require wireless devices to be turned off while traveling in an airplane. 802.11B (also known as wireless Ethernet or Wifi) and Bluetooth communication devices are examples of devices that provide wireless communication.



In environments where the risk of interference to other devices or services is harmful or perceived as harmful, the option to use a wireless device may be restricted or eliminated. Airports, Hospitals, and Oxygen or flammable gas laden atmospheres are limited examples where use of wireless devices may be restricted or eliminated. When in environments where you are uncertain of the sanction to use wireless devices, ask the applicable authority for authorization prior to use or turning on the wireless device.



Every country has different restrictions on the use of wireless devices. Since your system is equipped with a wireless device, when traveling between countries with your system, check with the local Radio Approval authorities prior to any move or trip for any restrictions on the use of a wireless device in the destination country.



If your system came equipped with an internal embedded wireless device, do not operate the wireless device unless all covers and shields are in place and the system is fully assembled.



Wireless devices are not user serviceable. Do not modify them in any way. Modification to a wireless device will void the authorization to use it. Please contact manufacturer for service.



Only use drivers approved for the country in which the device will be used. See the manufacturer System Restoration Kit, or contact manufacturer Technical Support for additional information.

Unintentional Emitter per FCC Part 15

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generate uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions may cause harmful interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet helpful: "Something About Interference." This is available at FCC local regional offices. Our company is not responsible for any radio or television interference caused by unauthorized modifications of this equipment or the substitution or attachment of connecting cables and equipment other than those specified by our company. The correction will be the responsibility of the user. Use only shielded data cables with this system.

Intentional emitter per FCC Part 15

Low power, Radio LAN type devices (radio frequency (RF) wireless communication devices), operating in the 2.4 GHz Band, may be present (embedded) in your notebook system. This section is only applicable if these devices are present. Refer to the system label to verify the presence of wireless devices.

Wireless devices that may be in your system are only qualified for use in the United States of America if an FCC ID number is on the system label.

The FCC has set a general guideline of 20 cm (8 inches) separation between the device and the body, for use of a wireless device near the body (this does not include extremities). This device should be used more than 20 cm (8 inches) from the body when wireless devices are on. The power output of the wireless device (or devices), which may be embedded in your notebook, is well below the RF exposure limits as set by the FCC.

This transmitter must not be collocated or operate in conjunction with any other antenna or transmitter.

Operation of this device is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation of the device.



Wireless devices are not user serviceable. Do not modify them in any way. Modification to a wireless device will void the authorization to use it. Contact manufacturer for service.



FCC Statement for Wireless LAN use:

"While installing and operating this transmitter and antenna combination the radio frequency exposure limit of 1mW/cm2 may be exceeded at distances close to the antenna installed. Therefore, the user must maintain a minimum distance of 20cm from the antenna at all times. This device can not be colocated with another transmitter and transmitting antenna."

FCC Part 68

This equipment compiles with part of the FCC rules. On the back of this equipment is a label that contains, among other information, the FCC registration number and ringer equivalence number (REN) for this equipment. If requested, this information must be provided to the telephone company.

This equipment uses the following USOC jacks: RJ11C

An FCC compliant telephone cord and modular plug is provided with this equipment. This equipment is designed to be connected to the telephone network or promises wiring using a compatible modular jack which is Part 68 compliant. See Installation Instructions for details.

The REN is used to determine the quantity of devices which may be connected to telephone line. Excessive RENs on the telephone line may result in the devices not ringing in response to an incoming call. In most, but not all areas, the sum of RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by total RENs, contact the local telephone company to determine the maximum REN for the calling area.

If the terminal equipment causes harm to the telephone network, the Telephone Company will notify you in advance that temporary discontinuance of service may be required. But if advance notice is not practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advanced notice in order for you to make necessary modifications to maintain uninterrupted service.

If trouble is experienced with this equipment (Modem) for repair or warranty information, please contact your local distributor. If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved.

The user must use the accessories and cables supplied by the manufacturer to get optimum performance from the product.

No repairs may be done by the customer.

This equipment cannot be used on public coin phone service provided by the telephone company. Connection to party line service is subject to state tariffs.

The Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device, including fax machines, to send any message unless such message clearly contains in a margin at the top or bottom of each transmitted page or on the first page of the transmission, the date and time it is sent and an identification of the business or other entity, or other individual sending the message and the telephone number of the sending machine or such business, other entity, or individual. (The telephone number provided may not be any number for which charges exceed local or long-distance transmission charges.)

In order to program this information into your fax machine, refer to your communications software user manual.

Unintentional Emitter per ICES-003

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of Industry Canada.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limitesapplicables aux appareils numériques de Classe B prescrites dans le règlement sur le brouillage radioélectrique édicté par Industrie Canada.

Intentional Emitter per RSS 210

Low power, Radio LAN type devices (radio frequency (RF) wireless communication devices), operating in the 2.4 GHz Band, may be present (embedded) in your notebook system. This section is only applicable if these devices are present. Refer to the system label to verify the presence of wireless devices.

Wireless devices that may be in your system are only qualified for use in Canada if an Industry Canada ID number is on the system label.

As a general guideline, a separation of 20 cm (8 inches) between the wireless device and the body, for use of a wireless device near the body (this does not include extremities) is typical. This device should be used more than 20 cm (8 inches) from the body when wireless devices are on.

The power output of the wireless device (or devices), which may be embedded in your notebook, is well below the RF exposure limits as set by Industry Canada.

This transmitter must not be collocated or operate in conjunction with any other antenna or transmitter.

Operation of this device is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation of the device.



To prevent radio interference to licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding. Equipment (or its transmit antenna) that is installed outdoors is subject to licensing.



Wireless devices are not user serviceable. Do not modify them in any way. Modification to a wireless device will void the authorization to use it. Contact manufacturer for service.

Telecommunications per DOC notice (for products fitted with an IC-compliant modem)

The Industry Canada label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operation, and safety requirements. The Department does not guarantee the equipment will operate to the users' satisfaction.

Before installing this equipment, users should make sure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. In some cases, the inside wiring associated with a single-line individual service may be extended by means of a certified connector assembly. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should make sure, for their own protection, that the electrical ground connections of the power utility, telephone lines, and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.



To avoid electrical shock or equipment malfunction do not attempt to make electrical ground connections by yourself. Contact the appropriate inspection authority or an electrician, as appropriate.

The Ringer Equivalence Number (REN) assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed 5.

European Union

The following information is only applicable to systems labeled with the CE mark (€.

European Directives

This Information Technology Equipment has been tested and found to comply with the following European directives:

- EMC Directive 89/336/EEC with amending directives 92/31/EEC & 93/68/EEC as per
 - EN 55022 Class B
 - EN 61000-3-2
 - EN 61000-3-3
 - EN 55024
- Low Voltage Directive (Safety) 73/23/EEC as per EN 60950(A1/A2/A3/A4/A11)
- Radio and Telecom Terminal Equipment Directive 199/5/EC as per
 - CTR21 (if fitted with a modem device)
 - ETS 300 328 (if fitted with a 2.4 GHz band embedded wireless device)
 - ETS 301 489-1 (if fitted with a 2.4 GHz band embedded wireless device)
 - ETS 301 489-17 (if fitted with a 2.4 GHz band embedded wireless device)

European Radio Approval Information (for products fitted with EU-approved radio devices)

This Product is a Notebook computer; low power, Radio LAN type devices (radio frequency (RF) wireless communication devices), operating in the 2.4 GHz band, may be present (embedded) in your notebook system which is intended for home or office use. This section is only applicable if these devices are present. Refer to the system label to verify the presence of wireless devices.

Wireless devices that may be in your system are only qualified for use in the European Union or associated areas if a CE mark **(** with a Notified Body Registration Number and the Alert Symbol is on the system label.

The power output of the wireless device or devices that may be embedded in you notebook is well below the RF exposure limits as set by the European Commission through the R&TTE directive.

European States qualified under wireless approvals:

EU Austria, Belgium, Denmark, Finland, France (with frequency

restrictions), Germany, Greece, Ireland, Italy, Luxembourg, The Netherlands, Portugal, Spain, Sweden and the United Kingdom.

Accept EU Iceland, Liechtenstein, Norway and Switzerland

European States with restrictions on use:

EU In France, the frequency range is restricted to 2446.5-2483.5 MHz for

devices above 10 mW transmitting power such as wireless LAN.

Accept EU No limitations at this time.

European Telecommunication Information (for products fitted with EU-approved modems)

Marking by the symbol **(** indicates compliance of this equipment to the Radio and Telecom Terminal Equipment Directive 1999/5/EC. Such marking is indicative that this equipment meets or exceeds the following technical standards:

CTR 21 – Attachment requirements for pan-European approval for connection to the analogue Public Switched Telephone Networks (PSTNs) of TE (excluding TE supporting voice telephony services) in which network addressing, if provided, is by means of Dual Tone Multi-Frequency (DTMF) signaling.



Although this equipment can use either loop disconnect (pulse) or DTMF (tone) signaling, only the performance of the DTMF signaling is subject to regulatory requirements for correct operation. It is therefore strongly recommended that the equipment is set to use DTMF signaling for access to public or private emergency services. DTMF signaling also provides faster call setup.

This equipment has been approved to Council Decision 98/482/EEC—"CTR 21" for Pan-European single terminal connection to the Public Switched Telephone Network (PSTN).

However, due to differences between the individual PSTNs provided in different countries, the approval does not, of itself, give an unconditional assurance of successful operation on every PSTN termination point. In the event of problems, you should contact manufacturer Technical Support.

Using Your Documentation

Congratulations on your purchase of a notebook computer with the Windows® XP operating system. Whether you are new to using a portable computer or are an experienced user, this user's manual can help you get the most from your computer.

Manual Documentation Conventions

Information Icons

Three icons and their associated messages appear in this manual. The information icons are placed before the step/information they apply to:



Warning:

Indicates the possibility of personal injury.



Caution:

Warns you of possible damage to equipment or data.



Note:

Informs you of special circumstances.



Technical Information:

Informs you of special requirements or limitations for use of item(s).

Keyboard Conventions

Keys that you need to press to perform certain functions are displayed in the manual in brackets. For example:

<Ctrl> indicates the control key (Ctrl on the keyboard).

If you need to press two keys at the same time, the key names are shown joined by a plus sign. For example:

<Fn+F8> means that you should press the Fn key and hold it and then press the F8 key.

CD-ROM Device Naming Convention

In many installation programs you will have to get a program from the CD-ROM device. The program installation sequence assumes that the CD is drive d:\, however this is not always the case. The name of the CD-ROM drive is the letter following the letter assigned to your last HDD. For instance, if you have one HDD with two partitions, the HDD is drives C: and D: and the CD-ROM drive is then drive E.

Touchpad Conventions

You may be asked to click or double-click on items on the display screen. As a general note the touchpad actions act much in the same way as a wheel mouse, any differences are explained fully.

The object that needs to be clicked upon will be displayed in **Bold** text or shown in a small figure such as the "**Start Button**" shown on the right =>. **## start**

Table 1. Touchpad Click Conventions

Action	Process
Click	Depress the touchpad left button and release
Double-click	Quickly click the left touchpad button two times



Windows Conventions:

Almost all "Windows" programs will display the name/function of a button or icon if you place the touchpad pointer on the item you want information about.

Software User Documentation

Your computer is shipped from the factory with several software programs installed. The software may include its own online or printed documentation. Refer to the documentation or the Help options in the software for more information.



The figures and illustrations in this manual may not be identical to those on your system.



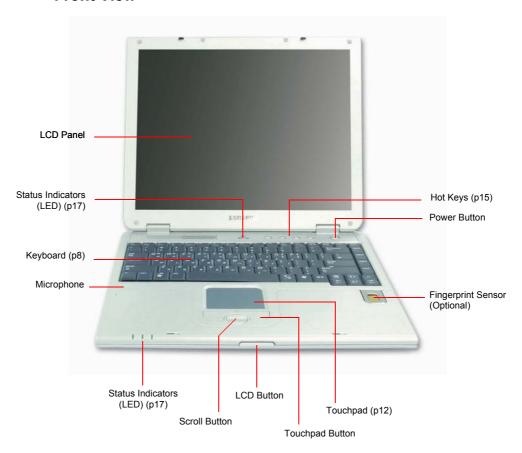
General Icon Note:

Some of the Icons used in Windows XP may be placed on the taskbar by selecting (ex: Place the volume icon in the taskbar) in the properties dialog box.

Getting Started

Introducing Your Computer

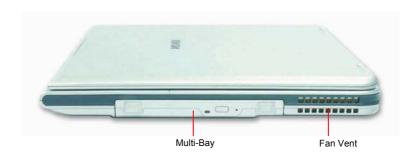
Front View





Fingerprint sensor is optional. For more information on using the fingerprint sensor, refer to the manual supplied with the device.

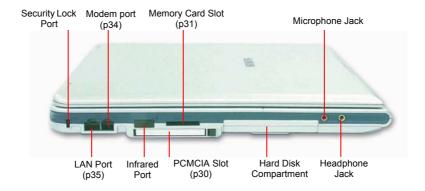
Right View



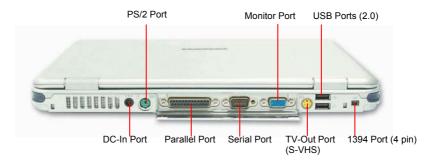


You can install various other multi-bay devices in the multi-bay of the system. Refer to "Using the Multi-Bay" (p 29).

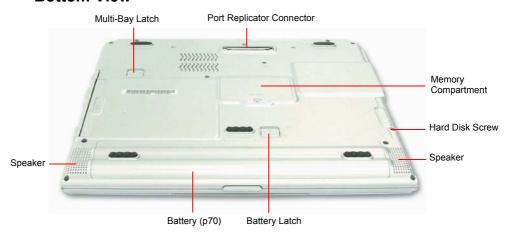
Left View



Back View



Bottom View



Turning the Computer On and Off

To turn on the computer

- 1. Insert the battery and connect the AC adapter according to the Installation Guide.
- 2. Press LCD button on the front of the system and open the LCD panel.
- **3.** Press the power button.



To turn off the computer

- 1. Click the **start** button (**#start**) on the taskbar.
- 2. Click Turn Off Computer.



3. Click Turn Off.





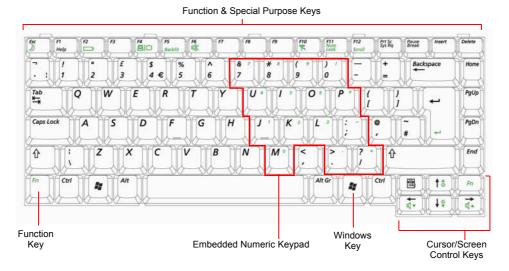
If the computer is not turned off properly due to a system error, press <Ctrl>+<Alt>+<Delete>. When [Windows Task Manager] dialog box appears, click Shut Down > Turn Off to turn off the computer. Your unsaved work may be lost/damaged.



If <Ctrl>+<Alt>+<Delete> keys do not operate either, press the power button for more than 4 seconds to turn off the computer. Your unsaved work may be lost/damaged. When you turn on the computer next time, it will perform a disk checking process.

Using the Keyboard

Your computer has an 89-key keyboard. By pressing designated key combinations, you can have access to all the key functions of a full-sized keyboard.





Although the layout of the keys on your computer's keyboard is different from that on a desktop computer's keyboard, the keyboard feels like a full-sized keyboard when you use it.

The keys on the keyboard can be grouped into the following categories:

- Full-sized Alphanumeric typewriter keys are arranged like a standard typewriter keyboard and are used for text entry. The Windows keys on either side of the spacebar open Windows menus and perform other special functions.
- Function keys, when pressed together with the <**Fn>** key, enable special functions.
- Cursor and Screen control keys move the cursor. They may perform other functions, depending on your software.

To clean the computer keyboard, use slightly damp cotton swabs. Scrub the keys and the surface around the keys.

8 Users Manual

Do not allow liquid to drip into the keyboard or you may damage the keyboard.



Using the Numeric Keypad

Your keyboard includes a numeric keypad, which is a group of keys that you can set to type numbers and mathematical symbols, such as the plus sign. A number or symbol on the corner of each keypad key shows its numeric function.





Press <Fn+Num Lock> to turn on the embedded numeric keypad. The numeric functions of the keypad are enabled and the Num Lock LED turns on. (See "Reading the Status Indicators" on page 17 for the location of the Num Lock LED.)

While the numeric functions are enabled, you can temporarily return a key to its normal function by pressing the key and the $\langle Fn \rangle$ key. For example to type the letter m, press <Fn+M>, this operation displays the letter m.

To turn the numeric keypad off, press <Fn+Num Lock> again. The Num Lock LED turns off.

Using Special Function Keys

The function key activates special functions when it is pressed in combination with another keys.

and the volume status. Power Supply Status When operating on operating or	<fn> Key Combinations</fn>	Key Name	Key Function
and the volume status. Power Supply Status When operating on AC power AC Mode Remaining Battery Charge Level Battery Capacity Wireless LAN Status Wireless LAN Status Wireless LAN Enabled Wireless LAN Disabled Volume Status Sound On Mute	<esc 🔰=""></esc>	Rest	Puts the computer into suspended mode. (p66)
When operating on AC power Remaining Battery Charge Level Battery Capacity Wireless LAN Status Wireless LAN Enabled Radio On Volume Status Sound On When operating or battery obeated operating or battery power battery p	<f2 -=""></f2>	Gauge	You can check the power supply, the battery charge, the wireless LAN, and the volume status.
Remaining Battery Charge Level Battery Capacity Wireless LAN Status Wireless LAN Enabled Radio On Volume Status Sound On Mute			Power Supply Status
Wireless LAN Status Wireless LAN Enabled Wireless LAN Disabled Wireless LAN Disabled Wolume Status Sound On Mute			operating on AC power operating on battery power
Wireless LAN Status Wireless LAN Enabled Wireless LAN Disabled Wireless LAN Disabled Wolume Status Sound On Mute			Remaining Battery Charge Level
Wireless LAN Enabled Radio On Volume Status Sound On Wireless LAN Disabled Mute			Battery Capacity
Radio On Volume Status Sound On Mute			
Sound On Mute			Enabled () Disabled
A Sound on			
Volume On Volume Mute			тф»

<f4 ≅ ○=""></f4>	LCD/CRT	Switches the display between the LCD and external display device when an external display device is connected. (p63)
<f5 backlit=""></f5>	Backlight	Turns the LCD on and off.
<f6 ເ🔆=""></f6>	Mute	Turns the audio output on and off.
<f10 咒=""></f10>	Low-noise	The system operates in low-noise mode.
		Note. In low-noise mode, the operational speed of a program will be slowed down because the CPU operating at half speed, and the system may overheat if used continuously in this mode because the fan is rotating only at half speed.
<f11 lock="" num=""></f11>	Number Lock	Enables the numeric keypad. (p9)
<f12 scroll=""></f12>	Scroll Lock	Scrolls the screen up and down while the cursor position does not change in some applications.

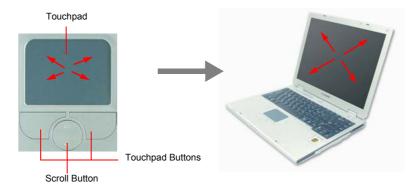
< ↑ /☆▲>	Brightness Up	Makes the LCD screen brighter.
< ↓ /☆▼>	Brightness Down	Makes the LCD screen dimmer.
< ← / ₫▼ >	Volume Down	Decreases the audio volume.
< → / ₫▲ >	Volume Up	Increases the audio volume.



When you press a function key combination, the system sound may be temporarily muted.

Using the Touchpad

In Windows, you always see a small graphical image on the screen that indicates the location where you can take the next action. This image is called a pointer, and is usually displayed in arrow shape ($\mbox{\cite{N}}$) or 'I' shape ($\mbox{\cite{I}}$).



The touchpad on your computer allows you to move the pointer on the LCD screen, just like a mouse that is used with a desktop computer. The touchpad buttons allow you to take actions with the pointer, such as selecting an item or executing a command.

You can use various actions with your touchpad as described below.

Action	Function	Process
Move	Move the pointer	Place your finger on the touchpad and slide your finger to a destination.
Click	Select an object, open a menu, or execute a button	Place the pointer over an object, then press left touchpad button once. Or, place the pointer over an object, then tap the touchpad once with your finger.
Double-Click	Launch a program or open a file	Place the pointer over an object, then quickly press left touchpad button twice. Or, place the pointer over an object, then quickly tap the touchpad twice with your finger.
Right-Click	Display a short cut menu	Place the pointer over an object, then press right touchpad button once.
Drag	Move an object, or select an area or multiple objects	Place the pointer over an object or on a starting location. While pressing the left touchpad button, press down on the touchpad and slide your finger to a destination or ending location.

Action	Function	Process
Scroll	Display upper/lower/left/right part of the content within a window (Applicable to certain programs only)	Press the scroll button. Or, place your finger on the right edge or bottom edge of the touchpad and move vertically or horizontally.



Make sure to use your finger to move the pointer with the touchpad. Do not use any sharpened tool because it may damage your touchpad.

Hot Keys



(i)	Internet Button	Launches Internet Explorer.
	E-Mail Button	Launches Outlook Express.
\checkmark	User 1 Button	You can launch a frequently used program by pressing the button. By default, Windows Calculator is configured to be launched when you press this button.
((🕏):	User 2 Button or WLAN/Bluetooth On/Off Button	By default, Windows Explorer is configured to be launched when you press User 2 button. In the models that have wireless LAN/Bluetooth installed, the wireless LAN/Bluetooth function can be switched on and off.



What is Bluetooth?

Bluetooth is a worldwide standard for the wireless exchange of data between two devices.



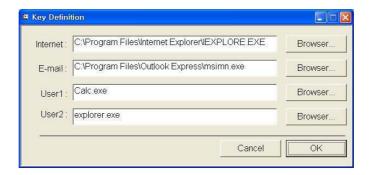
Using Wireless LAN/Bluetooth Button

Loading or unloading wireless LAN/Bluetooth driver takes about 5 seconds. Therefore, if you turn wireless LAN/Bluetooth on/off using the wireless LAN/ Bluetooth button, the button does not work for 5 seconds. (For wireless LAN/ Bluetooth installed models)

Changing the Hot Key Setting

Following example shows how to change the setting of User 1 button.

- 1. Double-click the **Key Define Utility** icon (on the taskbar.
- 2. Click Browser in the User 1 item.





In the models with wireless LAN/Bluetooth installed, you cannot change the configuration of the User 2 button.

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

Reading the Status Indicators

Status indicators show the status of computer functions.



1	Num Lock	Turns on when the numeric keypad is activated.
A	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.



<u>‡</u>	Battery	Turned green - 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.
- <u>Ö</u> -	Power	Turned green - when the computer is turned on. Blinks - when the computer is in Standby mode or low-noise mode.
	Hard disk drive	Blinks when the hard disk drive is in operation.

Adjusting LCD Brightness

There are 16 levels of LCD brightness (1: Dimmest ~ 16: Brightest).

Press <Fn>+< ↓ / ♥▼ > or <Fn>+< ↑ / *A > 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 14
- when operating on battery power: Brightness Level 10



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.



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>+< \leftarrow / < \checkmark > or <Fn>+< \rightarrow / < \checkmark > from the keyboard. The changed volume level is displayed on the upper part of the screen for a few seconds.



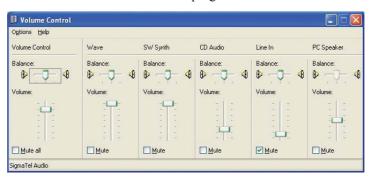


To adjust using volume control program

Click the **Volume** icon(**(()**)) on the taskbar, and move the Volume slider to a desired level.



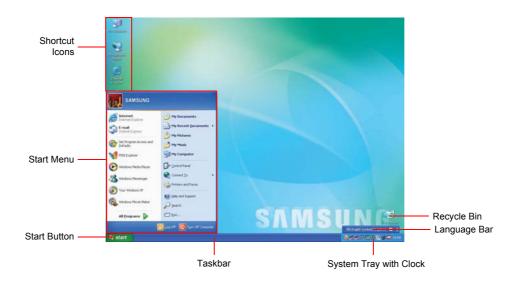
For advanced volume control options, double-click the **Volume** icon(**(()**), and adjust the volume level in the volume control program.



Introducing Windows

Understanding the Desktop

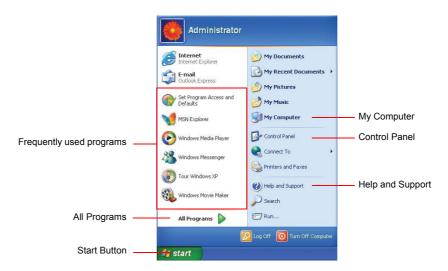
The desktop is the working area on the computer. It consists of the large workspace and a taskbar at the bottom.



Start Button	🥞 start	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	EN English (United Kingdom) 🙎 📮	Switches text input language.

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 Control Panel, receive support by clicking Help and Support, and search desired items from the computer or Internet by clicking Search.

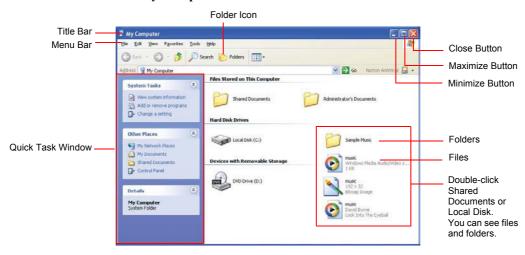


My Computer	3	Displays the contents of the hard disk, the CD-ROM drive, the network drive, and floppy disks. It can also be used to search and open files and folders.
Control Panel		Enables users to configure settings on the computer.
Help and Support	0	Provides on-line help, information on Windows and troubleshooting.
Search	P	Enables users to search for information in files or the Internet.
Run		Run 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 the contents of this folder**.



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 taskbar 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.

Windows XP Tour

You can tour elementary functions provided by Windows XP.

Click Start > Tour Windows XP.

Or click Start > All Programs > Accessories > Tour Windows XP.

Click on the topics to find out about important functions of Windows XP.

Using the Computer

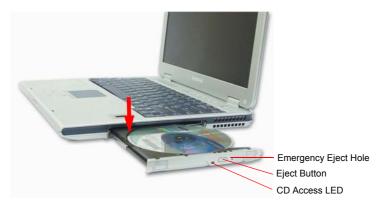
Using the CD Drive

One of the following CD drives is installed in your computer.

CD-ROM drive	Reads a CD.
CD-RW drive	Reads and writes a CD.
DVD-ROM drive	Reads a CD/DVD.
CD-RW/DVD-ROM Combo drive	Reads a CD/DVD and writes a CD.
DVD Multi Drive	Reads CD/DVD, and writes data to CD/DVD. Supports DVD-R, DVD-RW, and DVD-RAM only for the DVD recording format.

To insert a CD

- 1. Push the eject button on the CD drive.
- **2.** When the tray slides out, place a CD onto the tray with the label facing up, and push the CD down until it clicks.



3. Push the tray in gently until it clicks.

To eject a CD

- 1. Stop any process that accesses the CD drive and ensure the CD access LED is turned off.
- 2. Press the eject button on the CD drive.

- **3.** When the tray slides out, remove the CD from the tray.
- **4.** Push the tray in gently until it clicks.



If you remove the CD when the CD access LED is on, the disk and the data in it may be damaged.



Emergency Eject Hole

To eject a CD when the CD drive is not working or the computer is turned off, unfold a paper clip, and insert the unfolded end of the clip into the emergency eject hole and press until the CD tray opens.



To clean a CD or DVD title

Clean the disc with a soft clean cloth by wiping from the center outwards.



To play a DVD

You have to install the DVD software provided on a separate CD to view a DVD title.

To use the Windows Media Player

The Windows Media Player allows you to play audio and video files from the computer or the Internet.

To launch the Windows Media Player, click **Start > All Programs > Accessories > Entertainment > Windows Media Player**.



To play a video CD

If a video CD does not run automatically, follow these steps.

- 1. Insert a video CD into the CD drive.
- 2. When the CD drive window appears, double-click the MPEGAV folder.
- 3. Double-click the .dat file.
- 4. When the [Caution] dialog box appears, click **Open With**.
- 5. Select "Select the program from a list" and click **OK**.
- 6. Select the Windows Media Player, and click OK. The video starts playing.



Above procedure applies only to the video CDs that have a .dat file as the execution file. Playing procedure may be different according to video CDs.

To write data on a CD (Option)

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

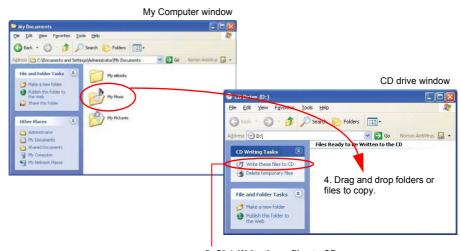


An additional CD writing program is supplied in an additional CD. For information about use, refer to the supplied manual.



You cannot write to a CD that already has data in it.

- 1. Insert a blank CD into the CD drive.
- 2. On the [CD Drive] dialog box, select Open Writable CD Folder and click OK. The CD drive window appears.
- 3. Click Start > My Computer.
- 4. In My Computer window, select files and folders to copy, then drag and drop them onto the CD drive window.



- 5. Click **Write these files to CD** in the CD drive window.
- **6.** When the CD Writing Wizard appears, enter the CD label, and click **Next**. The data begins copying.
- 7. When copying is completed, a 'completed' message appears and the CD drive window opens automatically.



For more information on writing CDs

Click **Start > Help and Support**. Type "CD copy" in the search field, and click the **Search** icon ().



For more information on creating an audio CD

Run the Windows Media Player program, click the **Help > Help Topics**. Click Using Windows Media Player > Using CDs > Creating your own CDs > To create your own CD.



To write data to a DVD

Use the CD/DVD writer program provided on a separate CD.

Using the Multi-Bay

Multi-Bay provides space for CD drive installations. You can replace the CD drive with various other types of drives.

The procedures to replace the drive installed in the Multi-Bay with other drives are described below.

- 1. Turn off the computer.
- 2. While holding the Multi-Bay latch to the UNLOCK position, remove the installed drive.



3. Insert a new drive into the Multi-Bay completely, and make sure that the latch is in the LOCK position.



To replace the drive without turning off the computer

- a. Click the Safely Remove Hardware () icon on the taskbar.b. When the 'Safely Remove Drive' message appears, click the message.
- c. Remove the CD drive, and install a new drive.

Using the PCMCIA Card Slot

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.



The PCMCIA card slot does not support a ZV card or a PCMCIA III card.

To insert a PCMCIA card



Before using the PCMCIA slot, remove the slot protector.

Push the eject button of the PCMCIA card slot once to pop it out. Push the button again to eject the slot protector.

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



2. Windows automatically installs the necessary driver for the card. If there is no available driver found by Windows, you have to install the driver using a disk supplied with the card.

To remove a PCMCIA card

- 1. Double-click Safely Removes Hardware icon (on the taskbar.
- **2.** On the [Safely Remove Hardware] dialog box, select the appropriate PCMCIA card and click **Stop**.
- **3.** When [Stop a Hardware Device] dialog box appears, click **OK**.
- 4. Click Close to close the [Safely Remove Hardware] dialog box.
- **5.** Push eject button of the PCMCIA card slot once, then the button pops out.
- **6.** Push the button again to eject the PCMCIA card.

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.







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



Restriction in Using Memory Stick

Your computer supports a maximum Memory Stick size of 128 MB. Please check the amount of memory of Memory Stick in advance when you purchase a Memory Stick. The MagicGate Memory Stick has a storage function and a security function. This computer does not support the security function, only the storage function.

To insert and use a memory card

1. Insert the card into the memory card slot, logo side facing upwards.



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







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

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

To remove a memory card

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



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.



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.



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.

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



To use a memory card in both the computer and other digital device such as a 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.



To format a Memory Stick in Windows 2000, Me, or 98SE, install the Memory Stick Formatter software included in the system software CD.

Connecting to the Internet

Connecting with a Modem

Before Start:

- Prepare a telephone line that is not digital.
- Contact an internet service provider (ISP) for instructions on how to connect to and disconnect from the Internet.
- 1. Connect a telephone line to the computer's modem port.



2. Connect to the Internet according to the instructions provided by your ISP.



If the Internet connection is not disconnected properly, additional telephone charges may be imposed.