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Macrovision Statement

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

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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.

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 operation 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.

United States of America

Federal Communications Commission (FCC)

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.”

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 generates uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions may cause harmful interference which 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.

Federal Communications Commission Part 68 Statement

This equipment complies 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 premises 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.

Canada

Industry Canada (IC)

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 operation 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.

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 limites applicables aux appareils numériques de Classe B prescrites dans le règlement sur le brouillage radioélectrique édicté par Industrie Canada.

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 your 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.

Japan

Wireless Devices

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 Japan if a TELEC ID is on the system label.

Operational guidelines for 2.4 GHz band wireless equipment (if equipped)

This equipment uses the 2.4 GHz ISM frequency band. The ISM band is the industrial, scientific, and medical device band. Devices that might also use this band are microwave ovens, other LAN devices, amateur radio stations, licensed premises radio stations, and non-licensed specified low-power radio stations.

Prior to setting up your device:

1. Make sure that there are no other devices in your area using the same frequency band.
2. Change the channel, location, or discontinue device use if you are interfering with any other radio station.
3. Contact manufacturer if you have any problems with this device.

この機器の使用上の注意

この機器の使用周波数は2.4GHz帯です。この周波数では電子レンジ等の産業・科学・医療用機器のほか、他の同種無線局、工場の製造ライン等で使用されている免許を要する移動体識別用の構内無線局、免許を要しない特定小電力無線局、アマチュア無線局（以下「他の無線局」と略す）が運用されています。

1. この機器を使用する前に、近くで「他の無線局」が運用されていないことを確認して下さい。
2. 万一、この機器と「他の無線局」ととの間に電波干渉が発生した場合には、速やかにこの機器の運用を停止（電波の発射の停止）をして下さい。
3. 不明な点、その他お困りのことがおきたときは、この機器をお求めになった販売代理店までお問い合わせください。



この無線機器は2.4GHz帯周波数、DSSS変調方式を採用しており、与干渉距離は約40mです。

VCCI Statement

This equipment is in the Class B category (Information Technology Equipment to be used in a residential area or an adjacent area thereto) and conforms to the standards set by the Voluntary Control Council for Interference by Information Technology Equipment aimed at preventing radio interference in such residential areas. When used near a radio or TV receiver, it may become the cause of radio interference. Read instructions for correct handling.

電波障害について

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。

取扱説明書に従って正しい取り扱いをして下さい。

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 C13 connector, for mating with appliance inlet on the computer.

Country-Specific Power Cord Set Requirements

The requirements listed below are applicable to the specific country listed:

Country	Accrediting Agency	Applicable Note Numbers
Australia	EANSW	1
Austria	OVE	1
Belgium	CEBC	1
Canada	CSA	2
Denmark	DEMKO	1
Finland	FIMKO	1
France	UTE	1
Germany	VDE	1
Italy	IMQ	1
Japan	JIS	3
The Netherlands	KEMA	1
Norway	NEMKO	1
Sweden	SEMKO	1
Switzerland	SEV	1
United Kingdom	BSI	1
United States	UL	2

Notes:



1. Flexible cord must be Type HO5VV-F, 2-conductor, 1.0 mm² conductor size. Power cord set fittings (appliance coupler and wall plug) must bear the certification mark of the agency responsible for evaluation in the country where it will be used.
2. Flexible cord must be Type SVT or equivalent, No. 18 AWG. Wall plug must be a two-pole grounding type.
3. Appliance coupler, flexible cord, and wall plug must bear a "T" mark and registration number in accordance with the Japanese Dentori Law. Flexible cord must be Type VCT or VCTF, 2-conductor, 0.75 mm² conductor size. Wall plug must be a two-pole grounding type with a Japanese Industrial Standard C8303 (15 A, 125V) configuration.

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 using a small graphic of the button. For example: <Ctrl>



or <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:



+



or <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

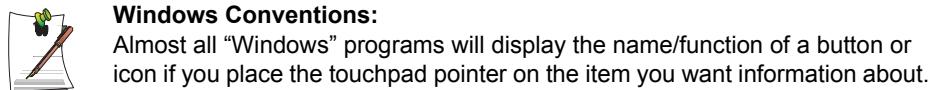
You may be asked to click or double-click on items on the display screen. As a general note the touchpad actions act much in the same way as a wheel mouse, any differences are explained fully.

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 => 

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:



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.

Introducing Your Computer

Your computer is a lightweight portable computer that includes features such as Dolby Digital & Dolby Home Theater System support, CD-ROM/floppy drives, Biometric (fingerprint) security system/Memory Stick (factory options) and wireless LAN capability (factory option), to meet your computing needs at home or on the road. [Figures may be different depending on options].

Where Everything Is

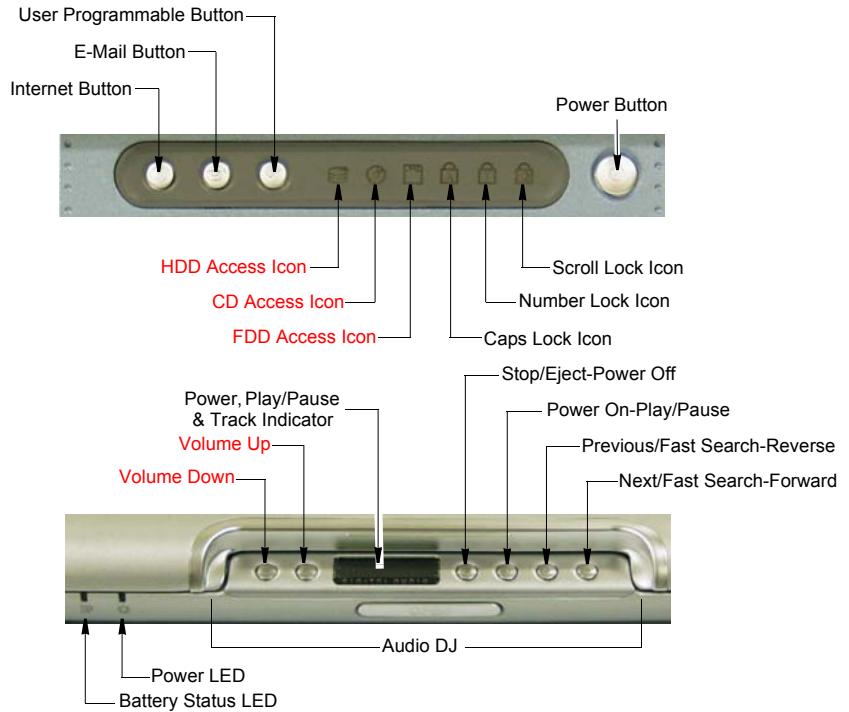
The next 7 figures will explain the location of all of the buttons, LEDs and equipment needed to operate your notebook computer.

Front

This figure shows the Biometric Security option installed.



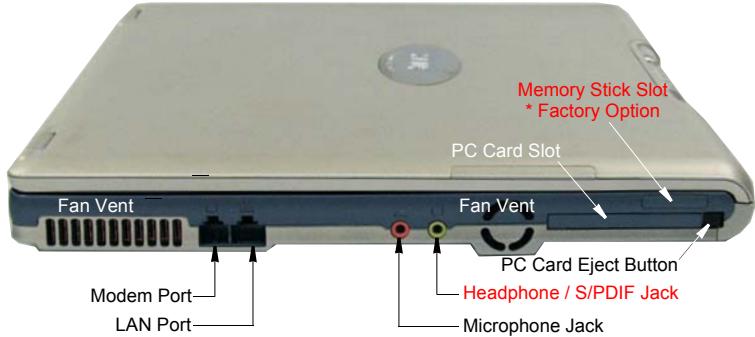
Buttons and LEDs



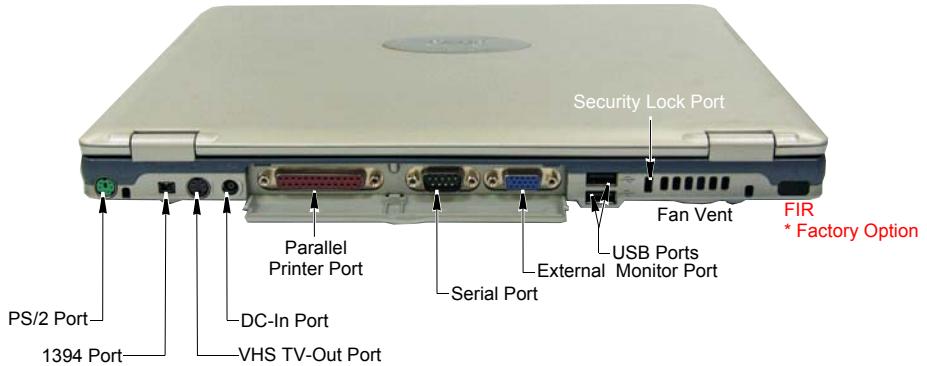
Right Side



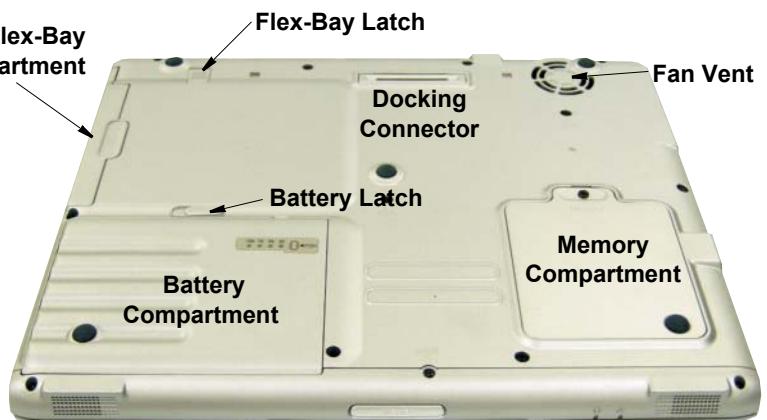
Left Side



Back Side



Bottom



Using Your Computer for the First Time

This section gives you detailed information on using your computer for the first time.

Installing the Battery

To install the battery pack:

1. With the computer's power off, close the LCD panel and turn the computer over so the bottom of the unit faces up.



Insert the battery into the battery compartment, ensuring the correct orientation so that the battery fits in its slot properly.



2. Place the battery inside and against front side of the computer battery compartment at an angle of approximately 30 degrees.
3. Push the battery down until the latch snaps into place, securing the battery.

Attaching the AC Adapter

Your computer runs on power from the battery in the computer or from an electrical outlet. The first time that you use your computer, fully charge the battery by attaching the power cord to the computer and to an electrical outlet.



All batteries lose their charge if they sit unused for an extended time period. When not used, battery can discharge fully in 2 to 3 months. The battery may have discharged in the time it took for the computer to go from the factory to you.

To attach the power cord:

1. Plug the AC adapter into the power connector on the back side of the computer.
2. Connect the power cord to the AC adapter and then to an electrical outlet.



The battery starts charging as soon as you plug the power cord into an electrical outlet. The battery charges faster if the computer is turned off during charging.

If the battery is fully depleted and the computer is turned off, the battery charges in about 3 hours. If the computer is turned on, the battery charges in about 6 hours. When the battery is charging, the battery charge light is red. When the battery is fully charged, the light turns green.

See "Using Power Management Options" on page 53 for more information on using your computer's battery.

Turning On the Computer

To turn on the computer's power for the first time:

1. Push the LCD cover button, located on the front of the computer below the Audio DJ.
2. Lift up the cover.
3. Press and then release the power button.

The power light is on when the computer's power is on.



Initial Computer Startup:

 The first time you start your computer you will see the operating system registration screens. Simply read each screen and follow the simple directions. You must complete this process in order to use your computer. A tutorial is provided if you require it.

Adjusting the LCD Display

You may wish to adjust the LCD (Liquid-Crystal Display) when you begin using your computer. A TFT (Thin-Film Transistor) LCD does not require adjustment for contrast because the contrast is set to remain at maximum.

To adjust the LCD:

- Press  +  **<Fn+Up Arrow>** to increase the display brightness.
- Press  +  **<Fn+Down Arrow>** to decrease the display brightness.

Turning Off Your Computer

Prior to shutting down your computer ensure all of your data and current work are saved. The system will ask if you wish to save any unsaved work, saving your work first will speed the shutdown process.

To turn off the computer, complete the following steps:

1. Click  on the taskbar.

If you need to restart your computer after software (re)installation or because it is not responding select the **Restart**  option in step 3 below.

2. Click **Shut Down Computer**  to display the shutdown popup window shown below.



3. Click **Turn Off**  to complete the shutdown sequence.



Power Off:

If the system does not power off, then press and hold the power button for over 5 seconds. See "Using Power Management Options" on page 53.



Power Button Functions:

The power button has several functions other than just turning on and off your computer, see "Using Power Management Options" on page 53.

You can also perform a soft boot by saving your files and pressing

 +  + 

<Ctrl+Alt+Del>

to pop-up the "Windows Task Manager" window.

Click **Shut Down > Restart**.

You can perform a cold boot by pressing the power button for more than 4 seconds to turn the computer off, waiting more than five seconds, and then pressing the power button to turn the computer on. The system may perform some extra checks during the restart.

Tips for Using Your Computer

The following information helps you avoid potential problems as you use your computer:



Do not try to disassemble your computer. Opening the system chassis voids your warranty. Only an authorised manufacturer service center can replace or add any parts inside the chassis.

- Follow all the instructions and cautions in your computer user documentation.
- The LCD has a polarized surface and can be damaged easily. To prevent damage, avoid touching the screen.
- Use only approved AC adapters, auto adapters, memory modules and other options.
- Because a notebook computer is small and has restricted air flow around components, it is more likely to overheat than a desktop computer. A fan inside your computer runs when needed to help eliminate heat. Make sure the fan vent on the left side of your computer is not blocked when you use the computer. Occasionally check the vents and remove any accumulated dust on the outside.
- Avoid using or storing the computer in extremely hot or cold areas, such as a car on a hot day. Keep the computer away from heaters and out of direct sunlight. Exposure to excessive heat may damage computer components. If you have left your computer in a hot place, let it cool down slowly to room temperature (with the LCD panel open) before using it.
- Do not remove the memory-module compartment door, or try to install a memory module when the computer is on. (For information on installing memory modules, see “Installing a Memory Module” on page 65.)
- Set up your computer work area to avoid physical strain. Sit with your back straight and supported by your chair. Adjust your chair or work table so that your arms and wrists can remain in a relaxed position, parallel with the floor. Avoid bending or twisting your wrists as you work. Your hands should “float” slightly above the keyboard. Refer to a book on office ergonomics for more information on setting up your work area.
- Take frequent breaks from working at the computer to rest your eyes and stretch your muscles.
- Remember to save your data files frequently and to make backup copies of your files.

Travelling with Your Computer

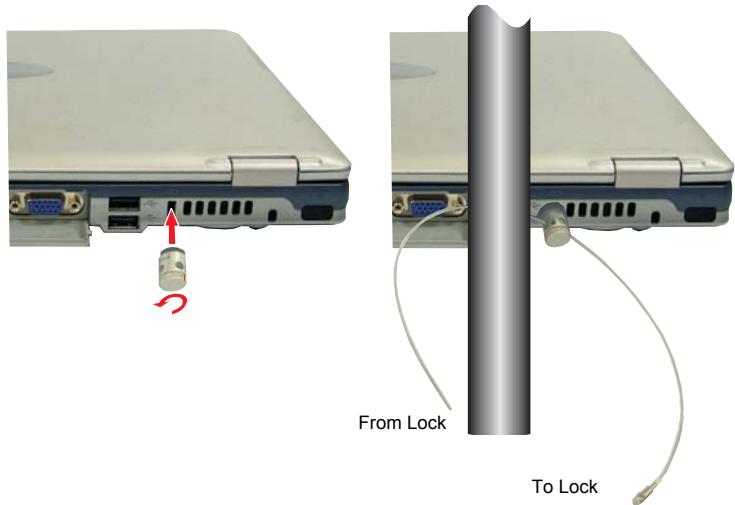
Air Travel

If you are travelling by air, follow these tips:

- Take the computer with you as carry-on luggage. Do not check the computer with your baggage.
- Allow the computer and disks to go through the X-ray security devices. Do not hand-carry disks through the walk-through metal detectors, which can cause loss of data.
- Make sure that the battery is charged or the power cord is easily accessible. You may be required to turn on the computer for airport security personnel.
- Be prepared to turn off the computer during take off and landing.

Locking your Computer

As a precaution when you are travelling or using your computer in an unsecured area, you should keep your computer as safe as possible. An option to do this is the *Security Lock System*. Follow the *Security Lock System* manufacturers instructions for specific installation and use. The following figure shows generally how to use the lock.



Handling Spills

Do not spill anything on your computer. The best way to avoid spills is to avoid eating and drinking around your computer. If you do spill something on your computer, turn off your computer, unplug it immediately, and do the following:

- If you spill liquid on the keyboard, drain as much of the liquid from the keyboard as possible. Be careful not to let the liquid drip onto the LCD panel. Allow the system to dry for several days before trying to use it.
- If you spill liquid on an external keyboard or keypad, unplug it and drain as much of the liquid as possible. Allow the keyboard to sit at room temperature for a full day before trying to use it.



Sweet liquids leave a sticky residue that may jam the keyboard despite your efforts to dry it.



- If you spill liquid on the LCD panel, clean it immediately with a soft cloth and denatured alcohol or a proprietary LCD screen cleaner. Do not use water, window cleaner, acetone, aromatic solvent, or dry, rough towels to clean it.

Some liquids damage the polarized LCD screen. If your screen is damaged, contact your authorized manufacturer's service center for a replacement.

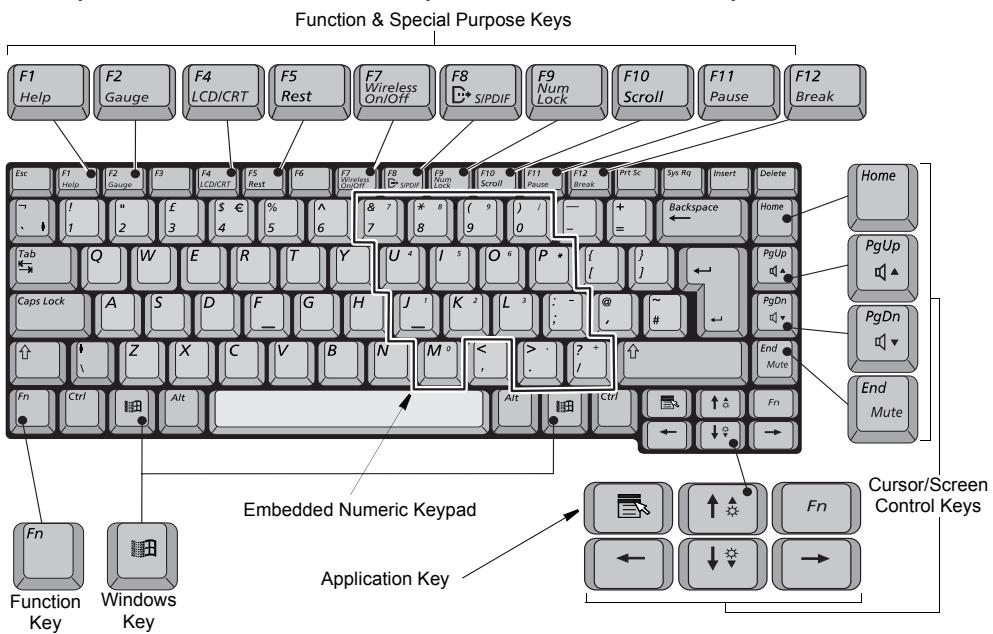
Storing the Computer for Long Periods

If possible, leave the power cord connected to the computer and an electrical outlet when the computer is not in use. This extends the life of the battery and keeps the battery fully charged.

If you will not be using the computer for a long period of time (a month or more), you should charge the battery until it is completely full. After you have done so, remove the battery from the unit.

Using the Keyboard

Your computer has an 87/88-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.

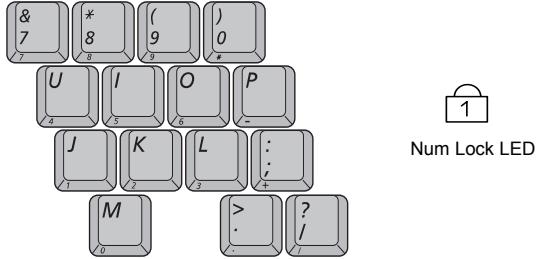
To clean the computer keyboard, use slightly damp cotton swabs. Scrub the keys and the surface around the keys.



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 right corner of each keypad key shows its numeric function.



Press 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 System Status Lights" on page 20 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 and the key. For example to type the letter *m*, press + , this operation displays the letter **m**.

To turn the numeric keypad off, press 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. Table 2 shows the special key combinations.

Table 2. Description of Special Function Key Combinations

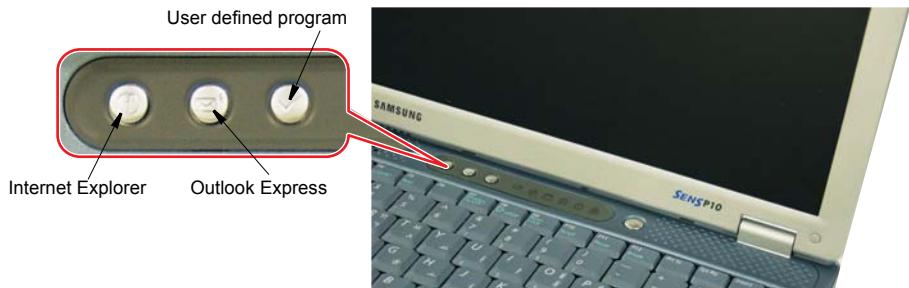
Key Combinations	Key Name	Key Function
 + 	F2 Gauge	Gauge Displays the battery gauge in the upper-right corner of your screen. The gauge closes in a few seconds, or you can press <Esc> to close the gauge. (See "Monitoring the Battery Charge" on page 43 for more information on the battery gauge.) This function will also display status of Wireless LAN and S/PDIF functions.
 + 	F4 CRT/LCD	CRT/LCD: Switches the display between the LCD, the external monitor, and simultaneous display on both the LCD and the external monitor.
 + 	F5 Rest:	Rest: Puts the computer into Suspend mode. To resume normal operation from rest, press the power button. (See "Using Power Management Options" on page 53 for more information about the rest mode.)
 + 	F7 WLAN	WLAN Toggles the Wireless LAN function On/Off
 + 	F8 S/PDIF	S/PDIF: Toggles the S/PDIF function On/Off
 + 	F10 Scroll	Scroll: In some applications, sets the cursor-control keys to scroll the page up or down while the cursor position does not change. Pressing key combination again turns off the scrolling function.
 + 	PgUp Volume up:	Volume up: Increases the audio volume.
 + 	PgDn Volume down:	Volume down: Decreases the audio volume.
 + 	End Mute:	Mute: Mutes the audio.
 + 	Up Arrow Brightness Up:	Brightness Up: Increases the LCD brightness.
 + 	Down Arrow Brightness Down:	Brightness Down: Decreases the LCD brightness.

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



User Defined Buttons (SENS Keyboard)

You may program the three buttons to the left of the power button to start any program you have installed on your computer.



The default settings for these buttons are:



Internet



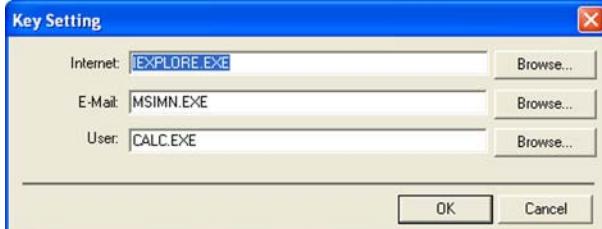
E-Mail - Outlook



Windows Calculator

To reprogram the Sens Keyboard, follow the steps below:

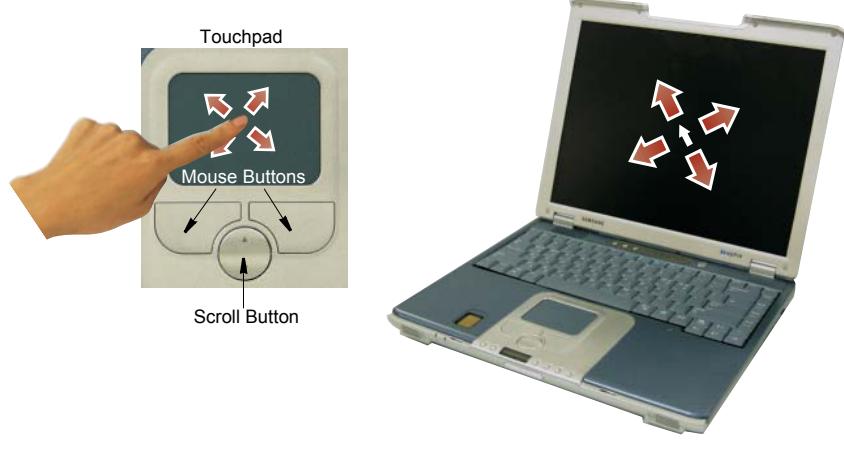
1. Double-Click  icon on the Windows taskbar, the **Key Setting** window is displayed.



2. Select **Button** you wish to reprogram from the drop down menus in the **Key Setting** window.
3. Use the **Browse** button to locate the program you wish to assign to the **SENS Keyboard** button selected.
4. Click on your program choice to select it.
5. Click **Open**.
6. Click **OK** to close window and complete programming the **Sens Keyboard**.

Using the Touchpad

Your computer is equipped with a touchpad, which is an integrated-pointing device that is used to perform standard mouse functions. The touchpad is an advanced and reliable pointing device that works with a touch of your finger.



Press on the touchpad gently. The touchpad responds to light pressure.



Table 3. Using the Touchpad

Action	Process and Comment
Click/Tap	<p>Process Depress the touchpad left button and release or position the pointer over the object and Quickly tap the touchpad once with your finger. This action is called <i>clicking</i>.</p> <p>Comment This will cause a process to begin or select an object on the screen.</p>

Action	Process and Comment
Double-Click/Tap  	Process Quickly click the left touchpad button two times or position the pointer over the object and Quickly tap the touchpad twice with your finger. This action is called <i>Double-clicking</i> . Comment This will cause a process to begin or open a file folder.
Click-Hold 	Process Depress the left touchpad button and do not release. Comment This is used to move/drag objects to new locations. See "Drag (Move)" on page 19.
Right-Click 	Process Position the pointer over the object. Quickly press and release the right button once. This action is called <i>Right-clicking</i> . Comment This is usually used to obtain information about an object or access a short cut menu.
Scroll Up 	Process Place your finger on the top half of the button to scroll up the current window. Comment Moves the current window down.
Scroll Down 	Process Place your finger on the bottom half of the button to scroll up the current window. Comment Moves the current window up.



PS/2 Mouse Menu:

You may change the setup in **Setup > Advanced Menu**

Disabled : Prevents any installed PS/2 mouse from functioning, but frees up IRQ12.

Enabled : Forces the PS/2 mouse port to be enabled regardless if there is a mouse present.

Auto Detect : Enables the PS/2 mouse only if present.

Drag (Move)

To move a window on the desktop, complete the following:

1. Click the **window title bar** or **icon** in the bottom of the window which you want to drag using the touchpad.
2. Press the left touchpad button and hold it.
3. Drag the window using the touchpad.



Area or Multiple item selection:

The drag function may be used to select an area or multiple items in an area by clicking in one area and then dragging to create a selection window. The items inside the window will be selected.

Reading the System Status Lights

System Top

System Status lights show the status of computer functions.



LED	Name	Function
	HDD Access	Blinking Green - HDD is being accessed.
	CD Access	Blinking Green - CD is being accessed.
	FDD Access	Blinking Green - FDD is being accessed.
	Num Lock	Changes a portion of the keyboard to a numeric keypad. See "Using the Numeric Keypad" on page 14.
	Caps Lock	Changes all alpha or letter input into capital letters. No changes occur to numeric and special keys.
	Scroll Lock	Scroll lock in certain software.

System Bottom



LED	Name	Function
	Power	Green - System power on. Blinking - Standby mode.
	Battery Status	Green - No battery pack installed/battery fully charged. Amber - Charging. Blinking - Bad Battery

Connecting to the Internet

This section explains how to connect you to the internet. For details on how to establish the connection contact the Internet Service Provider [**ISP**] or system administrator [**SysAdmin**].

Using the Modem

Install the Modem cable by simply plugging the cable into the modem slot as shown in the figure below.

Your Notebook computer will have a Modem/LAN installed.



1. Contact your Internet Service Provider to obtain information or CD required to make the connection in your area.
2. After the cable is connected create a “Dialup” connection by clicking **Start > Control Panel > Network and Internet Connections**.
3. Click **Set up or change your Internet connection > Setup** to start the connection wizard.
4. Follow the instructions in provided in the **Make New Connection** wizard.

Precautions Before Use

Country Selection



Country Selection:

Because your computer is very mobile you must ensure you select the *country you are calling from* is selected correctly, otherwise you may experience connection problems.

To change the country selection proceed as follows:

1. Click Start > Control Panel > Network and Internet Connections.
2. Click Phone and Modem Options.
3. Click on the connection you wish to edit in the Locations: box.
4. Click Edit in the Dialing Rules Tab
5. Select the Country/region you are calling from in the General tab.
6. Click OK to close the "Edit Locations" box.
7. Click OK to close "Phone and Modem Options" box.



Digital Phone Lines:

If you connect the modem to a digital phone line (such as a company 4-wire system), the modem may be damaged.

DOS support

- **Windows XP:** Does not support pure DOS mode and the modem does not support a DOS box in Windows. So you cannot use a communication application which runs under DOS.

Using the Modem on a PBX system

If you use a Windows Communication Program:

1. Click Start > Control Panel > Network and Internet Connections.
2. Click Phone and Modem Options.
3. Click Properties in the Modems tab section.
4. Check off "Wait for dial tone before dialing" check box in the Modem tab section.
5. Click OK to close the dialog box.
6. Click OK to close "Modem Properties" dialog box.

If you use a simple terminal program (i.e. hyper terminal):

Type the “ATX3&W” or “ATX3” command as an initialization command.



MODEM Notes:

1. In order to use the 56K feature, be sure to check if the standards supported by the on-line service provider and the modem are identical.
2. If you use a PBX phone system, you can not connect using the 56K mode.
3. Internationally connected calls will be limited to 33.6K (Max.)

Using the LAN

You may connect to the network using either a LAN cable or by establishing a wireless connection if factory option is installed.

Cable Connection

Install the LAN cable by simply plugging the cable into the slot in the left side of the computer.



Your computer's LAN adapter is ready to use for most situations, however if your system does not have a DHCP server or you wish to personally configure your LAN connection, proceed as outlined in “Configuring Network Environment” below.



Network Protocols:

You may need to consult your SysAdmin if their network protocols and settings are required for your LAN environment.

Configuring Network Environment

Configure the Network Adapter as follows:

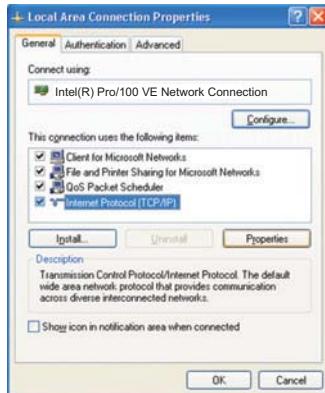
1. Click Start > Control Panel > Network and Internet Connections
2. Click  icon (Network Connections).



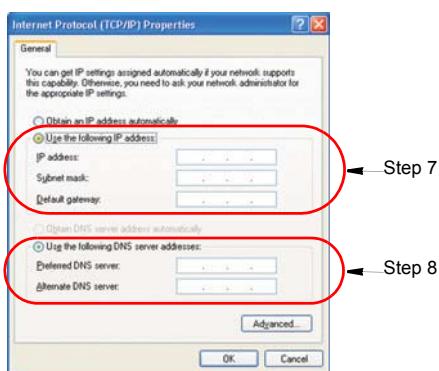
Configure Adapter Only (Not Connected to Network)

If your network is not active or the cable is NOT connected double click the  icon (Labeled Local Area Network) then follow the instructions starting with step 4 below.

3. Right-Click the  icon (Labeled Local Area Network) then click Properties button.
4. Select **Internet Protocol (TCP/IP)** in the "This connection uses the following items:" box.



5. Click Properties. The TCP/IP Properties window opens.



6. Click "Use the following IP address" in the **General** tab
7. In the "Use the following IP address" box, enter your **IP address:, subnet mask: and Default Gateway:**
8. In the "Use the following DNS server addresses" box, Enter your **Preferred DNS server: and Alternate DNS server:**
9. Click **OK** when you finish the TCP/IP set-up.

Wireless Connection (Factory Option)

Your computer's wireless LAN adapter is ready to use for most situations, however if your system does not have a DHCP server or you wish to personally configure your wireless LAN connection, proceed as outlined in "Configuring Network Environment" below.



FCC statement for Wireless LAN use:

"While installing and operating this transmitter and antenna combination the radio frequency exposure limit of 1mW/cm^2 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 co-located with another transmitter and transmitting antenna."

The table below shows the Windows taskbar icons for the wireless LAN.

Icon	Name	Description
	Connection Established	Displays if connection is available.
	Connection Unavailable	Displays if connection is unavailable.

To display relative Signal Strength:

1. Double Click the icon in the taskbar to display the Wireless Network Connection Status window. This window also displays connection *Status, Speed, Duration and Activity*.



Network Protocols:

You may need to consult your System Administrator if their network protocols and settings are required for your wireless LAN environment.

Configuring Network Environment

Configure the Wireless Network Adapter as follows:

1. Click Start > Control Panel > Network and Internet Connections
2. Click  icon (Network Connections)
3. Double-Click the Wireless Network Connection icon. The *Connect to Wireless Network* window pops up.



4. Select one of the available networks in the *Available networks* section, if displayed.



No networks are displayed

Office - Consult your system administrator.

Home - Verify your access point is working properly.

5. Click the **Connect** button. The Wireless Network Connection icon in the control panel will show your connection is *Enabled*. You may proceed using the network as normal wired LAN connections.

Change Wireless Network Access Point as follows:

1. Right Click the **Wireless Network Connection** icon.
2. Click *View Available Wireless Networks*. The *Connect to Wireless Network* window pops up.
3. Select the new network from the available networks in the *Available networks* section, if displayed.
4. Click **Connect** button. The Wireless Network Connection icon in the control panel will show your connection is *Enabled*. You may proceed using the network as normal wired LAN connections

Using the Flex-Bay



The Flex-Bay provides an impressive array of secondary storage devices listed below:

CD-ROM drive:

Shipped with some computers is also an available option.

CD-ROM R/W drive:

Shipped with some computers is also an available option.

DVD-ROM drive:

Shipped with some computers is also an available option.

DVD/CD-RW Combo drive:

Shipped with some computers is also an available option.

Optional secondary hard drive:

Available as an option for your computer.



If your operating system is Windows, you must install the *Softex Bay Manager* software on the software CD in order to use the Bay Manager Utility to hot-swap the devices.



If you do not use Windows, make sure that the computer's power is off before you remove or install any devices.

Swap a Flex-Bay Device - Power On

You can use the Softex Bay Manager utility to hot-swap your devices in the flex-bay.

To start the Softex Bay Manager utility:

1. Click Start > Control Panel > Other Control Panel Options > Softex Bay Manager.
- or -
2. Double-Click the SwapBay icon  in the Windows taskbar.

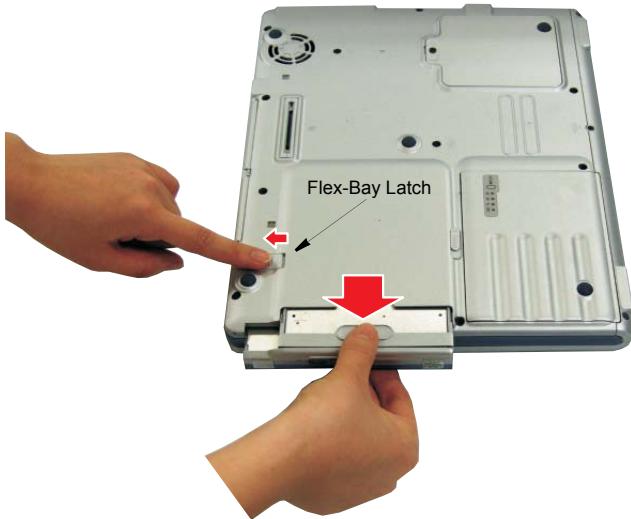
Device Swap

To swap a device with the power on proceed as follows:

1. Start the *Softex Bay Manager Utility*.



You do not have to turn the computer over or tip it on its side to change devices. Simply tilt the computer up about 10 cm at the back and locate the Flex-Bay latch. See Figure below for the location of the Flex-Bay latch. The computer in the figure is turned over for clarity.



2. Click *Remove / Swap*. A Device Change popup window stating, “Please wait until the system processes the device change” appears then another popup window appears and says, “Please remove or swap your bay device(s) now and press OK.”
3. Tilt the computer up & locate the smart bay latch.
4. Slide and hold the device latch toward the rear of the computer.
5. Slide the device out.
6. Slide the new device in
7. Click **OK**. The message “Please wait until the system processes the device change” appears again.
8. Click **OK** to close the *Softex Bay Manager Utility*.

Swap a Flex-Bay Device - Power Off

Device Swap

To remove a device with the power off proceed as follows:

1. Turn the computer's power off.
2. Tilt the computer up & locate the smart bay latch.
3. **Slide and hold the device latch toward the rear of the computer.**
4. Slide the device out.
5. Carefully slide the new device into the bay.
6. Push the device in until it is flush with the chassis and the Flex-Bay latch snaps into place. Your computer's operating system automatically recognizes the device in the Flex-Bay and configures your computer accordingly when power is restored.

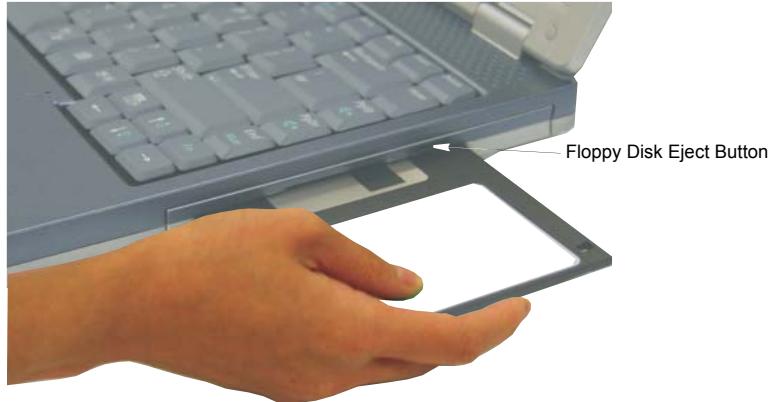
Using the Disk Drives

To use the Floppy drive or the CD-ROM drive you must verify it is installed in the flexbay slot. To swap devices see "Using the Flex-Bay" on page 27.

Using the Floppy Disk Drive

Your computer comes with a 1.44 MB, 3.5-inch, floppy drive.

To use a floppy disk in your computer, insert it into the floppy drive.



To remove a floppy disk, press the floppy disk eject button on the front of the floppy drive.

To protect the data on your floppy disks, follow the manufacturers guidelines.

Using the CD/DVD-ROM Drive

Compact discs are designed so that you can easily insert one into the computer when you need it, and then remove it. See "Using the Flex-Bay" on page 27 for information on installing the DVD-ROM drive into the computer.



DVD Notes:

A DVD player is a factory option and if you ordered this option you will have to install the provided DVD software to view the DVD Title.

1. Press the button on the CD-ROM or DVD-ROM drive, and the tray slides out. (Do not lean on the tray; because it will not support much weight.)



CD/DVD Drive Warnings:

Do not place reflective objects other than the CD/DVD disks in the disk slot because of possible hazardous laser emissions. The laser beam used in this CD/DVD-ROM drive is harmful to the eyes. Do not attempt to disassemble the CD/DVD-ROM drive. Refer servicing to your authorized service center. Do not touch the CD/DVD lens, doing so may damage the device.



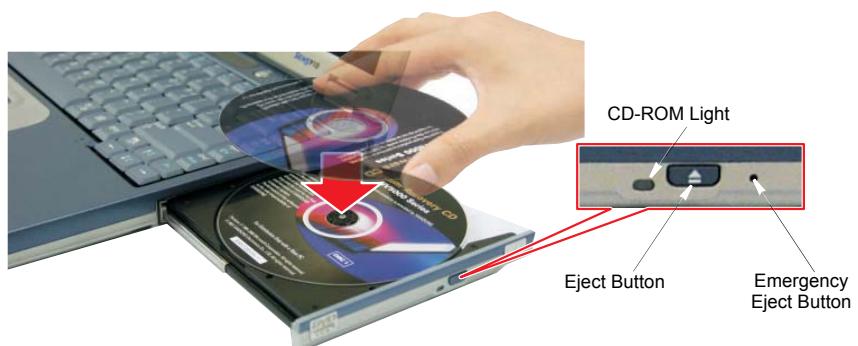
CD/DVD Precautions:

The tray may be stuck, in which case straighten out a paper clip,  insert it into the Emergency Eject hole in the front of the CD/DVD-ROM and push it until the tray ejects.

A LED on the drive tray is on when the computer is reading from a CD. Do not remove a disc when this LED is on.

To clean a CD/DVD, wipe from the center outwards with clean and dry cloth. Remove the CD/DVD when the drive activity LED is off.

2. Insert a CD/DVD, label side up (or remove a disc, if you have finished using it).
3. Push the tray in gently to close the drive tray.



Install and/or start a CD-based program as you would run a program on a floppy disk.

Using the Memory Stick (Factory Option)

The Memory Stick is a factory option that will increase your computer storage capacity as well as increase data portability. The Memory Stick may be used in many types of equipment such as digital cameras and PDAs for example.

Memory Stick and  are trademarks of the Sony Corporation.



Memory Stick Support

The Magic Gate model is not currently supported.

Inserting the Memory Stick

To insert the memory stick proceed as follows:



Ensure you Insert the Memory Stick into the slot with the correct orientation (Name Up) so that the Memory Stick will operate properly and be recognized by the computer.

1. Slide the Memory stick into the slot until you feel the first latch catch.



2. Then push the Memory stick in until it clicks into place.

Using the Memory Stick

The Memory Stick is used the same as the FDD drive on your computer but with much larger capacity, currently up to 128MB.



Formatting the Memory Stick

The Memory Stick may need to be formatted before use, if so insert it into the slot and format it the same as the FDD Drive.



Protecting Data on the Memory Stick

To prevent overwriting/deleting your data in the Memory Stick, move the slide lock to the "Lock" position.

to see the contents of the Memory Stick:

1. Double Click "My Computer" on the desktop, the My Computer window opens.
2. Double Click the  icon in the *Devices with Removable Storage* section of the window.

Removing the Memory Stick

To use the Memory Stick proceed as follows:



Ensure any operations using the Memory stick have completed before you remove it. Otherwise you will corrupt your data.

1. Push the Memory Stick in until it clicks and release.



2. The Memory Stick will pop out ~ 1 cm and then you can slide it out.