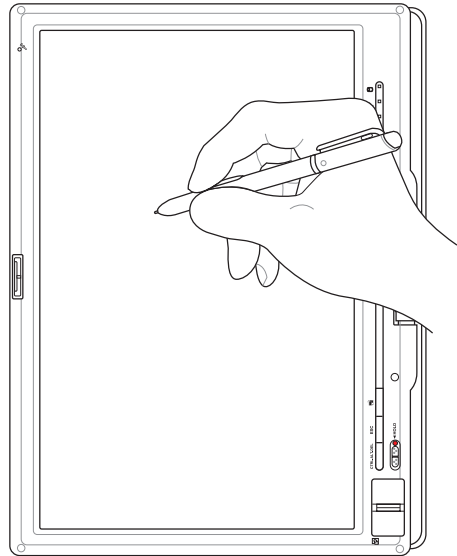
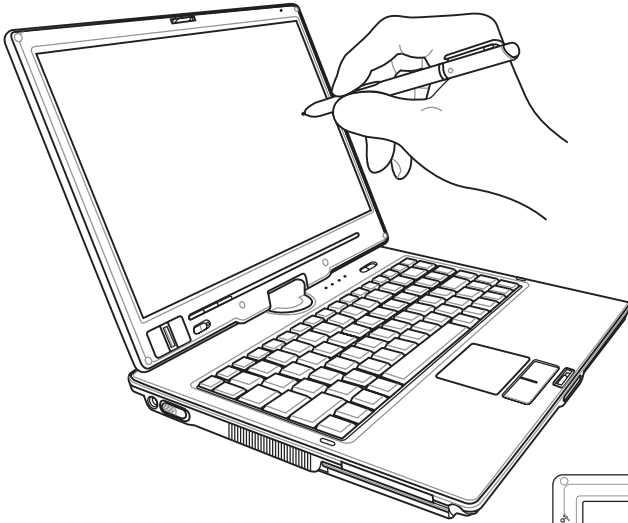


# Notebook PC Hardware User's Manual



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# **1. Introducing the Notebook PC**

**About This User's Manual**

**Notes For This Manual**

**Safety Precautions**

**Preparing your Notebook PC**

# 1 Introducing the Notebook PC

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## About This User's Manual

You are reading the Notebook PC User's Manual. This User's Manual provides information on the various components in the Notebook PC and how to use them. The following are major sections of this User's Manuals:



- 1. Introducing the Notebook PC**  
Introduces you to the Notebook PC and this User's Manual.
- 2. Knowing the Parts**  
Gives you information on the Notebook PC's components.
- 3. Getting Started**  
Gives you information on getting started with the Notebook PC.
- 4. Using the Notebook PC**  
Gives you information on using the Notebook PC's components.
- 5. Appendix**  
Introduces you to optional accessories and gives additional information.

## Notes For This Manual

A few notes and warnings in bold are used throughout this guide that you should be aware of in order to complete certain tasks safely and completely. These notes have different degrees of importance as described below:



---

**WARNING! Important information that must be followed for safe operation.**

---



---

**TIP: Tips and useful information for completing tasks.**

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**IMPORTANT! Vital information that must be followed to prevent damage to data, components, or persons.**

---



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**NOTE: Tips and information for special situations.**

---

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**< >** Text enclosed in < > or [ ] represents a key on the keyboard; do not actually type the < > or [ ] and the enclosed letters.

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## Safety Precautions

The following safety precautions will increase the life of the Notebook PC. Follow all precautions and instructions. Except as described in this manual, refer all servicing to qualified personnel. Do not use damaged power cords, accessories, or other peripherals. Do not use strong solvents such as thinners, benzene, or other chemicals on or near the surface.



**IMPORTANT! Disconnect the AC power and remove the battery pack(s) before cleaning. Wipe the Notebook PC using a clean cellulose sponge or chamois cloth dampened with a solution of nonabrasive detergent and a few drops of warm water and remove any extra moisture with a dry cloth.**



**DO NOT** place on uneven or unstable work surfaces. Seek servicing if the casing has been damaged.



**DO NOT** place or drop objects on top and do not shove any foreign objects into the Notebook PC.



**DO NOT** press or touch the display panel. Do not place together with small items that may scratch or enter the Notebook PC.



**DO NOT** expose to strong magnetic or electrical fields.



**DO NOT** expose to dirty or dusty environments. **DO NOT** operate during a gas leak.



**DO NOT** expose to or use near liquids, rain, or moisture. **DO NOT** use the modem during an electrical storm.



**DO NOT** leave the Notebook PC on your lap or any part of the body in order to prevent discomfort or injury from heat exposure.



**Battery safety warning:**  
**DO NOT** throw the battery in fire.  
**DO NOT** short circuit the contacts.  
**DO NOT** disassemble the battery.



**SAFE TEMP:** This Notebook PC should only be used in environments with ambient temperatures between 5°C (41°F) and 35°C (95°F)



**INPUT RATING:** Refer to the rating label on the bottom of the Notebook PC and be sure that your power adapter complies with the rating.



**DO NOT** throw the Notebook PC in municipal waste. Check local regulations for disposal of electronic products.



**DO NOT** carry or cover a Notebook PC that is powered ON with any materials that will reduce air circulation such as a carrying bag.

# 1 Introducing the Notebook PC

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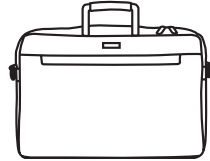
## Transportation Precautions

To prepare the Notebook PC for transport, you should turn it OFF and **disconnect all external peripherals to prevent damage to the connectors**. The hard disk drive's head retracts when the power is turned OFF to prevent scratching of the hard disk surface during transport. Therefore, you should not transport the Notebook PC while the power is still ON. Close the display panel and check that it is latched securely in the closed position to protect the keyboard and display panel.

### Cover Your Notebook PC



**CAUTION:** The Notebook PC's surface is easily dulled if not properly cared for. Be careful not to rub or scrape the Notebook PC surfaces when transporting your Notebook PC. You can purchase an optional carrying case to protect it from dirt, water, shock, and scratches.



## Charge Your Batteries

If you intend to use battery power, be sure to fully charge your battery pack and any optional battery packs before going on long trips. Remember that the power adapter charges the battery pack as long as it is plugged into the computer and an AC power source. Be aware that it takes much longer to charge the battery pack when the Notebook PC is in use.

## Airplane Precautions

Contact your airline if you want to use the Notebook PC on the airplane. Most airlines will have restrictions for using electronic devices. Most airlines will allow electronic use only between and not during takeoffs and landings.



**CAUTION!** There are three main types of airport security devices: X-ray machines (used on items placed on conveyor belts), magnetic detectors (used on people walking through security checks), and magnetic wands (hand-held devices used on people or individual items). You can send your Notebook PC and diskettes through airport X-ray machines. However, it is recommended that you do not send your Notebook PC or diskettes through airport magnetic detectors or expose them to magnetic wands.

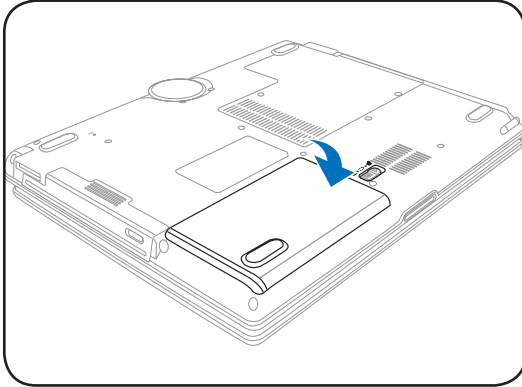
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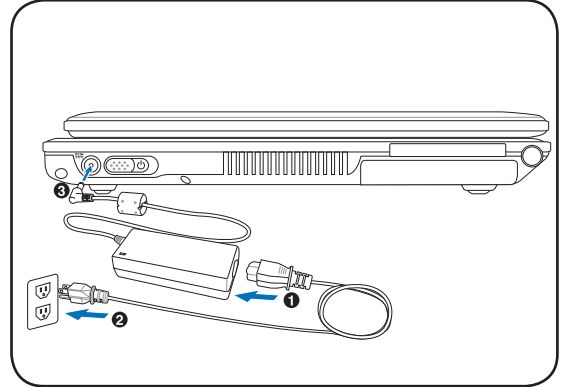
## Preparing your Notebook PC

These are only quick instructions for using your Notebook PC. Read the later pages for detailed information on using your Notebook PC.

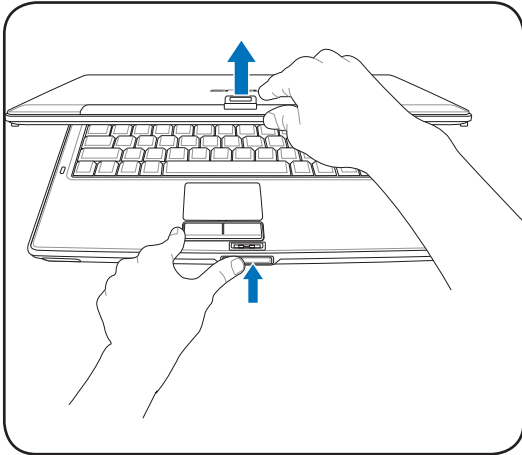
### 1. Install the battery pack



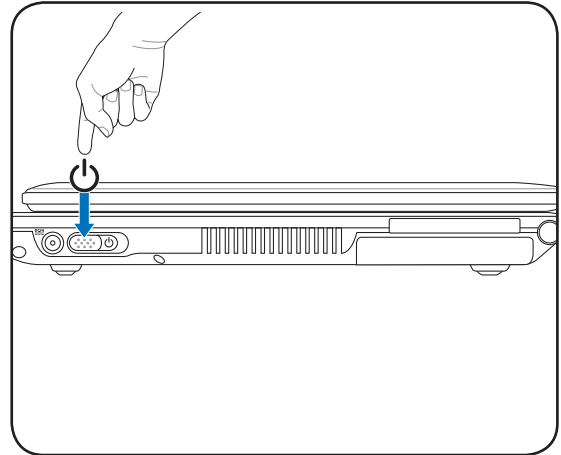
### 2. Connect the AC Power Adapter



### 3. Open the Display Panel



### 4. Turn ON the Notebook PC



**IMPORTANT!** When opening, do not force the display panel down to the table or else the hinges may break! Never lift the Notebook PC by the display panel!

Slide the power button and release.

(In Windows XP, this button can also be used to safely turn OFF the Notebook PC.)



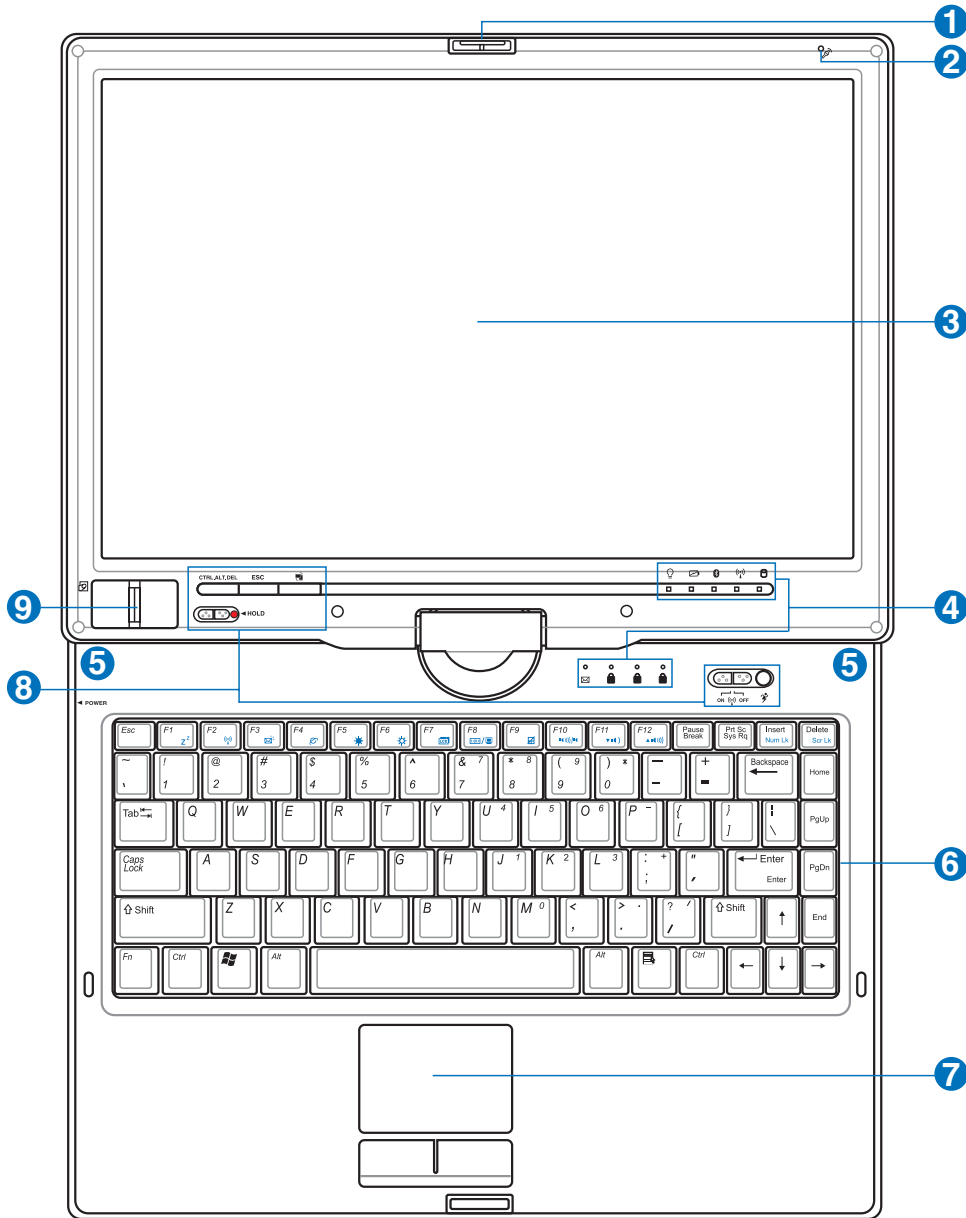
## **2. Knowing the Parts**

**Basic sides of the Notebook PC**

# 2 Knowing the Parts

## Top Side

Refer to the diagram below to identify the components on this side of the Notebook PC.



**NOTE:** The keyboard will be different for each territory.

**1**  **Display Panel Reversible Latch**

One reversible latch on the front of the Notebook PC locks the display panel in the closed position or in the tablet PC mode. The reversible latch must be manually switched from one mode to the other.

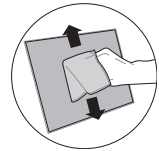
**2**  **Microphone (Built-in)**

The built-in mono microphone can be used for video conferencing, voice narrations, or simple audio recordings.



**3**  **Display Panel**

The display panel functions the same as a desktop monitor. The Notebook PC uses an active matrix TFT LCD, which provides excellent viewing like that of desktop monitors. Unlike desktop monitors, the LCD panel does not produce any radiation or flickering, so it is easier on the eyes. Use a soft cloth without chemical liquids (use plain water if necessary) to clean the display panel.

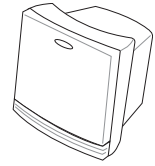


**4**  **Status Indicators**

Status indicator details are described in section 3.

**5**  **Audio Speakers**

The built-in stereo speaker system allows you to hear audio without additional attachments. The multimedia sound system features an integrated digital audio controller that produces rich, vibrant sound (results improved with external stereo headphones or speakers). Audio features are software controlled.



**6**  **Keyboard**

The keyboard provides full-sized keys with comfortable travel (depth at which the keys can be depressed) and palm rest for both hands. Two Windows™ function keys are provided to help ease navigation in the Windows™ operating system.

**7**  **Touchpad and Buttons**

The touchpad with its buttons is a pointing device that provides the same functions as a desktop mouse. A software-controlled scrolling function is available after setting up the included touchpad utility to allow easy Windows or web navigation.

**8**  **Instant Keys**

Instant keys allow you to launch frequently used applications with one push of a button. Details are described in section 3.

**9**  **Fingerprint Scanner**

The fingerprint scanner allows use of security software using your fingerprint as your identification key.



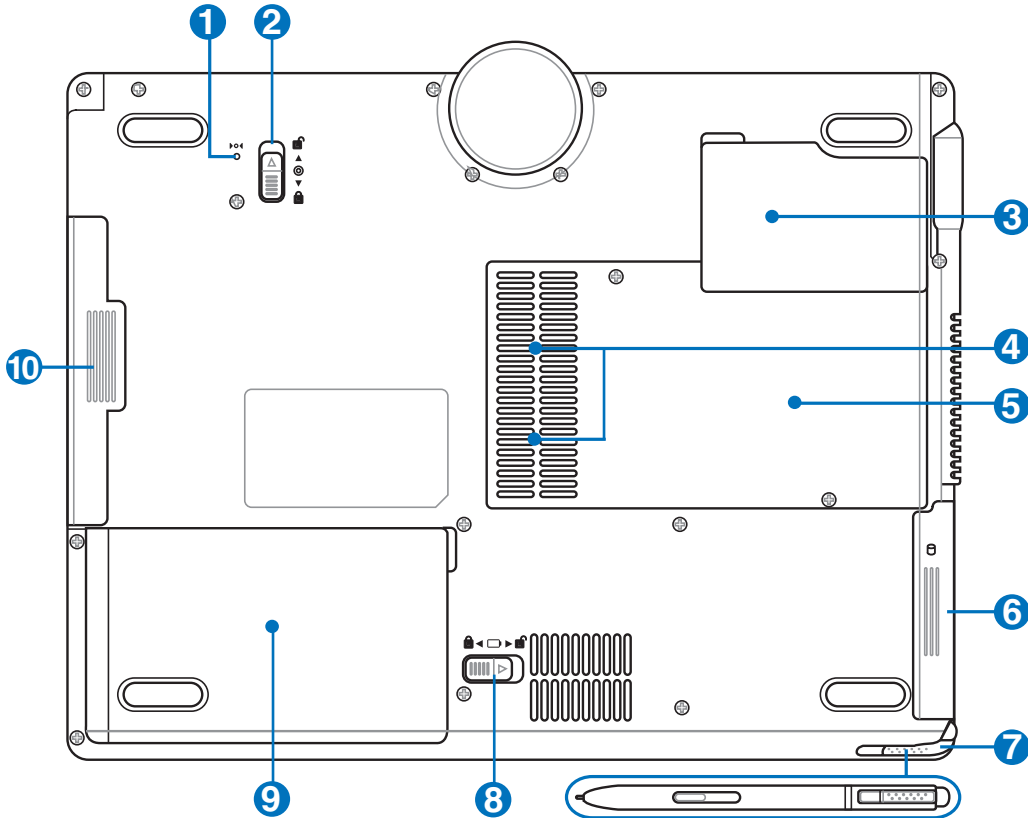
# 2 Knowing the Parts

## Bottom Side

Refer to the diagram below to identify the components on this side of the Notebook PC.



**NOTE:** The bottom side may vary in appearance depending on model.



**WARNING!** The bottom of the Notebook PC can get very hot. Be careful when handling the Notebook PC while it is in operation or recently been in operation. High temperatures are normal during charging or operation. Do not use on soft surfaces such as beds or sofas which may block the vents. **DO NOT PUT THE NOTEBOOK PC ON YOUR LAP OR OTHER PARTS OF THE BODY TO AVOID INJURY FROM THE HEAT.**

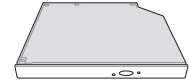
### 1 Shutdown Button (Emergency)

In case your operating system cannot properly turn OFF or restart, the shutdown button can be pressed with a straightened paper clip to shutdown the Notebook PC.



## 2 **Module Lock**

The Notebook PC has a user replaceable module. Visit an authorized dealer for compatible modules for this Notebook PC.



## 3 **Central Processor Unit (CPU) Compartment**

Some Notebook PC models feature a socketed-processor design to allow upgrading to faster processors in the future. Some models feature a ULV design for compactness and may not be upgraded. Visit an authorized service center or retailer for information on upgrades.



**WARNING! End-user removal of the CPU or hard disk drive will void the warranty.**

## 4 **Memory (RAM) Compartment**

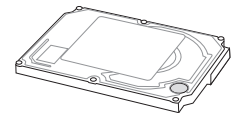
The memory compartment provides expansion capabilities for additional memory. Additional memory will increase application performance by decreasing hard disk access. The BIOS automatically detects the amount of memory in the system and configures CMOS accordingly during the POST (Power-On-Self-Test) process. There is no hardware or software (including BIOS) setup required after the memory is installed. Visit an authorized service center or retailer for information on memory upgrades for your Notebook PC. Only purchase expansion modules from authorized retailers of this Notebook PC to ensure maximum compatibility and reliability.

## 5 **Cooling Fan**

The cooling fan is activated to remove excess heat depending on temperature threshold settings.

## 6 **Hard Disk Drive Compartment**

The hard disk drive is secured in a compartment. Hard disk drive upgrades are to be done by authorized service centers or dealers only.



## 7 **Touchscreen Pen Compartment**

The touchscreen pen compartment allows storage of the pen used on the touchscreen panel.



## 8 **Battery Lock - Spring**

The spring battery lock is used to keep the battery pack secured. When the battery pack is inserted, it will automatically lock. To remove the battery pack, this spring lock must be held in the unlocked position.

## 9 **Battery Pack**

The battery pack is automatically charged when connected to an AC power source and maintains power to the Notebook PC when AC power is not connected. This allows use when moving temporarily between locations. Battery time varies by usage and by the specifications for this Notebook PC. The battery pack cannot be disassembled and must be purchased as a single unit.



## 10 **Optical Drive Module**

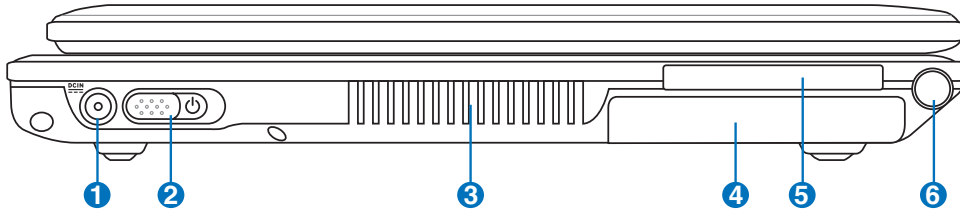
This Notebook PC features a module bay to accept various modules such as optical drives, travel drawer, or second battery pack. Visit an authorized dealer for upgrades.



# 2 Knowing the Parts

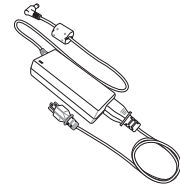
## Left Side

Refer to the diagram below to identify the components on this side of the Notebook PC.



### 1 Power (DC) Input

The supplied power adapter converts AC power to DC power for use with this jack. Power supplied through this jack supplies power to the Notebook PC and charges the internal battery pack. To prevent damage to the Notebook PC and battery pack, always use the supplied power adapter. **CAUTION: MAY BECOME WARM TO HOT WHEN IN USE. BE SURE NOT TO COVER THE ADAPTER AND KEEP IT AWAY FROM YOUR BODY.**



### 2 Power Switch

The power switch allows powering ON and OFF the Notebook PC and recovering from STD. Use the switch once to turn ON and once to turn OFF the Notebook PC. In Windows XP, this button can also be used to safely turn OFF the Notebook PC. The power switch only works when the display panel is opened.



### 3 Air Vents

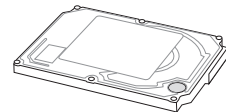
The air vents allow cool air to enter and warm air to exit the Notebook PC.



**IMPORTANT! Make sure that paper, books, clothing, cables, or other objects do not block any of the air vents or else overheating of the Notebook PC may occur.**

### 4 Hard Disk Drive Compartment

The hard disk drive is secured in a compartment. Hard disk drive upgrades are to be done by authorized service centers or dealers only.



### 5 ExpressCard Slot

One 26pin Express card slot is available to support one ExpressCard/34mm or one ExpressCard/54mm expansion card. This new interface is faster by using a serial bus supporting USB 2.0 and PCI Express instead of the slower parallel bus used in the PC card slot. (Not compatible with previous PCMCIA cards.)



### 6 Touchscreen Pen Compartment

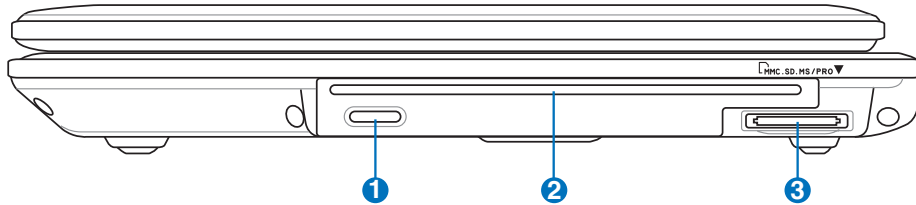
The touchscreen pen compartment allows storage of the pen used on the touchscreen panel.





## Right Side

Refer to the diagram below to identify the components on this side of the Notebook PC.



**1**  **Optical Drive Electronic Eject**

The optical drive eject has an electronic eject button for opening the tray. You can also eject the optical drive tray through any software player or by right clicking the optical drive in Windows™ “My Computer.”



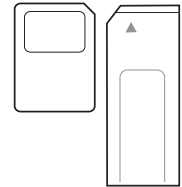
**2**  **Optical Drive Module**

This Notebook PC features a module bay to accept various modules such as optical drives, travel drawer, or second battery pack. Visit an authorized dealer for upgrades.



**3**  **Flash Memory Slot**

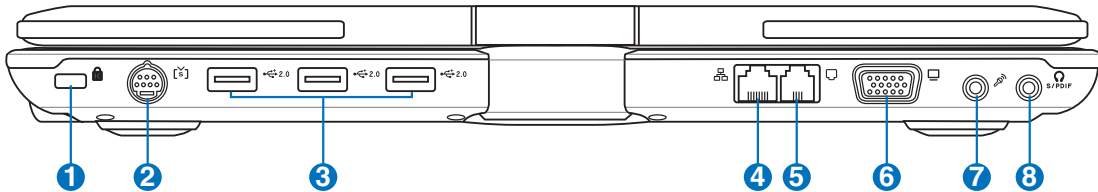
Normally a PCMCIA or USB memory card reader must be purchased separately in order to use memory cards from devices such as digital cameras, MP3 players, mobile phones, and PDAs. This Notebook PC has a built-in memory card reader that can read many flash memory cards as specified later in this manual. The built-in memory card reader is not only convenient, but also faster than most other forms of memory card readers because it utilizes the high-bandwidth PCI bus.



# 2 Knowing the Parts

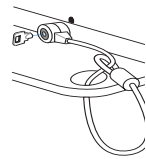
## Rear Side

Refer to the diagram below to identify the components on this side of the Notebook PC.



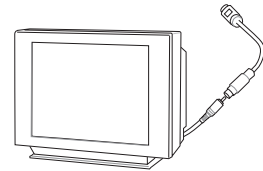
### 1 Kensington® Lock Port

The Kensington® lock port allows the Notebook PC to be secured using Kensington® compatible Notebook PC security products. These security products usually include a metal cable and lock that prevent the Notebook PC to be removed from a fixed object. Some security products may also include a motion detector to sound an alarm when moved.



### 2 TV-Out Port

The TV-Out port is an S-Video connector that allows routing the Notebook PC's display to a television or video projection device. You can choose between simultaneously or single display. Use an S-Video cable (not provided) for high quality displays or use the provided RCA to S-Video adapter for standard video devices. This port supports both NTSC and PAL formats.



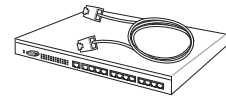
### 3 USB Port (2.0/1.1)

The Universal Serial Bus is compatible with USB 2.0 or USB 1.1 devices such as keyboards, pointing devices, cameras, hard disk drives, printers, and scanners connected in a series up to 12Mbps/sec (USB 1.1) and 480Mbps/sec (USB 2.0). USB allows many devices to run simultaneously on a single computer, with peripherals such as USB keyboards and some newer monitors acting as additional plug-in sites or hubs. USB supports hot-swapping of devices so that most peripherals can be connected or disconnected without restarting the computer.



### 4 LAN Port

The RJ-45 LAN port with eight pins is larger than the RJ-11 modem port and supports a standard Ethernet cable for connection to a local network. The built-in connector allows convenient use without additional adapters.



## 5 Modem Port

The RJ-11 modem port with two pins is smaller than the RJ-45 LAN port and supports a standard telephone cable. The internal modem supports up to 56K V.90 transfers. The built-in connector allows convenient use without additional adapters.



**IMPORTANT! The built-in modem does not support the voltage used in digital phone systems. Do not connect the modem port to a digital phone system or else damage will occur to the Notebook PC.**



## 6 Display (Monitor) Output

The 15-pin D-sub monitor port supports a standard VGA-compatible device such as a monitor or projector to allow viewing on a larger external display.



## 7 Microphone Input Jack

The mono microphone jack (1/8 inch) can be used to connect an external microphone or output signals from audio devices. Using this jack automatically disables the built-in microphone. Use this feature for video conferencing, voice narrations, or simple audio recordings.



## 8 SPDIF Output Jack



This jack provides connection to SPDIF (Sony/Philips Digital Interface) compliant devices for digital audio output. Use this feature to turn the Notebook PC into a hi-fi home entertainment system.



## Headphone Output Jack

The stereo headphone jack (1/8 inch) is used to connect the Notebook PC's audio out signal to amplified speakers or headphones. Using this jack automatically disables the built-in speakers.

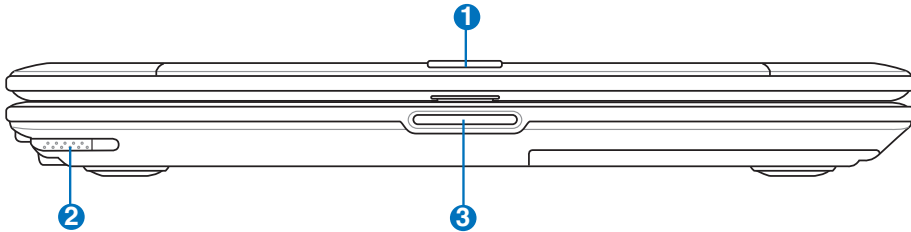


## 2 Knowing the Parts

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### Front Side

Refer to the diagram below to identify the components on this side of the Notebook PC.



#### 1 Display Panel Reversible Latch

One reversible latch on the front of the Notebook PC locks the display panel in the closed position or in the tablet PC mode. The reversible latch must be manually switched from one mode to the other.

#### 2 Tablet PC Pen

The tablet PC pen allows you to write or select items on the Notebook PC's touch panel.

#### 3 Display Panel Button

Press the display panel button to open the display panel.



**WARNING! When opening, do not force the display panel down to the table or else the hinges may break! Never lift the Notebook PC by the display panel!**

---

## **3. Getting Started**

**Using AC Power**

**Using Battery Power**

**Powering ON the Notebook PC**

**Checking Battery Power**

**Restarting or Rebooting**

**Powering OFF the Notebook PC**

**Special Keyboard Functions**

**Switches and Status Indicators**

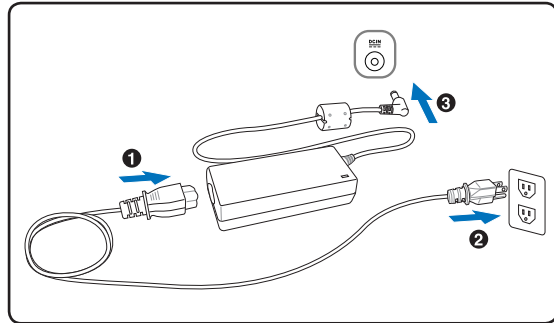
# 3 Getting Started

## Power System



### Using AC Power

The Notebook PC power is comprised of two parts, the power adapter and the battery power system. The power adapter converts AC power from a wall outlet to the DC power required by the Notebook PC. Your Notebook PC comes with a universal AC-DC adapter. That means that you may connect the power cord to any 100V-120V as well as 220V-240V outlets without setting switches or using power converters. Different countries may require that an adapter be used to connect the provided US-standard AC power cord to a different standard. Most hotels will provide universal outlets to support different power cords as well as voltages. It is always best to ask an experienced traveler about AC outlet voltages when bringing power adapters to another country.



**TIP:** You can buy travel kits for the Notebook PC that includes power and modem adapters for almost every country.

With the AC power cord connected to the AC-DC converter, connect the AC power cord to an AC outlet (preferably with surge-protection) and then connect the DC plug to the Notebook PC. Connecting the AC-DC adapter to the AC outlet first allows you to test the AC outlet's power and the AC-DC converter itself for compatibility problems before connecting the DC power to the Notebook PC. The green power LED on the adapter lights up if the power is within accepted ranges.



**IMPORTANT!** Damage may occur if you use a different adapter to power the Notebook PC or use the Notebook PC's adapter to power other electrical devices. If there is smoke, burning scent, or extreme heat coming from the AC-DC adapter, seek servicing. Seek servicing if you suspect a faulty AC-DC adapter. You may damage both your battery pack(s) and the Notebook PC with a faulty AC-DC adapter.



**NOTE:** This Notebook PC may come with either a two or three-prong plug depending on territory. If a three-prong plug is provided, you must use a grounded AC outlet or use a properly grounded adapter to ensure safe operation of the Notebook PC.



**WARNING!** THE POWER ADAPTER MAY BECOME WARM TO HOT WHEN IN USE. BE SURE NOT TO COVER THE ADAPTER AND KEEP IT AWAY FROM YOUR BODY.



### Second Battery Pack

This Notebook PC features a module bay to accept a second battery pack for extended use without AC power.



## ☐ Using Battery Power

The Notebook PC is designed to work with a removable battery pack. The battery pack consists of a set of battery cells housed together. A fully charged pack will provide several hours of battery life, which can be further extended by using power management features through the BIOS setup. Additional battery packs are optional and can be purchased separately through a Notebook PC retailer.

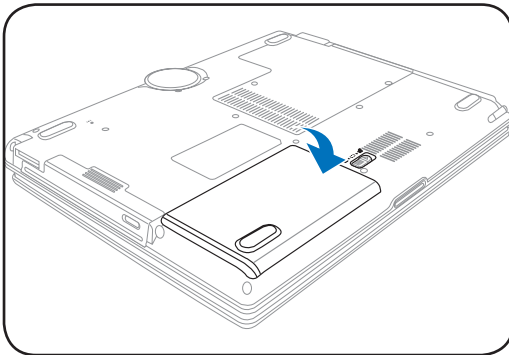
### Installing and Removing the Battery Pack

Your Notebook PC may or may not have its battery pack installed. If your Notebook PC does not have its battery pack installed, use the following procedures to install the battery pack.

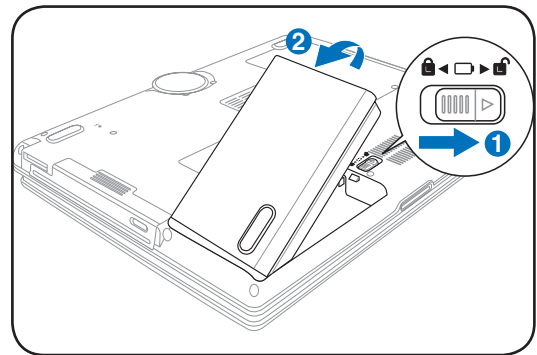


**IMPORTANT! Never attempt to remove the battery pack while the Notebook PC is turned ON, as this may result in the loss of working data.**

#### To install the battery pack:



#### To remove the battery pack:



**IMPORTANT! Only use battery packs and power adapters supplied with this Notebook PC or specifically approved by the manufacturer or retailer for use with this model or else damage may occur to the Notebook PC.**



## Battery Care

The Notebook PC's battery pack, like all rechargeable batteries, has a limit on the number of times it can be recharged. The battery pack's useful life will depend on your environment temperature, humidity, and how your Notebook PC is used. It is ideal that the battery be used in a temperature range between 5°C and 35°C (41°F and 95°F). You must also take into account that the Notebook PC's internal temperature is higher than the outside temperature. Any temperatures above or below this range will shorten the life of the battery. But in any case, the battery pack's usage time will eventually decrease and a new battery pack must be purchased from an authorized dealer for this Notebook PC. Because batteries also have a shelf life, it is not recommended to buy extras for storing.



**WARNING! For safety reasons, DO NOT throw the battery in fire, DO NOT short circuit the contacts, and DO NOT disassemble the battery. If there is any abnormal operation or damage to the battery pack caused by impact, turn OFF the Notebook PC and contact an authorized service center.**



# 3 Getting Started

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## Powering ON the Notebook PC

The Notebook PC's power-ON message appears on the screen when you turn it ON. If necessary, you may adjust the brightness by using the hot keys. If you need to run the BIOS Setup to set or modify the system configuration, press [F2] upon bootup to enter the BIOS Setup. If you press [Tab] during the splash screen, standard boot information such as the BIOS version can be seen. Press [ESC] and you will be presented with a boot menu with selections to boot from your available drives.



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**NOTE:** Before bootup, the display panel flashes when the power is turned ON. This is part of the Notebook PC's test routine and is not a problem with the display.

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**IMPORTANT!** To protect the hard disk drive, always wait at least 5 seconds after turning OFF your Notebook PC before turning it back ON.

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**WARNING! DO NOT** carry or cover a Notebook PC that is powered ON with any materials that will reduce air circulation such as a carrying bag.

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## The Power-On Self Test (POST)

When you turn ON the Notebook PC, it will first run through a series of software-controlled diagnostic tests called the Power-On Self Test (POST). The software that controls the POST is installed as a permanent part of the Notebook PC's architecture. The POST includes a record of the Notebook PC's hardware configuration, which is used to make a diagnostic check of the system. This record is created by using the BIOS Setup program. If the POST discovers a difference between the record and the existing hardware, it will display a message on the screen prompting you to correct the conflict by running BIOS Setup. In most cases the record should be correct when you receive the Notebook PC. When the test is finished, you may get a message reporting "No operating system found" if the hard disk was not preloaded with an operating system. This indicates that the hard disk is correctly detected and ready for the installation of a new operating system.

The S.M.A.R.T. (Self Monitoring and Reporting Technology) checks the hard disk drive during POST and gives a warning message if the hard disk drive requires servicing. If any critical hard disk drive warning is given during bootup, backup your data immediately and run Windows disk checking program. To run Windows's disk checking program: (1) right-click any hard disk drive icon in "My Computer", (2) choose Properties, (3) click the Tools tab, (4) click Check Now, (5) select a hard disk drive, (6) select Thorough to also check for physical damages, and (7) click Start. Third party disk utilities such as Symantec's Norton Disk Doctor can also perform the same functions but with greater ease and more features.



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**IMPORTANT!** If warnings are still given during bootup after running a software disk checking utility, you should take your Notebook PC in for servicing. Continued use may result in data loss.

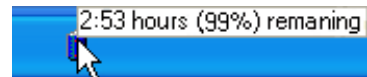
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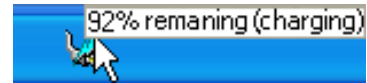
## ☑ Checking Battery Power

The battery system implements the Smart Battery standard under the Windows environment, which allows the battery to accurately report the amount of charge left in the battery. A fully-charged battery pack provides the Notebook PC a few hours of working power. But the actual figure varies depending on how you use the power saving features, your general work habits, the CPU, system memory size, and the size of the display panel.

To check the remaining battery power, move your cursor over the power icon. The power icon is a “battery” when not using AC power and a “plug” when using AC power. Double click on the icon for more information and settings.



Move your mouse over the battery icon for remaining power information.



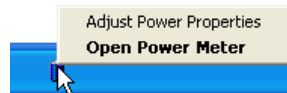
When the AC power is connected, charging status will be shown.



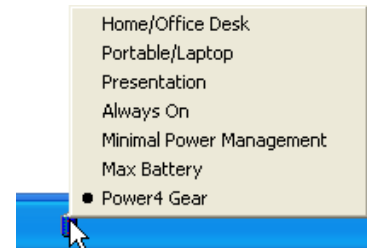
**NOTE: You will be warned when battery power is low. If you continue to ignore the low battery warnings, the Notebook PC eventually enters suspend mode (Windows default uses STR).**



**Note: Screen captures shown here are examples only and may not reflect what you see in your system.**



Right-click the battery icon for sub-menus.



Left-click the battery icon for power management settings.



**WARNING! Suspend-to-RAM (STR) does not last long when the battery power is depleted. Suspend-to-Disk (STD) is not the same as power OFF. STD requires a small amount of power and will fail if no power is available due to complete battery depletion or no power supply (e.g. removing both the power adapter and battery pack).**

## ☑ Charging the Battery Pack

Before you use your Notebook PC on the road, you will have to charge the battery pack. The battery pack begins to charge as soon as the Notebook PC is connected to external power using the power adapter. Fully charge the battery pack before using it for the first time. A new battery pack must completely charge before the Notebook PC is disconnected from external power. It takes a few hours to fully charge the battery when the Notebook PC is turned OFF and may take twice the time when the Notebook PC is turned ON. The battery charge light turns OFF when the battery pack is charged.



**NOTE: The battery stops charging if the temperature is too high or the battery voltage is too high. BIOS provides a smart battery refreshing function. If the battery calibration process fails, stop charging and contact an authorized service center.**

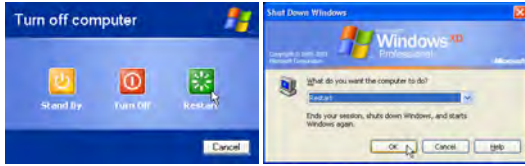


**WARNING! Do not leave the battery pack discharged. The battery pack will discharge over time. If not using a battery pack, it must continued to be charged every three months to extend recovery capacity or else it may fail to charge in the future.**

# 3 Getting Started

## Restarting or Rebooting

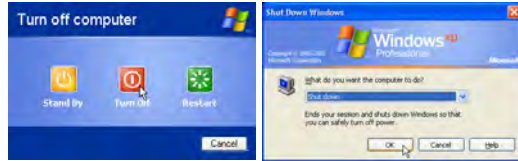
After making changes to your operating system, you may be prompted to restart the system. Some installation processes will provide a dialog box to allow restart. To restart the system manually, click Windows Start button and select Shut Down and then choose Restart.



(Screens are different depending on security settings.)

## Powering OFF

In Windows XP, power OFF the Notebook PC by clicking Windows Start button and select Shut Down and then choose Turn off (or Shut down). For operating systems without proper power management (DOS, Windows NT), you must close all applications and exit operating systems and then power OFF by holding the power switch for 2 seconds (as opposed to 1 second to power ON). Holding the power switch for 2 seconds is necessary in order to prevent accidental power-OFFs.

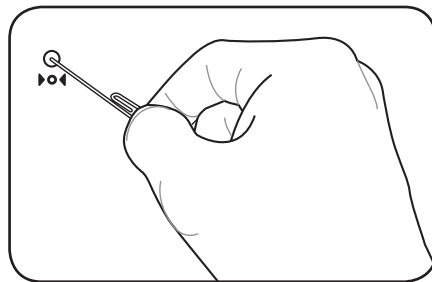
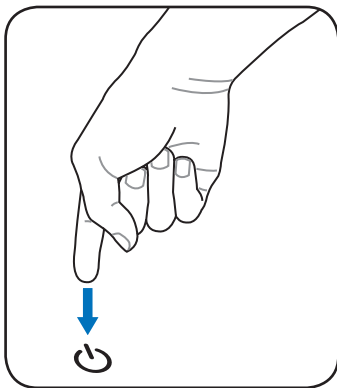


**IMPORTANT!** To protect the hard drive, wait at least 5 seconds after turning OFF your Notebook PC before turning it back ON.

## Emergency Shutdown

In case your operating system cannot properly turn OFF or restart, there are two additional ways to shutdown your Notebook PC:

- (1) Hold the power button  over 4 seconds, or (2) Press the shutdown button .



**TIP:** Use a straightened paper clip to press the shutdown button.



**IMPORTANT!** Do not use emergency shutdown while data is being written; doing so can result in loss or destruction of your data.

## Special Keyboard Functions

### Colored Hot Keys

The following defines the colored hot keys on the Notebook PC's keyboard. The colored commands can only be accessed by first pressing and holding the function key while pressing a key with a colored command.



**NOTE: The Hot Key locations on the function keys may vary depending on model but the functions should remain the same. Follow the icons instead of the function keys.**



**“Zz” Icon (F1):** Places the Notebook PC in suspend mode (either Save-to-RAM or Save-to-Disk depending on sleep button setting in power management setup).



**Radio Tower (F2):** Wireless Models Only: Toggles the internal wireless LAN or Bluetooth (on selected models) ON or OFF with an on-screen-display. When enabled, the corresponding wireless indicator will light. Windows software settings are necessary to use the wireless LAN or Bluetooth.



**Envelope Icon (F3):** Pressing this button will launch your Email application while Windows is running.



**“e” Icon (F4):** Pressing this button will launch your Internet browser application while Windows is running.



**Filled Sun Icon (F5):**  
Decreases the display brightness



**Open Sun Icon (F6):**  
Increases the display brightness



**LCD Icon (F7):** Toggles the display panel ON and OFF. This also stretches your screen area (on certain models) to fill the entire display when using low resolution modes.



**LCD/Monitor Icons (F8):** Toggles between the Notebook PC's LCD display and an external monitor in this series: Notebook PC LCD -> External Monitor -> Both. (This function does not work in 256 Colors, select High Color in Display Property Settings.) **IMPORTANT: Connect an external monitor before booting up the Notebook PC.**



**Crossed-out Touchpad (F9):** Toggles the built-in touchpad LOCKED (disabled) and UNLOCKED (enabled). Locking the touchpad will prevent you from accidentally moving the cursor while typing and is best used with an external pointing device such as a mouse. Note: An indicator between the touchpad buttons will light when the touchpad is UNLOCKED (enabled) and not light when the touchpad is LOCKED (disabled).



**Speaker Icons (F10):**  
Toggles the speakers ON and OFF (only in Windows OS)

# 3 Getting Started

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## Colored Hot Keys (Cont.)

**Speaker Down Icon (F11):**

Decreases the speaker volume (only in Windows OS)

**Speaker Up Icon (F12):**

Increases the speaker volume (only in Windows OS)



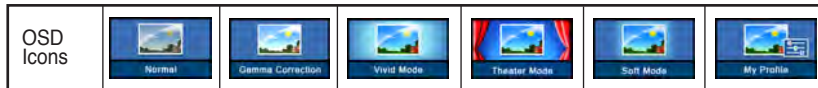
**Num Lk (Ins):** Toggles the numeric keypad (number lock) ON and OFF. Allows you to use a larger portion of the keyboard for number entering.



**Scr Lk (Del):** Toggles the “Scroll Lock” ON and OFF. Allows you to use a larger portion of the keyboard for cell navigation.



**Fn+C:** Toggles “Splendid Video Intelligent Technology” function ON and OFF. This allows switching between different display color enhancement modes in order to improve contrast, brightness, skin tone, and color saturation for red, green, and blue independently. You can see the current mode through the on-screen display (OSD).



## Microsoft Windows Keys

There are two special Windows keys on the keyboard as described below.



The key with the Windows Logo activates the Start menu located at the bottom left of the Windows desktop.



The other key, that looks like a Windows menu with a small cursor, activates the properties menu and is equivalent to pressing the right mouse button on a Windows object.

## Keyboard as a Numeric Keypad

The numeric keypad is embedded in the keyboard and consists of 15 keys that make number intensive input more convenient. These dual-purpose keys are labeled in orange on the key caps. Numeric assignments are located at the upper right hand corner of each key as shown in the figure. When the numeric keypad is engaged by pressing **[Fn][Ins/Num LK]**, the number lock LED lights up. If an external keyboard is connected, pressing the **[Ins/Num LK]** on the external keyboard enables/disables the NumLock on both keyboards simultaneously. To disable the numeric keypad while keeping the keypad on an external keyboard activated, press the **[Fn][Ins/Num LK]** keys on the Notebook PC.

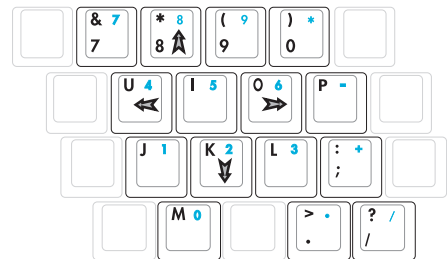


## Keyboard as Cursors

The keyboard can be used as cursors while Number Lock is ON or OFF in order to increase navigation ease while entering numeric data in spreadsheets or similar applications.

**With Number Lock OFF**, press **[Fn]** and one of the cursor keys shown below. For example **[Fn][8]** for up, **[Fn][K]** for down, **[Fn][U]** for left, and **[Fn][O]** for right.

**With Number Lock ON**, use **[Shift]** and one of the cursor keys shown below. For example **[Shift][8]** for up, **[Shift][K]** for down, **[Shift][U]** for left, and **[Shift][O]** for right.

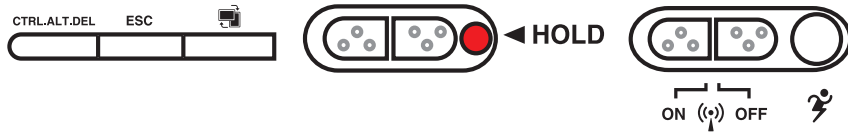


**NOTE:** The arrow symbols are illustrated here for your reference. They are not labeled on the keyboard as shown here.

# 3 Getting Started

## Switches and Status Indicators

### Switches



#### CTRL.ALT.DEL CTRL.ALT.DEL Key

Pressing this key emulates the key combinations on the keyboard. Used for logging into Windows.

#### ESC ESC Key

Pressing this key here is the same as on the keyboard.

#### Rotate Screen Key

For use with tablet PC mode. Press once to rotate the screen clock-wise.

#### ◀HOLD Hold Key

For use with tablet PC mode. When enabled, the keys on the display panel will be disabled in case they are accidentally pressed while using the tablet PC pen on the display panel.













#### Wireless Switch

Enables or disables the built-in wireless LAN. When enabled, the wireless status indicator will light. (Windows software settings are necessary before use.)

#### Power4 Gear+ Key

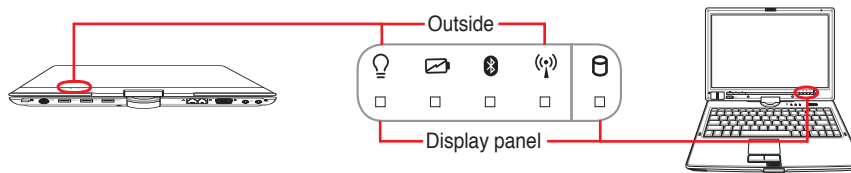
The Power4 Gear+ button toggles power savings between various power saving modes. The power saving modes control many aspects of the Notebook PC to maximize performance versus battery time.

When you are using an AC power adapter, Power4 Gear+ will switch between three modes in the AC power mode segment. When you remove the AC adapter, Power4 Gear+ will switch between seven modes in the battery (DC) mode segment. When you remove or apply the AC adapter, Power4 Gear+ will automatically shift you up or down into the proper mode segment (AC or DC).

Battery Mode	AC Mode
 High Performance	 Super Performance
 Game	 High Performance
 DVD movie	 Game
 Quiet Office	
 Presentation	 Presentation
 CD-Audio	 Quiet Office
 Battery Saving	

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## Status Indicators



### Display panel and outside

#### Power Indicator

The power indicator lights when the Notebook PC is turned ON and blinks slowly when the Notebook PC is in the Suspend-to-RAM (Standby) mode. This indicator is OFF when the Notebook PC is turned OFF or in the Suspend-to-Disk (Hibernation) mode.

#### Battery Charge Indicator

The battery charge indicator is an LED that shows the status of the battery's power as follows:

**ON:** The Notebook PC's battery is charging when AC power is connected.

**OFF:** The Notebook PC's battery is charged or completely drained.

**Blinking:** Battery power is less than 10% and the AC power is not connected.

#### Bluetooth Indicator

This is only applicable on models with internal Bluetooth (BT). This indicator will light to show that the Notebook PC's built-in BT function is activated.

#### Wireless Indicator

This is only applicable on models with built-in wireless LAN and/or built-in Bluetooth. When the built-in wireless LAN and/or built-in Bluetooth is enabled, this indicator will light. (Windows software settings are necessary.)

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#### Drive Activity Indicator

Indicates that the Notebook PC is accessing one or more storage device(s) such as the hard disk. The light flashes proportional to the access time.

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# 3 Getting Started

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## Status Indicators (Cont.)

### Top of keyboard



#### ✉ Email Indicator

Flashes when there is one or more new email(s) in your email program's inbox. This function requires software setup and may not be currently configured on your Notebook PC. This function is designed for Microsoft email software only and may not work with email software from other companies.

#### 🔒 1 Number Lock Indicator

Indicates that number lock [Num Lk] is activated when lighted. Number lock allows some of the keyboard letters to act as numbers for easier numeric data input.

#### 🔒 A Capital Lock Indicator

Indicates that capital lock [Caps Lock] is activated when lighted. Capital lock allows some of the keyboard letters to type using capitalized letters (e.g. A, B, C). When the capital lock light is OFF, the typed letters will be in the lower case form (e.g. a,b,c).

#### 🔒 S Scroll Lock Indicator

Indicates that scroll lock [Scr Lk] is activated when lit. Scroll lock allows some of the keyboard letters to act as direction keys in order to allow easier navigation when only a part of the keyboard is required, such as for playing games.



## **4. Using the Notebook PC**

**Operating System**

**Pointing Device**

**Storage Devices**

**ExpressCard Slot**

**Optical Drive**

**Hard Disk Drive**

**Connections**

**Modem Connection**

**Network Connection**

**Wireless LAN Connection**

**Bluetooth Wireless Connection**

**Power Management Modes**

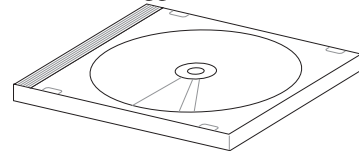
**Tablet PC Mode**

## os Operating System

This Notebook PC may offer (depending on territory) its customers the choice of a pre-installed operating system such as **Microsoft Windows XP**. The choices and languages will depend on the territory. The levels of hardware and software support may vary depending on the installed operating system. The stability and compatibility of other operating systems cannot be guaranteed.

### Ⓞ Support Software

This Notebook PC comes with a support CD that provides BIOS, drivers and applications to enable hardware features, extend functionality, help manage your Notebook PC, or add functionality not provided by the native operating system. If updates or replacement of the support CD is necessary, contact your dealer for web sites to download individual software drivers and utilities.



The support CD contains all drivers, utilities and software for all popular operating systems including those that have been pre-installed. The support CD does not include the operating system itself. The support CD is necessary even if your Notebook PC came pre-configured in order to provide additional software not included as part of the factory pre-install.

A recovery CD is optional and includes an image of the original operating system installed on the hard drive at the factory. The recovery CD provides a comprehensive recovery solution that quickly restores the Notebook PC's operating system to its original working state provided that your hard disk drive is in good working order. Contact your retailer if you require such a solution.



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**Note: Some of the Notebook PC's components and features may not work until the device drivers and utilities are installed.**

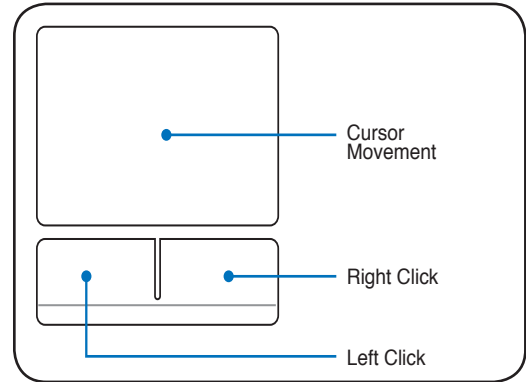
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## Pointing Device

The Notebook PC's integrated touchpad pointing device is fully compatible with all two/three-button and scrolling knob PS/2 mice. The touchpad is pressure sensitive and contains no moving parts; therefore, mechanical failures can be avoided. A device driver is still required for working with some application software.



**IMPORTANT! Do not use any objects in place of your finger to operate the touchpad or else damage may occur to the touchpad's surface.**

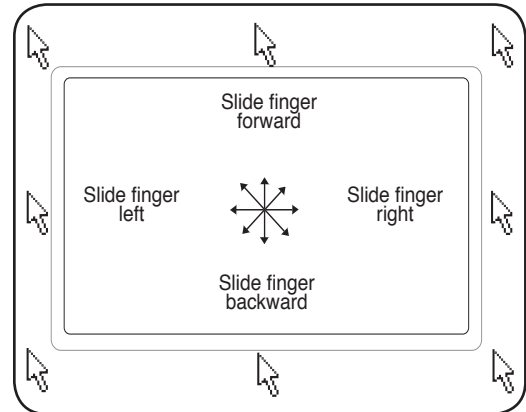


## Using the Touchpad

Light pressure with the tip of your finger is all that is required to operate the touchpad. Because the touchpad is electrostatic sensitive, objects cannot be used in place of your fingers. The touchpad's primary function is to move the cursor around or select items displayed on the screen with the use of your fingertip instead of a standard desktop mouse. The following illustrations demonstrate proper use of the touchpad.

### Moving The Cursor

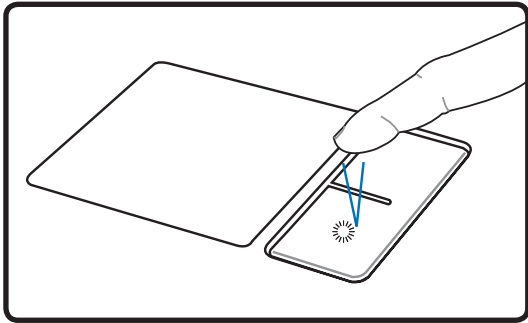
Place your finger in the center of the touchpad and slide in a direction to move the cursor.



# 4 Using the Notebook PC

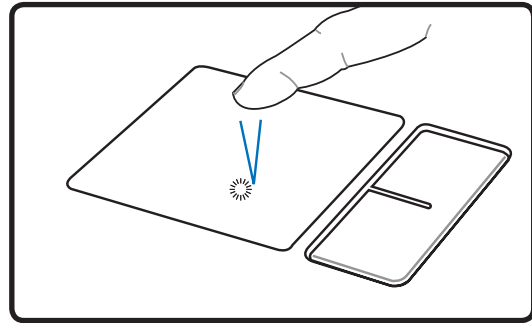
## Touchpad Usage Illustrations

**Clicking/Tapping** - With the cursor over an item, press the left button or use your fingertip to touch the touchpad lightly, keeping your finger on the touchpad until the item is selected. The selected item will change color. The following 2 examples produce the same results.



**Clicking**

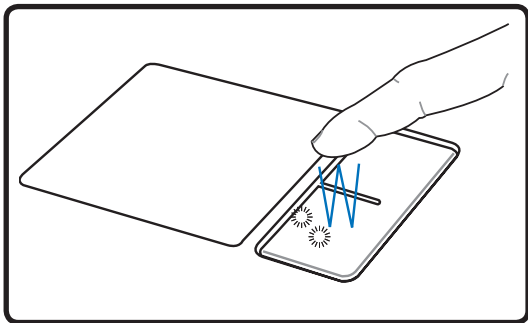
(press the left cursor button and release)



**Tapping**

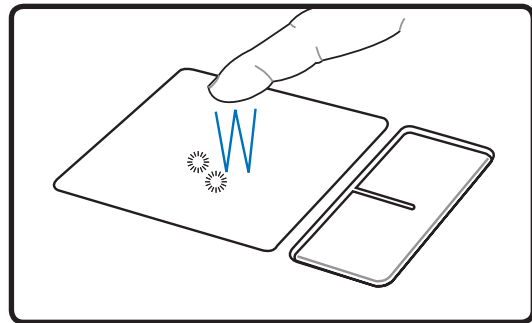
(lightly but rapidly strike the touchpad)

**Double-clicking/Double-tapping** - This is a common skill for launching a program directly from the corresponding icon you select. Move the cursor over the icon you wish to execute, press the left button or tap the pad twice in rapid succession, and the system launches the corresponding program. If the interval between the clicks or taps is too long, the operation will not be executed. You can set the double-click speed using the Windows Control Panel “Mouse.” The following 2 examples produce the same results.



**Double-Clicking**

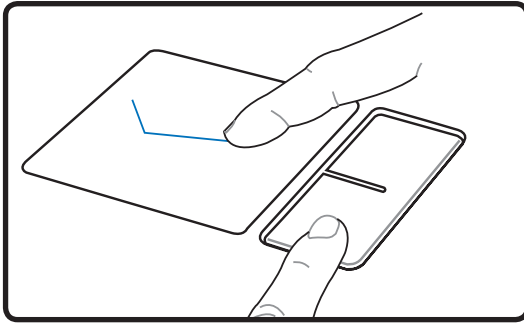
(press the left button twice and release)



**Double-Tapping**

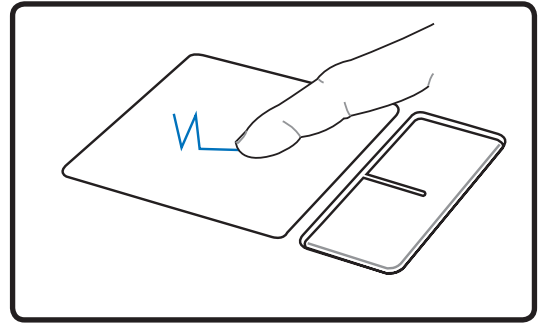
(lightly but rapidly strike the touchpad twice)

**Dragging** - Dragging means to pick up an item and place it anywhere on the screen you wish. You can move the cursor over the item you select, and while keeping the left button depressed, moving the cursor to the desired location, then release the button. Or, you can simply double-tap on the item and hold while dragging the item with your fingertip. The following illustrations produce the same results.



**Dragging-Clicking**

(hold left button and slide finger on touchpad)



**Dragging-Tapping**

(lightly strike the touchpad twice, sliding finger on touchpad during second strike)



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**NOTE: A software-controlled scrolling function is available after setting up the included touchpad utility to allow easy Windows or web navigation. Basic functions can be adjusted at the Windows control panel to allow comfortable clicking and tapping.**

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## Caring for the Touchpad

The touchpad is pressure sensitive. If not properly cared for, it can be easily damaged. Take note of the following precautions.

- Make sure the touchpad does not come into contact with dirt, liquids or grease.
- Do not touch the touchpad if your fingers are dirty or wet.
- Do not rest heavy objects on the touchpad or the touchpad buttons.
- Do not scratch the touchpad with your finger nails or any hard objects.



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**NOTE: The touchpad responds to movement not to force. There is no need to tap the surface too hard. Tapping too hard does not increase the responsiveness of the touchpad. The touchpad responds best to light pressure.**

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# 4 Using the Notebook PC

## Storage Devices

Storage devices allow the Notebook PC to read or write documents, pictures, and other files to various data storage devices. This Notebook PC has the following storage devices:

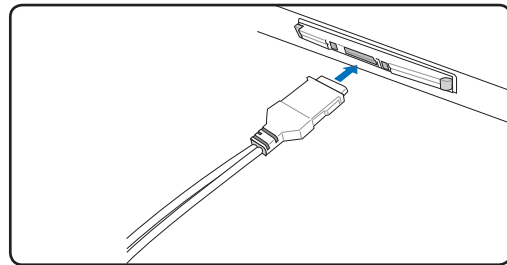
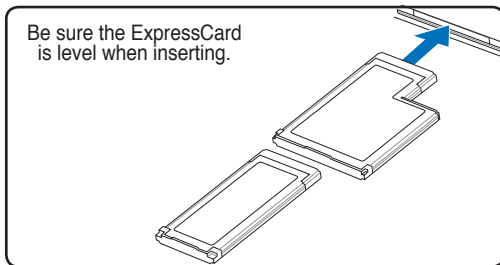
- ExpressCard
- Optical drive
- Flash memory reader
- Hard disk drive

### ExpressCard

One 26pin Express card slot is available to support one ExpressCard/34mm or one ExpressCard/54mm expansion card. This new interface is faster by using a serial bus supporting USB 2.0 and PCI Express instead of the slower parallel bus used in the PC card slot. (Not compatible with previous PCMCIA cards.)



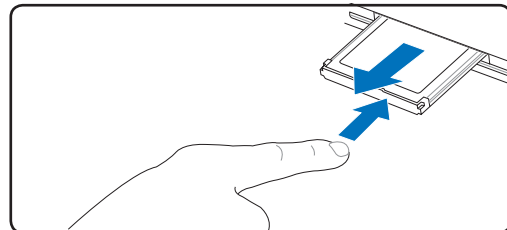
### Inserting an ExpressCard



1. If there is an ExpressCard socket protector, remove it using the “Removing an ExpressCard” instructions below.
2. Insert the ExpressCard with the connector side first and label side up. Standard ExpressCards will be flush with the Notebook PC when fully inserted.
3. Carefully connect any cables or adapters needed by the ExpressCard. Usually connectors can only be inserted in one orientation. Look for a sticker, icon, or marking on one side of the connector representing the top side.

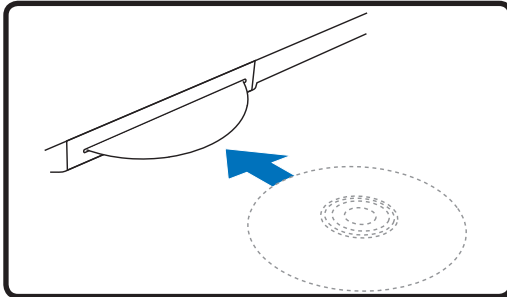
### Removing an ExpressCard

The ExpressCard slot does not have an eject button. Press the ExpressCard inwards and release to eject the ExpressCard. Carefully pull the ejected ExpressCard out of the socket.



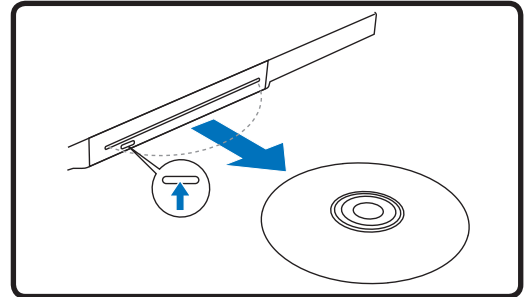
## ⊙ Optical Drive

### Inserting an optical disc



1. While the Notebook PC's power is ON, insert a disc slowly and the drive will receive the disc and bring it in.

### Removing an optical disc



1. While the Notebook PC's power is ON, push the electronic eject button (or use eject from Windows operating system).
2. Gently grab the disc by the edges and pull straight out.



**NOTE: It is normal to hear as well as feel the CD spinning with great intensity in the CD drive while data is read.**

A CD drive letter should be present regardless of the presence of a CD disc in the drive. After the CD is properly inserted, data can be accessed just like with hard disk drives; except that nothing can be written to or changed on the CD. Using the proper software, a CD-RW drive or DVD+CD-RW drive can allow CD-RW discs to be used like a hard drive with writing, deleting, and editing capabilities.

Vibration is normal for all high-speed optical drives due to unbalanced CDs or CD print. To decrease vibration, use the Notebook PC on an even surface and do not place labels on the CD.

### Listening to Audio CD

The optical drives can play audio CDs, but only the DVD-ROM drive can play DVD audio. Insert the audio CD and Windows™ automatically opens an audio player and begins playing. Depending on the DVD audio disc and installed software, it may require that you open a DVD player to listen to DVD audio. You can adjust the volume using hotkeys or Windows™ speaker icon on the taskbar.

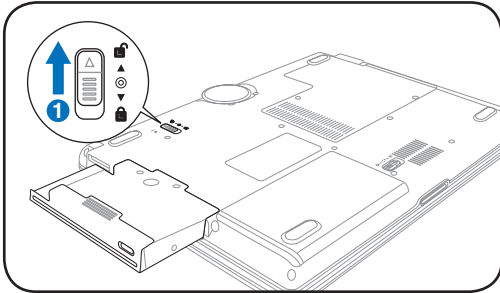
# 4 Using the Notebook PC

## Module Bay

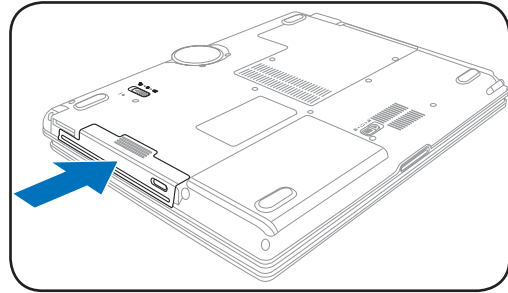
This Notebook PC features a module bay to accept various modules such as optical drives, travel drawer, or second battery pack. Visit an authorized dealer for upgrades.



### Removing a module

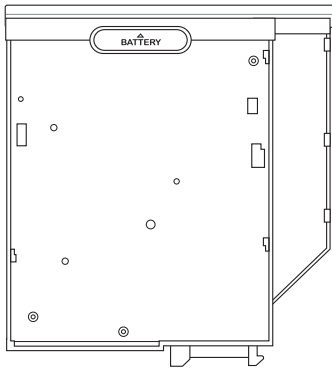


### Inserting a module



### Sample modules

#### Second battery pack



#### Optical drive

