

Notebook PC Hardware User's Manual

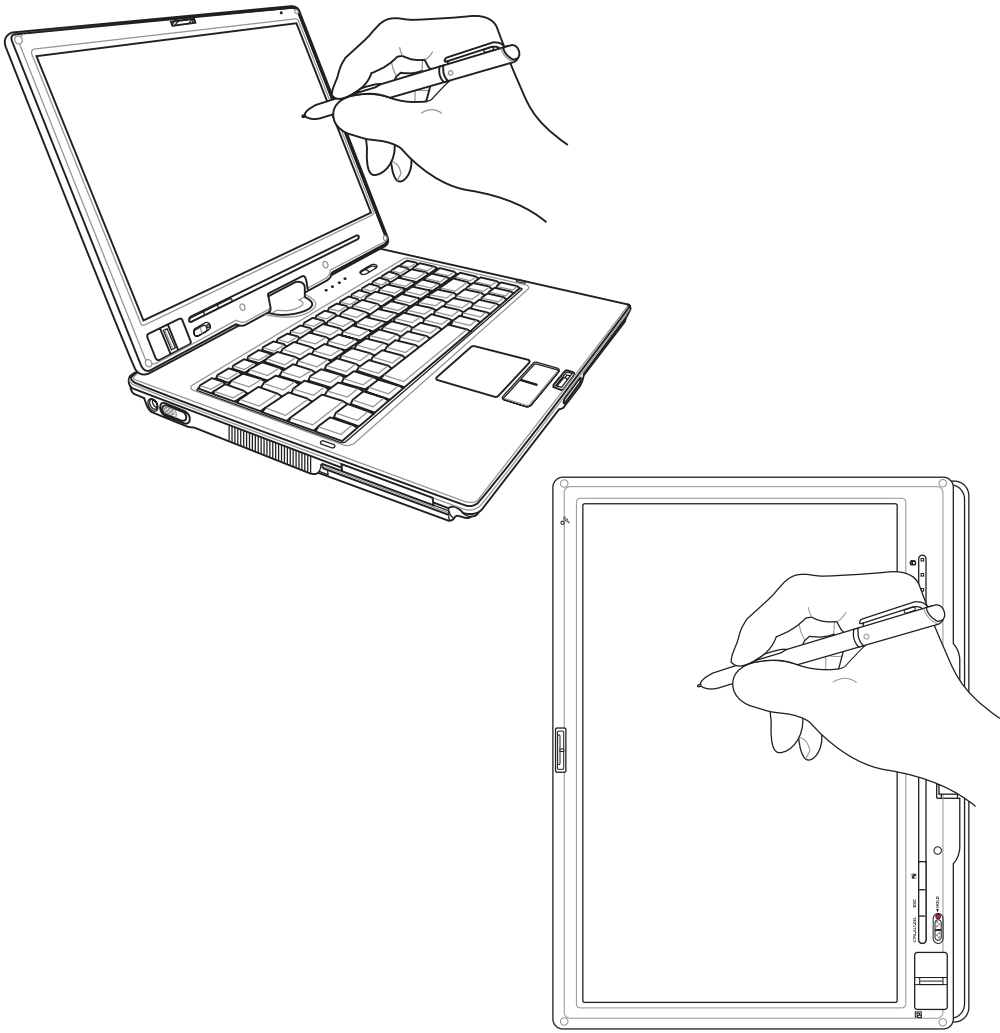


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1. Introducing the Notebook PC

About This User's Manual

Notes For This Manual

Safety Precautions

Preparing your Notebook PC



NOTE: Photos and icons in this manual are used for artistic purposes only and do not show what is actually used in the product itself.

1 Introducing the Notebook PC

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:

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

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

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

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

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

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

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.



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.



Cover Your Notebook PC

Purchase a carrying bag to protect the Notebook PC 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.

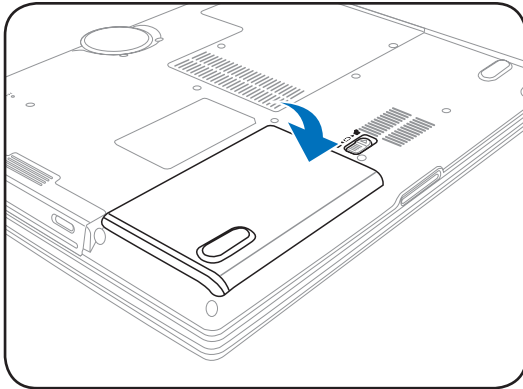


CAUTION! There are three main types of airport security devices: X-ray machines (used on items placed on conveyor belts), magnetic detectors (used on people walking through security checks), and magnetic wands (hand-held devices used on people or individual items). You can send your Notebook PC and diskettes 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.

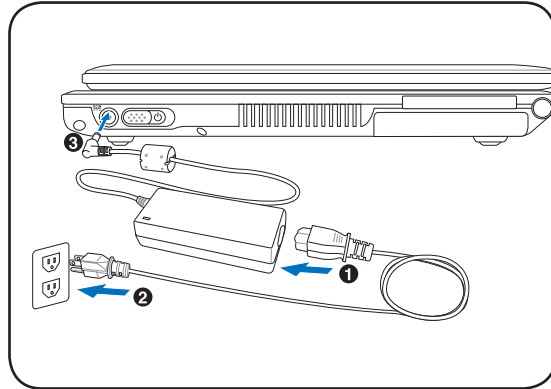
Preparing your Notebook PC

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

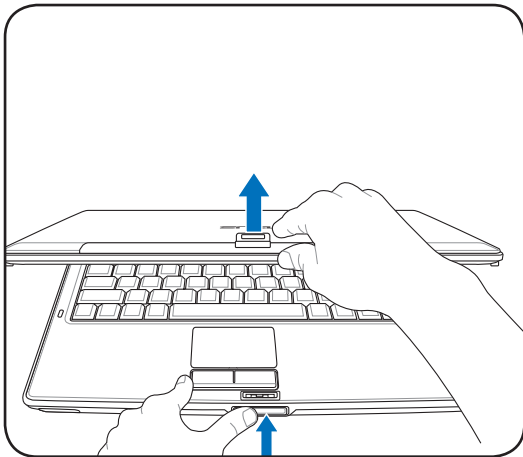
1. Install the battery pack



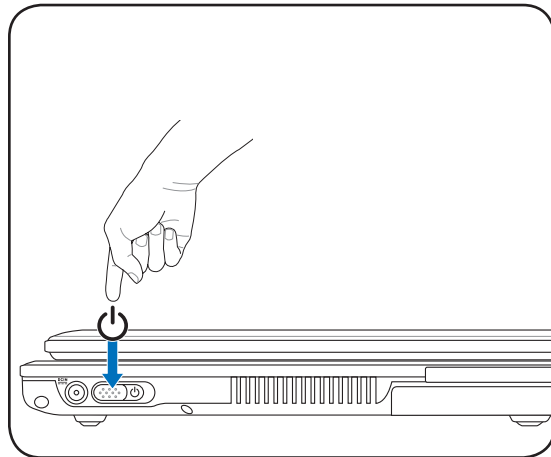
2. Connect the AC Power Adapter



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!

The power switch turns ON and OFF the Notebook PC or putting the Notebook PC into sleep or hibernation modes. Actual behavior of the power switch can be customized in Windows Control Panel > Power Options > **System Settings**.

2. Knowing the Parts

Basic sides of the Notebook PC



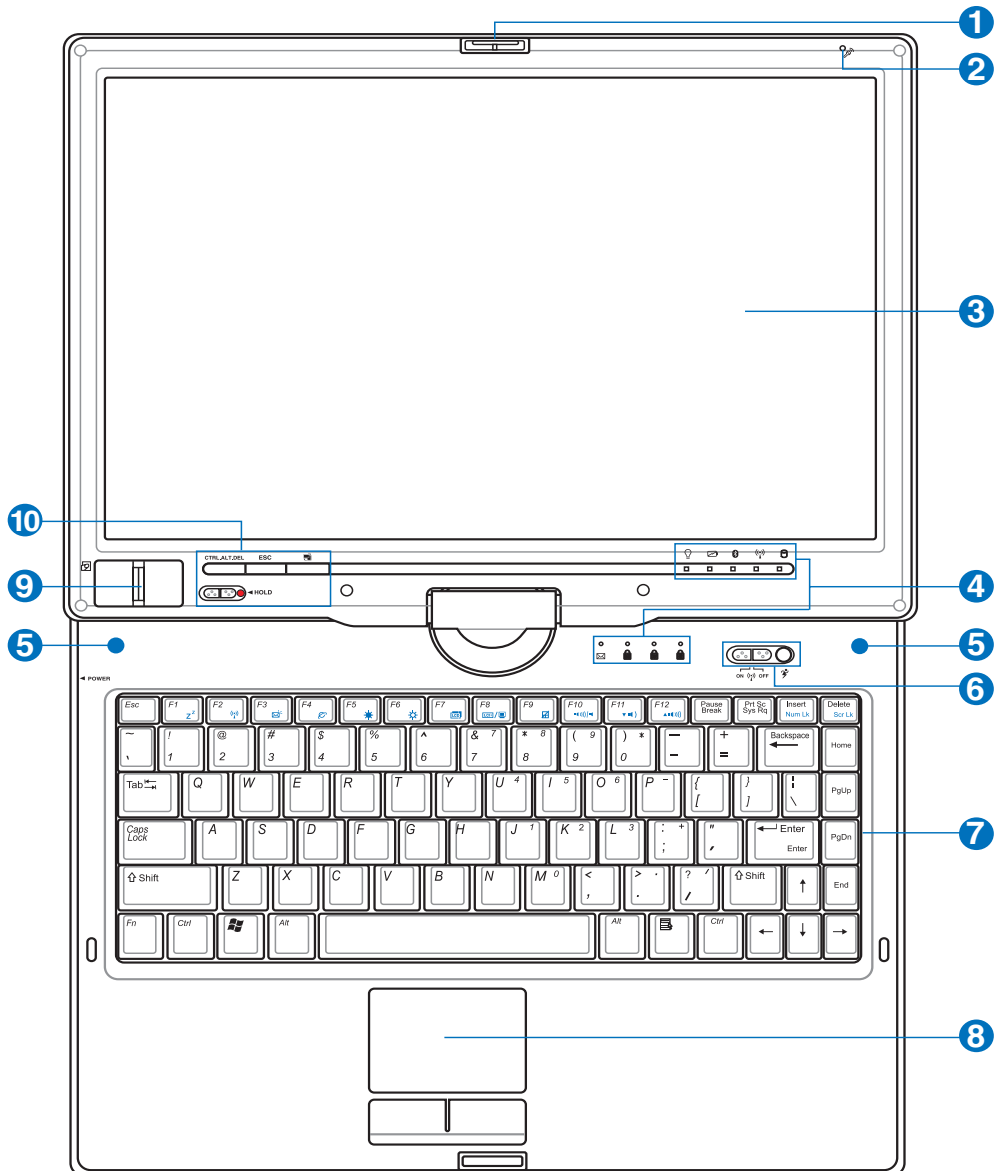
NOTE: Photos and icons in this manual are used for artistic purposes only and do not show what is actually used in the product itself.

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.

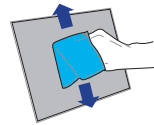
2 **Microphone (Built-in)**

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



3 **Display Panel**

The Notebook PC uses an active matrix TFT LCD, which provides excellent viewing like that of desktop monitors. Unlike traditional 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 (top)**

Status indicators represent various hardware/software conditions. See indicator details in section 3.



5 **Audio Speaker System**

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 **Instant Keys**

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



7 **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.



8 **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.



9 **Fingerprint Scanner (on selected models)**

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



10 **Instant Keys (Tablet PC)**

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

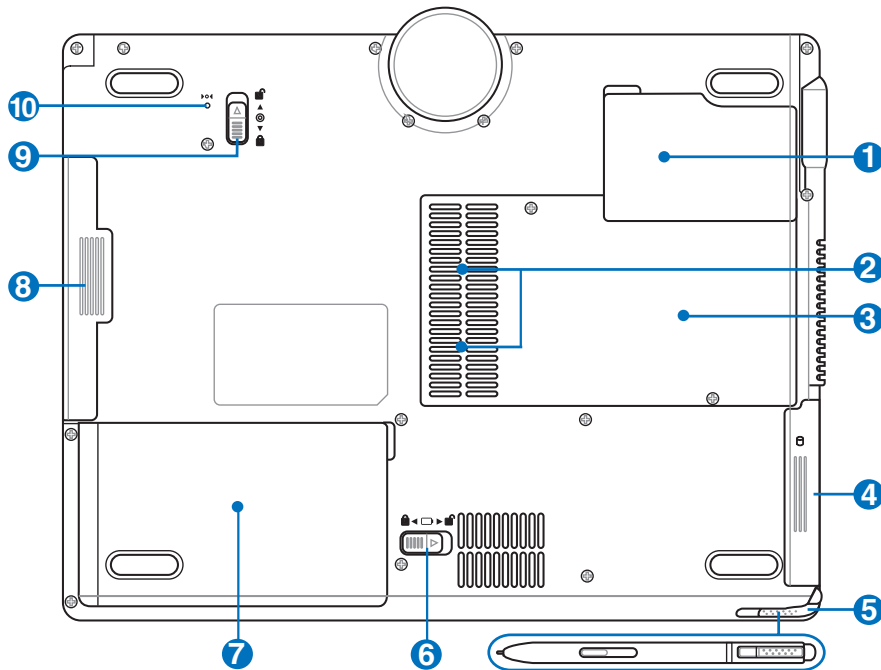
2 Knowing the Parts

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.

 **NOTE:** The battery pack size will vary 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 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.

2 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 accordingly. 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.



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 may occur.



4 Hard Disk Drive Compartment

The hard disk drive is secured in a compartment. Visit an authorized service center or retailer for information on hard disk drive upgrades for your Notebook PC. Only purchase hard disk drives from authorized retailers of this Notebook PC to ensure maximum compatibility and reliability.



5 Touchscreen Pen Compartment

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



6 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.



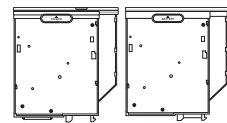
7 Battery Pack

The battery pack is automatically charged when the Notebook PC is 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.



8 Module Device

The Notebook PC has a user-swappable module device. Visit an authorized dealer for a selection of module devices for this Notebook PC.



9 Module Lock

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



10 Shutdown Button (Emergency)

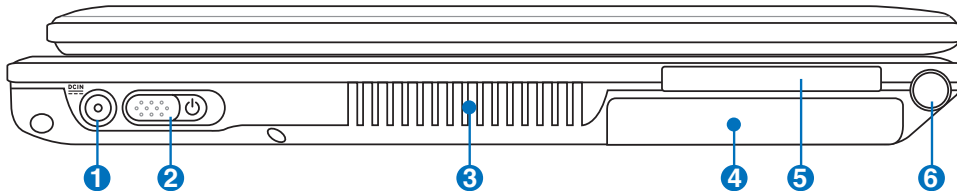
In case your operating system cannot properly turn OFF or restart, the shutdown button can be pressed with a straightened paper clip to shutdown the Notebook PC.



2 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 turns ON and OFF the Notebook PC or putting the Notebook PC into sleep or hibernation modes. Actual behavior of the power switch can be customized in Windows Control Panel “Power Options.”



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 may occur.



4 Hard Disk Drive Compartment

The hard disk drive is secured in a compartment. Visit an authorized service center or retailer for information on hard disk drive upgrades for your Notebook PC. Only purchase hard disk drives from authorized retailers of this Notebook PC to ensure maximum compatibility and reliability.



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.)



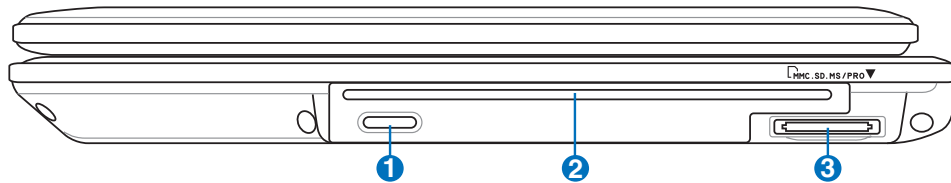
6 Touchscreen Pen Compartment

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



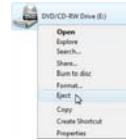
Right Side

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



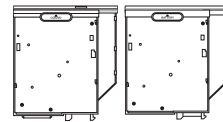
1 Optical Drive Electronic Eject

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 “Computer” and selecting **Eject**.



2 CD/DVD Module Device

The Notebook PC has a user-swappable module device. Visit an authorized dealer for a selection of module devices for this Notebook PC.



3 Flash Memory Slot

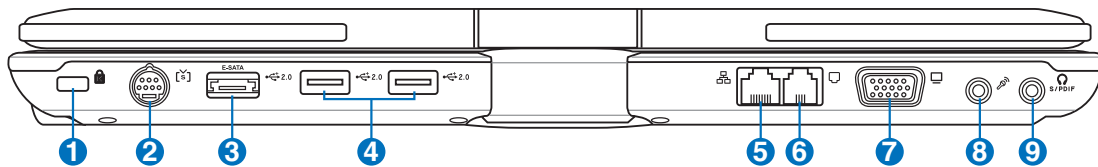
Normally an external memory card reader must be purchased separately in order to use memory cards from devices such as digital cameras, MP3 players, mobile phones, and PDAs. This Notebook PC has a built-in high-speed memory card reader that can conveniently read from and write to many flash memory cards as mentioned later in this manual.



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 may also include a motion detector to sound an alarm when moved.



2 TV-Out Port (on selected models)

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 E-SATA Port (on selected models)

External SATA or eSATA allows external connection of Serial-ATA devices originally designed for use inside the computer. It is up to six times faster than existing USB 2.0, & 1394 for external storage solutions and is also hot pluggable using shielded cables and connectors up to two meters.



4 USB Port (2.0/1.1) (on selected models)

The USB (Universal Serial Bus) port 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 some peripherals 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.



5 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.



6 **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.



7 **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.



8 **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.



9 **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

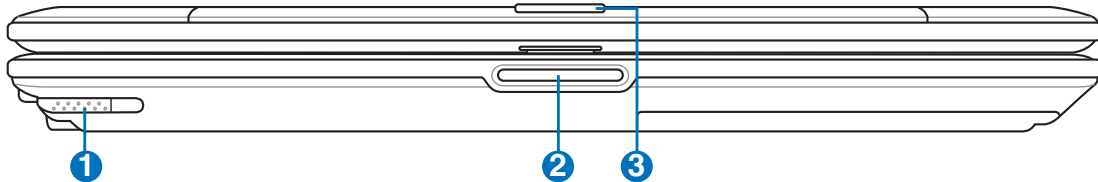
The stereo headphone jack (1/8 inch) is used to connect the Notebook PC's audio out signal to amplified speakers or headphones. Using this jack automatically disables the built-in speakers.



2 Knowing the Parts

Front Side

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



1 Touchscreen Pen Compartment

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

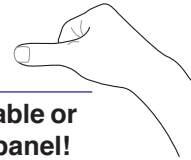


2 Display Panel Button

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 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.

3. Getting Started

Using AC Power

Using Battery Power

Powering ON the Notebook PC

Checking Battery Power

Powering Options

Power Management Modes

Special Keyboard Functions

Switches and Status Indicators



NOTE: Photos and icons in this manual are used for artistic purposes only and do not show what is actually used in the product itself.

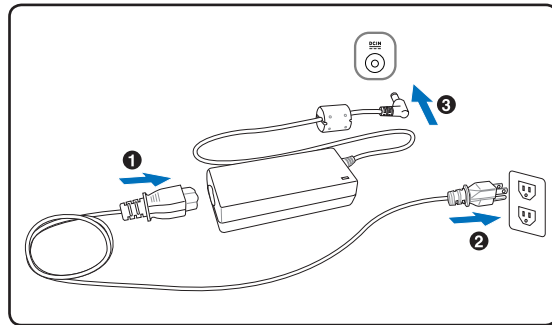
3 Getting Started

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 power indicator on the adapter (if available) will light 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.

 **Using Battery Power**

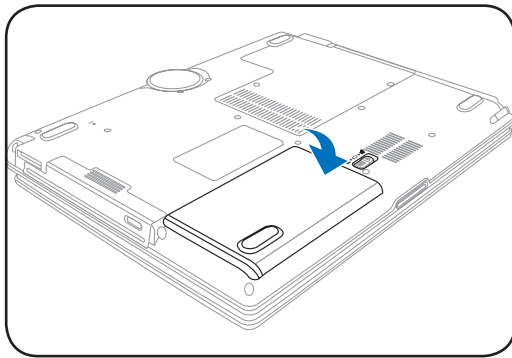
The Notebook PC is designed to work with a removable battery pack. The battery pack consists of a set of battery cells housed together. A fully charged pack will provide several hours of battery life, which can be further extended by using power management features through the BIOS setup. Additional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

 **Installing and Removing the Battery Pack**

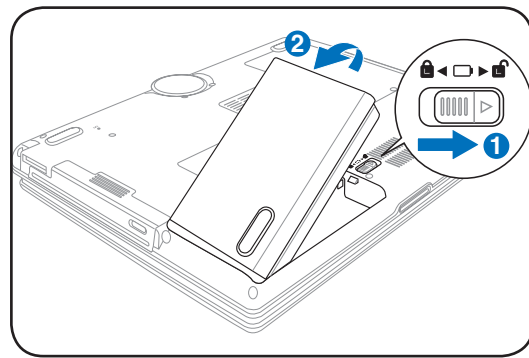
Your Notebook PC may or may not have its battery pack installed. If your Notebook PC does not have its battery pack installed, use the following procedures to install the battery pack.

 **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 D7. 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 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.

 **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

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.

 **BCH9.** is part of the Notebook PC's test routine and is not a problem with the display.

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

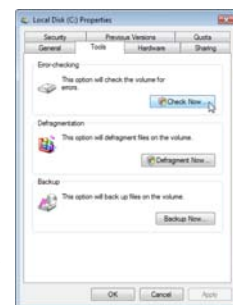
 **WARNING!** DO NOT carry or cover a Notebook PC that is powered ON with any materials that will reduce air circulation such as a carrying bag.


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.

Self Monitoring and Reporting Technology


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 disk checking program: click **Start** > select **Computer** > right-click a hard disk drive icon > choose **Properties** > click the **Tools** tab > click **Check Now** > click **Start**. You can also select "Scan ... sectors" for more effective scan and repair but the process will run slower.



 **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.

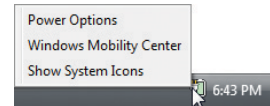
Checking Battery Power

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.

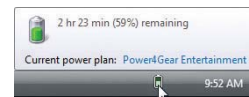
 **Note:** Screen captures shown here are examples only and a **Umbchif YÜYWik \ Uhmci 'gYY'** in your system.



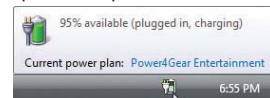
Left-click the battery icon



Right-click the battery icon




Cursor over the battery icon without power adapter.



Cursor over the battery icon with power adapter.


 **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).

 **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 status indicator on the Notebook PC 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.

 **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

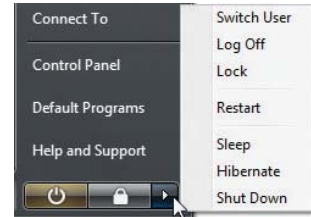
Power Options

The power switch turns ON and OFF the Notebook PC or putting the Notebook PC into sleep or hibernation modes. Actual behavior of the power switch can be customized in Windows Control Panel “Power Options.”

For other options, such as “Switch User, Restart, Sleep, or Shut Down,” click the arrowhead next to the lock icon.

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, choose **Restart**.




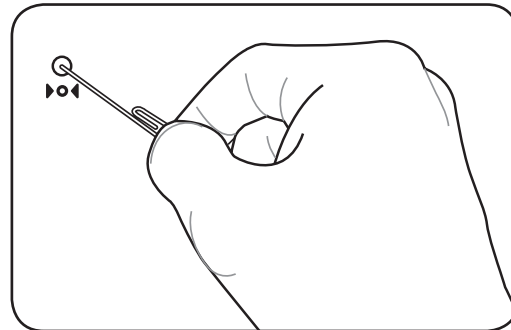
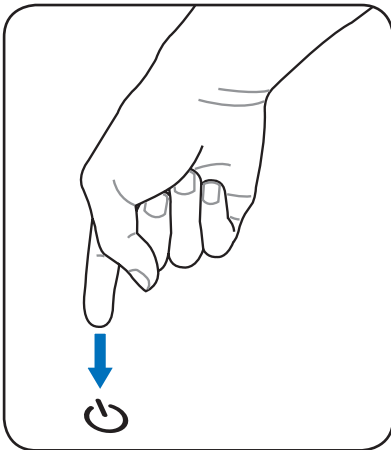
IMPORTANT! To protect the hard drive, wait at least 5 seconds after turning OFF your Notebook PC before turning it back ON.

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  on the bottom.



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.

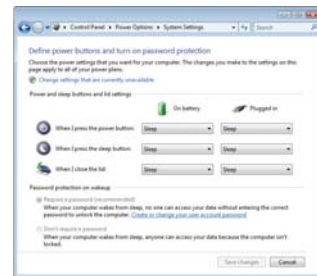


Power Management Modes

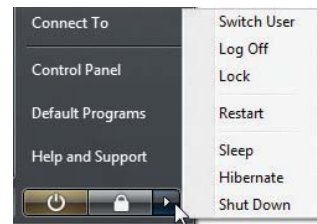
The Notebook PC has a number of automatic or adjustable power saving features that you can use to maximize battery life and lower Total Cost of Ownership (TCO). You can control some of these features through the Power menu in the BIOS Setup. ACPI power management settings are made through the operating system. The power management features are designed to save as much electricity as possible by putting components into a low power consumption mode as often as possible but also allow full operation on demand.

Sleep and Hibernate

Power management settings can be found in the Windows > Control Panel > **Power Options**. In **System Settings**, you can define “Sleep/Hibernate” or “Shut Down” for closing the display panel or pressing the power button. “Sleep” and “Hibernate” saves power when your Notebook PC is not in use by turning OFF certain components. When you resume your work, your last status (such as a document scrolled down half way or email typed half way) will reappear as if you never left. “Shut Down” will close all applications and ask if you want to save your work if any are not saved.



Sleep is the same as Suspend-to-RAM (STR). This function stores your current data and status in RAM while many components are turned OFF. Because RAM is volatile, it requires power to keep (refresh) the data. Click the **Start** button and the arrowhead next to the lock icon to see this option. You can also use the keyboard shortcut [**Fn F1**] to activate this mode. Recover by pressing any keyboard key except [Fn]. (NOTE: The power indicator will blink in this mode.)



Hibernate is the same as Suspend-to-Disk (STD) and stores your current data and status on the hard disk drive. By doing this, RAM does not have to be periodically refreshed and power consumption is greatly reduced but not completely eliminated because certain wake-up components like LAN needs to remain powered. “Hibernate” saves more power compared to “Sleep”. Click the **Start** button and the arrowhead next to the lock icon to see this option. Recover by pressing the power button. (NOTE: The power indicator will be OFF in this mode.)

Thermal Power Control

There are three power control methods for controlling the Notebook PC’s thermal state. These power control cannot be configured by the user and should be known in case the Notebook PC should enter these states. The following temperatures represent the chassis temperature (not CPU).

- The fan turns ON for active cooling when the temperature reaches the safe upper limit.
- The CPU decreases speed for passive cooling when the temperature exceeds the safe upper limit.
- The system shut down for critical cooling when temperature exceeds the maximum safe upper limit.

3 Getting Started

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.**



  **“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. (On certain models; stretches the screen area 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.)
NOTE: Must connect an external monitor “before” booting up.





  **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: Selected models have an indicator between the touchpad buttons will light when the touchpad is UNLOCKED (enabled) and not light when the touchpad is LOCKED (disabled).






Colored Hot Keys (cont.)






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- 





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


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
Speaker Down Icon (F11):
Decreases the speaker volume (only in Windows OS)


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
Speaker Up Icon (F12):
Increases the speaker volume (only in Windows OS)


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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.


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


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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).


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Fn+V: Toggles “Life Frame” software application.


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Fn+T: Toggles “Power For Phone” software application.


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Power4Gear eXtreme (Fn+Space Bar): This key 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. Applying or removing the power adapter will automatically switch the system between AC mode and battery mode. You can see the current mode through the on-screen display (OSD).



3 Getting Started

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

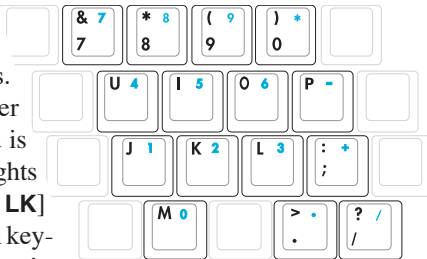
The numeric keypad is embedded in the keyboard and consists of 15 keys that make number intensive input more convenient.

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.

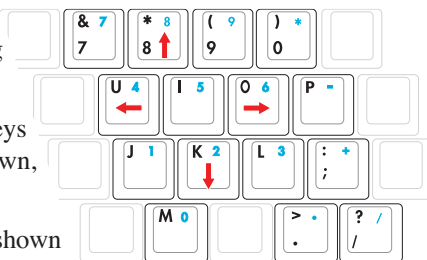


Keyboard as Cursors

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 red arrows are illustrated here for your reference. They are not labeled on the keyboard as shown here.