

Multi Book G22
User Manual

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1. Introduction

About This User's Manual

Notes For This Manual

Safety Precautions



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.

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.

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.

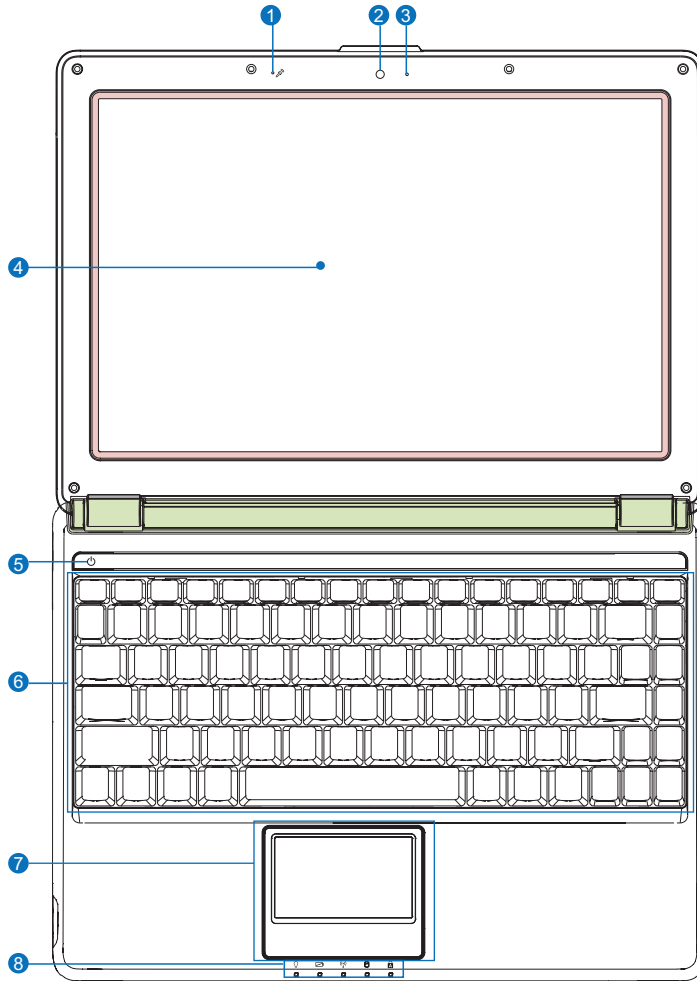
2 Knowing the Parts





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.

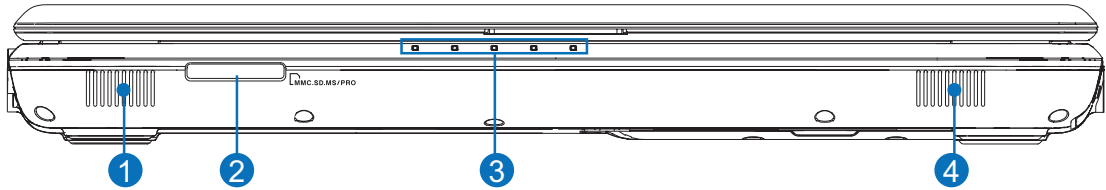






- 1** Microphone (Built-in) 
- 2** Camera 
- 3** Camera Indicator 
- 4** Display Panel 

- 5** Power Switch 
- 6** Keyboard 
- 7** Touchpad and Buttons 
- 8** Status Indicators (front) 

Front Side

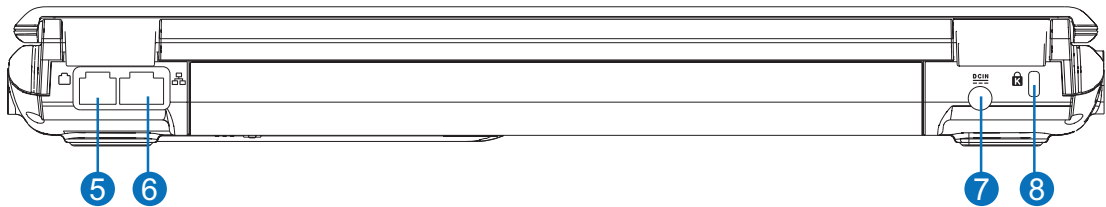
Refer to the diagram below to identify the components on this side of the Notebook PC.



- 1 Audio Speakers (Left and Right)** 
- 2 Flash Memory Reader** 
- 3 Status Indicators (front)** 
- 4 Audio Speakers (Left and Right)** 

Rear Side




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



- 5 Modem Port (on selected models)** 

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.

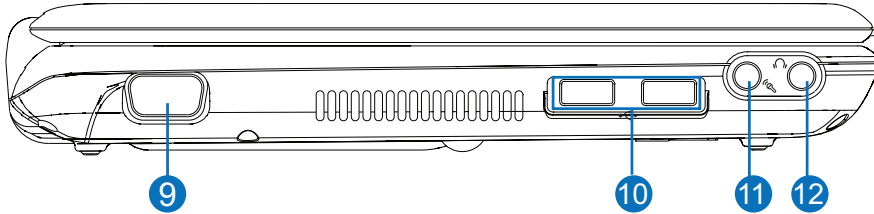






- 6 LAN Port** 
- 7 Power (DC) Input** 
- 8 Kensington® Lock Port** 

2 Knowing the Parts

Left Side

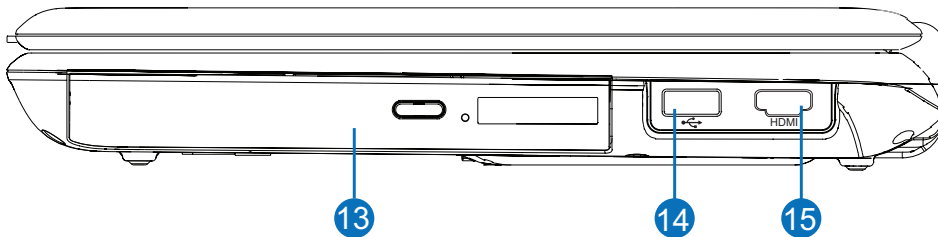
Refer to the diagram below to identify the components on this side of the Notebook PC.






- 9 Display (Monitor) Output 
 - 10 USB Port (2.0/1.1) 
 - 11 Microphone Input Jack 
 - 12 Headphone Output Jack 
-

Right Side

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



- 13 Optical Drive 
- 14 USB Port (2.0/1.1) 
- 15 HDMI Port 

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



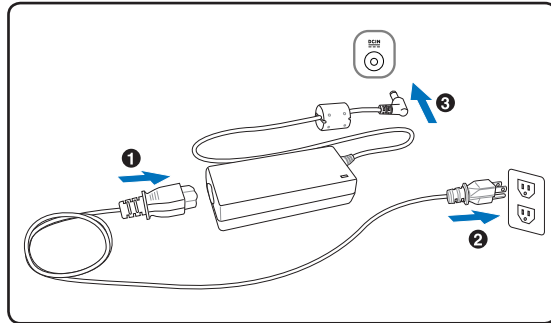
NOTE: Photos and icons in this manual are used for artistic purposes only and do not show what is actually used in the product itself.

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.



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.



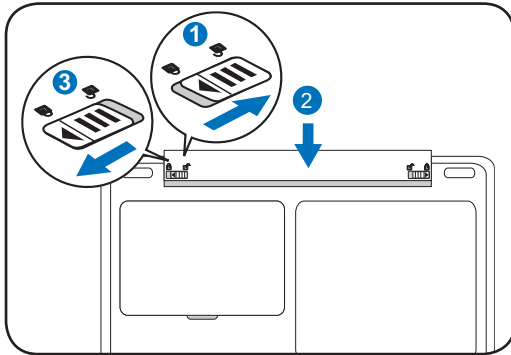
Installing and Removing the Battery Pack

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.

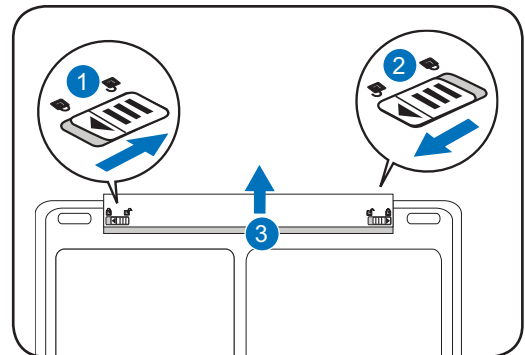


IMPORTANT! Never attempt to remove the battery pack while the Notebook PC is turned ON, as this may result in the loss of working data.

To install the battery pack:



To remove the battery pack:



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



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

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.



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.



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.



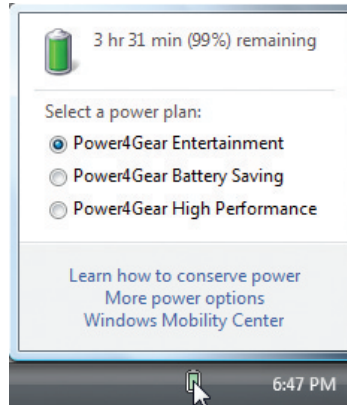
IMPORTANT! If warnings are still given during bootup after running a software disk checking utility, you should take your Notebook PC in for servicing. Continued use may result in data loss.

Checking Battery Power

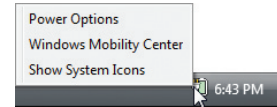
The battery system implements the Smart Battery standard under the Windows environment, which allows the battery to accurately report the amount of charge left in the battery. A fully-charged battery pack provides the Notebook PC a few hours of working power. But the actual figure varies depending on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



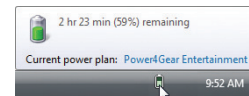
Note: Screen captures shown here are examples only and may not reflect what you see in your system.



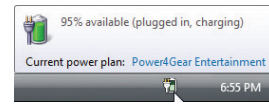
Left-click the battery icon



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

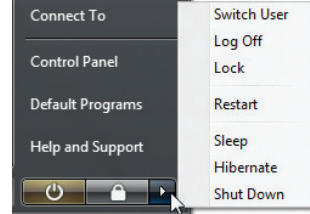
Power Options

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**.

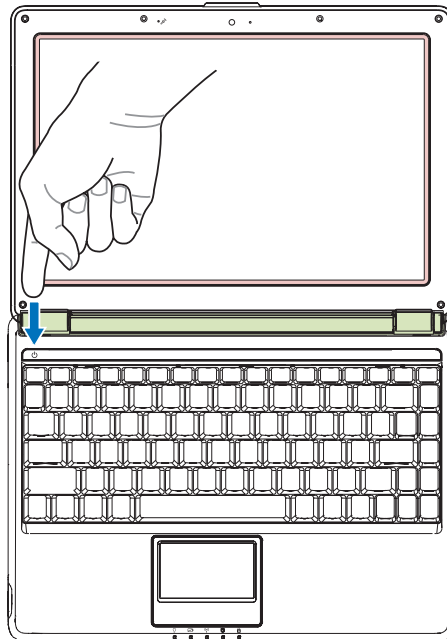


IMPORTANT! To protect the hard drive, wait at least 5 seconds after turning OFF your Notebook PC before turning it back ON.



Emergency Shutdown

In case your operating system cannot properly turn OFF or restart, hold the power button  over 4 seconds to shutdown your Notebook PC.



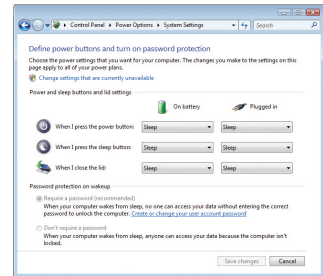


Power Management Modes

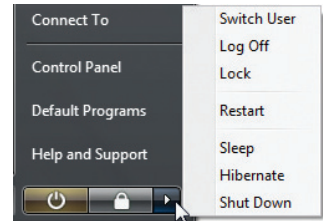
The Notebook PC has a number of automatic or adjustable power saving features that you can use to maximize battery life and lower Total Cost of Ownership (TCO). You can control some of these features through the Power menu in the BIOS Setup. ACPI power management settings are made through the operating 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

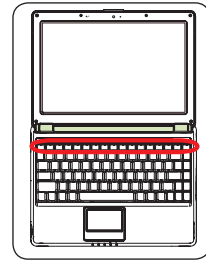
There are three power control methods for controlling the Notebook PC’s thermal state. These power control cannot be configured by the user and should be known in case the Notebook PC should enter these states. The following temperatures represent the chassis temperature (not CPU).

- 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.

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.**

Colored Hot Keys (cont.)

**Speaker Icons (F10):**

Toggles the speakers ON and OFF (only in Windows OS)

**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.



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

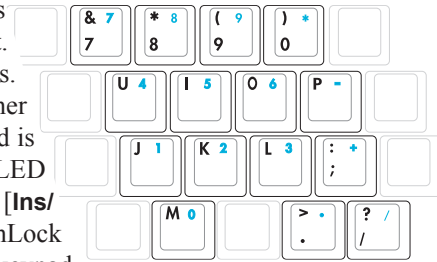
engaged by pressing [Fn][Ins/Num LK], the number lock LED

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.

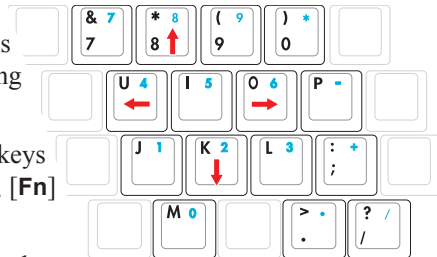


Keyboard as Cursors

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.

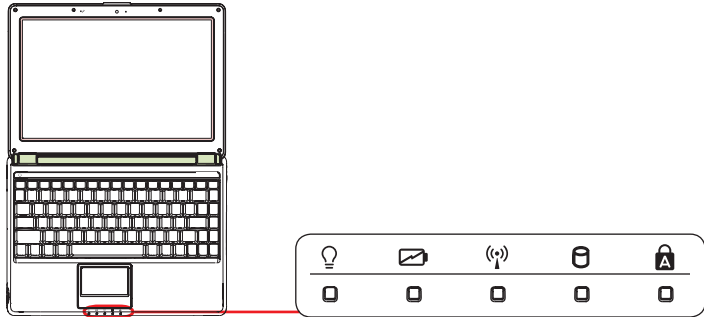
With Number Lock OFF, press [Fn] and one of the cursor keys shown below. For example [Fn][8] for up, [Fn][K] for down, [Fn][U] for left, and [Fn][O] for right.

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.

Status Indicators



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 (Sleep) 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.



Wireless Indicator

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



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.



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).



4. Using the Notebook PC

Pointing Device

Storage Devices

Flash memory card reader

Optical disc drive

Hard disk drive

Memory (RAM)

Connections

Network connection

Modem connection

Wireless LAN connection (on selected models)

Bluetooth wireless connection (on selected models)



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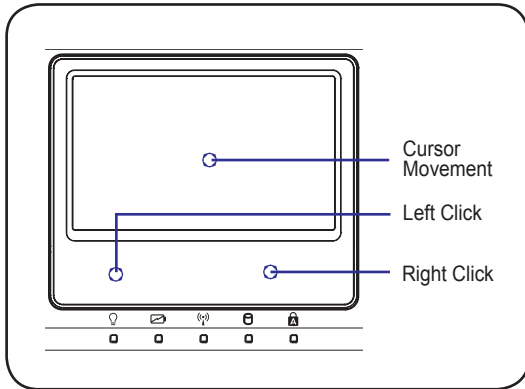
4 Using the Notebook PC

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.

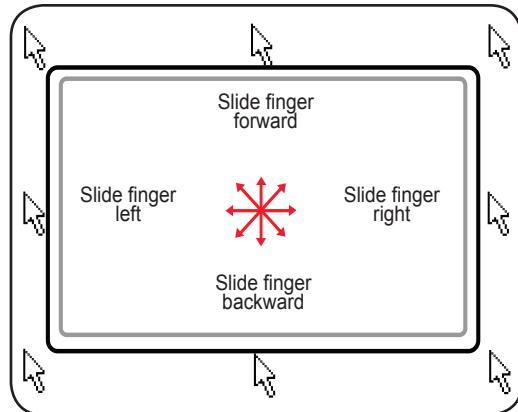


Using the Touchpad

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.



Multi-touch gesture usage

Multi-touch recognizes multiple simultaneous touch points to allow advanced software actions using just two fingers.



Chiral Scrolling

Touch the vertical scroll zone as shown and then slide your finger CW or CCW to scroll continuously. Convenient for scrolling a long document.



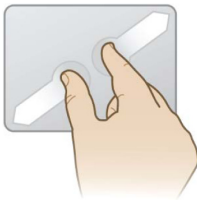
Chiral Rotate

Touch the left vertical zone as shown and then slide your finger CW or CCW for rotating an item, such as a photo.



Two Fingers Flick

Slide two fingers up/down/left/or right for enhanced navigation, such as browsing back on the web.



Two Fingers Pinch Zoom

Slide two fingers outwards to zoom in. Slide two fingers inwards to zoom out. Convenient for viewing photos.



Momentum Motion

Flick one finger for delivering smooth and fast cursor motion, like that of a trackball. Convenient for moving a window onto a secondary monitor.

TIP: For detailed multi-touch gesture usage, please refer to the video demonstration in [Mouse Properties > Device Settings](#).

4 Using the Notebook PC

☐ 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.

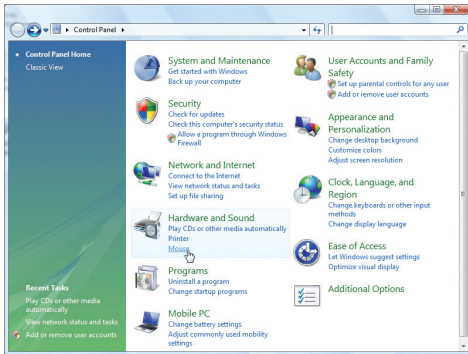
- Make sure the touchpad does not come into contact with dirt, liquids or grease.
- Do not touch the touchpad if your fingers are dirty or wet.
- Do not rest heavy objects on the touchpad or the touchpad buttons.
- Do not scratch the touchpad with your finger nails or any hard objects.



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.

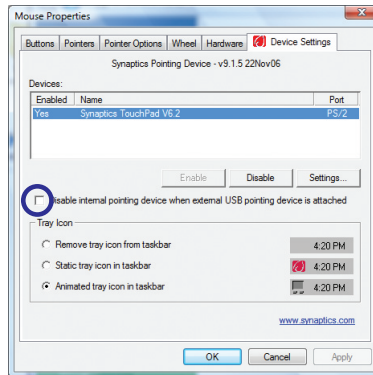
☐ Automatic Touchpad Disabling

Windows can automatically disable the Notebook PC's touchpad when an external USB mouse is attached. This feature is normally OFF, to turn ON this feature, select the option in Windows **Control Panel > Mouse Properties > Device Settings**.



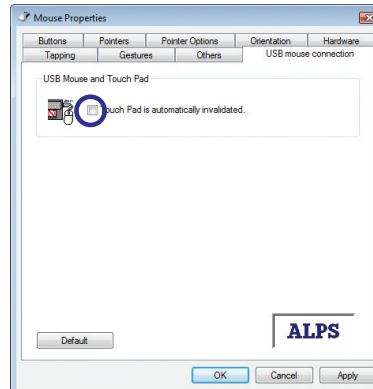
Find **Mouse** properties in the “Control Panel”.

Models with Synaptics touchpad.



Select this option to enable this feature.


Models with ALPS touchpad.



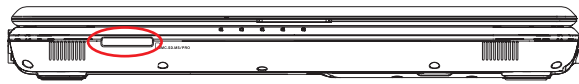
Select this option to enable this feature.

Flash Memory Card Reader

Normally a 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 single built-in memory card reader that can use many flash memory cards as shown in the example below. 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 internal high-bandwidth PCI bus.

 **IMPORTANT! Flash memory card compatibility varies depending on Notebook PC model and flash memory card specifications. Flash memory card specifications constantly change so compatibility may change without warning.**

Flash Memory Card Examples



MMC (Multimedia Card)
MMC Plus
RS-MMC (Reduced Size) (with MMC adapter)



SD (Secure Digital)
miniSD (with SD adapter)



SDHC (Secure Digital High Capacity)
microSD (with SD adapter)



xD-Picture Card




Memory stick (MS) / PRO / MagicGate / Select




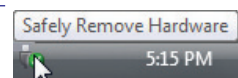
Memory Stick Duo/Duo Pro/MagicGate (with MS adapter)



Memory Stick Micro (with MS adapter)

 **IMPORTANT! Never remove cards while or immediately after reading, copying, formatting, or deleting data on the card or else data loss may occur.**

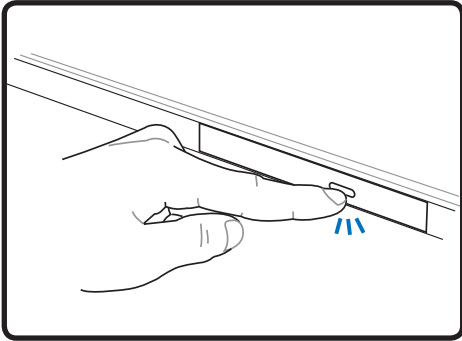
 **WARNING! To prevent data loss, use “Windows Safely Remove Hardware” on the taskbar before removing the flash memory card.**



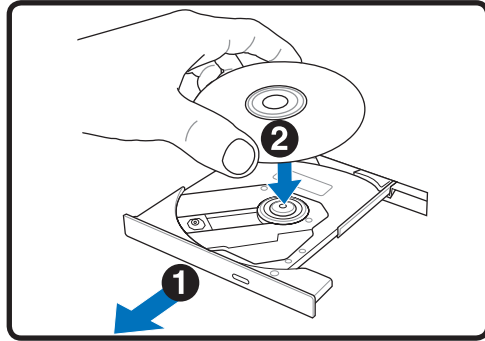
4 Using the Notebook PC

Optical Drive

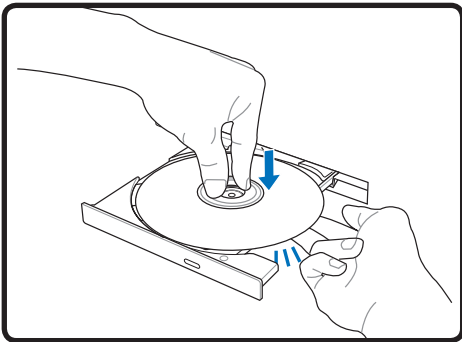
Inserting an optical disc



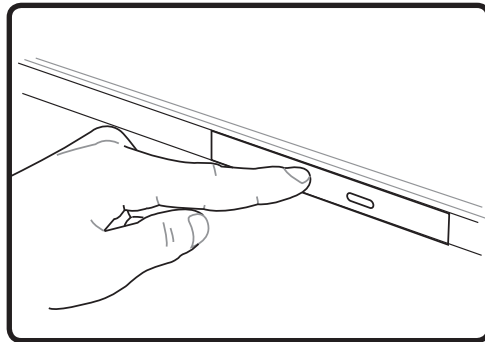
1. While the Notebook PC's power is ON, press the drive's eject button and the tray will eject out partially.



2. Gently pull on the drive's front panel and slide the tray completely out. Be careful not to touch the CD drive lens and other mechanisms. Make sure there are no obstructions that may get jammed under the drive's tray.



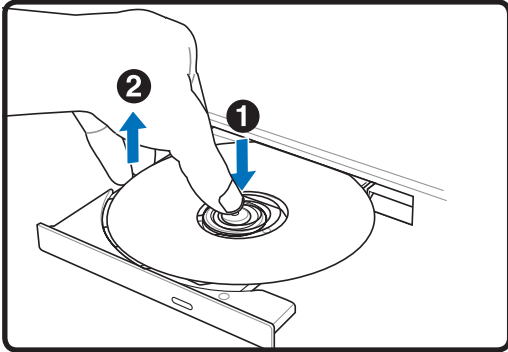
3. Hold the disc by the edge and face the disc's printed side up. Push down on both sides of the disc's center until the disc snaps onto the hub. **The hub should be higher than the disc when correctly mounted.**



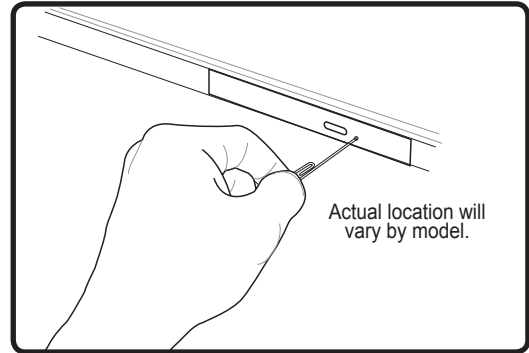
4. Slowly push the drive's tray back in. The drive will begin reading the table of contents (TOC) on the disc. When the drive stops, the disc is ready to be used.



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

Optical Drive (Cont.)**Removing an optical disc**

Eject the tray and gently pry the edge of the disc upwards at an angle to remove the disc from the hub.

Emergency eject

The emergency eject is located in a hole on the optical drive and is used to eject the optical drive tray in case the electronic eject does not work. Do not use the emergency eject in place of the electronic eject.



WARNING! If the CD disc is not properly locked onto the center hub, the CD can be damaged when the tray is closed. Always watch the CD closely while closing the tray slowly to prevent damage.

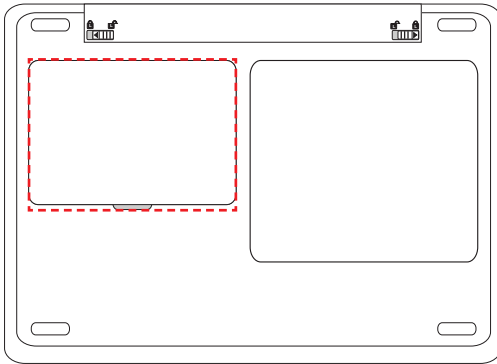
4 Using the Notebook PC

Hard Disk Drive

Hard disk drives have higher capacities and operate at much faster speeds than floppy disk drives and optical drives. The Notebook PC comes with a replaceable hard disk drive. Current hard drives support S.M.A.R.T. (Self Monitoring and Reporting Technology) to detect hard disk errors or failures before they happen. When replacing or upgrading the hard drive, always visit an authorized service center or retailer for this Notebook PC.



IMPORTANT! Poor handling of the Notebook PC may damage the hard disk drive. Handle the Notebook PC gently and keep it away from static electricity and strong vibrations or impact. The hard disk drive is the most delicate component and will likely be the first or only component that is damaged if the Notebook PC is dropped.

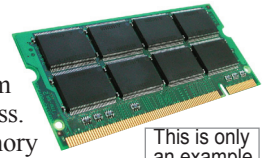


Hard Disk Drive Compartment

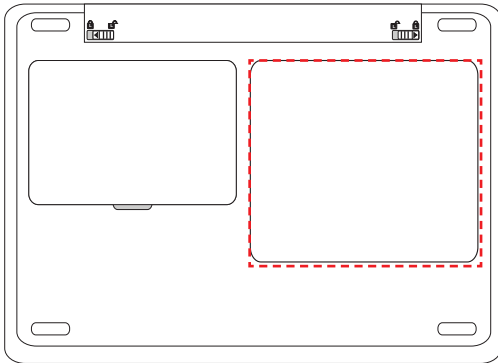
The hard disk drive is secured in a compartment. Visit an authorized service center or retailer for information on hard disk drive upgrades for your Notebook PC. Only purchase hard disk drives from authorized retailers of this Notebook PC to ensure maximum compatibility and reliability.

Memory (RAM)

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.

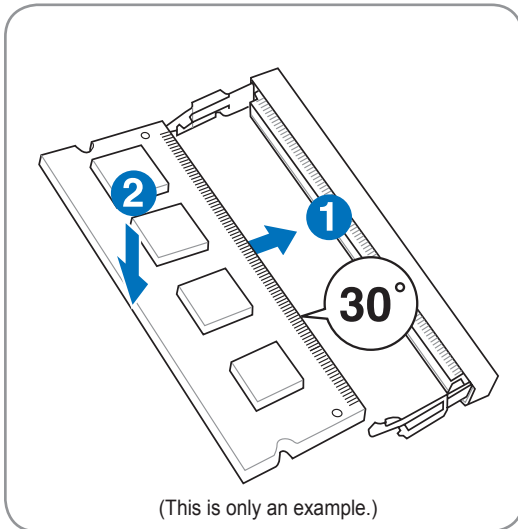


This is only an example.

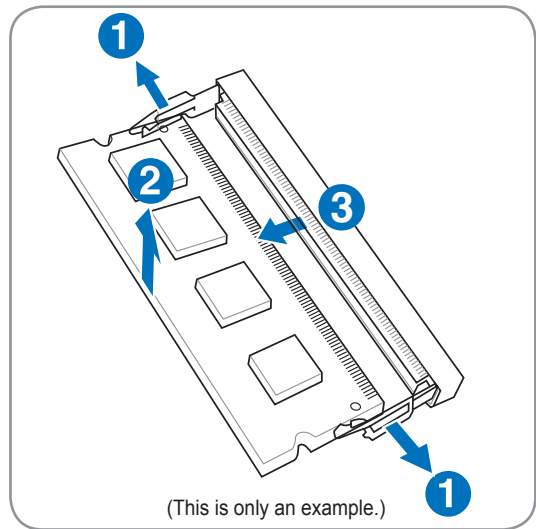


The memory compartment provides expansion capabilities for additional memory. Visit an authorized service center or retailer for information on memory upgrades for your Notebook PC. Only purchase expansion modules from authorized retailers of this Notebook PC to ensure maximum compatibility and reliability.

Installing a Memory Card:



Removing a Memory Card:



4 Using the Notebook PC

Connections

Network Connection

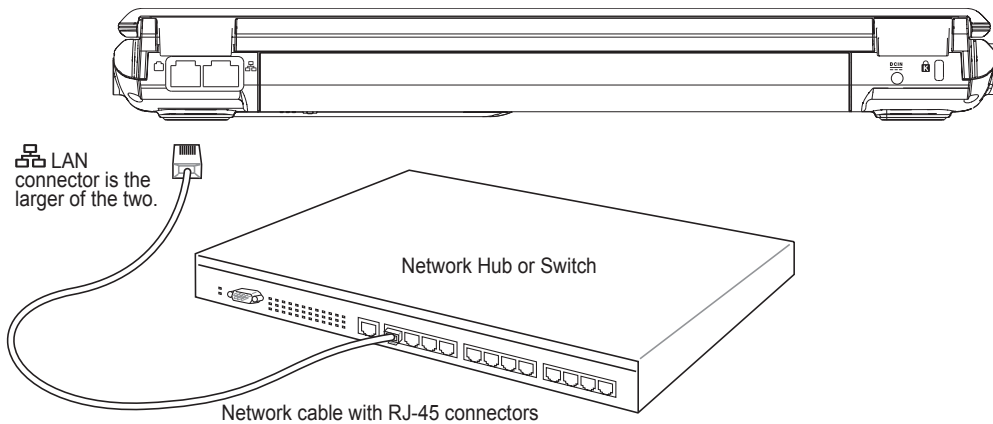
Connect a network cable, with RJ-45 connectors on each end, to the modem/network port on the Notebook PC and the other end to a hub or switch. For 100 BASE-TX / 1000 BASE-T speeds, your network cable must be category 5 or better (not category 3) with twisted-pair wiring. If you plan on running the interface at 100/1000Mbps, it must be connected to a 100 BASE-TX / 1000 BASE-T hub (not a BASE-T4 hub). For 10Base-T, use category 3, 4, or 5 twisted-pair wiring. 10/100 Mbps Full-Duplex is supported on this Notebook PC but requires connection to a network switching hub with “duplex” enabled. The software default is to use the fastest setting so no user-intervention is required.



1000BASE-T (or Gigabit) is only supported on selected models.



Example of the Notebook PC connected to a Network Hub or Switch for use with the built-in Ethernet controller.



Modem Connection



NOTE: The built-in modem and network cannot be installed later as an upgrade. After purchase, modem and/or network can be installed as an expansion card.

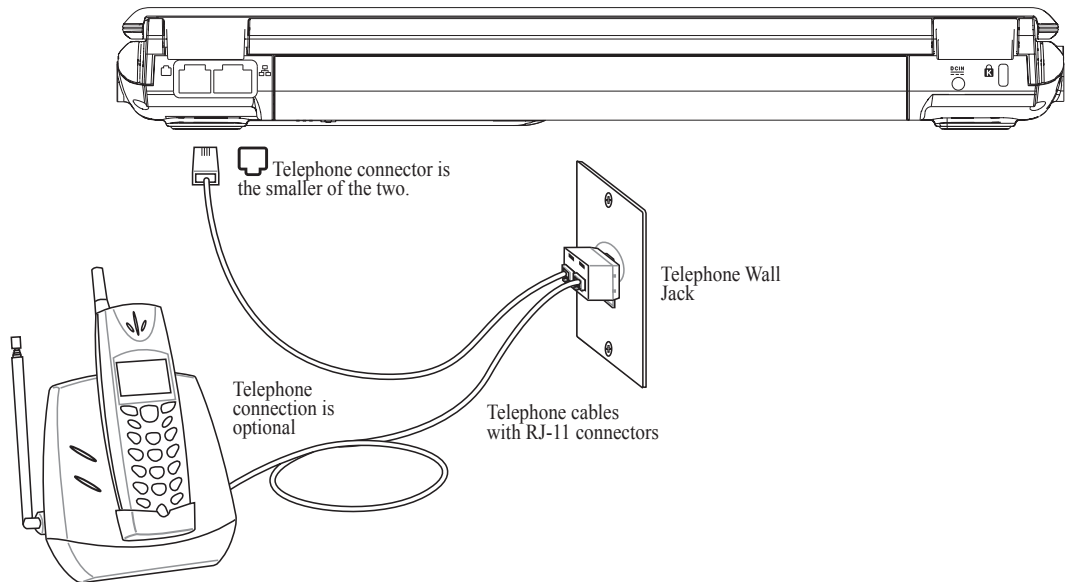
The telephone wire used to connect the Notebook PC's internal modem should have either two or four wires (only two wires (telephone line #1) is used by the modem) and should have an RJ-11 connector on both ends. Connect one end to the modem port and the other end to an analog telephone wall socket (the ones found in residential buildings). Once the driver is setup, the modem is ready to use.



NOTE: When you are connected to an online service, do not place the Notebook PC in suspend (or sleep mode) or else you will disconnect the modem connection.



Example of the Notebook PC connected to a telephone jack for use with the built-in modem:



WARNING! Only use analog telephone outlets. The built-in modem does not support the voltage used in digital phone systems. Do not connect the RJ-11 to digital phone systems found in many commercial buildings or else damage will occur!



CAUTION: For electrical safety concerns, only use telephone cables rated 26AWG or higher. (see Glossary for more information)

4 Using the Notebook PC

Wireless LAN Connection (on selected models)

The optional built-in wireless LAN is a compact easy-to-use wireless Ethernet adapter. Implementing the IEEE 802.11 standard for wireless LAN (WLAN), the optional built-in wireless LAN is capable of fast data transmission rates using Direct Sequence Spread Spectrum (DSSS) and Orthogonal Frequency Division Multiplexing (OFDM) technologies on 2.4GHz/5GHz frequencies. The optional built-in wireless LAN is backward compatible with the earlier IEEE 802.11 standards allowing seamless interfacing of wireless LAN standards.

The optional built-in wireless LAN is a client adapter that supports Infrastructure and Ad-hoc modes giving you flexibility on your existing or future wireless network configurations for distances up to 40 meters between the client and the access point.

To provide efficient security to your wireless communication, the optional built-in wireless LAN comes with a 64-bit/128-bit Wired Equivalent Privacy (WEP) encryption and Wi-Fi Protected Access (WPA) features.

Ad-hoc mode

The Ad-hoc mode allows the Notebook PC to connect to another wireless device. No access point (AP) is required in this wireless environment.

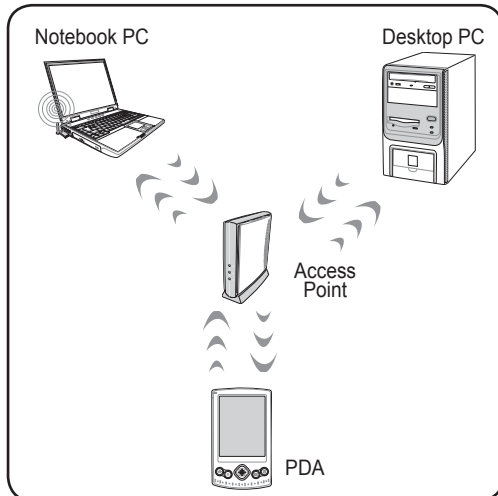
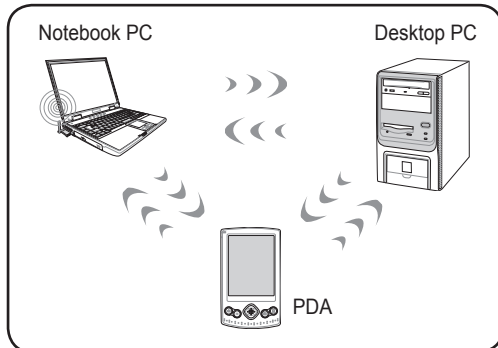
(All devices must install optional 802.11 wireless LAN adapters.)

Infrastructure mode

The Infrastructure mode allows the Notebook PC and other wireless devices to join a wireless network created by an Access Point (AP) (sold separately) that provides a central link for wireless clients to communicate with each other or with a wired network.

(All devices must install optional 802.11 wireless LAN adapters.)

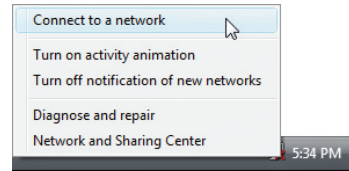
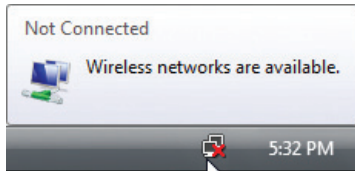
These are examples of the Notebook PC connected to a Wireless Network.



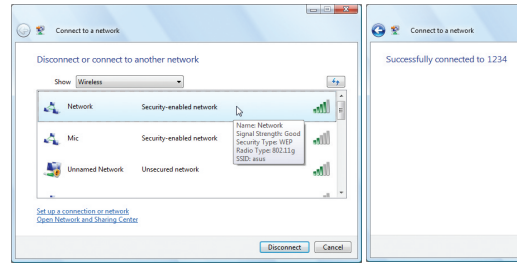
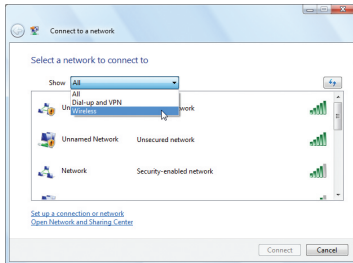
Windows Wireless Network Connection

Connecting to a network

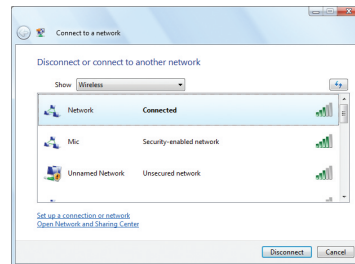
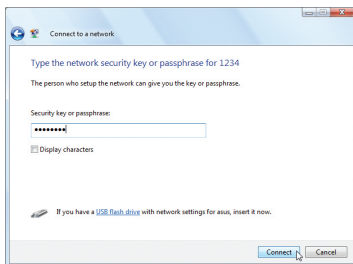
1. Switch ON the Wireless function if necessary for your model (see switches in Section 3).



2. You should see the “Not Connected” network icon.
3. Right click on the network icon and select **Connect to a network**.



4. Select “Show **Wireless**” if you have many networks in your area.
5. Select the wireless network you want to connect to.



6. When connecting, you may have to enter a password.
7. After connection has been established, “Connected” will be shown.

4 Using the Notebook PC

Bluetooth Wireless Connection (on selected models)

Notebook PCs with Bluetooth technology eliminates the need for cables for connecting Bluetooth-enabled devices. Examples of Bluetooth-enabled devices may be Notebook PCs, Desktop PCs, mobile phones, and PDAs.

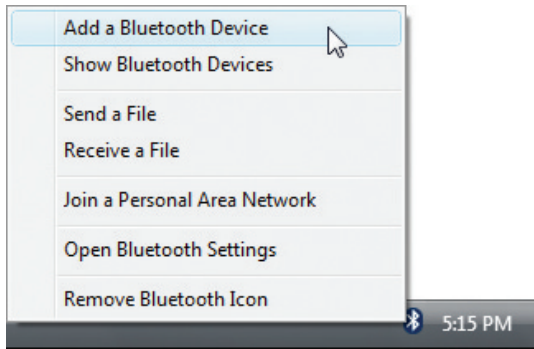


Note: If your Notebook PC did not come with built-in Bluetooth, you need to connect a USB or ExpressCard Bluetooth module in order to use Bluetooth.

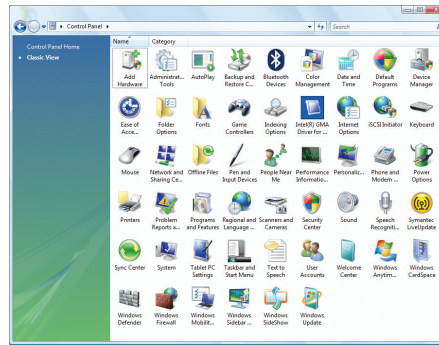
Turning ON and Launching Bluetooth Utility

This process can be used to add most Bluetooth devices. See Appendix for complete process.

1. Switch ON the Wireless function if necessary for your model (see switches in Section 3).



2. Select **Add a Bluetooth Device** on the taskbar men.



- 2b. Or Launch **Bluetooth Devices** from the Windows Control Panel.

Nordic Lithium Cautions (for lithium-ion batteries)



CAUTION! Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions. (English)



ATTENZIONE! Rischio di esplosione della batteria se sostituita in modo errato. Sostituire la batteria con un una di tipo uguale o equivalente consigliata dalla fabbrica. Non disperdere le batterie nell'ambiente. (Italian)



VORSICHT! Explosionsgefahr bei unsachgemäßen Austausch der Batterie. Ersatz nur durch denselben oder einem vom Hersteller empfohlenem ähnlichen Typ. Entsorgung gebrauchter Batterien nach Angaben des Herstellers. (German)



ADVARSELI! Lithiumbatteri - Eksplosionsfare ved fejlagtig håndtering. Udskiftning må kun ske med batteri af samme fabrikat og type. Levér det brugte batteri tilbage til leverandøren. (Danish)



VARNING! Explosionsfara vid felaktigt batteribyte. Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparattillverkaren. Kassera använt batteri enligt fabrikantens instruktion. (Swedish)



VAROITUS! Paristo voi räjähtää, jos se on virheellisesti asennettu. Vaihda paristo ainoastaan laitevalmistajan suosittellemaan tyyppiin. Hävitä käytetty paristo valmistagan ohjeiden mukaisesti. (Finnish)



ATTENTION! Il y a danger d'explosion s'il y a remplacement incorrect de la batterie. Remplacer uniquement avec une batterie du même type ou d'un type équivalent recommandé par le constructeur. Mettre au rebut les batteries usagées conformément aux instructions du fabricant. (French)



ADVARSEL! Eksplosjonsfare ved feilaktig skifte av batteri. Benytt samme batteritype eller en tilsvarende type anbefalt av apparatfabrikanten. Brukte batterier kasseres i henhold til fabrikantens instruksjoner. (Norwegian)



標準品以外の使用は、危険の元になります。交換品を使用する場合、製造者に指定されるものを使って下さい。製造者の指示に従って処理して下さい。

(Japanese)



IMPORTANT! Depending on model, components used in the Notebook PC display panel may contain mercury. Recycle or dispose according to local, state, and federal laws.

Optical Drive Safety Information

Laser Safety Information

Internal or external optical drives sold with this Notebook PC contains a CLASS 1 LASER PRODUCT. Laser classifications can be found in the glossary at the end of this user's manual.



WARNING: Making adjustments or performing procedures other than those specified in the user's manual may result in hazardous laser exposure. Do not attempt to disassemble the optical drive. For your safety, have the optical drive serviced only by an authorized service provider.

Service warning label



CAUTION: INVISIBLE LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM OR VIEW DIRECTLY WITH OPTICAL INSTRUMENTS.

CDRH Regulations

The Center for Devices and Radiological Health (CDRH) of the U.S. Food and Drug Administration implemented regulations for laser products on August 2, 1976. These regulations apply to laser products manufactured from August 1, 1976. Compliance is mandatory for products marketed in the United States.



WARNING: Use of controls or adjustments or performance of procedures other than those specified herein or in the laser product installation guide may result in hazardous radiation exposure.

Macrovision Corporation Product Notice

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