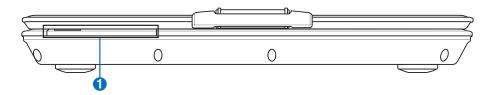
Front Side

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







3	Getting Started

3. Getting Started

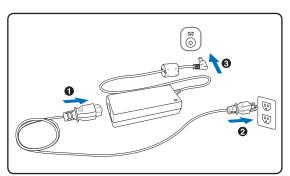
Using AC Power
Using Battery Power
Powering ON the Notebook PC
Checking Battery Power
Restarting or Rebooting
Powering OFF the Notebook PC
Special Keyboard Functions
Switches and Status Indicators

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 sup-



port 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.



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.

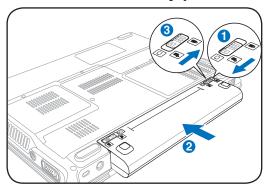
Installing and Removing the Battery Pack

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.

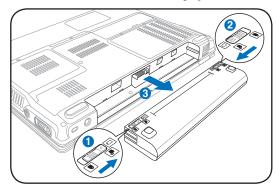


IMPORTANT! Never attempt to remove the battery pack while the Notebook PC is turned ON, as this may result in the loss of working data.

To install the battery pack:



To remove the battery pack:



ტ

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

Battery Care

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



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



() 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.

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 Window's disk checking program: (1) right-click any hard disk drive icon in "My Computer", (2) choose Properties, (3) click the Tools tab, (4) click Check Now, (5) select a hard disk drive, (6) select Thorough to also check for physical damages, and (7) click Start. Third party disk utilities such as Symantee's Norton Disk Doctor can



click Start. Third party disk utilities such as Symantec's Norton Disk Doctor can also perform the same functions but with greater ease and more features.



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.

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



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



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



Right-click the battery icon for sub-menus.



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



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



Left-click the battery icon for power management settings.



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

Charging the Battery Pack

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



NOTE: The battery stops charging if the temperature is too high or the battery voltage is too high.



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

3 Getting Started

Restarting or Rebooting

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



(Screens are different depending on security settings.)

Powering OFF

In Windows XP, power OFF the Notebook PC by clicking Windows Start button and select Shut Down and then choose Turn off (or Shut down). For operating systems without proper power management (DOS, Windows NT), you must close all



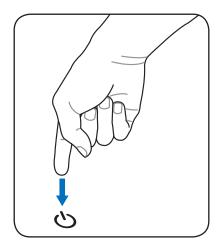
applications and exit operating systems and then power OFF by holding the power switch for 2 seconds (as opposed to 1 second to power ON). Holding the power switch for 2 seconds is necessary in order to prevent accidental power-OFFs.

6

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 \circlearrowleft over 4 seconds to shutdown your Notebook PC.



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 Saveto-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.)



Crossed-out Touchpad (F9): Toggles the built-in touchpad LOCKED (disabled) and UNLOCKED (enabled). Locking the touchpad will prevent you from accidentally moving the cursor while typing and is best used with an



external pointing device such as a mouse. Note: An indicator between the touchpad buttons will light when the touchpad is UNLOCKED (enabled) and not light when the touchpad is LOCKED (disabled).



Speaker Icons (F10):

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



Colored Hot Keys (Cont.)



F11

Speaker Down Icon (F11):

Decreases the speaker volume (only in Windows OS)





Speaker Up Icon (F12):

Increases the speaker volume (only in Windows OS)





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



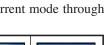


Scr Lk (Del): Toggles the "Scroll Lock" ON and OFF. Allows you to use a larger portion of the keyboard for cell navigation.





Fn+C: Toggles "Splendid Video Intelligent Technology" function ON and OFF. This allows switching between different display color enhanceplendid ment 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).



















Fn+V: Toggles "ASUS Life Frame" software application.







Fn+T: Toggles "Power For Phone" software application.





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

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

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

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

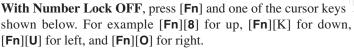
The numeric keypad is embedded in the keyboard and consists of 15 keys that make number intensive input more convenient.

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 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.

3

Getting Started

Switches and Status Indicators

Switches





Power4 Gear+ Key

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

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

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

(1) Wireless Switch of Switch

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.



(1) Power Switch

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



Status Indicators

Front





(*) Wireless Indicator

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



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



O Power Indicator

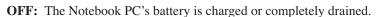
The power indicator lights when the Notebook PC is turned ON and blinks slowly when the Notebook PC is in the Suspend-to-RAM (Standby) mode. This indicator is OFF when the Notebook PC is turned OFF or in the Suspend-to-Disk (Hibernation) mode.



Battery Charge Indicator

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

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



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



Prive 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.



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



Capital Lock Indicator

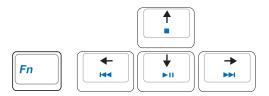
Indicates that capital lock [Caps Lock] is activated when lighted. Capital lock allows some of the keyboard letters to type using capitalized letters (e.g. A, B, C). When the capital lock light is OFF, the typed letters will be in the lower case form (e.g. a,b,c).



3 Getting Started

Multimedia Control Keys (on selected models)

The multimedia control keys allows for convenient controlling of the multimedia application. The following defines the meaning of each multimedia control key on the Notebook PC.



Use the [Fn] key in combination with the arrow keys for CD control functions.

▶II CD Play/Pause

During CD stop, begins CD play. **During CD play,** pauses CD play.

CD Stop

During CD stop: Ejects the CD tray. **During CD play:** Stops CD play.

CD Skip to Previous Track (Rewind) & Audio Volume Down

During CD play, this button has two functions:

Track: The first push will restart the current track. Second push will skip to the **previous** track.

Audio: Hold down to decrease audio volume.

CD Skip to Next Track (Fast Forward) & Audio Volume Up

During CD play, this button has two functions:

Track: Push once to skip to the next track during CD playing.

Audio: Hold down to increase audio volume.

(3) Audio Volume Controls

 $F_n + Speaker Icons (F10)$: Toggles the audio volume ON and OFF

 F_n **vi(**) **Fn + Down Speaker Icon (F11):** Decreases the audio volume

Fn + Up Speaker Icon (F12): Increases the audio volume

4. Using the Notebook PC

Pointing Device

Storage Devices

Expansion Card

Optical drive

Flash memory card reader

Hard disk drive

Memory (RAM)

Connections

Modem Connection

Network Connection

Wireless LAN Connection (on selected models)

Bluetooth Wireless Connection (on selected models)

Power Management Modes

Fingerprint Scanner (on selected models)

Trusted Platform Module (TPM) (on selected models)

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.



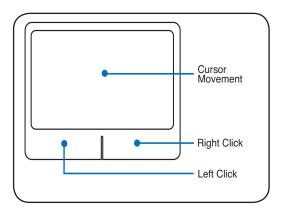
IMPORTANT! Do not use any objects in place of your finger to operate the touchpad or else damage may occur to the touchpad's surface.

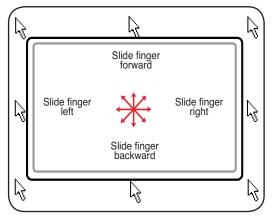


Light pressure with the tip of your finger is all that is required to operate the touchpad. Because the touchpad is electrostatic sensitive, objects cannot be used in place of your fingers. The touchpad's primary function is to move the cursor around or select items displayed on the screen with the use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





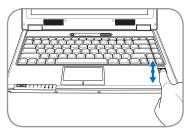
Scrolling (on selected models)

Slide your finger up or down on the right side to scroll a window up or down.

Scrolling on the fingerprint scanner

After software setup, you can use the fingerprint scanner as a scroll wheel like that on a mouse.



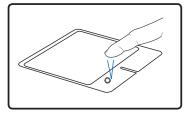


NOTE: A software-controlled scrolling function is available after setting up the included touchpad utility to allow easy Windows or web navigation.

☐ Touchpad Usage Illustrations

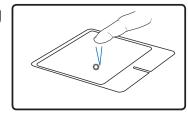
Clicking/Tapping - With the cursor over an item, press the left button or use your fingertip to touch the touchpad lightly, keeping your finger on the touchpad until the item is selected. The selected item will change color. The following 2 examples produce the same results.

Clicking



Press the left cursor button and release.

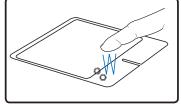
Tapping



Lightly but rapidly strike the touchpad.

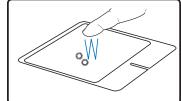
Double-clicking/Double-tapping - This is a common skill for launching a program directly from the corresponding icon you select. Move the cursor over the icon you wish to execute, press the left button or tap the pad twice in rapid succession, and the system launches the corresponding program. If the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

Double-Clicking



Press the left button twice and release.

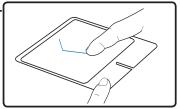
Double-Tapping



Lightly but rapidly strike the touchpad twice.

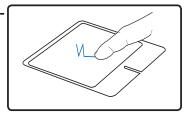
Dragging - Dragging means to pick up an item and place it anywhere on the screen you wish. You can move the cursor over the item you select, and while keeping the left button depressed, moving the cursor to the desired location, then release the button. Or, you can simply double-tap on the item and hold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

Dragging-Clicking



Hold left button and slide finger on touchpad.

Dragging-Tapping



Lightly strike the touchpad twice, sliding finger on touchpad during second strike.

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.

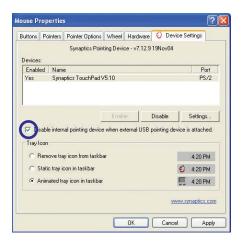
- Make sure the touchpad does not come into contact with dirt, liquids or grease.
- Do not touch the touchpad if your fingers are dirty or wet.
- Do not rest heavy objects on the touchpad or the touchpad buttons.
- Do not scratch the touchpad with your finger nails or any hard objects.



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 (on selected models)

Notebook PC models with newer chipsets will automatically disable the Notebook PC's touchpad when an external USB mouse is attached. To turn OFF this feature, deselect the option in Windows **Control Panel - Mouse Properties - Device Settings**.



Storage Devices

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

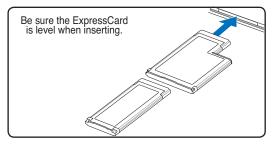
- Expansion Card
- · Optical drive
- Flash memory reader
- Hard disk drive

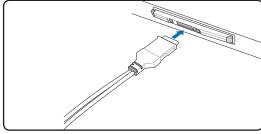
րդ Expansion Card

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



Inserting an Expansion Card





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

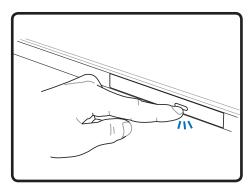
Removing an Expansion Card

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

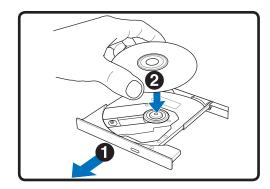


Optical Drive

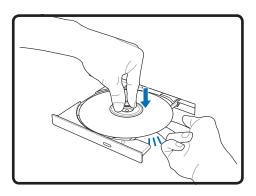
Inserting an optical disc



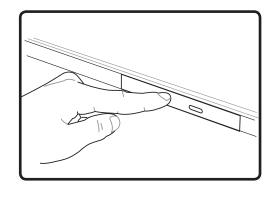
1. While the Notebook PC's power is ON, press the drive's eject button and the tray will eject out partially.



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.



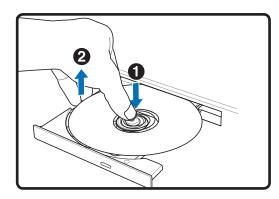
4. Slowly push the drive's tray back in. The drive will begin reading the table of contents (TOC) on the disc. When the drive stops, the disc is ready to be used.



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

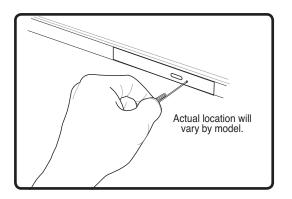
Optical Drive (Cont.)

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. Note: Make sure not to stab the activity indicator located in the same area.

Using the Optical Drive

Optical discs and equipment must be handled with care because of the precise mechanics involved. Keep in mind the important safety instructions from your CD suppliers. Unlike desktop optical drives, the Notebook PC uses a hub to hold the CD in place regardless of the angle. When inserting a CD, it is important that the CD be pressed onto the center hub or else the optical drive tray will scratch the CD.



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.

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

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

Listening to Audio CD

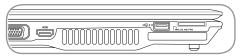
The optical drives can play audio CDs, but only the DVD-ROM drive can play DVD audio. Insert the audio CD and WindowsTM automatically opens an audio player and begins playing. Depending on the DVD audio disc and installed software, it may require that you open a DVD player to listen to DVD audio. You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

4 Using the Notebook PC



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. The

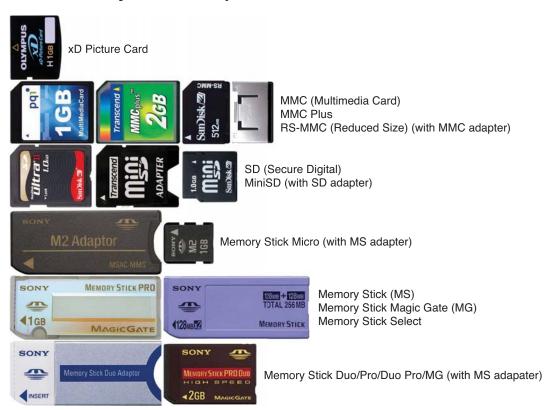


digital cameras, MP3 players, mobile phones, and PDAs. This Notebook PC has a single built-in memory card reader that can use many flash memory cards as shown in the example below. The built-in memory card reader is not only convenient, but also faster than most other forms of memory card readers because 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





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

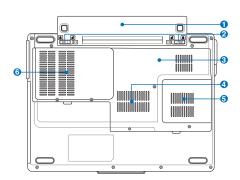
Hard Disk Drive

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 2.5" (6.35cm) wide and approximately .374" (.95cm) high 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.



6

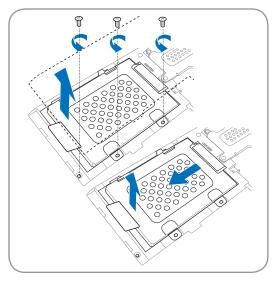
IMPORTANT! Poor handling of the Notebook PC may damage the hard disk drive. Handle the Notebook PC gently and keep it away from static electricity and strong vibrations or impact. The hard disk drive is the most delicate component and will likely be the first or only component that is damaged if the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



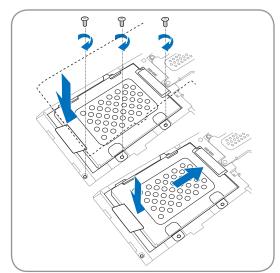
Hard Disk Drive Compartment

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

Removing the Hard Disk Drive



Installing the Hard Disk Drive



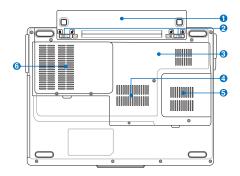
4

Using the Notebook PC

Memory (RAM)

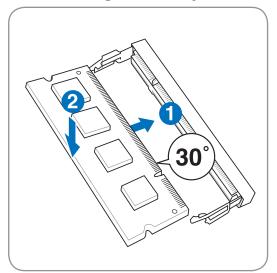
Additional memory will increase application performance by decreasing hard disk access. The BIOS automatically detects the amount of memory in the system and configures CMOS accordingly during the POST (Power-On-Self-Test) process. There is no hardware or software (including BIOS) setup required after the memory is installed.



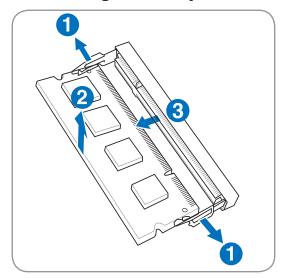


The memory compartment provides expansion capabilities for additional memory. Visit an authorized service center or retailer for information on memory upgrades for your Notebook PC. Only purchase expansion modules from authorized retailers of this Notebook PC to ensure maximum compatibility and reliability.

Installing a Memory Card



Removing a Memory Card



Connections



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.

Modem Connection

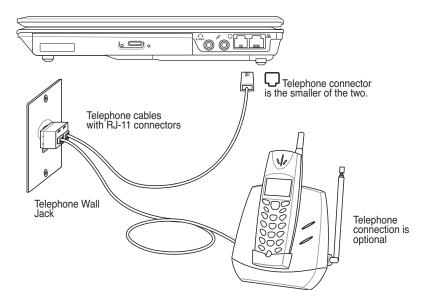
The telephone wire used to connect the Notebook PC's internal modem should have either two or four wires (only two wires (telephone line #1) is used by the modem) and should have an RJ-11 connector on both ends. Connect one end to the modem port and the other end to an analog telephone wall socket (the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



4

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:



6

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

4

Using the Notebook PC

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.



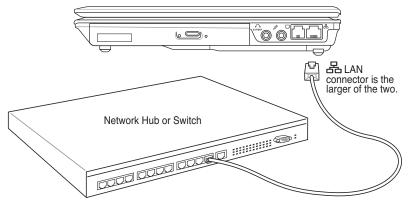
1000BASE-T (or Gigabit) is only supported on selected models.

Twisted-Pair Cable

The cable used to connect the Ethernet card to a host (generally a Hub or Switch) is called a straight-through Twisted Pair Ethernet (TPE). The end connectors are called RJ-45 connectors, which are not compatible with RJ-11 telephone connectors. If connecting two computers together without a hub in between, a crossover LAN cable is required (Fast-Ethernet model). (Gigabit models support auto-crossover so a crossover LAN cable is optional.)



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



Network cable with RJ-45 connectors



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!

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.)

Notebook PC Desktop PC

യ⊛യ

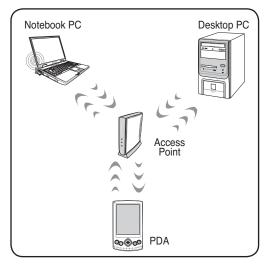
PDA

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

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.)



Intel PROSet (3945) Wireless LAN (on selected models) Connecting to a network

Press [FN F2] (or double click the Wireless Console icon on the taskbar). Four icons will appear as shown here. Click on the 1st setting to activate both Wireless & Bluetooth, or you may select the 2nd option for Wireless activation only.

- 1. Click Start | All Programs | Intel PROSet Wireless | Intel PROSet Wireless.
- 2. Select the Network by double clicking or click on connect. (Eg: WL-520G network)
- If the network has a security setup, a window will appear requesting a password to connect.
- After connecting, it will indicate that "You are connected to (network)" and showing the IP address.

Trouble Shooting

Changing network profile password

- 1. Select the Network then click **Profile** and click **Properties**.
- Profile name will not need to be changed. For "Operating Mode" select Infrastructure mode.
- 3. Select **Personal Security** and re-enter the password then click **Ok**.







