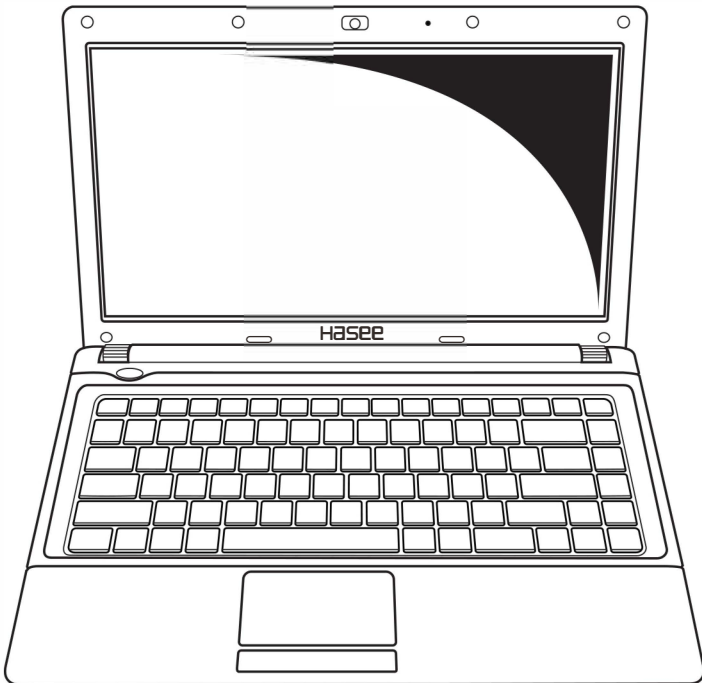


Hasee

E486

Laptop Computer



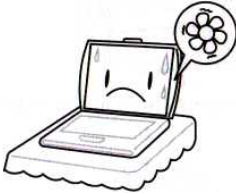
14" NOTEBOOK PC

Contents

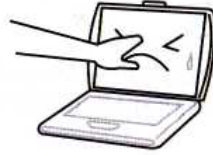
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Taking Care of your Notebook PC



To prevent possible overheating of the computer's processor, make sure you don't block the openings provided for ventilation.



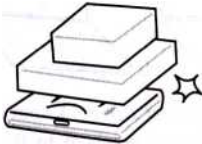
DO NOT press or touch the display panel.



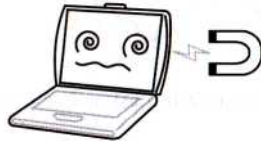
DO NOT place on uneven or unstable work surfaces.



DO NOT use your notebook under harsh conditions.



DO NOT place or drop objects on the computer and DO NOT apply heavy pressure on it.



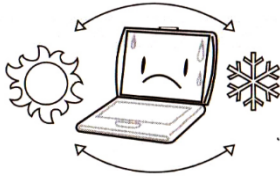
DO NOT subject the computer to magnetic fields.



DO NOT expose to direct sunlight.



DO NOT use in extreme temperatures.



Avoid sudden changes in temperature or humidity by keeping it away from A/C and heating vents.



DO NOT expose the computer to rain or moisture.



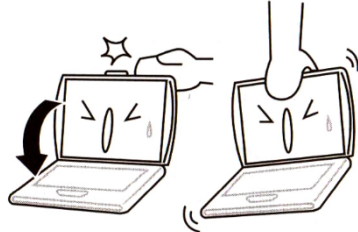
DO NOT place near fire or other sources of heat.



DO NOT tamper with the batteries. Keep them away from children.



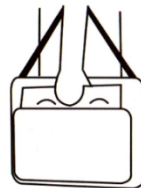
DO NOT expose to dust and/or corrosive chemicals.



DO NOT slam your notebook shut and never pick up or hold your notebook by the display



DO NOT spray water or any other cleaning fluids directly on the display.



If you are traveling with your computer, remember to carry it as hand luggage. Do not check it in as baggage.

Chapter 1

Introducing the Notebook PC

Components

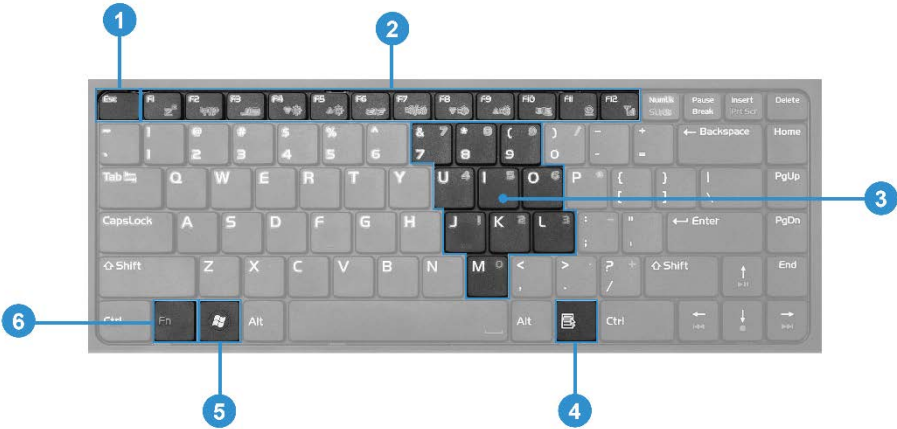
This chapter explains the hardware features of the computer. To see a list of installed hardware in the computer:

1. Select **Start > Settings > System > About**.
2. In the right pane of the window, select Device Manager.

You can also add hardware or modify device configurations using Device Manager.

Top Components

Keys

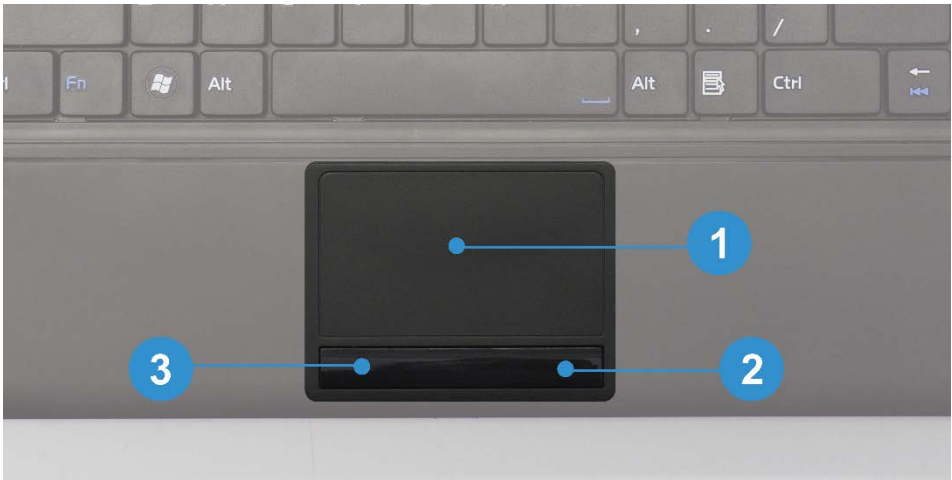


Components

Description

1. <i>esc</i> key	Displays system information when pressed in combination with the fn key
2. <i>Function</i> key	Execute frequently used system functions when pressed in combination with the fn key.
3. <i>Embedded numeric keypad</i> keys	Can be used like the keys on an external numeric keypad.
4. <i>Windows applications</i> key	Displays a shortcut menu for items beneath the pointer
5. <i>Windows logo</i> key	Displays the Microsoft Windows Start menu.
6. <i>fn</i> key	Executes frequently used system functions when pressed in combination with a function key or the esc key.

TouchPad



Components

Description

1. TouchPad	Moves the pointer and selects or activates items on the screen. Can be set to perform other mouse functions, such as scrolling, selecting, and double clicking.
2. Right TouchPad button	Functions like the right button on an external mouse.
3. Left TouchPad button	Functions like the left button on an external mouse.

This table describes default settings. To view and change TouchPad preferences, select **Start > Settings > Devices > Mouse and Touchpad > Additional Mouse Options.*

Front components



Components	Description
1. Memory Card Slot	Supports 7 optional digital card formats
2. Vent	Provides airflow to cool internal components.

CAUTION: To prevent overheating, do not obstruct vents. Use the computer only on a hard, flat surface. Do not allow another hard surface, such as an adjoining optional printer, or a soft surface, such as pillows or thick rugs or clothing, to block airflow.

NOTE: The computer fan starts up automatically to cool internal components and prevent overheating. It is normal for the internal fan to cycle on and off during routine operation.

Right Components

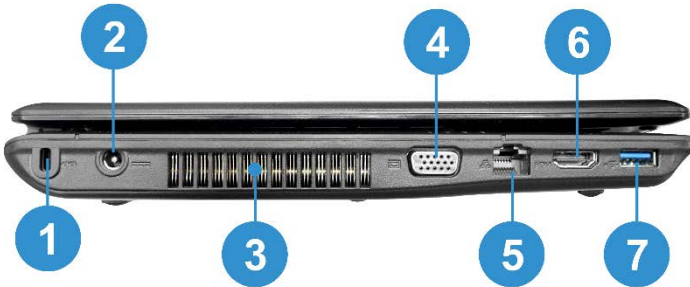


Components

Description

<i>1. Audio-out (headphone) jack</i>	Produces system sound when connected to optional powered stereo speakers, headphones, ear buds, a headset, or television audio.
<i>2. Audio-in (microphone) jack</i>	Connects an optional computer headset microphone or a microphone.
<i>3. USB 2.0 ports</i>	Connects an optional USB device.
<i>4. Optical drive</i>	Reads an optical disc.

Left Components



Components

Description

1. Security cable slot	Attaches an optional security cable to the computer. <i>NOTE: The security cable is designed to act as a deterrent, but may not prevent the computer from being mishandled or stolen.</i>
2. Power connector	Connects an AC adapter or an optional power adapter.
3. Vent	Provides airflow to cool internal components.
4. External VGA port	Connects an external monitor.
5. RJ-45 (network) jack	Connects a network cable.
6. HDMI Port	Connects an external monitor.
7. USB 3.0 Port	USB 3.0 adds the new transfer rate referred to as SuperSpeed USB (SS) that can transfer data at up to 5 Gbit/s (625 MB/s), which is about ten times as fast as the USB 2.0 standard

Additional Hardware Components



Components

- 1. Battery Pack*
- 2. AC adapter*
- 3. Power cord*

Description

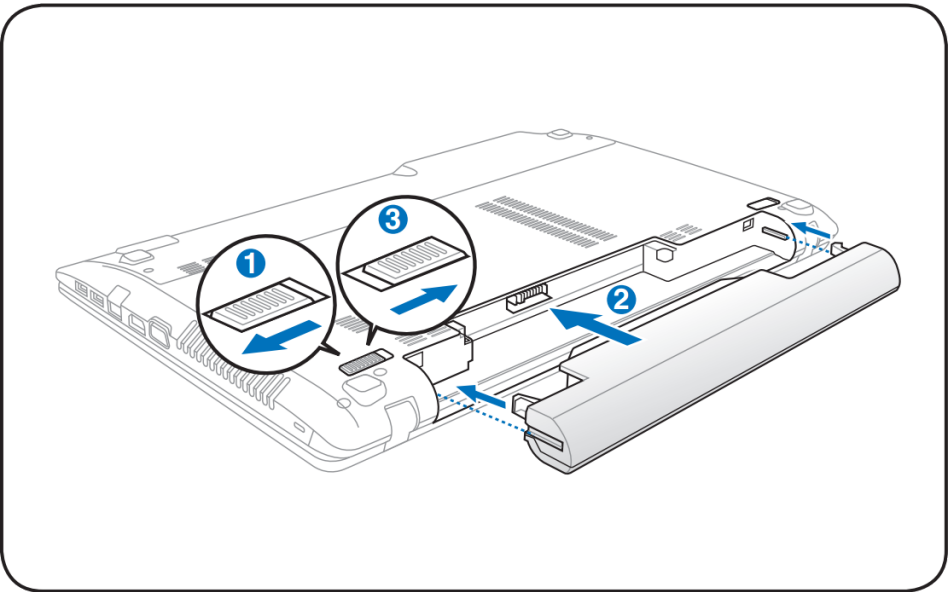
Powers the computer when the computer is not connected to external power.
Converts AC power to DC power.
Connects an AC adapter to an AC outlet.

Chapter 2

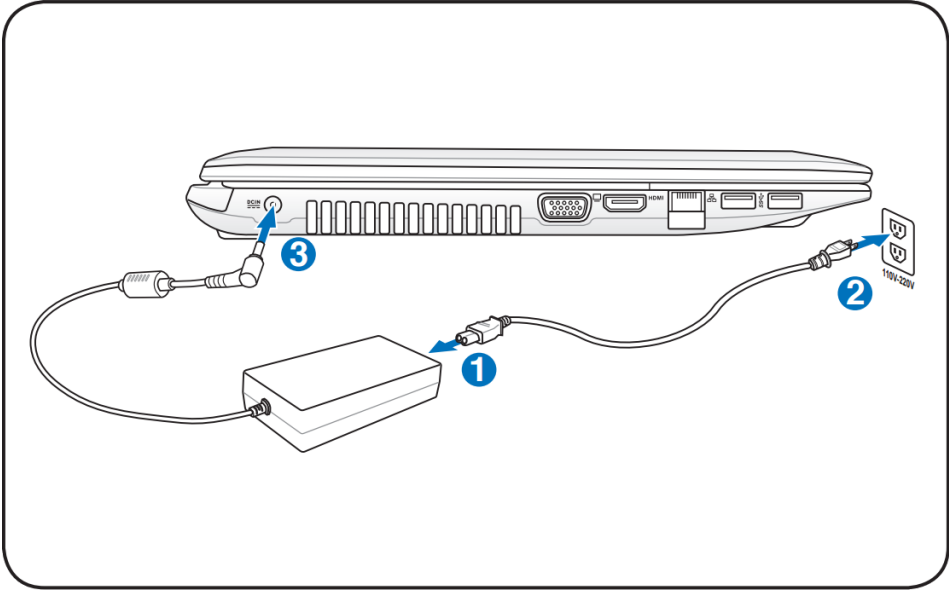
Preparing your Notebook PC

These are only quick instructions for using your notebook PC.

Installing Battery Pack

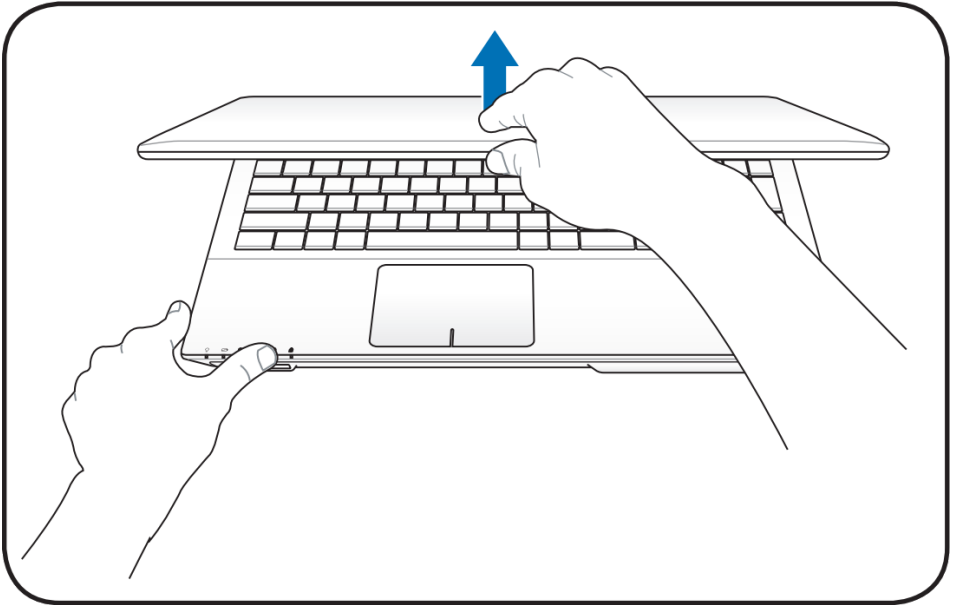


Connecting the Power Adapter



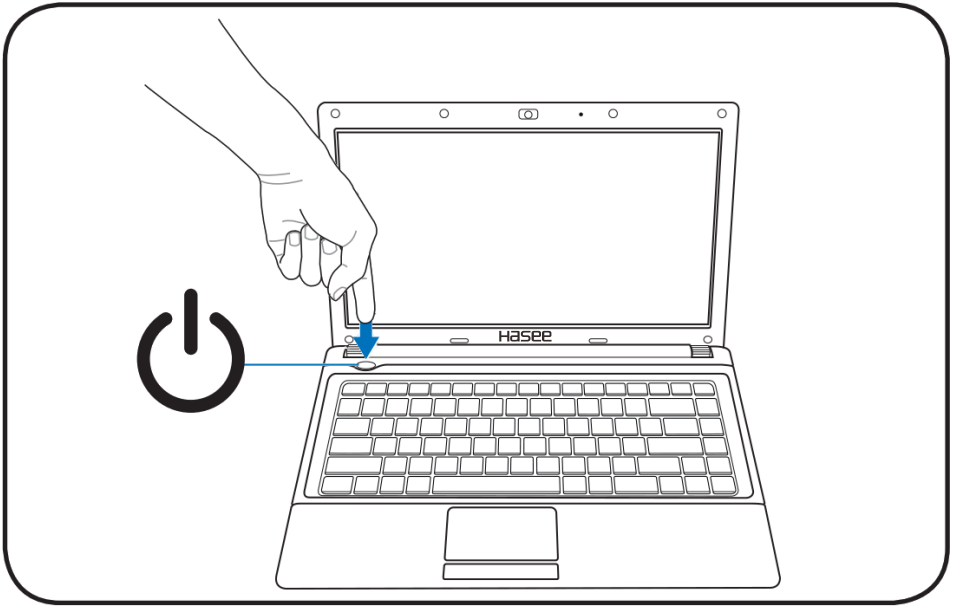
Opening the Display Panel

1. Carefully lift up the display panel with your thumb.
2. Slowly tilt the display panel forward or backward to a comfortable viewing angle.



Turning on the Computer

1. Push and release the power button located beneath the display panel.



Chapter 3

Using the Notebook PC

Touchpad

Using the Touchpad

To move the pointer, slide your finger across the Touchpad surface in the direction you want the pointer to go. Use the left and right Touchpad buttons as you would the left and right buttons on an external mouse. To scroll up and down using the Touchpad scroll zone, slide your finger up or down over the grooved lines on the Touchpad.

Using an external mouse

An external USB mouse can be connected to the computer using one of the USB ports on the computer. A USB mouse can also be connected to the system using the connectors on an optional expansion product.

Setting Touchpad preferences

Mouse Properties in Microsoft® Windows® allows you to customize settings for pointing devices, including

- Touchpad tapping, which enables you to tap the Touchpad once to select an object or twice to double-click an object (enabled by default).

- Edge motion, which enables you to continue to scroll even though your finger has reached the edge of the Touchpad (disabled by default).
- Button preference, which allows you to switch between left-hand and right-hand use (right-hand preference is enabled by default).

Other features, such as mouse speed preferences and mouse trails, are also found in Mouse Properties.

To access Mouse Properties, select **Start > Settings > Devices > Mouse and Touchpad**.

Keyboard

The following sections provide information on the keyboard features of the notebook.

Hotkeys

Hotkeys are combinations of the fn key (1) and either the esc key (2) or one of the function keys (3). The icons on the f1 through f12 keys represent the hotkey functions. Hotkey functions and procedures are discussed in the following sections.

<i>Components</i>	Description
1. <i>fn + F1</i>	Places the notebook in Suspend mode. Pressing the Power button returns it to active mode.
2. <i>fn + F2</i>	Enables or disables the wireless network connection and Bluetooth.
3. <i>fn + F3</i>	Allows you to change your selection of where to send your display video. Each time you press the combination of keys you will step to the next choice. The choices, in order, are: built-in display panel only, both built-in display panel and external monitor, or external monitor only.
4. <i>fn + F4</i>	Decreases the screen Brightness.

5. <i>fn + F5</i>	Increases the screen Brightness.
6. <i>fn + F6</i>	Enables or disables the touchpad.
7. <i>fn + F7</i>	Mutes the computer's volume.
8. <i>fn + F8</i>	Decreases the computer's volume.
9. <i>fn + F9</i>	Increases the computer's volume.
10. <i>fn + F10</i>	Enables or disables display panel.
11. <i>fn + F11</i>	Enables or disables the built-in camera.
12. <i>fn + F2</i>	Enables or disables the 3G network connection.

Hotkey procedures

To use a hotkey command on the computer keyboard, either

- Briefly press the *fn* key, and then briefly press the second key of the hotkey command or,
- Press and hold down the *fn* key, briefly press the second key of the hotkey command, and then release both keys at the same time.

Keypad

The computer has an embedded numeric keypad and also supports an optional external numeric keypad or an optional external keyboard that includes a numeric keypad.

Using the embedded numeric keypad

The 15 keys of the embedded numeric keypad can be used like the keys on an external keypad. When the embedded numeric keypad is turned on, each key on the keypad performs the function indicated by the icon in the upper-right corner of the key. Enabling and disabling the embedded numeric keypad Press **num lk** to enable the embedded numeric keypad. The num lock light is turned on. Press **num lk** again to return the keys to their standard keyboard functions.

Power Sources

Your computer has two types of power sources: a Lithium-Ion battery or an AC adapter.

CONNECTING THE POWER ADAPTERS

The AC adapter provides power for operating your notebook PC and charging the battery.

Connecting the AC Adapter

1. Plug the DC output cable into the DC power jack of your notebook PC.
2. Plug the AC adapter into an AC electrical outlet.

Switching from AC Adapter Power to Battery Power

1. Be sure that you have at least one charged battery installed.
2. Remove the AC adapter. Your notebook will automatically switch from DC power to battery power.

***Note:** The Lithium-Ion battery is not charged upon purchase. Initially, you will need to connect the AC adapter to use your notebook PC.*

RECHARGING THE BATTERY

The Lithium-Ion battery is recharged internally using the AC adapter. To recharge the battery, make sure the battery is installed and the computer is connected to the AC adapter. There is no "memory effect" in Lithium-Ion batteries; therefore, you do not need to discharge the battery completely before recharging. The charge times will be significantly longer if your notebook PC is in use while the battery is charging. If you want to charge the battery more quickly, put your computer into Suspend mode or turn it off while the adapter is charging the battery.

Low Battery State

When the battery charge is low, a notification message appears. If you do not respond to the low battery message, the battery continues to discharge until it is too low to operate. When this happens, your notebook PC goes into Suspend mode. There is no guarantee your data will be saved once the notebook reaches this point.

***Caution:** To protect your notebook from damage, use only the power adapter that came with it because each power adapter has its own power output rating.*

Once your notebook PC goes into Suspend mode as a result of a dead battery, you will be unable to resume operation until you provide a source of power either from an adapter or a charged battery. Once you have provided power, you can press the Suspend/ Resume button to resume operation. In Suspend mode, your data is maintained for some time, but if a power source is not provided promptly, the Power indicator stops flashing and then goes out, in which case you have lost the data that was not saved. Once you provide power, you can continue to use your computer while an adapter charges the battery.

Battery Replacement

There is danger of explosion if an incorrect battery type is used for replacement. For computers equipped with a replaceable lithium-ion battery pack, the following applies:

- If the battery is placed in an OPERATOR ACCESS AREA, there shall be a marking close to the battery, or a statement in both the operating and the servicing instructions;
- If the battery is placed elsewhere in the computer, there shall be a marking close to the battery or a statement in the servicing instructions. The marking or statement shall include the following or similar text:

***Caution:** Risk of explosion if battery is replaced with an incorrect type. Dispose of used batteries according to the instructions.*

Standby and hibernation

Standby and hibernation are energy-saving features that conserve power and reduce startup time. They can be initiated by you or by the system. For more information, refer to "Initiating standby, hibernation or shutdown."

Standby

***CAUTION:** To avoid a complete battery discharge, do not leave the computer in standby for extended periods. Connect the computer to an external power source.*

Standby reduces power to system components that are not in use. When standby is initiated, your work is stored in random access memory (RAM), and then the screen is cleared. When the computer is in standby,

the power lights blink. When you resume from standby, your work returns to the screen where you left off.

CAUTION: *To reduce the risk of information loss, save your work before initiating standby.*

Hibernation

CAUTION: *If the configuration of the computer is changed during hibernation, resuming from hibernation may not be possible. When the computer is in hibernation: Do not connect the computer to or disconnect the computer from an expansion product. Do not add or remove memory modules. Do not insert or remove any hard drives or optical drives. Do not connect or disconnect external devices. Do not insert or remove an external media card, such as a MultiMediaCard.*

Hibernation saves your work to a hibernation file on the hard drive, and then shuts down the computer. The power lights are turned off. When you restore from hibernation, your work returns to the screen where you left off. If a power-on password has been set, the password must be entered to restore from hibernation.

CAUTION: *To reduce the risk of information loss, save your work before initiating hibernation.*

You can disable hibernation. However, if hibernation is disabled and the system reaches a lowbattery condition, the system will not automatically save your work while power is on or when standby has been initiated.

Initiating standby, hibernation or shutdown

The following sections explain when to initiate standby or hibernation and when to shut down the computer.

NOTE: *You cannot initiate any type of networking communications or perform any computer functions while the computer is in standby or hibernation.*

When you leave your work

When standby is initiated, your work is stored in random access memory (RAM), and then the screen is cleared. When the computer is in standby, it uses less power than when it is on. Your work returns instantly to the screen when you resume from standby. Hibernation saves your work to a hibernation file on the hard drive, and then shuts down the computer.

When the computer is in hibernation, it uses much less power than when it is in standby. When the computer will be unused and disconnected from external power for an extended period, shut down the computer and remove the battery pack to extend the life of the battery pack. For details on battery pack storage, refer to "Storing a battery pack."

When a reliable power supply is unavailable







Be sure that hibernation remains enabled, especially if you are operating the computer on battery power and do not have access to an external power supply. If the battery pack fails, hibernation saves your work to a hibernation file and shuts down the computer. It is recommended that if you pause your work when the power supply is uncertain, you take one of the following actions:

- Save your work, and then initiate standby.
- Initiate hibernation.
- Shut down the computer.

Drives

Optical drives

An optical drive, such as a DVD-ROM drive, supports optical discs (CDs and DVDs). These discs are used to store or transport data and to play music and movies. DVDs have a higher capacity than CDs. The computer can read or write to optical drives as described in the following table.

<i>If your drive has this logo...</i>	This is your drive type...	Use your drive for...
	CD drive	Installing programs, playing audio CDs, and accessing data.
	CD-RW drive	Installing programs, playing audio CDs, accessing data, and creating CDs.
	DVD/CD-RW drive	Installing programs, playing audio CDs, accessing data, creating CDs, and playing DVDs.
	DVD drive	Installing programs, playing audio CDs, playing DVDs, and accessing data.
	DVD+RW	Installing programs, playing audio CDs, playing DVDs, accessing data, and recording video and data to DVD+R or DVD+RW discs.
	DVD R/RW drive	Installing programs, playing audio CDs, playing DVDs, accessing data, and recording video and data to DVD+R, DVD+RW, DVD-R, and DVD-RW discs.



Dual layer
DVD+RW

Installing programs, playing audio CDs, playing DVDs, accessing data, and recording video and data to double layer DVD+R discs. Note: To use the double layer capability of the double layer recordable DVD drive, the blank DVDs you purchase must state Double Layer, Dual Layer, or DL. Using other types of blank media will result in less capacity.

Inserting a CD or DVD

Inserting an optical disc

1. Turn on the computer.
2. Press the release button (1) on the drive bezel to release the media tray.
3. Pull out the tray (2).
4. Hold the CD or DVD by the edges to avoid touching the flat surfaces, and position the disc over the tray spindle, with the label-side up. NOTE If the tray is not fully accessible, tilt the disc carefully to position it over the spindle.
5. Gently press the disc (3) down onto the tray spindle until the disc snaps into place.



6. Close the media tray.

***NOTE:** After you insert a disc, a short pause is normal. If you have not selected a default media player, an AutoPlay dialog box opens. It prompts you to select how you want to use the media content.*

Playing a CD

Use the music program or Windows Media Player on your computer to:

- Play music CDs
- Create MP3 music files from your music CDs
- Edit music track information
- Use your music files to build a music library
- Listen to Internet Radio

Playing a DVD

A Digital Versatile Disc (DVD) is similar to a standard CD but has greater data capacity. Because of this increased capacity, full-length movies, several albums of music, or several gigabytes of data can fit on a single disc. You can play DVDs with the DVD program or Windows Media Player on your computer.

Creating CDs or DVDs

You can use the CD or DVD burning program on your computer to copy tracks from a music CD to your hard drive, copy or create data CDs and DVDs, create music CDs, create video DVDs, and more.

External Devices

Using a USB device

Universal Serial Bus (USB) is a hardware interface that can be used to connect an optional external device, such as a USB keyboard, mouse, drive, printer, scanner, or hub, to the computer or to an optional expansion product. A hub provides additional USB ports for the system and can be connected to the computer or to another hub.

Connecting a USB device

***CAUTION:** To prevent damage to the USB connectors, use minimal force to connect a USB device.*

To connect a USB device to the computer, connect the USB cable of the device to the USB port. The operating system will issue a sound to indicate that a device has been connected.

***NOTE:** The first time you connect a USB device, the "Found New Hardware" message is displayed in the notification area, at the far right of the taskbar.*

Stopping a USB device

***CAUTION:** To prevent loss of information or an unresponsive system, stop the USB device before removing it.*

To stop a USB device:

1. Double-click the Safely Remove Hardware icon in the notification area, at the far right of the taskbar.
2. Click the USB device listing.

NOTE: To display the Safely Remove Hardware icon, click Show Hidden Icons in the notification area.

3. Click Stop.

Required USB software

Some USB devices may require additional support software, which is usually included with the device. For more information about device-specific software, refer to the user guide for the device.

Wireless LAN

Wireless LAN features

A wireless computer includes Wi-Fi or Bluetooth® wireless capability or both.

These devices differ in the following ways:

- Wireless computer can connect to wireless local area networks (WLANs) in corporate offices, your home, and public places such as airports, restaurants, coffee shops, hotels, and universities. Hotspots are public places where you can access a wireless network. Contact your Internet service provider (ISP) or search the Web for a list of hotspots near you.
- A Bluetooth wireless computer can connect to other Bluetooth wireless-enabled devices such as computers, phones, printers, headsets, speakers, and cameras.

NOTE: The computer may look different from the illustrations in this guide. The location and number of buttons, lights, and jacks vary by model.

Wireless controls

The wireless button (**fn + F2**) enables and disables Wi-Fi and Bluetooth wireless devices, and the wireless light indicates the state of the wireless devices.

You can enable and disable the wireless devices with the wireless button. You can also enable and disable the wireless devices in the Setup Utility.

Connecting to a WLAN

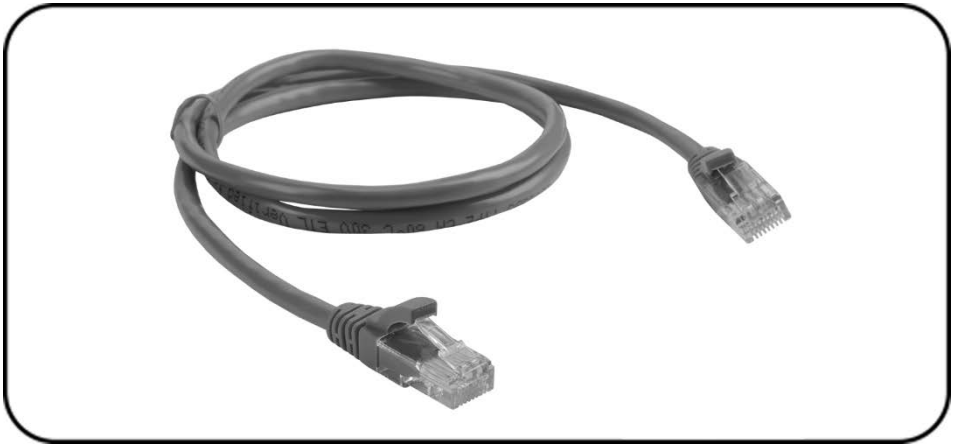
To connect to your WLAN:

1. Be sure that the Wi-Fi device is on. If it is on, the wireless light is on.
2. Be sure that your router is correctly installed and configured. For instructions, refer to your router user guide.
3. Use the Wireless Network Connection feature to connect the computer to the WLAN.

***NOTE:** Functional range for subsequent WLAN connections will vary, depending on the computer WLAN implementation, router manufacturer, and interference from walls and other electronic devices.*

Local area networks

Connecting to a local area network (LAN) requires an 8-pin, RJ-45 network cable (not included). Orient the circuitry end of the cable toward the computer.



To connect the network cable:

1. Plug the network cable into the network jack on the computer.
2. Plug the other end of the cable into a network router.

Chapter 4

Routine Care

Hardware Maintenance

The computer is designed for durability and long operating life. Follow the routine care guidelines described in this chapter to extend the life of the computer and maintain its peak performance.

- Carry and store the computer in a portable carrying case.

***CAUTION:** To reduce the risk of damage to the display, do not place anything on top of the computer, even when it is in the carrying case.*

- Avoid exposing the computer to direct sunlight, extreme temperatures, or ultraviolet light for extended periods.

***CAUTION:** Do not expose the computer or drives to temperature or humidity extremes.*

- Keep the computer clean. Dust buildup can raise the temperature of internal components.

***WARNING!** To avoid potential discomfort or burns, do not block the air vents or use the computer on your lap for extended periods. The computer is designed to run demanding applications at full power. As a result of increased power consumption, it is normal for the computer to feel warm or hot when used continuously.*

***CAUTION:** To reduce the risk of electric shock or damage to the computer:*

Always disconnect the computer from the AC outlet and disconnect peripherals from the computer before attempting to clean the computer or any of its components.

Do not spray liquids on the computer keyboard, display, or drives, or allow liquids to drip onto them.

CAUTION: *To prevent overheating, do not obstruct vents. Use the computer only on a hard, flat surface. Do not allow another hard surface, such as a printer, or a soft surface, such as pillows, thick rugs, or clothing, to block the airflow.*

Battery pack

If a computer will be unused and disconnected from external power for more than 2 weeks, remove the battery pack and store it separately.

To prolong the charge of a stored battery pack, place it in a cool, dry place.

Disposing of a used battery pack

WARNING! *When a battery pack has reached the end of its useful life, do not dispose of the battery pack in general household waste. Follow the local laws and regulations in your area for computer battery pack disposal.*

Touchpad and keyboard

Dirt and grease on the Touchpad can cause the pointer to jump around on the screen. To avoid this, clean the Touchpad with a damp cloth, and wash your hands frequently when using the computer.

WARNING! *To reduce the risk of electric shock or damage to internal components, do not use a vacuum cleaner attachment to clean the keyboard. A vacuum cleaner could deposit household debris on the keyboard surface.*

Clean the keyboard regularly to prevent keys from sticking and to remove dust, lint, and particles that can become trapped beneath the keys. A can of compressed air with a straw extension can be used to blow air around and under the keys to loosen and remove debris.



Display

To remove smudges and lint, frequently clean the display with a soft, damp, lint-free cloth. If the screen requires additional cleaning, use premoistened antistatic wipes or an antistatic screen cleaner.

CAUTION: *To prevent permanent damage to the computer, never spray water, cleaning fluids, or chemicals on the display.*

Drives

Drives are fragile components that must be handled carefully. Follow the guidelines in this section to protect the drives.

CAUTION: To reduce the risk of damage to the computer, damage to a drive, or loss of information, observe these precautions:

- Before handling a drive, discharge static electricity by touching the unpainted metal surface of the drive.
- Do not touch the connector pins on a removable drive or on the computer.
- Handle a drive carefully; do not drop or compress the drive.
- Do not use excessive force when inserting a drive into a drive bay.
- Do not type on the keyboard or move the computer while the drive is writing to a medium. The write process is sensitive to vibration.
- When the battery pack is the only source of power, ensure that the battery pack is sufficiently charged before writing to a medium.

Using Disk Defragmenter

As you use the computer, the hard disk files become fragmented. Disk Defragmenter consolidates the fragmented files and folders on the hard disk so that it can run more efficiently.

To run Disk Defragmenter:

1. Select **Start > Settings > System > About > Additional Administrative Tools > Defragment and Optimize Drives**.
2. Click a volume, and then click Optimize.

For additional information, access the Disk Defragmenter Online Help.

Using Disk Cleanup

Disk Cleanup searches the hard disk for unnecessary files that you can safely delete to free up disk space and help the computer to run more efficiently.

To run Disk Cleanup:

1. Select **Start > Settings > System > About > Additional Administrative Tools > Disk Cleanup**.
2. Follow the instructions on the screen.

Regular tune-ups

To keep the computer hardware and software running like new, perform these simple tasks periodically.

- **Install and/or update the antivirus software.** Protect against current security threats to the computer by installing antivirus software. Keep the antivirus software up to date to protect against the ongoing threat of new viruses.
- **Install and update software that detects and removes spyware.** Spyware tools allow you to detect and prevent electronic encroachment into the computer system by outside parties.
- **Enable service reminders.** Subscriber's Choice is a free service that allows you to receive instant e-mail notification about product updates, software drivers, and creative ideas to help you get more out of the computer.
- **Create a backup strategy.** A virus or an electrical outage could damage or destroy your information. Back up your files onto a CD-RW, DVD+RW, or USB drive to protect the security of your files.
- **Create a restore point.** In the event of a computer problem, these benchmarks allow you to go back in time to a point before the computer encountered a problem.
- **Create a PC tune-up schedule.** Create weekly and monthly reminders to back up files, update virus software, and perform hardware and software maintenance.

Chapter 5

Troubleshooting

The computer will not start up.

To turn on the computer, press the power button. When the computer is turned on, the power light is turned on.

If the computer and the power light are not turned on when you press the power button, adequate power may not be available to the computer.

The suggested actions below may help you determine the reason the computer will not start up:

- If the computer is plugged into an AC outlet, verify that the AC outlet is providing adequate power by plugging another electrical device into the outlet.
- If the computer is running on battery power or is plugged into an external power source other than an AC outlet, plug the computer into an AC outlet using the AC adapter. Make sure the power cord and AC adapter connections are secure.
- If the computer is running on battery power:
 - Remove the primary battery pack and travel battery pack (if applicable) and plug the computer into an AC outlet using the AC adapter. If the computer starts up, one of the battery packs may need to be replaced.
 - If the battery light on the front of the computer is blinking, the battery pack has reached a low-battery condition, which may not allow the computer to start up. Plug the computer into an AC outlet using the AC adapter to start the computer and allow the battery to charge.

The computer screen is blank.

If you have not turned off the computer but the screen is blank, the computer may be in standby or hibernation, may not be set to display the image on the computer screen, or the display switch may not be functioning properly.

The suggested actions below may help you determine the reason the computer screen is blank.

- To resume from standby or restore from hibernation, briefly press the power button.
Standby and hibernation are energy-saving features that can turn off the display. Standby and hibernation can be initiated by the system while the computer is in Microsoft® Windows® but is not in use or has reached a critical low-battery condition. To change these and other power settings, select **Start > Settings > System > Power and sleep > Additional power settings**.
- To transfer the image to the computer screen, press fn+f3. On most models, when an optional external display device, such as a monitor, is connected to the computer, the image can be displayed on the computer screen or the external display, or on both devices simultaneously. When you press fn+f3 repeatedly, the image alternates among the computer display, one or more external display devices, and simultaneous displays on all devices.
- Press the display switch fn+10.

The software is functioning abnormally.

If the software becomes unresponsive or responds abnormally:

- Restart the computer:
 - Select **Start > Power > Restart**. If you cannot restart the computer using these procedures, refer to the next section, "The computer is turned on, but is not responding."

- Run a virus scan.
- If the computer feels unusually warm, allow it to cool to room temperature. For more information about computer overheating, refer to "The computer is extremely warm." later in this chapter.
- If you are using an optional wireless mouse, make sure that the mouse battery has an adequate charge.

The computer is turned on, but is not responding.

If the computer is turned on, but is not responding to software applications or keyboard commands, try first to shut down the computer through the operating system by selecting **Start > Power > Shutdown**.

If the computer remains unresponsive, try the emergency shutdown procedures in the following sequence:

1. If the computer is in Windows, press **ctrl+alt+delete**. Then, click Power button located at lower right of the window pane then click **Shutdown**.
2. If you cannot shut down the computer by using **ctrl+alt+del**, press and hold the power button for at least 5 seconds.
3. If you are unable to shut down the computer by using the power button, unplug the computer from external power and remove the battery pack.

The computer is extremely warm.

It is normal for the computer to feel warm to the touch while it is in use. But if the computer feels extremely warm, it may be overheating because a vent is blocked. If you suspect that the computer is overheating, allow the computer to cool to room temperature. Then be sure to keep all vents free from obstructions while you are using the computer.

CAUTION: To prevent overheating, do not obstruct vents. Use the computer only on a hard, flat surface. Do not allow another hard surface, such as a printer, or a soft surface, such as a pillow or a thick rug or clothing, to block airflow.

An external device is not working.

If an external device does not function as expected:

- Turn on the device as instructed in the device user guide. Some devices, such as monitors and printers, may not be powered by the computer, and must be turned on before the computer is turned on.
- Verify that:
 - All device connections are secure.
 - The device is receiving electrical power.
 - The device, especially if it is an older one, is compatible with the operating system. For compatibility information, refer to the Web site of the device manufacturer.
 - The correct drivers are installed and updated. Drivers may be available on a CD included with the device or on the Web site of the device manufacturer.

The computer cannot connect to a wireless local area network (WLAN).

If the computer cannot connect to a WLAN:

- Verify that the computer is within optimal range of a wireless router (access point).
- Verify that the wireless light on the computer is turned on.
- Verify that the computer wireless antennae are free from obstructions.

- Verify that the wireless router and broadband modem are working correctly.

FCC Caution:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

Hasee