ALL IN ONE USER GUIDE



All In one

SIV0223

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product notice

This guide describes features that are common to most products. some features may not be available on your computer.

software terms

BY installing, copying, downloading, or otherwise using any software product

preinstalled on this computer, you agree to be bound by the terms of the End user License Agreement.

For any further information , please contact your seller.

safety warning notice

WARNINGI Toreduce the possibility of heat-related injuries or of overheating the computer, do not place the computer directly on your lap or obstruct the computer air vents. use the computer only on a hard, flat surface. Do not allow another hard surface, such as an adjoining optional printer, or as oft surface, such as pillows or rugs or clothing, to block airflow. Also, do not allow the Acadapter to come into contact with the skin or a soft surface, such as pillows or rugs or clothing, during operation. The computer and the AC adapter comply with the user-accessible surface temperature limits defined by the International standard for safety of Information Technology Equipment (IEC60950).

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1 Getting to knowyour computer

Locating hardware

yourcomputerfeaturestop-rated components. This chapterprovides details aboutyourcomponents, where they're located, and how they work.

To find out what hardware is installed on your computer:

L Type device manager in the taskbarsearchbox, and then selectthe Device Managerapp.

A list displays all the devices installed on your computer.

Locating software

To find out what software is installed on your computer:

 Δ click start button, and then select All programs.

setting up your computer

MWARNING! To reduce the risk of electrical shock or damage to your equipment:

- o place the computer in a location away from water, dust, moisture, and soot. These environmental factors can increase the temperature inside your computer or cause fire or electrocution.
- o Do not disable the powercord grounding pin. The grounding pin is an important safety feature.
- o plug the power cord into anAC Outletthat is easily accessible at all times.
- Disconnect powerfrom the equipmentby unplugging the powercord from the AC Outlet. To prevent direct exposure to the laserbeam, do not try to open the enclosure of the cD Or DVD drive.
- Thepowersupplyis presetforthe countryorregion inwhichyou purchasedyourcomputer. If you move, checkthevoltagerequirementsforyournew locationbeforepluggingthecomputerinto anAC outlet.

To reduce the risk of serious injury read the safety&comfort Guide.

- 1. place the computers othat all ventilation openings are unobstructed and cabling is not in a walkway or where it can be stepped on or damaged by placing furniture on it.
- 2. when connecting all powercordsfrom the monitor, computer, and accessories to an uninterruptible powersupply(ups), it is recommended that you use a powersurge protection detection device. If the computer has a television tuner, or a modem or telephone connection, protect the computer by using surge protection with these signal inputs as well.connect the television cable or the telephone line cord to the surge protection device, and then connect the device to the computer.
- 3. Download and install operating system updates.
- 4. Look in the computer boxforadditional printed details or updates.

Afteryou complete the initial computer setup, you might want to install additional hardwared evices or software. check the operating system, memory, and other requirements listed for these items before purchasing them for your computer. Follow these ftware manufacturer's directions to install the newsoftware.

shutting down (turning off) the computer

CAUTION: unsaved information is lostwhenthecomputershutsdown. Besureto saveyourworkbefore shutting down the computer.

The shutdown command closes all open programs , including the operating system , and then turns offthe display and computer.

shutdown the computer under any of the following conditions:

- when you need to access components inside the computer
- when you areconnecting anexternal hardwaredevice thatdoes notconnect to a USB or video port or to a headphone or microphonejack
- when the computer will be unused and disconnected from external powerforan extended period.

NOTE: If the computer is in the sleep state or in Hibernation, first exit sleep or Hibernation by briefly pressing the power button.

- 1. save yourwork and close all open programs.
- 2. select the start button, select the power icon, and then select shutdown.

If the computer is unresponsive and you are unableto use the preceding shutdown procedures, trythe following emergency procedures in the sequence provided:

- o press ctrl+alt+delete, select the power icon, and then select shutdown.
- o press and hold the power button for at least10 seconds.
- Disconnect the computerfrom external power.

USB ports

your computer may have four or more of the USB Ports.

2 connecting to a network

yourcomputer can travel with you whereveryou go. But even at home, you can explore the globe and access information from millions of websites using your computer and a wired or wireless network connection. This chapterwill help you get connected to that world.

connecting to a wireless network

your computer may be equipped with one or more of the following wireless devices:

WLAN device—connects the computer towireless local area networks (commonly referred to aswi-Finetworks, wireless LANs, orwLANs) incorporate offices, yourhome, and public places such as airports, restaurants, coffeeshops, hotels, and universities. Ina WLAN, the mobile wireless device inyour computer communicates with a wireless router or a wireless access point.

using the wireless controls

You can control the wireless devices in your computer using one or more of these features:

- Airplanemodekey(alsocalled wirelessbutton orwirelesskey)(referred to in this chapter as airplane mode key)
- o operating system controls

Airplane mode key

The computer may have an airplane mode key, one or more wireless devices, and one or two wireless lights. All the wireless devices on your computer are enabled at the factory.

The wireless light indicates the overall powerstate of your wireless devices, not the status of individual devices.

operating system controls

The Networkandsharingcenterallowsyou to setup a connection ornetwork, connectto a network, and diagnose and repair network problems.

To use operating system controls:

on the taskbar, right-click the network status icon, and then select open Network&Internet settings.

connecting to a WLAN

NOTE: whenyou are setting up Internetaccess inyourhome, you mustestablish an accountwith an Internetservice provider(ISP). Topurchase Internetserviceand a modem, contacta local ISP. The lsp will helpsetupthemodem, install a networkcabletoconnectyourwireless routertothe modem, andtest the Internet service.

To connect to a WLAN, follow these steps:

- 1. Be sure that the wLAN device is on.
- 2. onthetaskbar, right-clickthe networkstatus icon, and then connectto one of the available networks.

If thewLAN is a security-enabled wLAN, you are prompted to enter a security code. Enter the code, and then select Next to complete the connection.

- 含 NOTE: If no WLANs are listed, you may be out of range of a wireless router or access point.
- WOTE: Ifyou do not see the WWLAN You want to connectto:
 - 1. on the taskbar, right-clickthe network status icon, and then select open Network&Internet settings.
 - or -

on the taskbar, select the network status icon, and then select Network&Internet settings.

- 2. under the Network&Internet status section, select Network and sharing center.
- 3. select setup a new connection or network.

A list of options is displayed, allowing you to manually search for and connect to a network or to create a new network connection.

3. Follow the on-screen instructions to complete the connection.

Afterthe connection is made, right-clickthe networkstatus icon atthefarrightofthetaskbar, toverifythe name and status of the connection.

NOTE: Thefunctional range(how faryour wireless signalstrave)depends on wLAN implementation, router manufacturer, and interferencefromotherelectronicdevices orstructural barrierssuch aswallsandfloors.

Using Bluetooth wireless devices (for certain models)

ABluetooth device provides short-range wireless communications that replace the physical cable connections that traditionally link electronic devices such as the following:

- o computers (desktop, notebook)
- o phones (cellular, cordless, smart phone)
- Imaging devices (printer, camera)
- o Audio devices (headset, speakers)
- o Mouse
- o External keyboard

connecting Bluetooth devices

Before you can use a Bluetooth device, you must establish a Bluetooth connection.

- 1. Type bluetooth in the taskbar search box, and then select Bluetooth and otherdevices settings.
- 2. select Add Bluetooth or other device.

- 3. select your device from the list, and then follow the on-screen instructions.
- 含 NOTE: f the device requires verification, a pairing code is displayed. on the device you are adding, follow the on-screen instructions to verify that the code on your device matches the pairing code. For more information, refer to the documentation provided with the device.

NOTE: Ifyourdevice does not appear in the list, be sure that Bluetooth on that device isturned on . some devices may have additional requirements; refer to the documentation provided with the device.

connecting to a wired network-LAN

useaLAN connection ifyouwant to connectthecomputerdirectly to a router in your home (insteadof working wirelessly), or ifyou wantto connectto an existing networkatyouroffice.

connecting to a LAN requires an RJ-45(network) cable and anetworkjack oran optional docking device or expansion port, if there is no RJ-45jack on the computer.

To connect the network cable, follow these steps:

- 1. plug the network cable into the networkjack(1) on the computer.
- 2. plug the otherend of the network cable into a networkwall jack(2) or router.
- NOTE: If the networkcablecontains noisesuppressioncircuitry(3), which prevents interferencefrom TV and radio reception, orientthe circuitryend of the cable toward the computer.



3 Enjoying entertainment features

useyourcomputer as an entertainment hub to socialize viathe camera, enjoyand manage yourmusic, and download and watch movies. or, to make your computer an even more powerful entertainment center, connect external devices like a monitor, projector, TV, speakers, or headphones.

Using the camera (for certain models)

your computermay have one or more cameras thatenableyou toconnectwith othersforwork or play. camerasmaybe frontfacing, rearfacing, orpopup. see thesetupInstructionsorQuicksetupposter provided with your product for camera details.

Most cameras allowyou tovideo chat, record video, and record still images. some also provide HD(high-definition), appsforgaming, orfacial recognitionsoftwarelikewindows Hello.

To use yourcamera, type camera inthetaskbarsearchbox, and then select camera from the list of applications.

using audio

on yourcomputer, oron selectproductsusing an external opticaldrive, you can playmusic CDs, download and listento music, streamaudiocontent fromtheweb(includingradio), record audio, or mix audioand video tocreatemultimedia. To enhanceyourlisteningenjoyment, attach external audio devicessuch as speakers or headphones.

connecting speakers

on selectproducts , you can attach wiredspeakerstoyourcomputerbyconnectingthemto ausB Port, to an audio-out(headphone)ortoan audio-out(headphone)/audio-in(microphone)combojackon your computer.

To connect wireless speakers to your computer, follow the device manufacturer's instructions.

connecting headphones

WARNING! Toreduce therisk of personal injury, lower the volume setting before putting on headphones, earbuds, or a headset. For additional safety information, see the Regulatory, safety and ENviRonmental Notices.

on select products, you can connectwired headphones to an audio-out(headphone)jack orto an audio-out (headphone)/audio-in (microphone) combojack on your computer.

To connect wireless headphones to your computer, follow the device manufacturer's instructions.

connecting a microphone

on select products, connect a microphone to the audio-in (microphone)jack on the computerto record audio. Forbest results when recording, speak directly into the microphone and records ound in a setting free of background noise.

using sound settings

usesound settingsto adjustsystem volume, changesystem sounds, or manage audio devices.

To view or change sound settings:

Type control panel in the taskbarsearchbox, selectcontrol panel, select Hardware and sound, and then select sound.

yourcomputermayincludean enhancedsoundsystem. As a result, yourcomputermayinclude advancedaudio features that can becontrolled through an audiocontrol panel specific to your sound system.

use the audio control panel to view and control audio settings.

Type control panel in the taskbarsearch box, select control panel, select Hardware and sound, and then select the audio control panel specificto yoursystem.

using video

your computer is a powerful video device that enables you to watch streaming video from your favorite websites and download video and movies to watch on your computer when you are not connected to a network.

To enhance your viewing enjoyment, use one of the video ports on the computer to connect an external monitor, projector, or TV.

讼 MPORTANT: Be sure that the external device is connected to the correct port on the computer, using the correct cable. Follow the device manufacturer's instructions.

Connecting video devices using a USB Type-C cable (for certain models)

NOTE: Toconnect a USB Type-CThunderboltTM device to yourcomputer, you need a USB Type-c cable, purchased separately.

To see video or high-resolution display output on an external Thunderbolt device, connectthe Thunderbolt device according to the following instructions:

1. connectone end of the usBType-ccable to the usBType-CThunderboltport on the computer.



- 2. connect the otherend of the cable to the external Thunderbolt device.
- 3. press the switch screen key, forexample f4, to alternate the computer screen image between 4display states.
 - pc screen only: view the screen image on the computeronly ·
 - Duplicate:viewthescreen imagesimultaneouslyon boththe computerandtheexternaldevice.
 - Extend: viewthe screen image extended across both the computerand the external device.
 - second screen only: viewthe screen image on the external device only.

Each time you press the key, the display state changes.

含 NOTE: Forbestresults, especialyifyouchoosethe "Extend" option, increasethe screen resolution of the external device, as follows. select the start button, select thesettings icon 如, and then select system. underDisplay, selectthe appropriate resolution, and then select keepchanges.

Connecting video devices by using a VGA cable (for certain models)

NOTE:

Tosee the computer screen image on an external vGA monitor or projected fora presentation, connect a monitor or projectorto the computer'S VGA port.

1. connectthevGAcablefrom the monitor or projectortothevGAport on the computer as shown.



- 2. presstheswitch screen key, forexamplef4, toalternate the screen imagebetween4displaystates:
 - pc screen only: viewthe screen image on the computer only.
 - Duplicate:viewthe screen imagesimultaneously on boththecomputerandtheexternal device.
 - Extend:viewthe screen imageextended across boththe computerand theexternal device.
 - second screen only:view the screen image on the external device only.

Each time you press he key, the display state changes.

含 NOTE: Forbest results, especiallyifyouchoosethe "Extend" option, increase the screen resolution of the external device, as follows. select the start button, select the settings icon io, and then select system. underDisplay, selecttheappropriate resolution, and then selectkeepchanges.

Connecting video devices using an HDMI cable (for certain models)

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NOTE:
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To see the computer screen image on a high-definition Tvor monitor, connectthe high-definition device according to the following instructions:

1. connect one end of the HDMI Cable to the HDMI Port on the computer.



- 2. connectthe otherend of the cable to the high-definition Tvor monitor.
- ^{3.} pressthe switch screen key, forexample f4, to alternate the computer screen image between 4display states:
 - pc screen only: view the screen image on the computeronly.
 - Duplicate:viewthescreen imagesimultaneouslyon boththecomputerandtheexternaldevice.
 - Extend: viewthe screen image extended across both the computerand the external device.
 - second screen only:view the screen image on the external device only.

Each time you press he key, the display state changes.

NOTE: Forbestresults, especiallyifyouchoosethe "Extend" option, increase the screen resolution of the external device, as follows. select the start button, select the settings icon 💩, and then select system. underDisplay, selecttheappropriate resolution, and then selectkeepchanges.

connecting digital display devices using a Dual-Mode Display port cable (for certain models)

NOTE: Toconnect a digital display device to your computer, you need a Dual-Mode Display port (DP-DP) cable, purchased separately.

TheDual-ModeDisplay portconnects a digital display devices uch as a high-performance monitor or projector. The Dual-Mode Display portdelivers higher performance than the vGA external monitor portand improves digital connectivity.

1. connectone end of the Dual-Mode Display portcable to the Dual-Mode Display port on the computer.



- 2. connectthe other end of the cable to the digital display device.
- 3. pressthe switch screen key, forexample f4, to alternate the computer screen image between 4display states:
 - pc screen only: viewthe screen image on the computer only.
 - Duplicate:viewthesamescreen imagesimultaneouslyon boththecomputerandtheexternal device.
 - Extend:viewthe screen image extended across both the computerand the external device.
 - second screen only:view the screen image on the external device only.

Each time you press he key, the display state changes.

含 NOTE: Forbestresults, especiallyifyouchoosethe "Extend" option, increase the screen resolution of the external device, as follows. select the start button, select the settings icon 如, and then select system. underDisplay, selecttheappropriate resolution, and then select keepchanges.

Discovering and connecting to Miracast-compatiblewireless displays (select products only)

Todiscoverand connectto Miracast-compatible wireless displays without leaving yourcurrentapps, follow the stepsbelow.

To open Miracast:

Typeproj ect in the taskbarsearchbox, and then click projectto a second screen. clickconnectto a wireless display, and then follow the on-screen instructions.

4 Navigating the screen

You can navigate the computer screen in the following ways:

- using touch gestures(for certain models)
- Using the keyboard and mouse

select computermodelshavespecialaction keys or hot keyfunctions on thekeyboard to perform routine tasks.

Using touch gestures (for certain models)

you can customize the touch gestures by changing settings, button configurations, clickspeed, and pointer options.

Type control panel in thetaskbarsearchbox, and then select control panel. select Hardware and sound. under Devices and printers, select Mouse.

含 NOTE: Touch gestures are not supported in all apps.

Using the keyboard and mouse (for certain models)

Thekeyboardand mouseallow you totype, select items, scrolland to perform the same functions as you do usingtouch gestures. Thekeyboard alsoallowsyouto use action keys and hotkeys to perform specific functions.

Tip: The windows key **T** on thekeyboard alowsyouto auickiy returntothestartscreenfrom an

open app or the windows desktop. press the key again to return to the previous screen.

NOTE: Depending onthecountryorregion, the keys and keyboardfunctionsofyourkeyboardmaybe differentfrom those discussed in this section.

Using the action keys or hot keys (for certain models)

You can quickly access information or perform functions by using certain keys and key combinations.

 Actionkeys—perform an assigned function. The icons on the functionkeys at the top of the keyboard illustrate the assigned function for that key.

To use an action key function, press and hold the key.

• Hot keys—A Combination of the fn key and the esc key, the spacebar, or the appropriate actionkey. To use ahotkey, brieflypressthefn key, and then brieflypressthesecondkeyof the combination.

Depending on the computer model, your keyboard may support the following keys.

lcon	Description
?	opens the "How to get help in windows 10" webpage.

lcon	Description
*	Decreases the screen brightness incrementally as long as you hold down the key.
*	Increases the screen brightness incrementally as long as you hold down the key.
ioi	switches thescreen imagebetweendisplaydevicesconnected tothesystem. Forexample, if a monitor is connected to the computer, repeatedly pressing this key alternates the screen image from the computer displaytothe monitordisplaytoa simultaneousdisplay on boththecomputerand the monitor.
N	Turns the keyboard backlight off or on.
	NOTE: To conserve battery power, turn off this feature.
144	plays the previous track of an audio CD Or the previous section of a DVD Or a Blu-ray Disc (BD).
►II	starts, pauses, or resumes playback of an audio CD, a DVD, or a BD.
	plays the next track of an audio CD Or the next section of a DVD Or a BD.
	stops audio or video playback of a CD, a DVD, or a BD.
┫-	Decreases speaker volume incrementally while you hold down the key.
4 +	Increases speaker volume incrementally while you hold down thekey.
	Mutes or restores speaker sound.
((+))	Turns the wireless feature on or off.
.1.	NOTE: A Wireless network must be set up before a wireless connection is possible.
	Turns the airplane mode and wireless feature on or off.
T	NOTE: The airplane mode key is also referred to as the wireless button.
	NOTE: A Wireless network must be set up before a wireless connection is possible.

5 Maintaining yourcomputer

It is important to perform regular maintenance to keepyour computer in optimal condition. It also provides instructions for updating programs and drivers, steps to clean the computer, and tips for traveling with (or shipping) the computer.

Improving performance

you can improve the performance of your computer by performing regular maintenance tasks with tools such as Disk Defragmenter and Disk cleanup.

Using Disk Defragmenter (for certain models)

using Disk Defragmenter to defragment your hard drive at least once a month.

XOTE: It is not necessary to run Disk Defragmenter on solid-statedrives.

Using Disk Cleanup (for certain models)

use Diskcleanupto search the hard drive for unnecessaryfilesthatyou can safelydeletetofree up diskspace and help the computer run morE efficiently.

updating programs and drivers

It is recommended that you update your programs and drivers on a regular basis. updates can resolve issues and bring newfeaturesand optionsto yourcomputer. Forexample, oldergraphics components mightnot workwellwiththe mostrecent gaming software. without the latest driver, youwould not begetting the most out of your equipment.

cleaning your computer

use the following products to safely clean your computer:

- Dimethyl benzyl ammonium chloride 0.3percent maximum concentration (forexample, disposable wipes, which come in a variety ofbrands)
- Alcohol-free glass-cleaningfluid
- solution ofwater and mild soap
- Dry microfibercleaning cloth ora chamois (static-free cloth without oil)
- static-free clothwipes

CAUTION: Avoidstrongcleaningsolventsthatcan permanentlydamageyourcomputer. Ifyou are notsure thata cleaning productissafeforyourcomputer, checktheproductcontentsto make surethat ingredients such as alcohol, acetone, ammonium chloride, methylene chloride, and hydrocarbons are not included in the product.

Fibrous materials, such as papertowels, can scratch the computer. overtime, dirt particles and cleaning agents can gettrapped in the scratches.

cleaning procedures

Follow the procedures in this section to safely clean your computer.

WARNING! To preventelectricshockordamagetocomponents, do notattemptto cleanyourcomputer while it is on.

- 1. Turnoffthe computer.
- 2. Disconnect Acpower.
- 3. Disconnect all powered external devices.

CAUTION: To prevent damageto internal components, donot spraycleaning agents or liquids directly on any computer surface. Liquids dripped on the surface can permanently damage internal components.

cleaning the display

Gentlywipethe displayusinga soft, lint-freecloth moistenedwith an alcohol-freeglasscleaner. Be sure that a display is dry before you open the computer.

cleaning the sides or cover

To cleanthe sides orcover, usea soft microfibercloth orchamois moistened with one of the cleaning solutions listed previously, or use an acceptable disposable wipe.

MOTE: when cleaning the cover of the computer, usea circular motion to aid in removing dirt and debris.

Cleaning the TouchPad, keyboard, or mouse (for certain models)

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

ACAUTION: To prevent damage to internal components, do not allow liquids to drip between the keys.

- Toclean the Touchpad, keyboard, or mouse, use a softmicrofibercloth ora chamois moistened with one of the cleaning solutions listed previously or use an acceptable disposablewipe.
- To preventkeys fromstickingandto remove dust, lint, and particles from the keyboard, use a can of compressed air with a straw extension.

Traveling with or shipping your computer

If you have to travel with or ship your computer, follow these tips to keep your equipment safe.

- prepare the computerfortraveling or shipping:
 - Backup your information to an external drive.
 - Remove all discs and all external media cards, such as memory cards.
 - Turn offand then disconnect all external devices.
 - shutdown the computer.
- Take along a backup ofyour information. keepthe backupseparate from the computer.
- whentravelingbyair, carrythecomputeras hand luggage;donotcheckitinwiththerestofyour luggage.

CAUTION: Avoid exposing a drive to magnetic fields. security devices with magnetic fields include airportwalk-throughdevicesandsecuritywands. Airport conveyer beltsandsimilarsecuritydevices thatcheckcarry-on baggage usex-rays instead ofmagnetism and do notdamage drives.

- If you planto use the computer during affight, listenfor the in-flight announcement that tells you when you are allowed to use your computer. In-flight computer use is at the discretion of the airline.
- If you are shipping the computer ora drive, use suitable protective packaging and label the package "FRAGILE."
- The use of wireless devices maybe restricted in some environments. such restrictions mayapplyaboard aircraft, in hospitals, nearexplosives, and inhazardous locations. If you are uncertain of the policy that applies to the use of a wireless device in your computer, ask for authorization to use your computer before you turn it on.
- o Ifyou are traveling internationally, follow these suggestions:
 - check thecomputer-related customs regulationsforeachcountry or region on youritinerary.
 - checkthepowercordandadapterrequirements foreach location inwhich you planto use the computer. voltage, frequency, and plug configurations vary.

WARNING! To reduce the risk of electric shock, fire, or damage to the equipment, do not attempt to power the computer with a voltage converter kit sold for appliances.

6 securing yourcomputer and information

yourcomputerincludesfeaturesthathelpprotectthe integrityofyoursystemand its datafrom unauthorized access. Reviewthese features to ensure proper use.

computer security features

computer risk	computer feature
unauthorized use ofthecomputeror	user password
user account	A password is a group of characters that you choose. These characters must be entered to authorize access to your computer information.
	—or -
	windows Hello(for certain models)
	on products equipped with a fingerprint reader oran infrared camera, you can use windows Hello to sign inby swiping your finger or looking at the camera.
	To set up windows Hello, follow these steps:
	1. select the start button, selectthe settings icon O , selectAccounts, and then selectsign- in options.
	2. underwindowsHello, followthe on-screen instructions to add both a password and a 4-digit PIN, and then enroll yourfingerprint or facial ID.
unauthorized access to setuputility, BIOS Settings, and other system identification information	Administrator password
computer viruses	Antivirus software
	The free trial antivirus software that is preinstalled on your computer can detect most viruses, remove them, and, in most cases, repairdamage caused byviruses. Forprotection against new viruses beyondthe trial period, purchase an extended service.
unauthorized accesstodataand	Firewall software
ongoing threats to the computer	• windows includes firewall software preinstalled on the computer.
	• The antivirus software, which is preinstalled on the computer, includes firewall software.
	windows critical security updates
	updates to the windows operating system

7 Troubleshooting

If you haveproblemsusing any peripheral devices such as a monitororal printer with your computer, for more extensive troubles hooting reference the documentation provided by the product manufacturer. The following tables present some issues you might encounter while installing, starting up, or using your computer and suggest possible solutions.

computer does not start

symptom	possible solution	
Error message: hard drive error	 Restart thecomputer. press ctrl+alt+delete. selectthe power icon, and then select Restart. or - press and hold the power button on the computer for 5 or more seconds to turn off the computer, and then press the button to turn on the computer. If windows opens, immediately backup all important datatoa backup hard drive. 	
	3. contactsupport(regardless ofwhetherwindows started or not).	
computer will not turn on or start	Besure that the cables connecting the computer to the AC Outlet are plugged in properly. The power supply light on the computer should be on. If it is not, try a different AC Outlet. If you are still having trouble, contact support.	
	Be sure that the operating voltage of the AC Outlet is appropriate for the electrical voltage of the computer.	
	Test the AC Outlet by plugging a different electrical device into it.	
	If possible, remove any outlet filters and stabilizers, and then insert the power plug directly into the AC Outlet.	
	Disconnect all peripheral devices press and hold the power button down for at least 15 seconds until the computer turns off. Then press the power button again to turn on the computer.	
	If themonitor screen isblank, the monitor might not beproperlyconnected. connectthemonitortothe computer, plug the powercord into anAC Outlet, and thenturnthemonitoron.	
computerisnot	press ctrl+alt+delete.	
responding	2. select Task Manager.	
	3. select any programs that are not responding, and then selectEndtask.	
	If closing programs does not resolve the problem, restart thecomputer.	
	1. press ctrl+alt+delete.	
	2. selectthe power icon, and then select Restart.	
	- or -	

symptom	possible solution
	press and hold the power button on the computer for 5 or more seconds to turn off the computer. Then press the power button again to turn on the computer.
Error message: Invalid system disk or Non- system disk or Disk error	whendrive activitystops, remove the optical disc insidetheoptical drive, and then press the spacebar on the keyboard.

power

symptom	possible solution
computer does not turn off when the power button is pressed	press and hold the power button until the computer turns off. Then turn the computer on again.
computer shuts down automatically	 The computermight be in an exceedingly hot environment. Let it cool down. Be sure thatcomputerairvents are not blocked. NOTE: If your computer has an internal fan, be sure that the internal fan is running.

Display(monitor) (for certain models)

possible solution	
Reconnect the power cable to the back of the monitor and to the AC Outlet.	
press the power button on the monitor.	
press the space bar on the keyboard or move the mouse to redisplay the screen image.	
press the sleep button(for certain models)oresc, to resume from sleep mode.	
press the power button to turn on the computer.	
Inspect the monitor cable for bent pins.	
 Ifany of the pins are bent, replace the monitorcable. 	
 Ifno pins are bent, reconnect the monitorcable to the computer. 	
Adjust the monitor resolution setting in windows.	
selectthe start button, selectthe settings icon 🔯, and thenselectsystem. underDisplay, selectthe	
appropriate resolution, and then select keepchanges.	

NOTE: In addition to the information listed here, refer to the documentation that came with your monitor.

keyboard and mouse (with cable)

symptom	possible solution
keyboard commands and typ ng are notrecogn zed by thecomputer	use the mouse to turn off the computer. Disconnect and reconnect the keyboard to your computer and then restart your computer.
Mouse (with cable) does	Disconnect and reconnect the mouse cable to your computer.
detected	If the mouse is still not detected turn off the computer disconnect and reconnect the mouse cable and then restart the computer.
cursordoes notrespond to the arrow keys on the number keypad	press num lock on the keyboard to turn off num lock, So that the arrow keys on the number keypad can be used
cursordoes notrespond to mouse movement	 press alt+tabto navigate to an open program. press ctrl+sto save yourchanges inthe selected program (ctrl+s isthe keyboard shortcutforthe save command on most—not all—programs). Repeatstep 1 and step2to save changes in all open programs. press the power button to turnoffthe computer. Afterthe shutdown is complete, disconnect and reconnectthe mouse cableto yourcomputer, and then restart yourcomputer.

keyboard and mouse(wireless)

symptom	pos	ssible solution
wireless keyboard or mouse doesnotwork oris not detected	•	Be sure that you are using the wireless keyboard or wireless mouse within range of the transceiver, approximately 10 meters(32 feet)for normal use, andwithin30cm(12inches)during initialsetup or for re-synchronization.
	•	Be sure that the mouse isnot insuspend mode, which occurs after 20 minutes of inactivity. click the left mouse button to reactivate the mouse.
	•	Replacethe batteries in the keyboard and/or mouse.

speakers and sound

symptom	possible solution
volumeisverylowor unsatisfactory	Be sure that you connected the speakers to the audio-out jack on the computer. (Additional audio jacks are used for multiple-channel speakers.) Detached nonpowered speakers (speakers without a separate power source, such as batteries or a power cord) do not produce satisfactory sound. Replace the nonpowered speakers with powered speakers.
No sound is produced	 Type control panel in the taskbarsearchbox, and then selectcontrol panel. selectsystem and security. undersecurity and Maintenance, select Troubleshoot computerproblems, and then select Troubleshoot audio playback.
	Be sure that you connected powered speakers and that they are turned on.
	Turnoffyourcomputer, and thendisconnectand reconnectthespeakers. Be sure that the speakers are connected to an audiojack, not a microphone or headphonejack.

possible solution

To resume from sleep mode, press the sleep button(for certain models), or press esc.

unplug headphones if they are connected to your computer (or speaker system).

Internet access

symptom	possible solution		
cannotconnecttothe Internet	Type control panel in the taskbarsearchbox, and then select control panel. under Networkand sharing center, select connectto a network.		
	verify that you are using the proper cables for your Internet connection type. your computer might have a dial- up modem and an Ethernet network adapter (also called a network interface card, or NIC). A modem uses a standard telephone cable, whereas the networkadapter uses a networkcable, to connecttoa local area network(LAN). Do not connect a telephone cable to the network adapter, anddonot connect a network cable to a telephone line; doing so mightdamage the network adapter.		
	 Run the wireless setup wizard. 1. Type control panel in thetaskbar searchbox, and then selectcontrol panel. select Network and Internet, and then select Networkand sharing center. 2. In the Networkand sharing centerwindow, selectsetup anew connection or network to open thewizard, and then follow the on-screen instructions. 		
	If your system has an external antenna, try moving the antenna to a better position. If the antenna is internal, try moving the computer.		
Try to connect again later, or contact your lsp for assistance.			
cannot connect to the Internet but there is no errormessage	 Right-click ortapand holdthe networkstatus icon inthe notification area, at thefarrightofthetaskbar. select Troubleshoot problems. 		
No network connection icon inthenotification area	 Type repair in thetaskbarsearch box, and then select Identifyand repair network problems. Followthe on-screen instructions. 		

software troubleshooting

symptom	possible solution		
To resolve software problems, try these methods:	Turn the computer offcompletely, and then turn it on again.		
	update the drivers. see "updating device drivers" in thistable.		
	Restoreyourcomputertoa configuration that was in use before the software was in Restore" in this table.	stalled. see "Microsoftsystem	
	Reinstall the software program or hardware driver. see "software program and hard table.	lware driver reinstallation" in this	
	Erase and reformat the hard drive , and then reinstall the operatingsystem , program all thedatafilesthatyou have created.	s, anddrivers. This process erases	
software programs are slow to respond	close unnecessarysoftware programs.		
	Run virus scans and othersystem tools when the computer is not in use.		

symptom	possible solution		
	stop startup applications (such as messaging software and multimedia applications) from loading.		
	1. Type ms config in thetaskbarsearchbox, and then selectsystem configuration.		
	NOTE: If you are prompted for an administrator password or confirmation, type the password or provide confirmation.		
	2. From the General tab, select selective startup.		
	3. select the startup tab, and then select open TaskManager.		
	4. select the startup itemsthatyouwant to preventfrom loading, and thenselect		
	Disable. NOTE: If you are unsure about an item, do not disable it.		
	5. If prompted, select Restart to restart the computer.		
	NOTE: To enable a program to load at startup, restart the computer and reverse these steps.		
	Disable nonessential graphics capabilities.		
	1. Type file explorer in the taskbarsearch box, and then select File Explorer.		
	2. Right-click or tap and hold This Pc, and then select properties.		
	3. selectAdvanced system settings.		
	NOTE: If you are prompted for an administrator password or confirmation, type the password or provide confirmation.		
	4. From theAdvanced tab under performance, select settings.		
	5. From thevisual Effects tab, selectAdjustforbest performance, and then select ok.		
updating device drivers	complete the following procedure to update a driver, orto revert to an earlier version of the driver if the new one does not solve your problem.		
	1. Type device manager in thetaskbarsearch box, and then select Device Manager.		
	 select thearrow to expand the listof thetype ofdeviceyou want to update or roll back(forexample, DVD/CD- ROM drives). 		
	3. Double-click or double-tapthe specific item.		
	4. select the Drivertab.		
	5. To update a driver, select updateDriver, and then follow the on-screen instructions.		
	- or -		
	To revert to an earlier version of a driver, select Roll Back Driver, and then follow the on-screen instructions.		
Microsoft system Restore	If you have a problem that might be caused by software that you have installed on your computer, use system Restore to return the computer to a previous restore point. You can also set restore points manually.		
	IMPORTANT: Always use this system Restore procedure before you use the system Recovery program.		
	For more information and steps, see the Get Help app.		
	Δ select the start button, and then selectthe Get Help app.		
software program and hardware driver reinstallation	Before you uninstall a program, besure that you haveaway to reinstall it. confirmthatitisstillavailablefrom the original source (forexample, discs or the Internet).		
	NOTE: some features might not be available on systems that are shipped without a version of windows.		

8 Backing up, restoring, and recovering

This chapterprovides information about the following processes, which are standard procedure for most products:

- Backing up yourpersonal information—you can use windows tools to backup your personal information .
- o creating arestore point-you can use windowstoolstocreate arestore point .
- Restoringand recovery—windowsoffersseveral optionsforrestoring from backup, refreshingthe computer, and resetting the computer to its original state.

Backing up information and creating recovery media

using windows tools

讼 iMPORTANT: windows is the only option that allows you to back up your personal information. schedule regular back ups to avoid information loss.

you can use windows tools to backuppersonal information and create system restore points and recovery media.

- NOTE: If computer storage is 32 GB Or less, Microsoft system Restore is disabled by default. For more information and steps, see the Get Help app.
 - Δ select the start button, and then select the Get Help app.
 - NOTE: You must be connected to the Internet to access the Get Helpapp.

Restoring and recovery

Restoring, resetting, and refreshing using windows tools

windows offers several options for restoring, resetting, and refreshing the computer.

9 specifications

operating specifications

NOTE: Todeterminetheexact electrical ratingsofyourcomputer, refertothecomputerratings label, located on the outside of the computer.

Factor	Metric	U.S.
operating temperature	5'c to 35'c	41 o F to 95oF
storage temperature	-20'c to 60oc	-22oF to 149'F
operating humidity	15% to 80% @26c	15% to 80% @ 78oF
operating altitude	0 m to 2000 m	0 ft to 6561 ft
storage altitude	0 m to 4572 m	0 ft to 15000 ft

10 Electrostatic Discharge

Electrostatic discharge is the release of static electricity when two objects come into contact—for example, the shockyou receive when you walk across the carpet and touch a metal doorknob.

A discharge of static electricity from fingers or other electrostatic conductors may damage electronic components.

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

- o If removal or installation instructions direct you to unplugthecomputer, first be surethat it is properly grounded.
- o keepcomponents in theirelectrostatic-safe containers until you are readyto install them.
- o Avoid touching pins, leads, and circuitry. Handle electronic components as little as possible.
- o use nonmagnetictools.
- o Beforehandlingcomponents, dischargestatic electricitybytouching an unpainted metal surface.
- o Ifyou remove a component, place it in an electrostatic-safe container.

FCC Statement

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.

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, pursua nt 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 a nd, if not installed and used in accordance with the instructions, may cause harmful interference to radio comm unications. 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 th e equipment off and on, the user is encouraged to try to correct the interference by one or more of the followin g 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. Important Note:

Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. Country Code selection feature to be disabled for products marketed to the US/Canada.

ISED Statement

- English: This device complies with Industry Canada license-exempt RSS standard(s).

Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) This d evice must accept any interference, including interference that may cause undesired operation of the device. The digital apparatus complies with Canadian CAN ICES-3 (B)/NMB-3(B).

- French: Le présentappareilestconforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitationestautorisée aux deux conditions suivantes: (1) l'appareil ne doit pas pr oduire de brouillage, et (2) l'utilisateur de l'appareildoit accepter tout brouillageradioélectriquesubi, mêmesi le b rouillageest susceptible d'encompromettre le fonctionnement.

This radio transmitter has been approved by Industry Canada to operate with the antenna types listed with the maximum permissible gain indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Le présent émetteur radio a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal. Les types d'antenne non inclus dans cette liste, et dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

Caution:

The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

Avertissement:

les dispositifs fonctionnant dans la bande de 5150 à 5250MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

Radiation Exposure Statement

This equipment complies with Canada radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Déclaration d'exposition aux radiations

Cet équipement est conforme Canada limites d'exposition aux radiations dans un environnement non contrôlé. Cet équipement doit être installé et utilisé à distance minimum de 20cm entre le radiateur et votre corps.

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