Getac

K120

USER MANUAL

March 2018

TRADEMARKS

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NOTE

The information in this manual is subject to change without notice.
For the latest version of the manual, please visit the Getac website at www.getac.com.

Table of Contents

Chapter 1

Getting Started

This chapter first tells you step by step how to get the computer up and running. Then, you will find a section briefly introducing the external components of the computer.

Getting the Computer Running

Installing the Micro-SIM Card (Optional) and Battery Packs

1. **Select models only:**

   The micro-SIM card slot is covered by a metal plate. Remove one screw to detach the plate.

   Noting the orientation, insert the micro-SIM card all the way into the slot.

   NOTE: To remove the micro-SIM card, just push in the card to release it and then pull it out.

2. The Tablet has two battery compartments for two battery packs; each is installed in the same way.

   With the battery pack correctly oriented, attach its connector side to the battery compartment at an angle (❶) and then press down the other side (❷). The battery latch should automatically engage.

3. Slide the lock of the battery latch downward to the locked position.

CAUTION: Make sure the battery latch is correctly locked, not revealing the underneath red part.

Locked: Unlocked（revealing red part）:

Lock
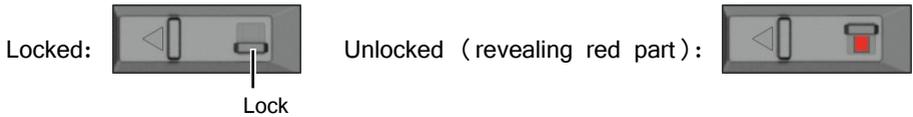
Connecting to AC Power

CAUTION: Use only the AC adapter included with your computer. Using other AC adapters may damage the computer.

NOTE:
- The battery pack is shipped to you in power saving mode that protects it from charging/discharging. It will get out of the mode to be ready for use when you install the battery pack and connect AC power to the computer for the very first time.
- When the AC adapter is connected, it also charges the battery pack. For information on using battery power, see Chapter 3.

You must use AC power when starting up the computer for the very first time.

1. **K120 Tablet:**

   Open the cover of the power connector. The cover is protected by a security lock. Slide the lock outward（❶）to unlock the cover.

   Plug the DC cord of the AC adapter to the power connector（❷）. Plug the female end of the AC power cord to the AC adapter and the male end to an electrical outlet （❸）.
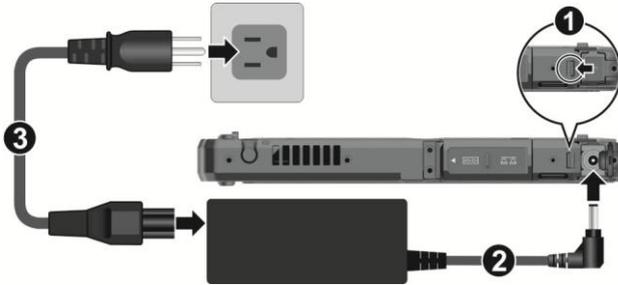
K120 Tablet with the Keyboard Dock:

Open the cover of the power connector.

Plug the DC cord of the AC adapter to the power connector（❷）. Plug the female end of the AC power cord to the AC adapter and the male end to an electrical outlet （❸）.
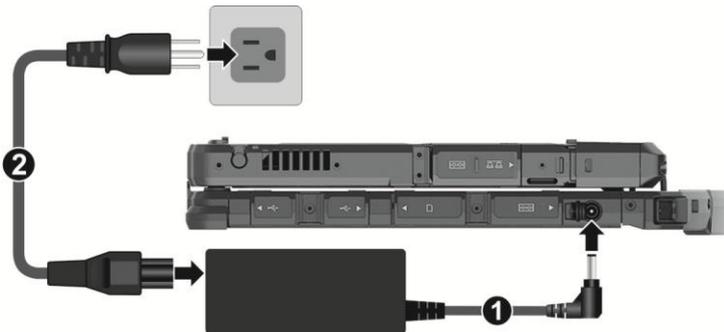
2. Power is being supplied from the electrical outlet to the AC adapter and onto your computer. Now, you are ready to turn on the computer.

Turning On and Off the Computer

Turning On

Press the power button （ ⏻ ） for at least 2 seconds until the Power Indicator lights up. The Windows operating system should start.

Turning Off

When you finish a working session, you can stop the system by turning off the power or leaving it in Sleep or Hibernation mode：

To…	Do this…
Power off （Shutdown）	Click ▦ → ⏻ **Power** → **Shut down**.
Sleep	Use one of these methods： ● Press the power button.✱ ● Click ▦ → ⏻ **Power** → **Sleep**.
Hibernate	By default, this option is not shown in the Start menu. If you want to use the feature, set up accordingly in Windows settings.

✱ "Sleep" is the default result of the action. You can change what the action does through Windows settings.

Taking a Look at the Computer

NOTE: Depending on the model you purchased, the appearance of your computer may not be exactly the same as those shown in this manual.

CAUTION: You need to open the protective covers to access the connectors. When not using a connector, make sure to close the cover completely for water- , dust-, and fire-proof integrity. (Engage the locking mechanism if existing.)

Tablet Components

Front Components

Ref	Component	Description
❶	**Camera cover** (optional)	Covers the camera lens. Slide the camera cover toward the right to use the camera; slide it toward the left for privacy protection.
❷	**Microphone**	Receives sound and voice to record voice.
❸	**Camera indicator** (optional)	Lights up when the camera is in use.
❹	**IR sensor** (optional)	Detects the infrared energy of objects to form an image. The sensor flashes red light when in use. The near infrared (IR) imaging capability allows you to use Windows Hello face authentication.
❺	**Camera lens** (optional)	Allows you to use the camera function.
❻	**Light sensor**	Detects the surrounding lighting condition for automatic adjustment of the LCD brightness.
❼	**Touchscreen**	Displays and receives information for the computer.
❽	**P2 button**	The default function is **Camera** or **Trigger** depending on your model.

		Camera	Starts the G-Camera application.
		Trigger	Serves as the trigger button for the barcode reader if your model has the module.

Ref	Component	Description
❾	**Stereo speaker**	Sends out sound and voice from your computer.
❿	**Power button**	Turns the power on or off. (The default "off" state is "Sleep mode.") With a default setting of 2-second delay, you have to press the button for at least 2 seconds for it to function.
⓫	**Indicators**	
	⏻ **Power**	Lights blue when the power is on.

Ref	Component	Description
		Blinks blue when the system is in Sleep mode.
	▬ Battery	Lights amber when the battery is being charged.
		Lights green when battery charging is completed.

Ref	Component	Description
		Blinks green to indicate the battery's built-in high temperature protection mechanism is activated. **CAUTION:** Do not remove the battery during this period.
		Blinks red（once per second）when the battery's capacity is below 10%.
		Blinks red rapidly（once per 0.5 second）when there is a thermal protection problem. Ask for repair service in case this happens.
		Blinks amber when the battery charging is in an abnormal state. Replace the battery in case this happens.
	📶 RF (Radio Frequency)	Lights blue when the RF radio of any RF feature（WLAN／Bluetooth／WWAN）is on.
⑫	Windows logo button	Opens or closes the Start menu.
⑬	Plus button	Increases the sound volume.
⑭	Minus button	Decreases the sound volume.
⑮	P1 button	Opens or closes the OSD Control Panel.
		When pressed longer: Serves as the **Ctrl**+**Alt**+**Del** keyboard keys.
⑯	Fingerprint scanner	Serves as the fingerprint verification, preventing unauthorized access to your computer.

NOTE: The hardware buttons (except the power button) can be re-defined using G-Manager.

Rear Components

Ref	Component	Description
❶	**Flash**（optional）	Provides extra light when taking pictures.
❷	**Camera lens**（optional）	Allows you to use the camera function. When the camera lens is in use, the indicator beside it lights up.
❸	**NFC/RFID reader**（optional）	Reads data from NFC/RFID tags.
❹	**Battery pack**	Supplies power to your computer when external power is not connected.

Right-Side Components

For covers with an arrowhead icon, push the cover toward one side to unlock and the other side to lock. The arrowhead points to the side for unlocking.

Ref	Component	Description
❶	Stylus holder	Holds the stylus.
❷	USB 2.0 port	Connects a USB device, such as a USB flash disk, printer, digital camera, joystick, and more.
	– or –	
	RS232 serial connector	Connects a serial mouse or serial communication device.
❸	RJ-45 connector	Connects the LAN cable.
❹	Security lock	Locks the cover of the power connector.
❺	Power connector	Connects the AC adapter.

Left-Side Components

For covers with an arrowhead icon, push the cover toward one side to unlock and the other side to lock. The arrowhead points to the side for unlocking.
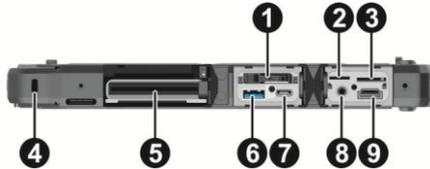
Ref	Component	Description
❶	SSD canister	Contains the solid-state drive, which is the mass storage device of your computer.
❷	MicroSD card slot	Accepts a microSD card for removable storage media.
❸	Micro-SIM card slot（optional）	Accepts a micro-SIM card for models having the WWAN module.
❹	Kensington lock	Locks the computer to a stationary object for security.
❺	Smart card reader	Accepts a smart card for additional security feature.
❻	PowerShare USB port	Provides either of the below two functions depending on your setting.
		Charges a connected mobile device.
		- or -
		Functions as a standard USB 3.0 port（default setting）.
❼	USB 3.1 Gen 1 Type-C port	Connects a USB device that supports USB Type-C connection.
❽	Combo audio connector	Connects a set of headphones or external speakers with amplifier.
		Supports a headset microphone with 4-pole TRRS 3.5mm jack.
❾	HDMI connector	Connects a HDMI monitor or TV set.

Top Components

Ref	Component	Description
❶	Barcode reader lens （optional）	Scans and reads barcodes.

Bottom Components

Ref	Component	Description
❶	Battery release latch	Releases the battery pack. The latch has a locking mechanism.
❷	Docking connectors	Connects a proprietary dock such as the keyboard dock, office dock, and vehicle dock.

Keyboard Dock Components

NOTE:
- The Keyboard Dock can be purchased separately. Specific models come with the Keyboard Dock.
- See "Attaching and Detaching the Keyboard Dock" later in this chapter for more information.

Top Components
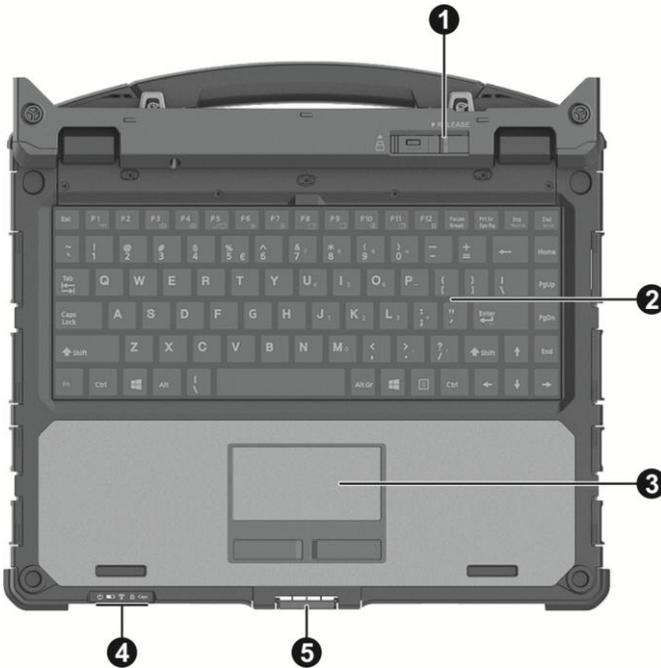
Ref	Component	Description
❶	**Tablet release latch**	Releases the Tablet. The latch has a locking mechanism.
❷	**Keyboard**	Serves as the data input device of the computer.
❸	**Touchpad**	Serves as the pointing device of the computer.

| Ref	Component	Description
❹	Indicators	
	⏻ Power	Lights green when computer is on.
		Blinks green when computer is in Sleep mode.
	🔋 Battery	Lights amber when the battery is being charged.
		Lights green when battery charging is completed.
		Blinks green to indicate the battery's built-in high temperature protection mechanism is activated. **CAUTION:** Do not remove the battery during this period.
		Blinks red (once per second) when the battery's capacity is below 10%.
		Blinks red rapidly (once per 0.5 second) when there is a thermal protection problem. Ask for repair service in case this happens.
		Blinks amber when the battery charging is in an abnormal state. Replace the battery in case this happens.
	📶 RF (Radio Frequency)	Lights green when the RF radio of any RF feature (WLAN/Bluetooth/WWAN) is on.
	🔢 Num Lock	Lights green when Num Lock is on.
	Caps Lock	Lights green when Caps Lock is on.
❺	Top cover latch	Locks the top cover.

Right-Side Components

For covers with an arrowhead icon, push the cover toward one side to unlock and the other side to lock. The arrowhead points to the side for unlocking.
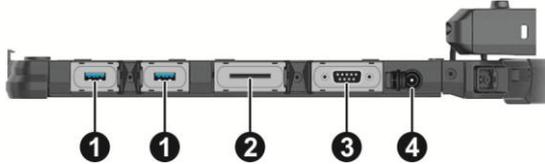
Ref	Component	Description
❶	USB 3.0 port	Connects a USB device, such as a USB flash disk, printer, digital camera, joystick, and more.
❷	SD card slot	Accepts a SD card for removable storage media.
❸	RS232 serial connector	Connects a serial mouse or serial communication device.
❹	Power connector	Connects the AC adapter.

Left-Side Components

For covers with an arrowhead icon, push the cover toward one side to unlock and the other side to lock. The arrowhead points to the side for unlocking.
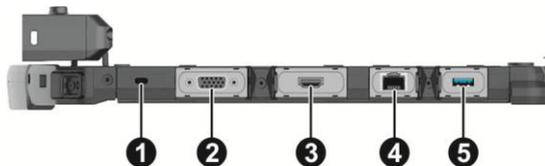

Ref	Component	Description
❶	Kensington lock	Locks the computer to a stationary object for security.
❷	VGA connector	Connects an external display monitor.
❸	HDMI connector	Connects a HDMI monitor or TV set.
❹	RJ-45 connector	Connects the LAN cable.

Ref	Component	Description
❺	**USB 3.0 port**	Connects a USB device, such as a USB flash disk, printer, digital camera, joystick, and more.

Bottom Components

Ref	Component	Description
❶	**Handle**	Provides a convenient way to carry the computer.
❷	**Docking connectors**	Connects a proprietary dock such as the office dock and vehicle dock.
❸	**Antenna pass-through** （optional）	Connects to the docking station for using external WWAN/WLAN/GPS antenna.

Multiple Usage Modes

NOTE: The Keyboard Dock can be purchased separately. Specific models come with the Keyboard Dock.

With the Keyboard Dock, you can use K120 in different modes.

Usage Mode	Description
Notebook Mode	When the Tablet and Keyboard Dock are assembled, the system works as a regular notebook computer. **NOTE:** See "Attaching and Detaching the Keyboard Dock" later for more information.
Tablet Mode	You can easily detach the Keyboard Dock and leave it behind when you desire the portability of the Tablet.
Convertible Mode	You can transform the system from notebook to tablet and back again. For the transformation, the Tablet has to be detached, flip over, and then reattached. **NOTE:** See "Attaching and Detaching the Keyboard Dock" later for more information.
Presentation Mode	When the Tablet faces outwards, you can use the Keyboard Dock as a stand for the Tablet.

Attaching and Detaching the Keyboard Dock

To attach the Keyboard Dock:

1. Depending on the desired usage mode, have the Tablet face either inwards or outwards.

   Align and put the Tablet on the holder. The latches should click into place.

2. Push the lock upward to the locked position.

To detach the Keyboard Dock:

1. Push the lock downward to the unlocked position.

2. Slide the release latch toward the right, and while holding the latch, lift the Tablet out of the holder.

Chapter 2

Operating Your Computer

This chapter provides information about the use of the computer.

If you are new to computers, reading this chapter will help you learn the operating basics. If you are already a computer user, you may choose to read only the parts containing information unique to your computer.

CAUTION:
- Do not expose your skin to the computer when operating it in a very hot or cold environment.
- The computer can get uncomfortably warm when you use it in high temperatures. As a safety precaution in such a circumstance, do not place the computer on your lap or touch it with your bare hands for extended periods of time. Prolonged body contact can cause discomfort and potentially a burn.

Navigating on the Screen

The screen of your computer is touch-sensitive. You can operate the computer by touching the screen with your finger or the stylus.

CAUTION: Do not use a sharp object such as a ballpoint pen or pencil on the touchscreen. Doing so may damage the touchscreen surface.

NOTE: An optical film has been attached to the screen before shipment. The film is a consumable, which will be worn out by possible scratches. You can purchase a new one when replacement is required.

Using the Touchscreen

Your computer has a capacitive touchscreen. This type of touchscreen responds to objects that have conductive properties, such as fingertips and a capacitive-tipped stylus.

You can change the touchscreen sensitivity settings to suit your scenario. Double-tap the **Touch Screen Mode** shortcut on Windows desktop to open the settings menu and select one of the options (as shown below).

Select this if you prefer using fingertips. Also, select this when raindrops are falling on the screen and should be

Select this if you are using the stylus. (You must use the one supplied with your model.)

Select this if you are wearing gloves (referring to warm gloves or work gloves, not referring to touchscreen-capable gloves).

NOTE: If liquid is spilled on the touchscreen causing a wet area, the area will stop responding to any inputs. For the area to function again, you must dry it.

The following table shows how you use the touchscreen to obtain equivalent mouse functions.

Term/Action	Equivalent Mouse Function
Tap: Touch the screen once.	Click/Point
Double-tap: Touch the screen twice rapidly.	Double-click
Tap and hold: Tap and hold until a popup menu appears.	Right-click
Drag: Hold the stylus（or finger）on the screen and drag across the screen until reaching your destination.	Drag

Using Multi-touch Gestures

You can interact with your computer by placing two fingers on the screen. The movement of the fingers across the screen creates "gestures," which send commands to the computer.

Here are the multi-touch gestures that you can use:

Gestures	Actions (⟳ = finger down; ⟳ = finger up)	Descriptions
Pan（Scroll）	or Drag 1 or 2 fingers up or down.	Use panning to see another part of a page that has scroll bars.
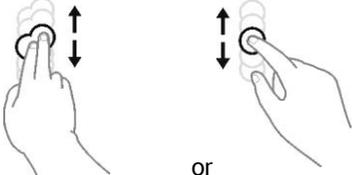
Gestures	Actions α = finger down; ⟲ = finger up)	Descriptions
Zoom （Pinch）	Move two fingers apart/toward each other.	Use zooming to make an item （a photo for example） on the screen larger or smaller. The gesture works in applications that support mouse wheel zooming.
Rotate	or Move two fingers in opposing directions. -or- Use one finger to pivot around another.	Use rotating to move a picture or other item on the screen in a circular direction （clockwise or counter-clockwise）. The gesture works in applications that support the specific gesture.
Press and Tap	Press on target and tap using a second finger.	Use press and tap to access the shortcut menu.
Two-finger Tap	Tap two fingers at the same time （where the target is in the midpoint between the fingers）.	The function is defined by applications that support the specific gesture.
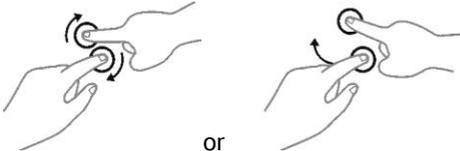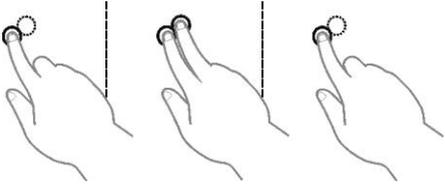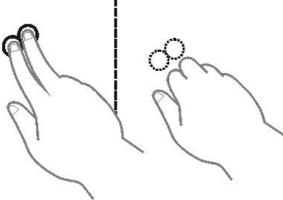
Gestures	Actions ○ = finger down; ⊙ = finger up)	Descriptions
Flicks	Make quick drag gestures in the desired direction.	Flick left or right to navigate back and forward in a browser and other applications. The gesture works in most applications that support back and forward.
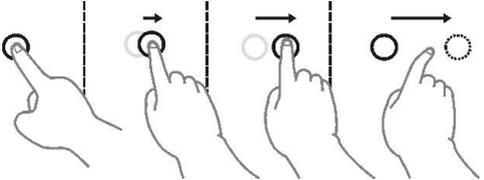
Using the Dual Mode Display (Optional)

Dual mode display（if your model has the feature）incorporates both touchscreen and digitizer functions.

The display is set to Touchscreen mode by default. Touchscreen mode provides all the functionalities that an ordinary touchscreen has. When the Computer receives signals from the digitizer pen, the display automatically switches to Digitizer mode.

You can move the cursor by bringing the digitizer pen close to the screen, without actually touching the screen's surface.

Using the Keyboard Dock

NOTE: The Keyboard Dock can be purchased separately. Specific models come with the Keyboard Dock.

Using the Keyboard

Your keyboard has all the standard functions of a full-sized computer keyboard plus an **Fn** key added for specific functions.

The standard functions of the keyboard can be further divided into four major categories:

- Typewriter keys
- Cursor-control keys
- Numeric keys
- Function keys

Typewriter Keys

Typewriter keys are similar to the keys on a typewriter. Several keys are added such as the **Ctrl**, **Alt**, **Esc**, and lock keys for special purposes.

The Control (**Ctrl**) / Alternate (**Alt**) key is normally used in combination with other keys for program-specific functions. The Escape (**Esc**) key is usually used for stopping a process. Examples are exiting a program and canceling a command. The function depends on the program you are using.

Cursor-Control Keys

Cursor-control keys are generally used for moving and editing purposes.

NOTE: The word "cursor" refers to the indicator on the screen that lets you know exactly where on your screen anything you type will appear. It can take the form of a vertical or horizontal line, a block, or one of many other shapes.
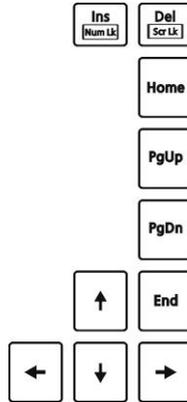
Numeric Keypad

A 15-key numeric keypad is embedded in the typewriter keys as shown next:
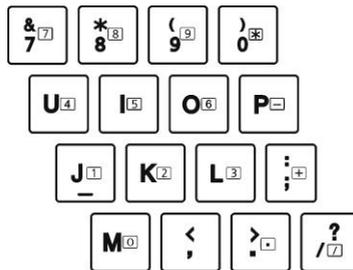
Numeric keys facilitate entering of numbers and calculations. When Num Lock is on, the numeric keys are activated; meaning you can use these keys to enter numerals.

NOTE:

● When the numeric keypad is activated and you need to type the English letter in the keypad area, you can turn Num Lock off or you can press **Fn** and then the letter without turning Num Lock off.

● Some software may not be able to use the numeric keypad on the computer. If so, use the numeric keypad on an external keyboard instead.

● The **Num Lock** key can be disabled.

Function Keys

On the top row of the keys are the function keys: **F1** to **F12**. Function keys are multi-purpose keys that perform functions defined by individual programs.

Fn Key

The **Fn** key, at the lower left corner of the keyboard, is used with another key to perform the alternative function of a key. To perform a desired function, first press and hold **Fn**, then press the other key.

Hot Keys

Hot keys refer to a combination of keys that can be pressed any time to activate special functions of the computer. Most hot keys operate in a cyclic way. Each time a hot key combination is pressed, it shifts the corresponding function to the other or next choice.

You can easily identify the hot keys with the icons imprinted on the keytop. The hot keys are described next.

Key	Description
Fn Esc	Switches the keyboard backlight on and off（option）.
Fn F1	Switches the RF（radio frequency）radio on and off. When off, all wireless modules（such as WLAN, Bluetooth, and WWAN）cannot be used. When on, individual settings of the module work.
Fn F3	Decreases the sound volume.
Fn F4	Increases the sound volume.

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Key	Description
[Fn] [F5 ⌧]	Switches the display output to the next choice if an external display is connected. Choices are: 　→ LCD only 　　↓ 　　LCD + External display （Duplicate） 　　↓ 　　LCD + External display （Extend） 　　↓ 　　External display only The hot keys are equivalent to ■ Windows logo key + **P**.
[Fn] [F6 ❄]	Decreases the LCD brightness.
[Fn] [F7 ❄]	Increases the LCD brightness.
[Fn] [F8 ▱]	Switches the touchscreen on or off.
[Fn] [F9 ▱]	Switches the touchpad off or on.
[Fn] [F10 ◁]	Switches the system sound output off （mute） or on.
[Fn] [F11 ▣]	Switches the display on or off.
[Fn] [F12 ⏸]	Serves as the sleep button that you can define with Windows' **Power Options**.

Windows Keys

The keyboard has two keys that perform Windows-specific functions: ■ Windows Logo key and ☰ Application key.

The ⊞ Windows Logo key opens the **Start** menu and performs software–specific functions when used in combination with other keys. The ▤ Application key usually has the same effect as a right mouse click.

Using the Touchpad

CAUTION: Do not use a sharp object such as a pen on the touchpad. Doing so may damage the touchpad surface.

NOTE:
● Press **Fn+F9** to toggle the touchpad on or off.
● For optimal performance of the touchpad, keep your fingers and the pads clean and dry. When tapping on the pad, tap lightly. Do not use excessive force.

The touchpad is a pointing device that allows you to communicate with the computer by controlling the location of the pointer on the screen and making selection with the buttons.

The touchpad consists of a rectangular pad（work surface）and a left and right buttons. To use the touchpad, place your forefinger or thumb on the pad. The rectangular pad acts like a miniature duplicate of your display. As you slide your fingertip across the pad, the pointer（also called cursor）on the screen moves accordingly. When your finger reaches the edge of the pad, simply relocate yourself by lifting the finger and placing it on the other side of the pad.

Here are some common terms that you should know when using the touchpad:

Term	Action
Point	Move your finger on the pad until the cursor points to the selection on the screen.
Click	Press and release the left button. –or– Tap gently anywhere on the pad.

Term	Action
Double-click	Press and release the left button twice in quick succession. -or- Tap twice on the pad rapidly.
Drag and drop	Press and hold the left button, then move your finger until you reach your destination (drag). Finally, release the button (drop) when you finish dragging your selection to the destination. The object will drop into the new location. -or- Gently tap twice on the pad and on the second tap, keep your finger in contact with the pad. Then, move your finger across the pad to drag the selected object to your destination. When you lift your finger from the pad, the selected object will drop into place.

Touch Gestures for Windows 10

The touchpad supports touch gestures for Windows 10 such as one-finger scrolling, two-finger scrolling, pinch zoom, rotating, and others. For detailed information, go to **Settings → Devices → Mouse & touchpad → Additional mouse options → Device Settings → Settings.**

Configuring the Touchpad

You may want to configure the touchpad to suit your needs. For example, if you are a left-handed user, you can swap the two buttons so that you can use the right button as the left button and vice versa. You can also change the size of the on-screen pointer, the speed of the pointer, and so on.

To configure the touchpad, go to **Settings → Devices → Mouse & touchpad**.

Using Network and Wireless Connections

Using the LAN

To connect the network cable to the LAN module, connect one end of the LAN cable to the RJ-45 connector on the computer and the other end to the network hub.

Using the WLAN

The WLAN（Wireless Local Area Network）module of your computer supports IEEE 802.11a/b/g/n/ac.

Turning On/Off the WLAN Radio

To turn on the WLAN radio:

Click 　　 → Settings → Network & Internet → Wi-Fi.　 Slide the Wi-Fi switch to the On position.

To turn off the WLAN radio:

You can turn off the WLAN radio the same way you turn it on.

If you want to quickly turn off all wireless radio, simply switch on Airplane mode. You can control the Airplane mode using one of the below methods.

● Press Fn+F1.

● Use the Airplane Mode button in the OSD Control Panel.

● Click 　　 → Settings → Network & Internet → Airplane mode.

Connecting to a WLAN Network

1. Make sure that the WLAN function is enabled（as described above）.

2. Click the network icon 　 in the lower right of the task bar.

3. Select the device you want to connect from the search results.

4. Some networks require a network security key or passphrase. To connect to one of those networks, ask your network administrator or Internet service provider （ISP） for the security key or passphrase.

For more information on setting a wireless network connection, refer to Windows online help.

Using the Bluetooth Feature

The Bluetooth technology allows short-range wireless communications between devices without requiring a cable connection. Data can be transmitted through walls, pockets and briefcases as long as two devices are within range.

Turning On/Off the Bluetooth Radio

To turn on the Bluetooth radio:

Click **■** → **Settings** → **Devices** → **Bluetooth**. Slide the **Bluetooth** switch to the **On** position.

To turn off the Bluetooth radio:

You can turn off the Bluetooth radio the same way you turn it on.

If you want to quickly turn off all wireless radio, simply switch on Airplane mode. You can control the Airplane mode using one of the below methods.

● Press **Fn+F1**.

● Use the **Airplane Mode** button in the OSD Control Panel.

● Click **■** → **Settings** → **Network & Internet** → **Airplane mode**.

Connecting to another Bluetooth Device

1. Make sure that the Bluetooth function is enabled （as described above）.

2. Make sure that the target Bluetooth device is turned on, discoverable and within close range. （See the documentation that came with the Bluetooth device.）

3． Click ■ → **Settings** → **Devices** →**Bluetooth**.

4． Select the device you want to connect from the search results.

5． Depending on the type of Bluetooth device that you want to connect to, you will need to enter the pertinent information.

For detailed information on using the Bluetooth feature, see Windows' online Help.

Using the WWAN Feature (Optional)

A WWAN（Wireless Wide Area Network）uses mobile telecommunication cellular network technologies to transfer data. The WWAN module of your computer supports 3G and 4G LTE.

NOTE: Your model only supports data transmission. Voice transmission is not supported.

Turning On/Off the WWAN Radio

To turn on the WWAN radio:

Click ■ → **Settings** → **Network & Internet** → **Airplane mode**. Slide the **Cellular** switch to the On position.

To turn off the WWAN radio:

You can turn off the WWAN radio the same way you turn it on.

If you want to quickly turn off all wireless radio, simply switch on Airplane mode. You can control the Airplane mode using one of the below methods.

● Press **Fn+F1**.

● Use the **Airplane Mode** button in the OSD Control Panel.

● Click ■ → **Settings** → **Network & Internet** → **Airplane mode**.

Setting up a WWAN Connection

Tap ▦ → **Settings** → **Network & Internet** → **Cellular**. （For detailed information on cellular settings in Windows 10，see Microsoft Support website.）

Chapter 3

Managing Power

Your computer operates either on external AC power or on internal battery power.

This chapter tells you how you can effectively manage power. To maintain optimal battery performance, it is important that you use the battery in the proper way.

AC Adapter

CAUTION:

● The AC adapter is designed for use with your Computer only. Connecting the AC adapter to another device can damage the adapter.

● The AC power cord supplied with your Computer is for use in the country where you purchased your Computer. If you plan to go overseas with the Computer, consult your dealer for the appropriate power cord.

● When you disconnect the AC adapter, disconnect from the electrical outlet first and then from the Computer. A reverse procedure may damage the AC adapter or Computer.

● When unplugging the connector, always hold the plug head. Never pull on the cord.

The AC adapter serves as a converter from AC（Alternating Current）to DC（Direct Current）power because your Computer runs on DC power, but an electrical outlet usually provides AC power. It also charges the battery pack when connected to AC power.

The adapter operates on any voltage in the range of 100~240 V AC.

Battery Pack

Your computer has two battery packs. The battery pack is the internal power source for the computer. It is rechargeable using the AC adapter.

NOTE: Care and maintenance information for the battery is provided in the "Battery Pack Guidelines" section in Chapter 7.

Charging the Battery Pack

NOTE:
- Charging will not start if the battery's temperature is outside the allowed range, which is between 0 °C (32 °F) and 50 °C (122 °F). Once the temperature meets the requirements, charging automatically resumes.
- During charging, do not disconnect the AC adapter before the battery has been fully charged; otherwise you will get a prematurely charged battery.
- The battery has a high temperature protection mechanism which limits the maximum charge of the battery to 80% of its total capacity in the event of high temperature conditions. In such conditions, the battery will be regarded as fully charged at 80% capacity.
- The battery level may automatically lessen due to the self-discharge process (0.21% per day), even when the battery pack is fully charged (100%). This happens no matter if the battery pack is installed in the computer.

To charge the battery pack, connect the AC adapter to the computer and an electrical outlet. The Battery Indicator ( ) on the computer glows amber to indicate that charging is in progress. You are advised to keep the computer power off while the battery is being charged. When the battery is fully charged, the Battery Charge Indicator glows green.

The two battery packs are charged in parallel. It takes approximately 5 hours to fully charge the two battery packs when the power is off and approximately 6 hours when the power is on（may need a longer charging time at lower temperatures）.

CAUTION: After the computer has been fully recharged, do not immediately disconnect and reconnect the AC adapter to charge it again. Doing so may damage the battery.

Initializing the Battery Pack

You need to initialize a new battery pack before using it for the first time or when the actual operating time of a battery pack is much less than expected. Initializing is the process of fully charging, discharging, and then charging. It can take several hours.

A software tool called "Gauge Reset" is provided for the purpose. Use the G-Manager program and select the **Battery** tab to find the tool.

Checking the Battery Level

NOTE: Any battery level indication is an estimated result. The actual operating time can be different from the estimated time, depending on how you are using the computer.

The operating time of a fully charged battery pack depends on how you are using the computer. When your applications often access peripherals, you will experience a shorter operating time.

The two battery packs are discharged in parallel.

By Operating System

You can check the approximate battery level using the battery meter function of the operating system. To read the battery level in Windows, click the battery icon on the taskbar.

By Gas Gauge

On the exterior side of the battery pack is a gas gauge for displaying the estimated battery charge. When the battery pack is not installed in the computer and you want to know the battery charge, you can press the push-button to see the number of LEDs that light up. Each LED represents 20% charge.

Battery Low Signals and Actions

The battery icon changes appearance to display the current state of the battery.

Battery Icon	Battery Level	Description
▭	Discharging	The icon shows the charge remaining in 10-percent increments until the charge reaches the low-battery level.
▭ ▭	Low	The battery charge has reached the low-battery level.
▭	Critically low	The battery charge has reached the critical battery level. By default, Windows will display a notification and put your computer into Hibernation.

When the battery is low, the computer's Batter Indicator (▭) also blinks red to alert you to take actions.

Always respond to low-battery by connecting the AC adapter, placing your computer in Hibernation mode, or turning off the computer.

Replacing the Battery Pack

CAUTION:
● There is danger of explosion if the battery is incorrectly replaced. Replace the battery only with the computer manufacturer's battery packs. Discard used batteries according to the dealer's instructions.
● Do not attempt to disassemble the battery pack.

NOTE: You can hot swap one battery pack while the other one is supplying the power.

To replace the battery pack, follow these steps:

1. If the Keyboard Dock is connected, detach it.

2. Slide the lock of the battery latch upwards to the unlocked position.

3. Slide the battery latch toward the left （❶）. The battery pack will slightly pop up. Remove the battery pack from its compartment （❷）.

4. Fit another battery pack into place. With the battery pack correctly oriented, attach its connector side to the battery compartment at an angle （❶） and then press down the other side （❷）. The battery latch should automatically engage.

5. Slide the lock of the battery latch downward to the locked position.

CAUTION: Make sure the battery latch is correctly locked, not revealing the underneath red part.

Locked: Unlocked （revealing red part）:
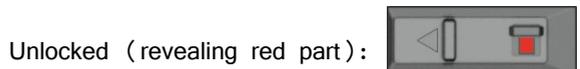
Power-Saving Tips

Aside from enabling your computer's power saving mode, you can do your part to maximize the battery's operating time by following these suggestions.

● Do not disable Power Management.

● Decrease the LCD brightness to the lowest comfortable level.

● Shorten the length of time before Windows turn off the display.

● When not using a connected device, disconnect it.

● Turn off the wireless radio if you are not using the wireless module（such as WLAN，Bluetooth，or WWAN）.

● Turn off the computer when you are not using it.

Chapter 4

Care and Maintenance

Taking good care of your computer will ensure a trouble-free operation and reduce the risk of damage to your computer.

This chapter gives you guidelines covering areas such as protecting, storing, cleaning, and traveling.

Protecting the Computer

To safeguard the integrity of your computer data as well as the computer itself, you can protect the computer in several ways as described in this section.

Using an Anti-Virus Strategy

You can install a virus-detecting program to monitor potential viruses that could damage your files.

Using the Cable Lock

You can use a Kensington-type cable lock to protect your computer against theft. The cable lock is available in computer stores.

To use the lock, loop the lock cable around a stationary object such as a table. Insert the lock to the Kensington lock hole and turn the key to secure the lock. Store the key in a safe place.

Taking Care of the Computer

Location Guidelines

- For optimal performance, use the computer where the recommended temperature is between 0 °C（32 °F）and 55 °C（131 °F）.（Actual operating temperature depends on product specifications.）

- Avoid placing the computer in a location subject to high humidity, extreme temperatures, mechanical vibration, direct sunlight, or heavy dust. Using in extreme environments for long periods can result in product deterioration and a shortened product life.

- Operating in an environment with metallic dust is not allowed.

- Place the computer on a flat and steady surface. Do not stand the computer on its side or store it in an upside-down position. A strong impact by dropping or hitting may damage the computer.

- Do not cover or block any ventilation openings on the computer. For example, do not place the computer on a bed, sofa, rug, or other similar surface. Otherwise, overheating may occur that results in damage to the computer.

- As the computer can become very hot during operation, keep it away from objects that are vulnerable to heat.

- Keep the computer at least 13 cm（5 inches）away from electrical appliances that can generate a strong magnetic field such as a TV, refrigerator, motor, or a large audio speaker.

- Avoid moving the computer abruptly from a cold to a warm place. A temperature difference of more than 10 °C（18 °F）may cause condensation inside the unit, which may damage the storage media.

General Guidelines

- Do not place heavy objects on top of the computer as this may damage the display.

- Do not move the computer simply by grasping the display screen.

- To avoid damaging the screen, do not touch it with any sharp object.

- LCD image sticking occurs when a fixed pattern is displayed on the screen for a prolonged period of time. You can avoid the problem by limiting the amount of static content on the display. It is recommended that you use a screen saver or turn off the display when it is not in use.

- To maximize the life of the backlight in the display, allow the backlight to automatically turn off as a result of power management.

Cleaning Guidelines

- Never clean the computer with its power on.

- Use a soft cloth moistened with water or a non-alkaline detergent to wipe the exterior of the computer.

- Gently wipe the display with a soft, lint-free cloth.

- Dust or grease on the touchpad can affect its sensitivity. Clean the pad by using adhesive tape to remove the dust and grease on its surface.

- If water or liquid is split onto the computer, wipe it dry and clean when possible. Though your computer is water-proof, do not leave the computer wet when you can dry it.

- If the computer gets wet where the temperature is 0°C (32°F) or below, freeze damage may occur. Make sure to dry the wet computer.

Battery Pack Guidelines

- Recharge the battery pack when it is nearly discharged. When recharging, make sure that the battery pack is fully charged. Doing so may avoid harm to the battery pack.

- The battery pack is a consumable product and the following conditions will shorten its life:

- when frequently charging the battery pack
- when using, charging, or storing the battery in high temperature condition

● To avoid hastening the deterioration of the battery pack thereby prolonging its useful life, minimize the number of times you charge it so as not to frequently increase its internal temperature.

● Charge the battery pack between 10 °C ~ 30 °C (50 °F ~ 86 °F) temperature range. A higher environment temperature will cause the battery pack's temperature to rise. Avoid charging the battery pack inside a closed vehicle and in hot weather condition. Also, charging will not start if the battery pack is not within the allowed temperature range.

● It is recommended that you do not charge the battery pack more than once a day.

● It is recommended that you charge the battery pack with the computer's power off.

● To maintain the battery pack's operating efficiency, store it in a cool dark place removed from the computer and with 30 % ~ 40 % charge remaining.

● Important guidelines when using the battery pack.
When installing or removing the battery pack take note of the following:
- avoid installing or removing the battery pack when the computer is in Sleep mode. Abruptly removing the battery pack may cause loss of data or the computer may become unstable.
- avoid touching the battery pack terminals or damage may occur, thereby causing improper operation to it or the computer.

The computer's input voltage and surrounding temperature will directly affect the battery pack's charge and discharge time:
- charging time will be prolonged when the computer is turned on. To shorten the charging time, it is recommended that you place the computer in Sleep or hibernation mode.
- a low temperature will prolong the charging time as well as hasten the discharge time.

- When using battery power in an extremely low temperature environment, you may experience shortened operating time and incorrect battery level reading. This phenomenon comes from the chemical characteristics of batteries. The appropriate operating temperature for the battery is -10 °C ~ 50 °C（14 °F ~ 122 °F）.

- Do not leave the battery pack in storage for more than six months without recharging it.

Touchscreen Guidelines

- Use your finger or the stylus（if purchased）on the display. Using a sharp or metallic object other than your finger or stylus may cause scratches and damage the display, thereby causing errors.

- Use a soft cloth to remove dirt on the display. The touchscreen surface has a special protective coating that prevents dirt from sticking to it. Not using a soft cloth may cause damage to the special protective coating on the touchscreen surface.

- Turn off the computer power when cleaning the display. Cleaning the display with the power on may cause improper operation.

- Do not use excessive force on the display. Avoid placing objects on top of the display as this may cause the glass to break thereby damaging the display.

- In low and high temperatures（below 5 ^{o}C ／ 41 °F and above 60 ^{o}C ／ 140 °F）, the touchscreen may have a slower response time or register the touch in the wrong location. It will go back to normal after returning to room temperature.

- When there is noticeable discrepancy in the operation of the touchscreen function （wrong location on intended operation or improper display resolution）, refer to the Windows online Help for instructions on recalibrating the touchscreen display.

When Traveling

- Before traveling with your computer, make a backup of your hard disk data into flash disks or other storage devices. As an added precaution, bring along an extra copy of your important data.

- Make sure that the battery pack is fully charged.

- Make sure that the computer is turned off and the top cover is securely closed.

- Make sure that all the connector covers are closed completely to ensure the waterproof integrity.

- Do not leave objects in between the keyboard and closed display.

- Disconnect the AC adapter from the computer and take it with you. Use the AC adapter as the power source and as a battery-charger.

- Hand-carry the computer. Do not check it in as luggage.

- If you need to leave the computer in the car, put it in the trunk of the car to avoid exposing the computer to excessive heat.

- When going through airport security, it is recommended that you send the computer and flash disks through the X-ray machine (the device you set your bags on). Avoid the magnetic detector (the device you walk through) or the magnetic wand (the handheld device used by security personnel).

- If you plan to travel abroad with your computer, consult your dealer for the appropriate AC power cord for use in your country of destination.

Chapter 5
Troubleshooting

Computer problems can be caused by hardware, software, or both. When you encounter any problem, it might be a typical problem that can easily be solved.

This chapter tells you what actions to take when solving common computer problems.

Preliminary Checklist

Here are helpful hints to follow before you take further actions when you encounter any problem:

- Try to isolate which part of the computer is causing the problem.

- Make sure that you turn on all peripheral devices before turning on the computer.

- If an external device has a problem, make sure that the cable connections are correct and secure.

- Make sure that the configuration information is properly set in the BIOS Setup program.

- Make sure that all the device drivers are correctly installed.

- Make notes of your observations. Are there any messages on the screen? Do any indicators light? Do you hear any beeps? Detailed descriptions are useful to the service personnel when you need to consult one for assistance.

If any problem persists after you follow the instructions in this chapter, contact an authorized dealer for help.

Solving Common Problems

Battery Problems

The battery does not charge (Battery Charge indicator does not light amber).

- Make sure that the AC adapter is properly connected.

- Make sure that the battery is not too hot or cold. Allow time for the battery pack to return to room temperature.

- If the battery doesn't charge after it has been stored in very low temperatures, try disconnecting and reconnecting the AC adapter to solve the problem.

- Make sure that the battery pack is installed correctly.

- Make sure that the battery terminals are clean.

The operating time of a fully charged battery becomes shorter.

- If you often partially recharge and discharge, the battery might not be charged to its full potential. Initialize the battery to solve the problem.

The battery operating time indicated by the battery meter does not match the actual operating time.

- The actual operating time can be different from the estimated time, depending on how you are using the computer. If the actual operating time is much less than the estimated time, initialize the battery.

Bluetooth Problems

I cannot connect to another device with Bluetooth wireless technology.

- Make sure that both devices have activated Bluetooth feature.

- Make sure that the distance between the two devices is within the limit and that there are no walls or other obstructions between the devices.

- Make sure that the other device is not in "Hidden" mode.

- Make sure that both devices are compatible.

Display Problems

Nothing appears on the screen.

- During operation, the screen may automatically turn off as a result of power management. Press any key to see if the screen comes back.

- The brightness level might be too low. Increase the brightness.

- The display output might be set to an external device. To switch the display back to the LCD, press the **Fn+F5** hot key or change the display through the **Display Settings** Properties.

The characters on the screen are dim.

- Adjust the brightness and/or contrast.

The display brightness cannot be increased.

- As a protection, the display brightness will be fixed at a low level when the surrounding temperature is too high or too low. It is not a malfunction in this situation.

Bad dots appear on the display at all times.

- A small number of missing, discolored, or bright dots on the screen are an intrinsic characteristic of TFT LCD technology. It is not regarded as a LCD defect.

Clouding (or called "mura") happens on the screen when you exert forces on the left or right side of the LCD frame.

- This is a normal phenomenon, not a defect.

Hardware Device Problems

The computer does not recognize a newly installed device.

- The device may not be correctly configured in the BIOS Setup program. Run the BIOS Setup program to identify the new type.

- Make sure if any device driver needs to be installed.（Refer to the documentation that came with the device.）

- Make sure if the device needs any jumper or switch settings.（Refer to the documentation that came with the device.）

- Check the cables or power cords for correct connections.

- For an external device that has its own power switch, make sure that the power is turned on.

Keyboard and Touchpad Problems

The keyboard does not respond.

- Try connecting an external keyboard. If it works, contact an authorized dealer, as the internal keyboard cable might be loose.

Water or liquid is spilt into the keyboard.

- Immediately turn off the computer and unplug the AC adapter. Then turn the keyboard upside down to drain the liquid out of the keyboard. Make sure to clean up any part of the spill you can get to. Though the keyboard of your computer is spill-proof, liquid will remain in the keyboard enclosure if you don't remove it. Wait for the keyboard to air dry before using the computer again.

The touchpad does not work, or the pointer is difficult to control with the touchpad.

- Make sure that the touchpad is clean.

LAN Problems

I cannot access the network.

- Make sure that the LAN cable is properly connected to the RJ-45 connector and the network hub.

- Make sure that the network configuration is appropriate.

- Make sure that the user name or password is correct.

Power Management Problems

The computer does not enter Sleep or Hibernation mode automatically.

- If you have a connection to another computer, the computer does not enter Sleep or Hibernation mode if the connection is actively in use.

- Make sure that the Sleep or Hibernation time-out is enabled.

The computer does not enter Sleep or Hibernation mode immediately.

- If the computer is performing an operation, it normally waits for the operation to finish.

The computer does not resume from Sleep or Hibernation mode.

- The computer automatically enters Sleep or Hibernation mode when the battery pack is empty. Do any one of the following:
  - Connect the AC adapter to the computer.
  - Replace the empty battery pack with a fully charged one.

Software Problems

An application program does not work correctly.

- Make sure that the software is correctly installed.

- If an error message appears on the screen, consult the software program's documentation for further information.

- If you are sure the operation has stop, reset the computer.

Sound Problems

No sound is produced.

- Make sure that the volume control is not set too low. Increase the volume.

- Make sure that the sound is not muted.

- Make sure that the computer is not in Sleep mode.

- If using an external speaker, make sure that the speaker is properly connected.

Distorted sound is produced.

- Make sure that the volume control is not set too high or too low. In most cases, a high setting can cause the audio electronics to distort the sound.

Startup Problems

When you turn on the computer, it does not respond and the Power Indicator does not light green.

- If you are using an external AC power, make sure that the AC adapter is correctly and securely connected. If so, make sure that the electrical outlet works properly.

- If you are using the battery power, make sure that the battery is not discharged.

- When the ambient temperature is below -20 °C (-4 °F), the computer will start up only if both battery packs are installed.

When you turn on the computer, it stops after POST.

- Reset your computer.

WLAN Problems

I cannot use the WLAN feature.

- Make sure that the WLAN feature is turned on.

Transmission quality is poor.

- Your computer may be in an out-of-range situation. Move your computer closer to the Access Point or another WLAN device it is associated with.

- Check if there is high interference around the environment and solve the problem as described next.

Radio interference exists.

- Move your computer away from the device causing the radio interference such as microwave oven and large metal objects.

- Plug your computer into an outlet on a different branch circuit from that used by the affecting device.

- Consult your dealer or an experienced radio technician for help.

I cannot connect to another WLAN device.

- Make sure that the WLAN feature is turned on.

- Make sure that the SSID setting is the same for every WLAN device in the network.

- Your computer is not recognizing changes. Restart the computer.

- Make sure that the IP address or subnet mask setting is correct.

I cannot communicate with the computer in the network when Infrastructure mode is configured.

- Make sure that the Access Point your computer is associated with is powered on and all the LEDs are working properly.

- If the operating radio channel is in poor quality, change the Access Point and all the wireless station(s) within the BSSID to another radio channel.

- Your computer may be in an out-of-range situation. Move your computer closer to the Access Point it is associated with.

- Make sure that your computer is configured with the same security option (encryption) to the Access Point.

- Use the Web Manager/Telnet of the Access Point to check whether it is connected to the network.

- Reconfigure and reset the Access Point.

I cannot access the network.

- Make sure that the network configuration is appropriate.

- Make sure that the user name or password is correct.

- You have moved out of range of the network.

- Turn off power management.

Other Problems

The date/time is incorrect.

- Correct the date and time via the operating system or BIOS Setup program.

- After you have performed everything as described above and still have the incorrect date and time every time you turn on the computer, the RTC （Real-Time Clock） battery is at the end of its life. Call an authorized dealer to replace the RTC battery.

System Recovery

Using Windows RE

Windows 10 has a recovery environment（Windows RE）that provides recovery, repair, and troubleshooting tools. The tools are referred to as Advanced Startup Options. You can access these options by selecting ▦ → **Settings** → **Update & security**. There are several choices:

- **System Restore**
  This option allows you to restore Windows to an earlier point in time if you have created a restore point.

- **Recover from a drive**
  If you have created a recovery drive on Windows 10, you can use the recovery drive to reinstall Windows.

- **Reset this PC**
  This option allows you to reinstall Windows with or without keeping your files.

See Microsoft website for more information.

NOTE:
- If you are in a situation where your computer won't boot into Windows, you can access the Advanced Startup Options by running the BIOS Setup Utility and selecting **Advanced → Windows RE.**
- System recovery for Windows 10 typically will take several hours to complete.

Using Recovery Partition

When necessary, you can restore your Windows 10 system to the factory default state by using the "recovery partition" feature. Recovery partition is a portion of your hard disk drive that is set aside by the manufacturer to hold the original image of your system.

WARNING:
● Using this feature will reinstall Windows to your system and configure it to the system's factory default settings. All data on the hard disk drive will be lost.
● Make sure that power is not interrupted during the recovery process. An unsuccessful recovery may result in Windows startup problems.

To restore your system to the factory default state:

1. Connect the AC adapter.

2. Run BIOS Setup Utility. Select **Advanced** → **Recovery Partition**.

3. Follow the onscreen instructions to complete the process.

Using the Driver Disc (Optional)

NOTE: You can download the latest drivers and utilities from Getac website at http://www.getac.com → Support.

The Driver disc contains drivers and utilities required for specific hardware in your computer.

Since your computer comes with drivers and utilities pre-installed, you normally do not need to use the Driver disc. In case you want to manually install Windows, you will have to install the drivers and utilities one by one after installing Windows.

To manually install drivers and utilities:

1. Start up the computer.

2. Prepare an external CD/DVD drive (with USB connection). Connect the drive to your computer. Wait for the computer to recognize the drive.

3. Insert the Driver disc. Make sure you use the disc that matches the Windows version of your computer.

4. The autorun program should automatically start. You will see the installation menu. Click **NEXT** to go to the next page if there is more than one.

5. To install a driver or utility, just click the particular button and follow the onscreen instructions to complete the installation.

Appendix A
Specifications

NOTE: Specifications are subject to change without any prior notice.

Tablet Specifications

Parts	Specifications
CPU	Intel Kaby Lake Refresh i5 and i7 U series（vPro and non-vPro）
	Cache：i5 6MB; i7 8MB
BIOS	Insyde, Flash EEPROM, 16MB, UEFI, supporting TPM, vPro（optional）, NIST, Computrace（optional）, WMI, BIOS Diagnostic, Credential guard, Device guard, and MAC passthrough
RAM	4GB/8GB/16/32GB DDR4, 2133MHz, SO-DIMM slot x 2
Video	Controller	UMA - Intel UHD Graphics 620（GT2）
	Display Panel	12.5-inch（16:9）TFT LCD with PSR（Panel Self Refresh）, FHD 1920 x 1080, dimmer mode, blackout mode, sunlight readable, 1,200 nits maximum brightness
Touchscreen	Capacitive multi-touch screen - 10 point, anti-glare Gorilla Glass
Audio	Features	Azalia, High Definition audio
	Speaker	1.5W x 2
	Microphone	Integrated
Mass storage device	128GB/256GB/512GB/1TB SSD（Solid-State Disk）in a user-removable canister, SATA3 and PCIe Gen3x4 interface available, M.2 2280 type
Card slots	MicroSD Smart Card
I/O ports	USB 2.0 Type A or RS232, PowerShare USB 3.0 Type A, USB 3.1 Gen 1 Type-C, HDMI, combo audio（4-pole TRRS 3.5mm type）, RJ-45, docking, tri-passthrough（option）
LAN	Intel® i219-LM Gigabit Network Connection, 10/100/1000 Mbps Ethernet
Wireless LAN + Bluetooth	Intel 8265 AC 2x2 802.11 AC + Bluetooth combo, Bluetooth 4.2
WWAN （option）	Sierra EM7455, 3G/4G/4.5G LTE-A
GPS （option）	Internal UART

Parts		Specifications
Camera （option）		Front：FHD 2MP Webcam, IR sensor （option） Rea: 8M pixel, autofocus, LED, video capture
Barcode reader （option）		1D and 2D
RFID reader （option）		Contactless, HF, supporting ISO14443A, ISO14443B, ISO15693, and Sony Felica
Security		Kensington lock TPM 2.0 Fingerprint scanner （option）
Power	AC adapter	Universal 65 W; input：100~240 V, 50/60 Hz; output: 19V
	Battery pack x 2	Standard：Lithium-ion prismatic type, 3-cell
		High capacity：Lithium-ion cylindrical type, 4-cell
Dimension （LxW×D）		330 x 238 x 245 mm （13 × 9.4 × 0.96 inch）
Weight		1.75 kg （3.85 lbs）

Keyboard Dock Specifications

Parts	Specifications
Keyboard	Standard keys with numeric pad keys, 12 function keys, special **Fn**（Function）key and Windows keys, with water-proof membrane or backlight
Pointing device	Glide touchpad, capacitive type
Card slot	SDXD
I/O ports	USB 3.0 Type A x 3, RS232, VGA, HDMI, RJ-45, docking, tri antenna pass-through
Security	Kensington lock
Dimension （LxW×D）	333 x 304 x 193 mm （13.1 x 12.0 x 0.76 inch）
Weight	1.35 kg （2.97 lbS）

Appendix B

Regulatory Information

This appendix provides regulatory statements and safety notices on your computer.

NOTE: Marking labels located on the exterior of your computer indicate the regulations that your model complies with. Please check the marking labels and refer to the corresponding statements in this appendix. Some notices apply to specific models only.

On the Use of the System

Class B Regulations

USA

Federal Communications Commission Radio Frequency Interference Statement
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.

Any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Please note:

The use of a non-shielded interface cable with this equipment is prohibited.

Canada

Canadian Department of Communications
Radio Interference Regulations Class B Compliance Notice

This Class B digital apparatus meets all requirements of the Canada Interference-Causing equipment regulations.

Cet appareil numérique de Classe B respecte toutes les exigences du Règlement Canadien sur le matériel brouileur.

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe B prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

ANSI Warning

Equipment approved for ANSI/ISA 12.12.01, Nonincendive Electrical Equipment for use in Class 1, Division 2, Group A, B, C, and D.
Maximum ambient temperature: 40°C

- **WARNING:** To prevent ignition of a hazardous atmosphere, batteries must only be changed or charged in an area known to be non-hazardous.

- **EXPLOSION HARZARD WARNING:** External connections/hubs through the connectors as mentioned（USB connector, Ethernet connector, phone connector, video port, serial port, power supply connector, microphone jack, headphones jack, and buttons/switches） and super multi DVD/combo drive are not to be used in a hazardous location.

- Power adapter shall not be used in hazardous locations.

Safety Notices

About the Battery

If the battery is mishandled, it may cause fire, smoke or an explosion and the battery's functionality will be seriously damaged. The safety instructions listed below must be followed.

Danger

● Do not immerse the battery with liquid such as water, sea water or soda.

● Do not charge/discharge or place the battery in high-temperature（more than 80 °C / 176 °F）locations, such as near a fire, heater, in a car in direct sunlight, etc.

● Do not use unauthorized chargers.

● Do not force a reverse-charge or a reverse-connection.

● Do not connect the battery with AC plug（outlet）or car plugs.

● Do not adapt the battery to unspecified applications.

● Do not short circuit the battery.

● Do not drop or subject the battery to impacts.

● Do not penetrate with a nail or strike with a hammer.

● Do not directly solder the battery.

● Do not disassemble the battery.

Warning

● Keep the battery away from infants.

● Stop using the battery if there are noticeable abnormalities such as abnormal smell, heat, deformities, or discoloration.

● Stop charging if the charging process cannot be finished.

- In case of a leaking battery, keep the battery away from flames and do not touch it.

- Pack the battery tightly during transport.

Caution

- Do not use the battery where static electricity（more than 100V）exists that might damage the protection circuit of the battery.

- When children are using the system, parents or adults must ensure that they are using the system and battery correctly.

- Keep the battery away from flammable materials during charging and discharging.

- In case lead wires or metal objects come out from the battery, you must seal and insulate them completely.

Caution Texts Concerning Lithium Batteries

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

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

SWEDISH
VARNING: Explosionsfara vid felaktigt batteribyte. Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparattillverkaren. Kassera använt batteri enligt fabrikantens instruktion.

FINNISH
VAROITUS: Paristo voi räjähtää, jos se on virheellisesti asennettu. Vaihda paristo ainoastaan valmistajan suosittelemaan tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.

ENGLISH

CAUTION: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the equipment manufacturer. Discard used batteries according to manufacturer's instructions.

DEUTSCH

VORSICHT: Explosionsgefahr bei unsachgemäßem Austausch der Batterie. Ersatz nur durch denselben oder einen vom Hersteller empfohlenen gleich-wertigen Typ. Entsorgung gebrauchter Batterien nach Angaben des Herstellers.

FRENCH

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

Attention (for USA Users)

The product that you have purchased contains a rechargeable battery. The battery is recyclable. At the end of its useful life, under various state and local laws, it may be illegal to dispose of this battery into the municipal waste stream. Check with your local solid waste officials for details in your area for recycling options or proper disposal.

About the AC Adapter

- Use only the AC adapter supplied with your computer. Use of another type of AC adapter will result in malfunction and/or danger.

- Do not use the adapter in a high moisture environment. Never touch the adapter when your hands or feet are wet.

- Allow adequate ventilation around the adapter when using it to operate the device or charge the battery. Do not cover the AC adapter with paper or other objects that will reduce cooling. Do not use the AC adapter while it is inside a carrying case.

- Connect the adapter to a proper power source. The voltage requirements are found on the product case and/or packaging.

- Do not use the adapter if the cord becomes damaged.

- Do not attempt to service the unit. There are no serviceable parts inside. Replace the unit if it is damaged or exposed to excess moisture.

On the Use of the RF Device

USA and Canada Safety Requirements and Notices

IMPORTANT NOTE: To comply with FCC RF exposure compliance requirements, the antenna used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Radio Frequency Interference Requirements and SAR

This device meets the government's requirements for exposure to radio waves.

This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment.

EMC Requirements

This device uses, generates and radiates radio frequency energy. The radio frequency energy produced by this device is well below the maximum exposure allowed by the Federal Communications Commission (FCC).

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.
(2) This device must accept any interference received, including interference that may cause undesired operation.

The FCC limits are designed to provide reasonable protection against harmful interference when the equipment is installed and used in accordance with the instruction manual and operated in a commercial environment. However, there is no guarantee that interference will not occur in a particular commercial installation, or if operated in a residential area.

If harmful interference with radio or television reception occurs when the device is turned on, the user must correct the situation at the user's own expense. The user is encouraged to try one or more of the following corrective 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.

CAUTION: The Part 15 radio device operates on a non-interference basis with other devices operating at this frequency. Any changes or modification to said product not expressly approved by the manufacturer could void the user's authority to operate this device.

Canada Radio Frequency Interference Requirements

To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding. Equipment (or its transmit antenna) that is installed outdoors is subject to licensing.

Pour empêcher que cet appareil cause du brouillage au service faisant l'objet d'une licence, il doit être utilisé à l'intérieur et devrait être placé loin des fenêtres afin de fournir un écran de blindage maximal. Si le matériel (ou son antenne d'émission) est installé à l'extérieur, il doit faire l'objet d'une licence.

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 device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1) l'appareil ne doit pas produire de brouillage, et
2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Cet appareil et son antenne ne doivent pas être situés ou fonctionner en conjonction avec une autre antenne ou un autre émetteur, exception faites des radios intégrées qui ont été testées.

Radiation Exposure Statement:
The product comply with the Canada portable RF exposure limit set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The further RF exposure reduction can be achieved if the product can be kept as far as possible from the user body or set the device to lower output power if such function is available.

European Union CE Marking and Compliance Notices

Statements of Compliance

English
This product follows the provisions of the European Directive 2014/53/EU.

Danish
Dette produkt er i overensstemmelse med det europæiske direktiv 2014/53/EU.

Dutch
Dit product is in navolging van de bepalingen van Europees Directief 2014/53/EU.

Finnish
Tämä tuote noudattaa EU-direktiivin 2014/53/EU määräyksiä.

French
Ce produit est conforme aux exigences de la Directive Européenne 2014/53/EU.

German

Dieses Produkt entspricht den Bestimmungen der Europäischen Richtlinie 2014/53/EU.

Greek

Το προϊόν αυτό πληροί τις προβλέψεις της Ευρωπαϊκής Οδηγίας 2014/53/EU.

Icelandic

Þessi vara stenst reglugerð Evrópska Efnahags Bandalagsins númer 2014/53/EU.

Italian

Questo prodotto è conforme alla Direttiva Europea 2014/53/EU.

Norwegian

Dette produktet er i henhold til bestemmelsene i det europeiske direktivet 2014/53/EU.

Portuguese

Este produto cumpre com as normas da Diretiva Européia 2014/53/EU.

Spanish

Este producto cumple con las normas del Directivo Europeo 2014/53/EU.

Swedish

Denna produkt har tillverkats i enlighet med EG-direktiv 2014/53/EU.

Notices

CE Max power:

WLAN 2.4G: 16.5 dBm
WLAN 5G: 17.5 dBm
Bluetooth: 12 dBm
WWAN: 24 dBm
RFID: dBuA/m @ 10m

The device is restricted to indoor use only when operating in the 5150 to 5350 MHz frequency range.

	AT	BE	BG	HR	CY	CZ	DK

	EE	FI	FR	DE	EL	HU	IE
	IT	LV	LT	LU	MT	NL	PL
	PT	RO	SK	SI	ES	SE	UK

	Waste Electrical and Electronic Equipment (WEEE)
	This symbol means that according to local laws and regulations your product and/or its battery shall be disposed of separately from household waste. When this product reaches its end of life, take it to a collection point designated by local authorities. Proper recycling of your product will protect human health and the environment.

User Notification of Take-back Service

To Institutional （B2B） Users in United States：

Getac believes in providing our institutional customers with easy-to-use solutions to recycle your Getac-brand products for free. Getac understands the institutional customers will likely be recycling multiple items at once and as such. Getac wants to make the recycling process for these larger shipments as streamlined as possible. Getac works with recycling vendors with the highest standards for protecting our environment, ensuring worker safety, and complying with global environmental laws. Our commitment to recycling our old equipment grows out of our work to protect the environment in many ways.

Please see the product type below for information on Getac product, battery and packaging recycling in USA.

- **For Product Recycling:**
  Your portable Getac products contain hazardous materials. While they pose no risk to you during normal use, they should never be disposed with other wastes. Getac provides a free take-back service for recycling your Getac products. Our electronics recycler will provide competitive bids for recycling non-Getac products as well.

- **For Battery Recycling:**
  The batteries used to power your portable Getac products contain hazardous materials. While they pose no risk to you during normal use, they should never be disposed with other wastes. Getac provides a free take-back service for recycling your batteries from Getac products.

- **For Packaging Recycling:**
  Getac has chosen the packaging materials used to transport our products carefully, to balance the requirements of shipping the product to you safely while minimizing the amount of material used. The materials used in our packaging are designed to be recycled locally.

If you have the above for recycling, please contact our recycler, All Green Electronics Recycling, LLC. For more information on recycling, visit the website http://www.allgreenrecycling.com.

ENERGY STAR 6.1

ENERGY STAR® is a government program that offers businesses and consumers energy-efficient solutions, making it easy to save money while protecting the environment for future generations.

Please reference ENERGY STAR® related information from http://www.energystar.gov.

As an ENERGY STAR® Partner, Getac Technology Corporation has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

An ENERGY STAR® qualified computer uses 70 % less electricity than computers without enabled power management features.

Earning the ENERGY STAR®

- When every home office is powered by equipment that has earned the ENERGY STAR®, the change will keep over 289 billion pounds of greenhouse gases out of the air.

- If left inactive, ENERGY STAR® qualified computers enter a low-power mode and may use 15 watts or less. New chip technologies make power management features more reliable, dependable, and user-friendly than even just a few years ago.

- Spending a large portion of time in low-power mode not only saves energy, but helps equipment run cooler and last longer.

- Businesses that use ENERGY STAR® enabled office equipment may realize additional savings on air conditioning and maintenance.

- Over its lifetime, ENERGY STAR® qualified equipment in a single home office （e.g., computer, monitor, printer, and fax） can save enough electricity to light an entire home for more than 4 years.

- Power management （"sleep settings"） on computers and monitors can result in much savings annually.

Remember, saving energy prevents pollution

Because most computer equipment is left on 24 hours a day, power management features are important for saving energy and are an easy way to reduce air pollution. By using less energy, these products help lower consumers' utility bills, and prevent greenhouse gas emissions.

Getac Product Compliance

All Getac products with ENERGY STAR® logo comply with the ENERGY STAR® standard, and the power management feature is enabled by default. As recommended by the ENERGY STAR® program for optimal energy savings, the computer is automatically set to sleep after 15 minutes （in battery mode） and 30 minutes （in AC mode） of user inactivity. To wake up the computer, press the power button.

If you want to configure power management settings such as inactivity time and ways to initiate/end Sleep mode, go to **Power Options** by right-clicking the battery icon on the Windows taskbar and then selecting **Power Options** in the pop-up menu.

Please visit http://www.energystar.gov/powermanagement for detail information on power management and its benefits to the environment.

Battery Recycling

For the U.S. and Canada only:

To recycle the battery, please go to the RBRC Call2Recycle website or use the Call2Recycle Helpline at 800-822-8837.

Call2Recycle® is a product stewardship program providing no-cost battery and cellphone recycling solutions across the U.S. and Canada. Operated by Call2Recycle, Inc., a 501(c)4 nonprofit public service organization, the program is funded by battery and product manufacturers committed to responsible recycling. See more at: http://www.call2recycle.org