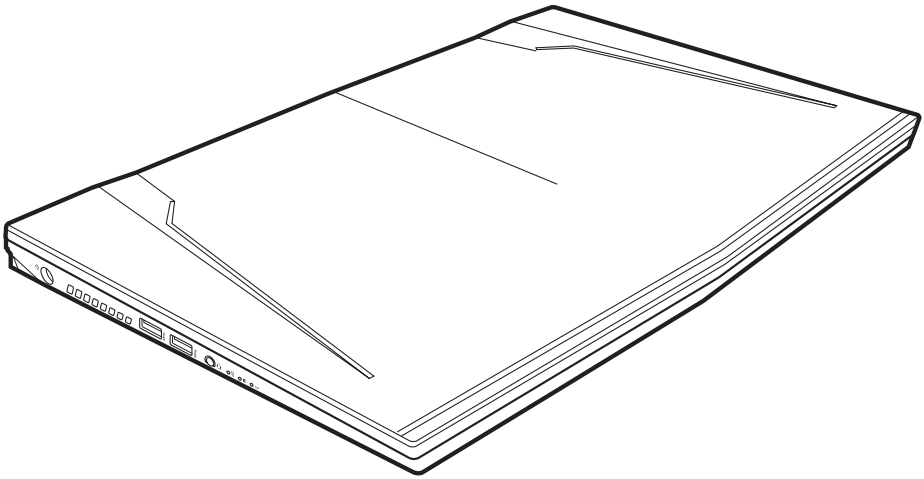
NL5A

USER MANUAL

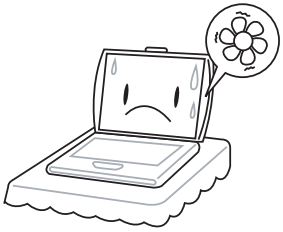
ENGLISH



March 2017

CONTENTS

TAKING CARE OF YOUR NOTEBOOK PC

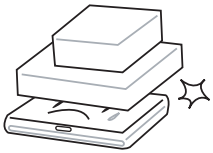


To prevent possible overheating of the computer's processor, make sure you don't block the openings provided for ventilation.

DO NOT press or touch the display panel.

DO NOT place on uneven or unstable work surfaces.

DO NOT use your notebook computer under harsh conditions.



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

DO NOT subject the computer to magnetic fields.

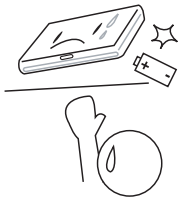
DO NOT expose to direct sunlight.

DO NOT use or store the computer in a place with a temperature higher than 35°C or other extreme environments.

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

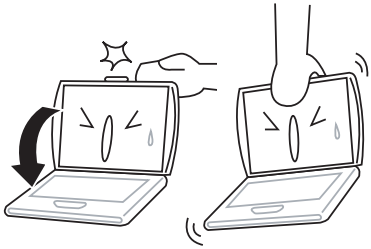
DO NOT expose the computer to rain or moisture.

DO NOT place near fire or other sources of heat.



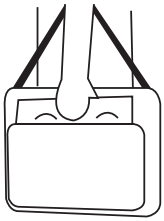
DO NOT tamper with the batteries. Keep them away from children.

DO NOT expose to dust and/or corrosive chemicals.



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

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



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

BEFORE YOU START

Make sure you have everything

When you receive your notebook PC, unpack it carefully, and check the packing list to make sure your notebook system is complete.

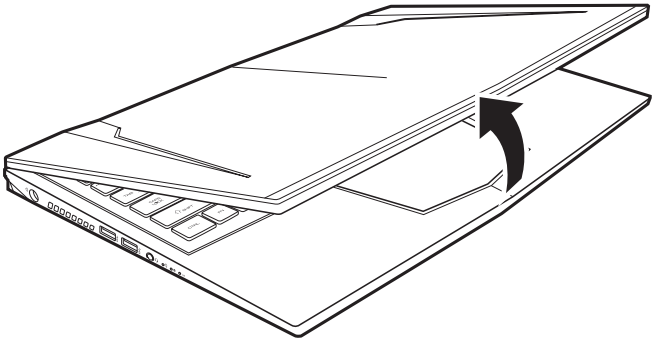
Once you have checked and confirmed that your notebook system is complete, read through the following pages to learn about all of your notebook components.

Depending on the model you purchased, the actual appearance of your notebook may vary from that shown in this manual.

Familiarize yourself with the computer

OPENING THE DISPLAY PANEL

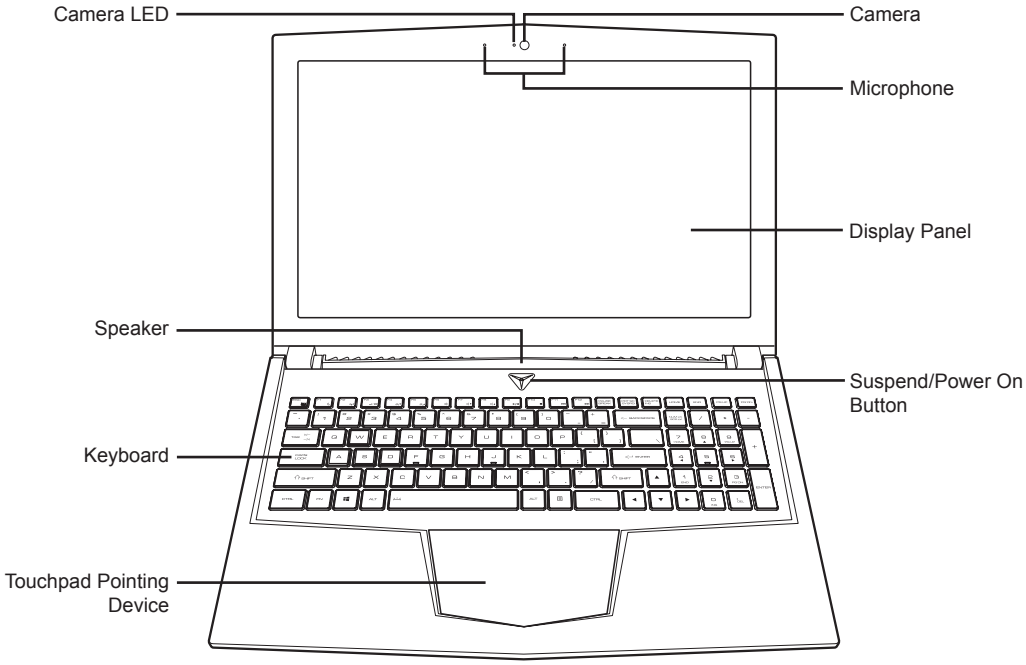
To open the display panel, simply lift the lid up.



When closing it, be sure not to slam it shut.

FRONT OVERVIEW

The following is an overview of the front of the notebook.



Camera

The built-in HD camera allows you to snap a photo or create a video chat or video conference with just a click.

Microphone

The built-in microphone allows for the reception and transmission of voice and/or other audio data to any program capable of accepting such input.

Display Panel

The display panel is a color LCD panel with back lighting for the display of text and graphics.

Suspend/Power On Button

This button turns your notebook on and off or puts it to sleep. (See Suspend/Power On Button in the POWER ON section for more information.)

Touchpad Pointing Device

The touchpad pointing device is a mouse-like cursor control with two virtual buttons and a touch sensitive movement pad.

Keyboard

A full-size keyboard with numeric keys and dedicated Windows® keys.

Speaker

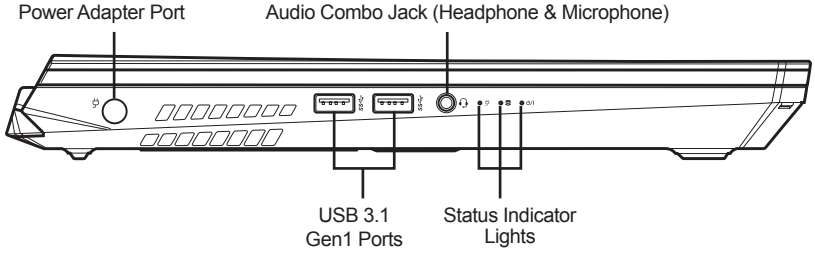
The built-in speaker allows for stereo sound and provides audio output for video and music playback.

Camera LED

The camera LED indicates when the camera is enabled or disabled.

LEFT SIDE OVERVIEW

The following is a brief description of the left side of the notebook.



Power Adapter Port

The power adapter port allows you to plug in the AC adapter to power your notebook and charge the internal Lithium-Ion battery.

Audio Combo Jack (Headphone & Microphone)

The audio combo jack allows you to connect headphones, external speakers, amplifiers, or an external mono microphone.

Status Indicator Lights

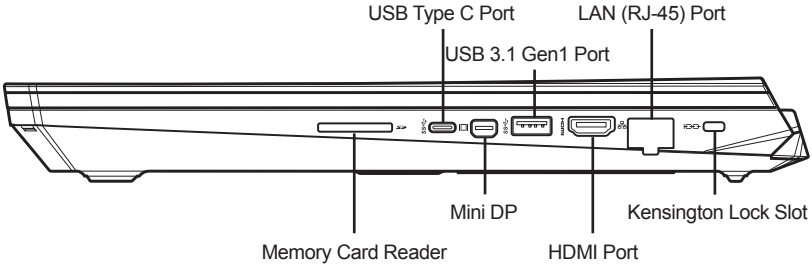
The status indicator lights correspond to specific operating modes. These modes are: battery status, hard disk drive (HDD) activity, and power status.

USB 3.1 Gen1 Ports

The USB 3.1 Gen1 ports allow you to connect Universal Serial Bus devices. It supports v3.1 of the USB standard. USB 3.1 Gen1 is backwards compatible with USB 2.0.

RIGHT SIDE OVERVIEW

The following is a brief description of the right side of the notebook.



USB Type C Port

The USB Type C port allows you to connect Universal Serial Bus devices. It is small, compact, and reversible port.

USB 3.1 Gen1 Port

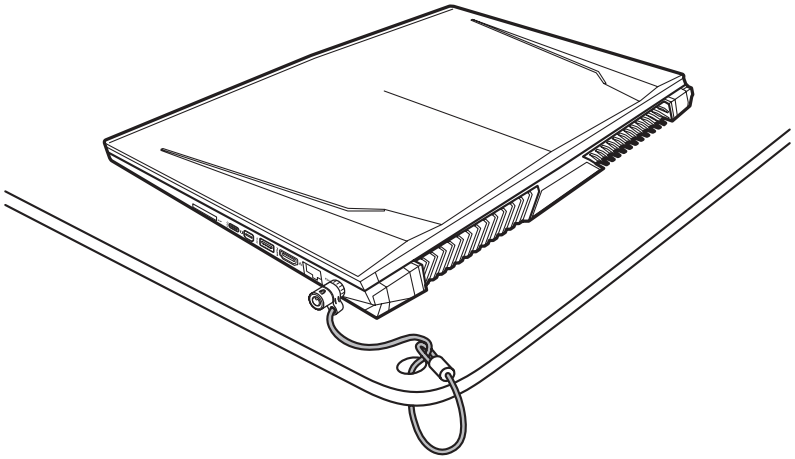
The USB 3.1 Gen1 port allows you to connect Universal Serial Bus devices. It supports v3.1 of the USB standard. USB 3.1 Gen1 is backwards compatible with USB 2.0.

LAN (RJ-45) Port

The LAN port is designed to support a 10/100/1000 Base-T standard RJ-45 plug.

Kensington Lock Slot

The Kensington lock slot allows you to secure your notebook to an immovable object with an optional security cable.



HDMI Port

The HDMI port allows you to connect a video device such as a television, a projector, or a VCR to your computer.

Mini DP (DisplayPort)

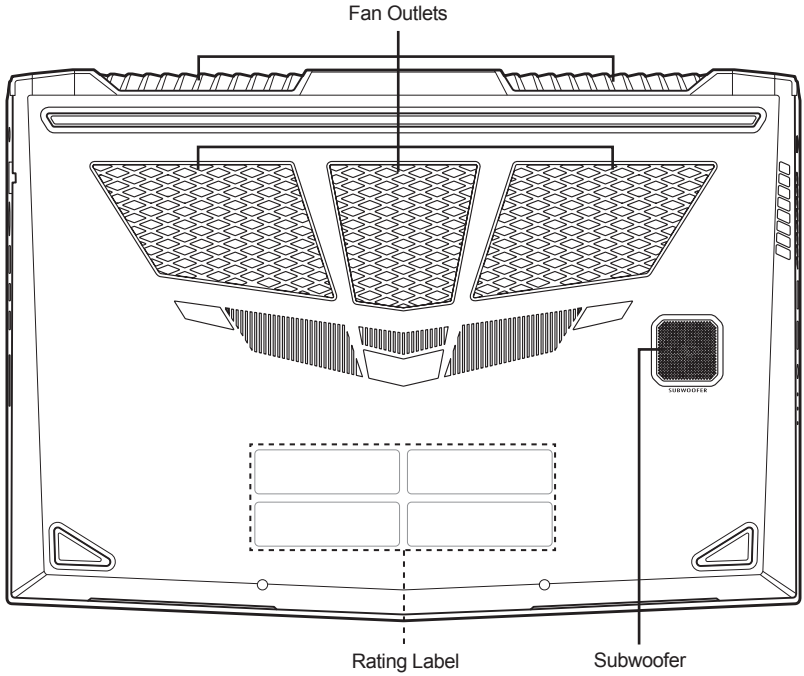
The mini DP port allows you to connect an external monitor. It can support multiple displays.

Memory Card Reader

The memory card reader offers a fast and easy way to transfer digital photos, music and data between your notebook and flash compatible devices such as digital cameras, portable MP3 players, mobile phones, tablets, and handheld devices.

BOTTOM OVERVIEW

The following is a brief description of the bottom of the notebook.



Fan Outlets

These are open ports for the fan to dissipate heat from the computer's internal components. Do not block or place the computer in such a position that you inadvertently allow the outlet to become blocked.

Subwoofer

The 3W subwoofer provides enhanced low-frequency tones (bass) to audio output from your notebook.

Rating Label

The label shows the model number and other information about your notebook.

GETTING STARTED

Power Sources

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

CONNECTING THE POWER ADAPTER

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

Connecting the AC Adapter

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

Switching from AC Adapter Power to Battery Power

Remove the AC adapter. Your notebook will automatically switch to battery power.

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

RECHARGING THE BATTERY

The Lithium-Ion battery is recharged internally using the AC adapter. To recharge the battery, make sure the computer is connected to the AC.

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

Low Battery State

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

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

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

If the battery with an incorrect type is used, it may explode. Dispose of used batteries in accordance with the instructions.

Standard Charge

Unless otherwise specified, "Standard Charge" shall consist of charging at a 0.5C constant current. The cell shall then be charged at constant voltage of 4.2V while tapering the charge current. Charging shall be terminated when the charging current has tapered to 50mA. For testing purposes, charging shall be performed at 25ºC ±2ºC.

Standard Discharge

"Standard Discharge" shall consist of discharging at a 0.2C constant current until the cell voltage reaches 2.75V. Discharging shall be performed at 25ºC ±2ºC unless otherwise noted (such as capacity versus temperature).

Battery Capacity

For example:
Typical: 7560mAH (0.2C_{min} discharge with 3V/cell cut off voltage at 25± 3ºC)
Minimum: 7180 mAH (0.2C_{min} discharge with 3V/cell cut off voltage at 25± 3ºC)

To measure the battery capacity, discharge the battery at the various current until it reaches the end-of-discharge cut-off voltage of 3V (standard charge) as shown in the table below.

Item	Discharge condition			
Current	0.2C	0.5C	1.0C	2.0C
Relative Capacity	100.0%	95.0%	90.0%	N/A

Percentage as an index of the capacity compared with 100% at 25ºC (initial capacity).

Cells shall be charged per "Standard Charge" and discharged per "Standard Discharge" within 1 hour after a full charge. [≥ 7180 mAh (C_{min})]

Starting Your Notebook

POWER ON

Suspend/Power On Button

The **Suspend/Power On** button is used to turn on your notebook from its off state. Once you have connected your AC adapter or charged the internal Lithium-Ion battery, you can power on your notebook by pressing the **Suspend/Power On** button located above the keyboard. If you need to take an extended break press the button again to turn it off.

Do not carry your notebook around with the power on or subject it to shocks or vibration, as you risk damaging the hard disk.

When you power on your notebook, it will perform a Power On Self Test (POST) to check the internal parts and configuration for correct functionality. If a fault is found, your computer emits an audio warning and or displays and error message.

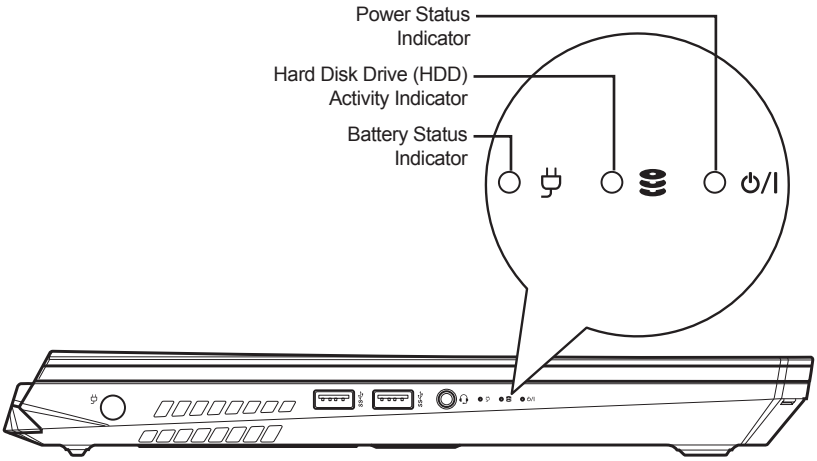
Depending on the nature of the problem, you may be able to continue by starting the operating system or, by pressing F2 key when the logo appears during the startup process to enter the BIOS setup utility and revise the settings.

After satisfactory completion of the Power On Self Test (POST), your notebook loads the installed operating system.

Never turn off your notebook during the Power On Self Test (POST), or an unrecoverable error may occur.

STATUS INDICATORS

The status indicator lights correspond to specific operating modes. These modes are: battery status, hard disk drive (HDD) activity, and power status.



Battery Indicator

The battery status indicator tells you the battery charge level.

- The light illuminates when the computer is operating using the AC adapter.
- The light indicates:
  - Blinking - Battery is below 10% capacity.
  - Fast Blinking - Battery is at a critically low level and the system cannot be powered on, plug the AC adapter into your notebook to charge the battery immediately.
- If the battery is not working correctly, the indicator will be off.
- Batteries subjected to shocks, vibrations or extreme temperatures can be permanently damaged.

Hard Disk Drive (HDD) Activity Indicator

The hard disk drive (HDD) activity indicator tells you whether your internal hard drive is being accessed and, if so, how fast.

Power Indicator

The power status indicator tells you that the notebook is powered on and running.

USING FUNCTION KEYS

Your computer has 12 function keys, F1 through F12. The functions assigned to these keys differ for each application. You should refer to your software documentation to find out how these keys are used.

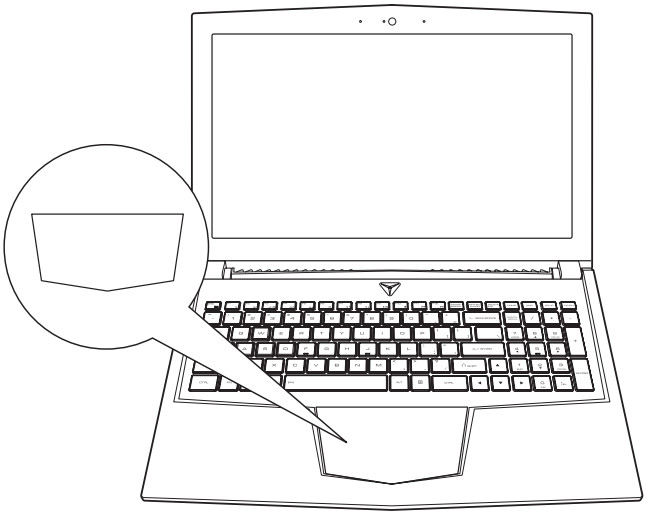
The [FN] key provides extended functions for the notebook and is always used in conjunction with another key.

- [FN+Esc]: Enables or disables the touchpad function.
- [FN+F1]: Places the notebook in Suspend mode. Pressing the **Suspend/Power On** button returns it to active mode.
- [FN+F2]: Enables or disables the wireless network connection.
- [FN+F3]: Allows you to change your selection of where to send your display video. Each time you press the combination of keys you will step to the next choice. The choices, in order, are: built-in display panel only, both built-in display panel and external monitor, or external monitor only.
- [FN+F4]: Decreases the screen brightness.
- [FN+F5]: Increases the screen brightness.
- [FN+F6]: Mutes the computer's volume.
- [FN+F7]: Decreases the computer's volume.
- [FN+F8]: Increases the computer's volume.
- [FN+F9]: Plays or pauses the current multimedia track.
- [FN+F10]: Stops the current multimedia track.
- [FN+F11]: Goes to the previous multimedia track.
- [FN+F12]: Goes to the next multimedia track.
- [FN]+Spacebar: Toggles the keyboard backlight between On (dim), On (bright), and Off.
- [FN+0]: Turns the panel backlight and all other lights (included the top cover logo) On or Off except for the keyboard backlight.
- [FN+1]: Switches the system fans to the maximum speed.
- [FN+2]: Controls the breathing LED.
- [FN+3]: Turns the top cover dual light bars On or Off.
- [FN+9]: Turns the touchpad backlight and the dual light bars on the front panel On or Off.

USING THE TOUCHPAD

A touchpad pointing device comes built into your computer. It is used to control the movement of the pointer to select items on your display panel.

The touchpad consists of a cursor control, a virtual left button, a virtual right button, and a scroll bar. The cursor control works the same way a mouse does, and moves the cursor around the display. It only requires light pressure from the tip of your finger. The left and right buttons function the same as mouse buttons. The actual functionality of the buttons may vary depending on the application that is being used. Finally, the scroll bar allows you to navigate quickly through pages, without having to use the on-screen cursor to manipulate the up and down scroll bars.



Clicking

Clicking means pushing and releasing a button. To left-click, move the cursor to the item you wish to select, press the left button once, and then immediately release it. To right-click, move the mouse cursor to the item you wish to select, press the right button once, and then immediately release it. You also have the option to perform the clicking operation by tapping lightly on the touchpad once.

Double-Clicking

Double-clicking means pushing and releasing the left button twice in rapid succession. This procedure does not function with the right button. To double-click, move the cursor to the item you wish to select, press the left button twice, and then immediately release it. You also have the option to perform the double-click operation by tapping lightly on the touchpad twice.

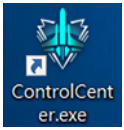
Dragging

Dragging means pressing and holding the left button, while moving the cursor. To drag, move the cursor to the item you wish to move. Press and hold the left button while moving the item to its new location and then release it. Dragging can also be done using only the touchpad. First, tap the touchpad twice over the item you wish to move making sure to leave your finger on the pad after the final tap. Next, move the object to its new location by moving your finger across the touchpad, and then release your finger. Using the scroll bar allows you to navigate through a document quickly without using the window's scroll bars. This is particularly useful when you are navigating through on-line pages.

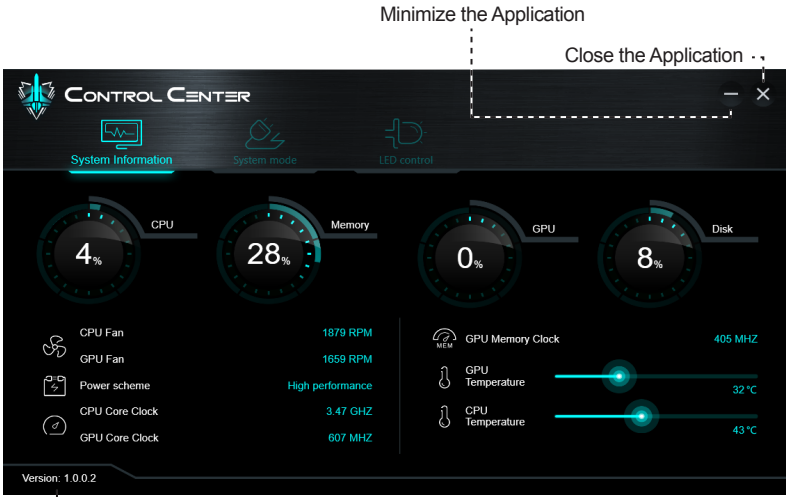
USING THE CONTROL CENTER

The Control Center application allows you to preview the system parameters, select and adjust the system mode, and configure LED behaviour for each system mode.

To access the Control Center, double click the *Control Center* application (**ControlCenter.exe**) icon.



Control Center Overview

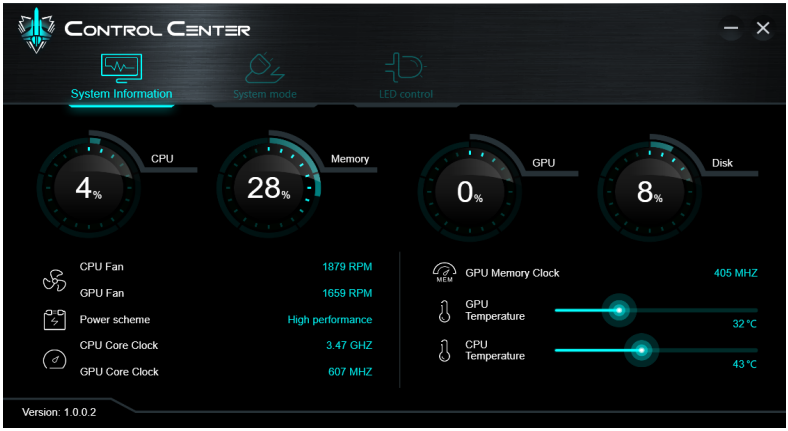


Do any of the following:

- Select *System Information*, *System Mode, or LED Control* to access its configuration page. Click ⊖ to minimize the application window.
- Click ⊗ to exit the application window.

You can find the Control Center version on the bottom left of the screen.

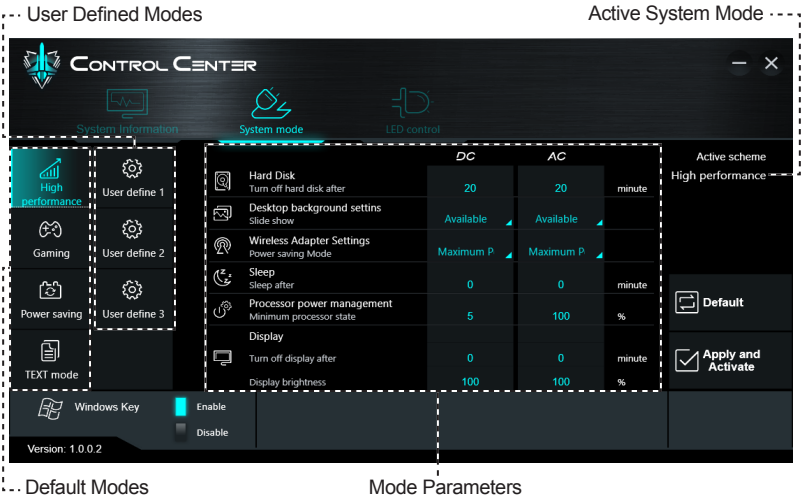
System Information



On *System Information* page, you can do the following:

- Monitor the *CPU*, *Memory*, *GPU*, and *Disk* usage percentage.
- View the *CPU Fan* speed, *GPU Fan* speed, *Power scheme*, *CPU Core Clock* frequency, *GPU Core Clock* frequency, *GPU Memory Clock* frequency, *GPU Temperature,* and *CPU Temperature*.

System Mode



On *System mode* page, do any of the following:

- Select the system mode:
  1. Select your preferred system mode among the Default Modes, such as *High performance* (most power consuming), *Gaming*, *Power saving*, or *TEXT mode* or User Defined Modes, such as *User define 1/User define 2/User define 3.*

Using User Defined Modes, you can create up to three customized modes.

  3. On the Mode Parameters, define the mode values when running the computer on battery power (DC) and on AC power.
  4. Click any of the following:
     – *Default* to restore the default values of the currently selected mode.
     – *Apply & Activate* to save and apply the settings for the currently selected mode.
- Click *Disable* to disable the *Windows Key* function or click *Enable* to enable the *Windows Key* function.

LED Control

On *LED control* page, configure the system mode LED illumination:

1. Make sure the *LED Control* is turned *ON*.
2. Select your desired System Mode to adjust its illumination. The available options include *Gaming*, *High performance*, *Power saving*, and *Custom*.
3. Select your desired LED mode and set its parameters. The available modes include:
   – *Keyboard LED Mode*: *Light, Flash*, *Breath*, *HeartBeat, Random, and Repeat*.
   – *Clickpad LED Mode*: *Always on, Off, and Sleep.*
4. Set the *Select All keyboard zone* function to *ON* if you want to modify all the adjustable LED zones at once or *OFF* to adjust each LED zone individually.

The LED zones are divided into five groups and each group has its own color code. These groups include *Zone A*, *Zone B*, *Zone C*, *Power button*, and *Clickpad*. If you want to adjust the LED illumination of a specific group, select the group name first, and then select a new color from the Color Wheel.

5. Select the LED color from the Color Wheel.
6. Slide the *Keyboard brightness* bar to left or right to adjust the keyboard brightness level.
7. Click *Default* to restore the default values for LEDs.

TROUBLESHOOTING

Your notebook PC is sturdy and subject to few problems in the field. However, you may encounter simple setup or operating problems that you can solve on the spot, or problems with peripheral devices, that you can solve by replacing the device. The information in this section helps you isolate and resolve some of these straightforward problems and identify failures that require service.

Identifying the Problem

If you encounter a problem, go through the following procedure before pursuing complex troubleshooting:

1. Turn off your notebook.
2. Make sure the AC adapter is plugged into your notebook and to an active AC power source.
3. Make sure that any card installed in any available card slots is seated properly. You can also remove the card from the slot, thus eliminating it as a possible cause of failure.
4. Make sure that any devices connected to the external connectors are plugged in properly. You can also disconnect such devices, thus eliminating them as possible causes of failure.
5. Turn on your notebook. Make sure it has been off at least 10 seconds before you turn it on.
6. Go through the boot sequence.
7. If the problem has not been resolved, contact your support representative.

Before you place the call, you should have the following information ready so that the customer support representative can provide you with the fastest possible solution:

- Product name
- Product configuration number
- Product serial number
- Purchase date
- Conditions under which the problem occurred
- Any error messages that have occurred
- Hardware configuration
- Type of device connected, if any

See the Configuration Label on the bottom of your notebook for configuration and serial numbers.