

# **1**

## **Preface**

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## Copyright Notice

The material in this document is the intellectual property of MICRO-STAR INTERNATIONAL. We take every care in the preparation of this document, but no guarantee is given as to the correctness of its contents. Our products are under continual improvement and we reserve the right to make changes without notice.

## Trademarks

All trademarks are the properties of their respective owners.

## Revision History

- ▶ Version: 2.0
- ▶ Date: 01, 2016

## FCC-B Radio Frequency Interference Statement

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 radiates 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.

### NOTE

- ▶ The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- ▶ Shield interface cables and AC power cord, if any, must be used in order to comply with the emission limits.

## FCC Conditions

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- ▶ This device may not cause harmful interference.
- ▶ This device must accept any interference received, including interference that may cause undesired operation.

## CE Conformity



This device is in compliance with the essential safety requirements and other relevant provisions set out in the European Directive.

## Battery Regulations

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**European Union:** Batteries, battery packs, and accumulators should not be disposed of as unsorted household waste. Please use the public collection system to return, recycle, or treat them in compliance with the local regulations.

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廢電池請回收

**Taiwan:** For better environmental protection, waste batteries should be collected separately for recycling or special disposal.

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California, USA: The button cell battery may contain perchlorate material and requires special handling when recycled or disposed of in California.

For further information please visit: <http://www.dtsc.ca.gov/hazardouswaste/perchlorate/>

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## WEEE Statement

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**European Union:** Under the European Union ("EU") Directive on Waste Electrical and Electronic Equipment, Directive 2002/96/EC, which takes effect on August 13, 2005, products of "electrical and electronic equipment" cannot be discarded as municipal waste anymore and manufacturers of covered electronic equipment will be obligated to take back such products at the end of their useful life.

---

## Upgrade and Warranty

Please note that certain components, such as memory cards, HDD, SSD, ODD, and bluetooth/WiFi combo card, etc., preinstalled in the product may be upgradable or replaceable by user's request depending on the models users purchased.

For any further information on the product users purchased, please contact the local dealer. Do not attempt to upgrade or replace any component of the product if users do not understand the component location or how to assembly/disassembly, since it may cause the product damaged. It is recommended that user contact the authorized dealer or service center for product service.

## Optical Disc Drive Notice

CAUTION: This appliance contains a laser system and is classified as a "CLASS 1 LASER PRODUCT." To use this model properly, read the instruction manual carefully and keep this manual for your future reference. In case of any trouble with this model, please contact your nearest "AUTHORIZED service station." To prevent direct exposure to the laser beam, do not try to disassemble the enclosure.

## Safety Instructions

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Read the safety instructions carefully and thoroughly. All cautions and warnings on the equipment or user's manual should be noted.

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Keep the notebook away from humidity and high temperature.

---



Lay the notebook on a stable surface before setting it up.

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Do not cover the ventilators of the notebook to prevent the notebook from overheating.

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- Do not leave the notebook in an unconditioned environment with a storage temperature above 60°C (140°F) or below 0°C (32°F), which may damage the notebook.
  - This notebook should be operated under maximum ambient temperature of 35°C (95°F).
- 



Place the power cord in a way that people are unlikely to step on it. Do not place anything on top of the power cord.

---



Always keep the strong magnetic or electrical objects away from the notebook.

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Never pour liquid onto the notebook, since it may damage the equipment or cause an electrical shock.

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If any of the following situations arises, get the equipment checked by a service personnel:



- The power cord or plug is damaged.
- Liquid has penetrated into the equipment.
- The equipment has been exposed to moisture.
- The equipment has not worked well or you can not get it work according to User's Manual.
- The equipment was dropped and damaged.
- The equipment has obvious signs of breakage.

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### **Green Product Features**

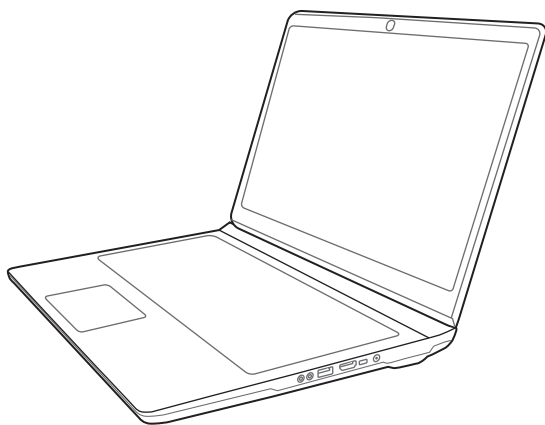
- Reduced energy consumption during use and stand-by
- Limited use of substances harmful to the environment and health
- Easily dismantled and recycled
- Reduced use of natural resources by encouraging recycling
- Extended product lifetime through easy upgrades
- Reduced solid waste production through take-back policy



### **Environmental Policy**

- The product has been designed to enable proper reuse of parts and recycling and should not be thrown away at its end of life.
- Users should contact the local authorized point of collection for recycling and disposing of their end-of-life products.
- Visit the MSI website and locate a nearby distributor for further recycling information.
- Users may also reach us at [gpcontdev@msi.com](mailto:gpcontdev@msi.com) for information regarding proper disposal, take-back, recycling, and disassembly of MSI products.





# 2

## Introductions

Congratulations on becoming an user of this notebook, the finely designed notebook. You will have a delightful and professional experience in using this exquisite notebook. We are proud to tell users that this notebook is thoroughly tested and certified by our reputation for unsurpassed dependability and customer satisfaction.

## Unpacking

First, unpack the shipping carton and check all items carefully. If any item contained is damaged or missing, please contact your local dealer immediately. Also, keep the box and packing materials in case you need to ship the unit in the future. The package should contain the following items:

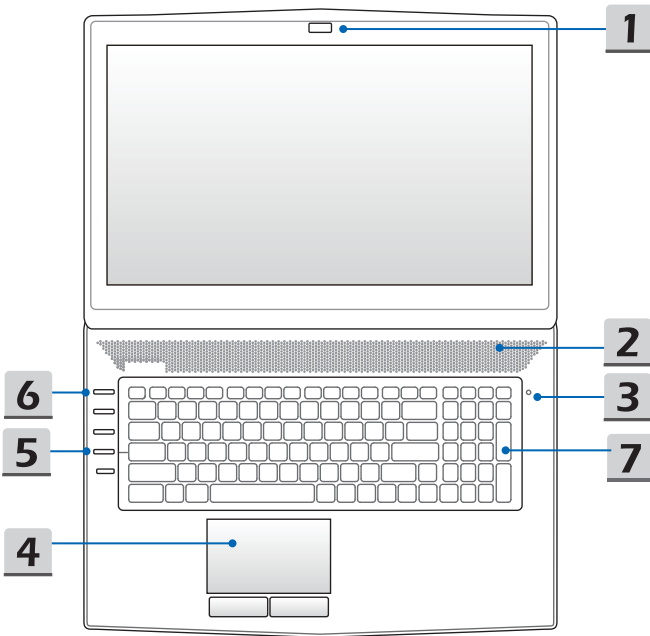
- ▶ Notebook
- ▶ Quick Start Guide
- ▶ AC/DC adapter and AC power cord
- ▶ Optional carry bag
- ▶ Optional all-in-one application disk, containing the full version of user's manual, drivers, utilities, and so on.

## Product Overview

This section provides the description of basic aspects of the notebook. It will help you to know more about the appearance of this notebook before using it. Please be aware that the figures shown here are for reference only.

### Top-open View

The figure of top-open view and description shown below will lead you to browse the main operating area of your notebook.



### 1. Webcam/ Webcam LED/ Internal Microphone

- This built-in webcam can be used for picture taking, video recording or conferencing, and so on.
- Webcam LED indicator, next to the webcam, glows when webcam function is activated; LED goes out when this function is turned off.
- The built-in microphone and its function is the same with microphone.

### 2. Stereo Speakers

This notebook may be equipped with built-in stereo speakers which deliver the high quality sound, and supports the HD audio technology.

### 3. Status LED

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#### Caps Lock

Glows when the Caps Lock function is activated.

---



#### Num Lock

Glows when the Num Lock function is activated.

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### 4. Touchpad

This is the pointing device of the notebook.

### 5. Quick Launch Buttons

Use the quick launch buttons to activate the specific applications or tools. The following quick launch buttons will only be functional in the operating system with the SCM application installed. Find the SCM exe file in the optional all-in-one disk that comes with the package or download it from MSI's website for easy and convenient operation.

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#### Graphics Switch

- Use this button to select either discrete GPU mode or UMA GPU mode.
  - Button LED glows when the discrete GPU mode is selected.
- 



#### Cooler Boost

- Use this button to maximize the fan speed to cool down the overall temperature of the notebook.
  - Button LED glows when the fan speed is set to maximum level; LED goes off when AUTO mode is selected.
-

## **P2** User Defined

- This button allows user to define the P2 quick launch button for launching the particular application.
- If user left this button undefined, press this button would bring up the User Define Key dialogue.



## **Keyboard LED Backlit Switch**

- Use this button to switch ON or OFF the flash keyboard LEDs which are mounted beneath the keyboard.

## 6. Power Button / Power LED



**Power**

### **Power Button**

- Use this button to turn the notebook power ON and OFF.
- Use this button to awake the notebook from the sleep state.

### **Power LED**

- LED glows when the notebook power is turned on.
- LED goes off when the notebook is turned off.

## 7. Keyboard

The built-in keyboard provides all the functions of a full-sized keyboard. Refer to **How to Use the Keyboard** for details.

## Front Side View



### 1. Status LED



#### Wireless LAN (WiFi)

- LED glows when **Wireless LAN (WiFi)** function is enabled.
- LED goes out when this function is disabled.



#### Battery Status

- LED glows when the battery is being charged.
- Continuously blinking if the battery fails.
- Always consult an authorized retailer or service center for purchasing or replacing an equivalent type of battery recommended by the manufacturer.
- Battery LED goes out when it is fully charged or when the AC/DC adapter is disconnected.

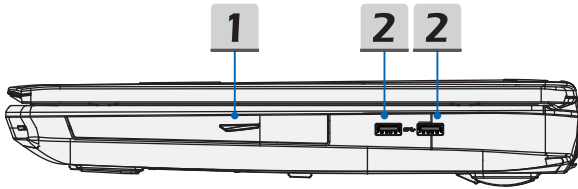


#### Drive Activity Indicator

LED blinks when the system is accessing the internal storage drives.



## Right Side View



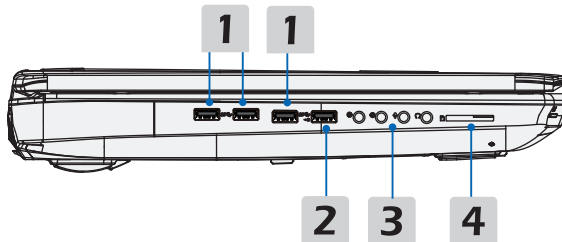
### 1. Optical Disc Drive

This notebook is equipped with an optical disc drive. The actual device preinstalled in the notebook depends on the model you purchased.

### 2. USB 3.0 Port

USB 3.0, the SuperSpeed USB, delivers the higher interface speeds for connecting various devices, such as storage devices, hard drives, or video cameras, and offers more advantages over high-speed data transferring.

## Left Side View



### 1. USB 3.0 Port

USB 3.0, the SuperSpeed USB, delivers the higher interface speeds for connecting various devices, such as storage devices, hard drives, or video cameras, and offers more advantages over high-speed data transferring.

### 2. USB 3.0 Port

USB 3.0, the SuperSpeed USB, delivers the higher interface speeds for connecting various devices, such as storage devices, hard drives, or video cameras, and offers more advantages over high-speed data transferring.

### 3. Audio Port Connectors



#### Microphone

Used for an external microphone.



#### Line In

Used for an external microphone.



**Line Out**

A connector for speakers.



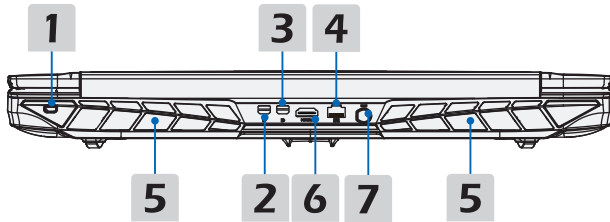
**Headphone out/ S/PDIF-out**

- A connector for speakers or headphones.
- Used for speakers or headphones. The S/PDIF connector is also provided for digital audio transmission to external speakers through an optical fiber cable.

**4. Card Reader**

The built-in card reader supports various types of memory cards. Check the Specifications in for details.

## Rear Side View



### 1. Kensington Lock

This notebook provides a Kensington lock hole, which allows users to secure the notebook in place.

### 2. Mini-DisplayPort

The Mini-DisplayPort is a miniaturized version of the DisplayPort, with a suitable adapter, the Mini-DisplayPort may be used to drive displays with a VGA, DVI or HDMI interface.

### 3. Thunderbolt (Type C)

Thunderbolt 3 supports up to 40Gbps data rate, dual 4K displays monitor output.

### 4. RJ-45 Connector

This connector is used to connect a LAN cable for network connection.

### 5. Ventilator

The ventilator is designed to cool the system. DO NOT block the ventilator for air circulation.

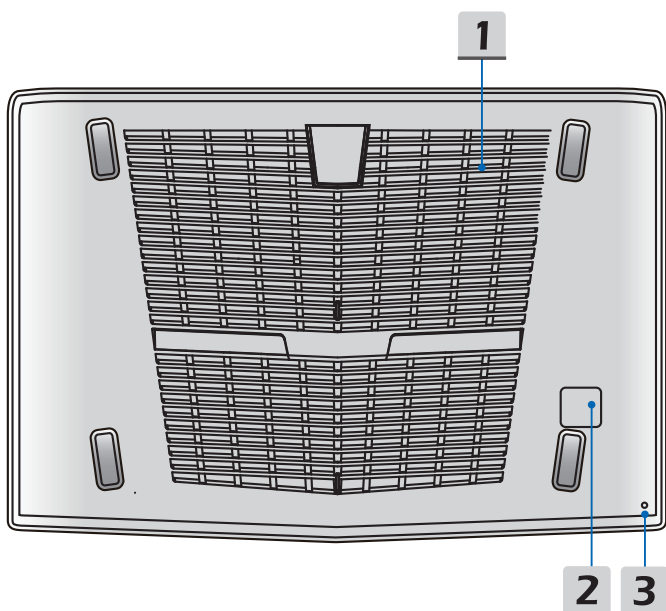
### 6. HDMI Connector

HDMI (High-Definition Multimedia Interface) technology is the industry-leading interface and de-facto standard connecting high-definition (HD) and ultra high-definition (UHD) equipment.

### 7. Power Connector

This connector is to connect the AC/DC adapter and supply power for the notebook.

## Bottom Side View



### 1. Ventilator

The ventilator is designed to cool the system. DO NOT block the ventilator for air circulation.

### 2. Subwoofer Speaker

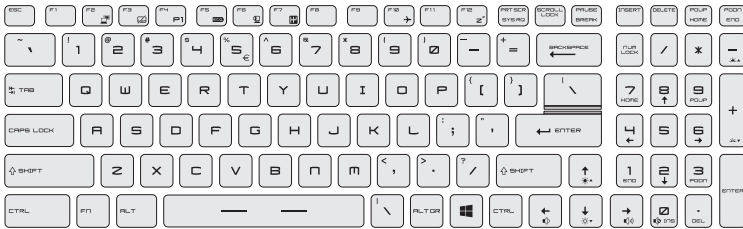
The subwoofer speaker is to reproduce low-pitched audio frequencies known as bass.

### 3. Battery Reset Hole

Whenever the system firmware (EC) is upgraded or the system hangs, please  
 1) power off the notebook; 2) connect the AC power; 3) use a straightened paperclip to insert this hole and reset the notebook; 4) power on the notebook.

## How to Use the Keyboard

This notebook provides a full functioned keyboard. To ensure that the keyboard will be functional properly, it is a must to install SCM application before using the keyboard function keys.



## Windows Key



You can find the Windows Logo key on the keyboard which is used to perform Windows-specific functions, such as opening the Start menu and launching the shortcut menu.

## Quick Launch Keys

Use the [Fn] combination keys on the keyboard to activate the specific applications or tools. With the help of these keys, users will be able to do work more efficiently.



### User Defined or Windows Search (optional)

- Press and hold the **Fn** button, and then press the **F4** button to launch the **User Defined** application.
- Or, press and hold the **Fn** button, and then press the **F4** button to launch the Windows Search function.



### ECO Engine (Power Saving)

- Press **Fn** and **F5** keys repeatedly to switch among various power saving modes provided by **ECO Engine**, or to turn this function off recurrently.



### Webcam

- Press **Fn** and **F6** keys to turn the **Webcam** function on. Press again to turn it off.
- Webcam is turned off under default settings.



### P2

- Press and hold the **Fn** button, and then press the **F7** button to define the **P2** quick launch button for launching the particular application.
- If user left this button undefined, press this button would bring up the **User Define** Key dialogue.



### Airplane mode

- Press **Fn** and **F10** keys repeatedly to turn **Airplane mode** on or off recurrently.
- Refer to the Airplane mode switch icon under [**Start/ Settings/ Change PC settings/ Network / Airplane mode**] on the desktop to check the device status.

## Disable or Enable Touchpad

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Enable or disable the touchpad function. (Optional)

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## Enter Sleep Mode

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Force the computer into sleep state (depending on the system configuration). Press the Power button to wake up the system from sleep state.

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## Switch Display

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Switch the display output mode between the LCD, external monitor and both.

---

## Use Multiple Monitors

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If users connect an additional monitor to the notebook, the system will automatically detect the external monitor connected. Users will be allowed to customize the display settings.

- Connect the monitor to the notebook.
  - Press and hold the Windows key, and then press [P] key to bring up [Project].
  - Select how you want your display to project on the second screen from the selections of PC screen only, Duplicate, Extend, and Second screen only.
-



## Adjust the Brightness Level of the Display

---



Increase the LCD brightness.



Decrease the LCD brightness.

## Adjust the Sound Level of the Speaker

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Increase the built-in speaker's volume.



Decrease the built-in speaker's volume.



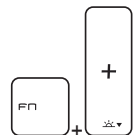
Mute the built-in speakers.

## Adjust the Brightness Level of the Keyboard Backlight LED

---



Increase the brightness level of the keyboard backlight LEDs.



Decrease the brightness level of the keyboard backlight LEDs.

## Specifications

The specifications listed here is reference only, and may change without notice. The actual products sold are different from areas.

### Physical Characteristic

Dimension 428 (W) x 249 (D) x 48 (H) mm

Weight 3.85kg with battery

### CPU

Package FCBGA

CPU Processor Type Intel® Quad/ Dual Core Mobile Processor

L3 Cache Up to 8MB (Based on CPU)

### Core Chip

Platform Controller Hub Intel® PCH-H

### Memory

Technology DDR4 2133/ 2400MHz

Memory DDR4 SO-DIMM slots x 4  
8G/ 16G DDR4 SDRAM

Maximum Up to 64GB

### Power

AC/DC Adapter 230W, 19.5V  
Input: 100~240V, ~3.2A, 50~60Hz  
Output: 19.5V  $\equiv$  11.8A  $\ominus$   $\bullet$   $\oplus$

Battery Type 9-cell

RTC Battery Yes

### Storage

HDD form factor 2.5" HDD

SSD (optional)	M.2 slot x 4 (optional) Support up to 4 SSD devices
Optical Drive Device (optional)	Super Multi / Blu-ray
MultiBay	Supported
<b>I/O Port</b>	
USB	x 6 (version 3.0) x 1 (Thunderbolt+DP+USB 3.1 10Gbps)
Mic-in	x 1
Headphone-out	x 1 (S/PDIF-Out supported)
Side-out	x 1
Line-in	x 1
RJ45	x 1
HDMI	x 1
Mini-DisplayPort	x 1
Card Reader	x 1 (SD4.0/ MMC) The supported memory cards may vary without notice.
<b>Communication Port</b>	
LAN	10/ 100/ 1000Mb Ethernet
Wireless LAN+ Bluetooth (optional)	M.2 type
<b>Display</b>	
LCD Type	17.3" LED panel
Brightness	Controlled by K/B hot-keys

## Video

Graphics NVIDIA® Quadro® discrete MXM graphics card or Intel® HD UMA graphics card.  
Discrete or UMA graphics card is switchable by GPU Quick Launch Button.

VRAM Based on GPU structure

HDMI output Supported

DisplayPort output Supported

Multi-Display Function Supported

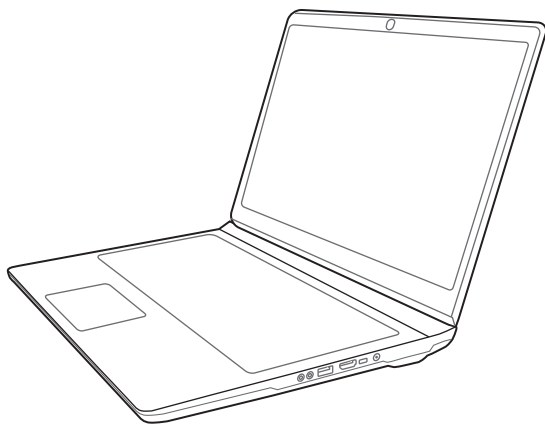
## Webcam

Full HD Type 30fps@1080p

## Audio

Internal Speaker 2 speakers + 1 subwoofer

Sound Volume Adjusted by keyboard hot-key and switches.

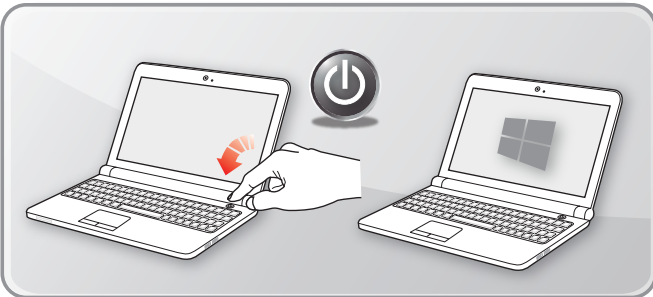
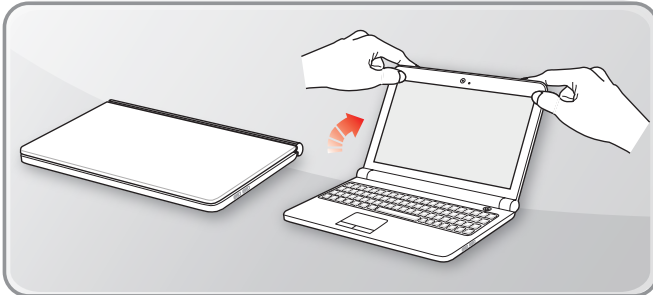
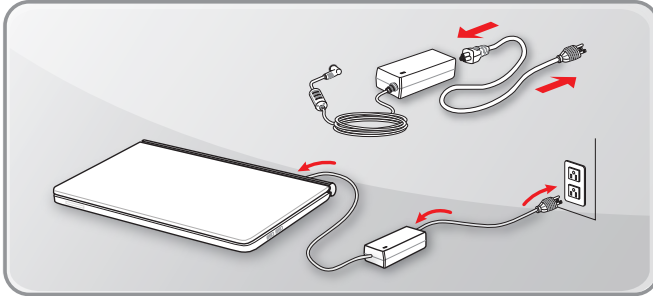


# 3

## How To Get Started

## Begin to Use the Notebook

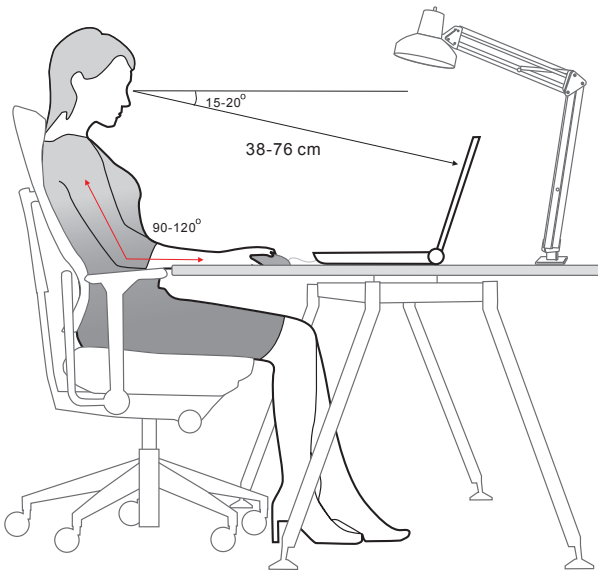
For a new user of this notebook, we would like to suggest you follow the illustrations below to begin to use the notebook.



## How to Use the Notebook Comfortably

If you are a beginner to the notebook, please read the following instructions to assure your own safety, and make yourself comfortable during the operations.

- ▶ Good illumination is essential in the work area.
- ▶ Choose a chair and desk with good ergonomics and adjust their heights according to your posture.
- ▶ Adjust the backrest to support your lower back comfortably when you are sitting upright.
- ▶ Place your feet flat on the floor with your knees bent to a 90 degrees.
- ▶ Adjust the angle/position of the LCD panel to have an optimal view.
- ▶ Stretch and relax your body regularly. Always take a break after working for a period of time.



## How to Manage Power Supply

This section provides users basic safety precautions to take when using an AC/DC adapter and battery power properly.

### AC/DC Adapter

Ensure that your notebook is connected to an AC power source via the AC adapter before turning it on for the first time. If the notebook automatically shuts down due to low battery power, it is likely to cause system failure. Below are some Dos and Don'ts of an AC/DC adapter.

- ▶ Dos
  - Use the adapter that shipped with your notebook only.
  - Always be aware of heat coming from the in use AC/DC adapter.
  - Unplug the AC power cord before disassembly the notebook.
- ▶ Don'ts
  - Cover an in-use adapter since it can generate heat.
  - Have the AC power cord plugged after powering off the system when the notebook is going to be left unused for a longer time.

### Battery

When you get a new notebook or a new notebook battery, it is important to know how to charge and care for your battery in order to get the most out it for as long as you can.

Be aware of that the battery may not be replaced by users.

- ▶ **Safety guidelines**
  - Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer.
  - Discard used batteries according to manufacturer's instruction.
  - Always unplug the AC power cord before installing any module to the notebook.
- ▶ **Battery type**
  - This notebook may be equipped with a high-capacity Li-ion or Li-polymer battery pack depending on the model you have.
  - The rechargeable battery pack is an internal power source of the notebook.
  - To keep the battery safely, always keep the battery away from liquid and the place which has extreme temperature changes.



▶ **Battery charging behavior**

To optimize battery life and avoid a sudden power loss, read the tips below:

- Suspend system operation if the system will be idle for a while or shorten the suspend timer's time period.
- Turn off the system if you won't be using it for a period of time.
- Disable unnecessary settings or remove idle peripherals.
- Connect an AC/DC adapter to the system whenever possible.

▶ **How to charge the battery properly**

Please pay attention to the following tips before recharging the battery:

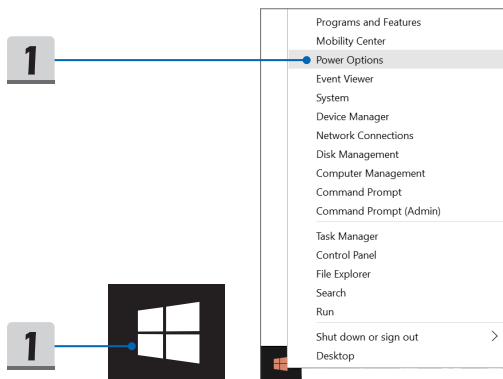
- If a charged battery pack is not available, save your work and close all running programs and shut down the system.
- Plug in an AC/DC adapter.
- You can use the system, suspend system operation or shut down and turn off the system without interrupting the charging process.
- The Li-ion or Li-polymer battery has no memory effect. It is unnecessary to discharge the battery before recharging. However, to optimize the life of battery, we suggest that consuming the battery power completely once a month is necessary.
- The actual charging time will be determined by the applications in use.

# How to Set Up a Power Plan in Windows 10

A power plan is a collection of hardware and system settings that manages how your computer uses and conserves power. Power plans can save energy, maximize system performance, or balance energy conservation with performance. The default power plans — Balanced and Power saver — meet most people's needs. But you can modify settings for existing plans or create your own plan.

## Choose or Customize a Power Plan

1. Find [Windows] icon in the lower-left corner of the screen. Right click it to show selection menu. Select [Power Options] in the menu.
2. Choose a Power Plan by left clicking on one of the selections from the Power Plan list. The Power Plan of [Balanced] is selected as an example here. Click on the [Change plan settings] to the right of the power plan to customize a power plan.
3. Choose the sleep and display settings you want your computer to use. Click on [Change advanced power settings] to make changes to the selected power plan settings to meet your needs.
4. To restore the selected Power Plan back to its default settings, click on [Restore plan defaults] and then click [Yes] to confirm.
5. Click [OK] to finish.



2

### Choose or customize a power plan

A power plan is a collection of hardware and system settings (like display brightness, sleep, etc.) that manages how your computer uses power. [Tell me more about power plans](#)

Plans shown on the battery meter

- Balanced (recommended)** Change plan settings  
Automatically balances performance with energy consumption on capable hardware.
- Power saver Change plan settings  
Saves energy by reducing your computer's performance where possible.

Hide additional plans ^

- Gaming Change plan settings
- High performance Change plan settings  
Favors performance, but may use more energy.

3

### Change settings for the plan: Balanced

Choose the sleep and display settings that you want your computer to use.

On battery Plugged in

Turn off the display: 5 minutes 5 minutes

Put the computer to sleep: 10 minutes 10 minutes

Adjust plan brightness: [slider] [slider]

[Change advanced power settings](#)  
[Restore default settings for this plan](#)

5

### Power Options

Advanced settings

Select the power plan that you want to customize, and then choose settings that reflect how you want your computer to manage power.

[Change settings that are currently unavailable](#)

Balanced [Active]

- Balanced
  - Require a password on wakeup
    - On battery: No
    - Plugged in: No
  - Hard disk
  - Internet Explorer
  - Desktop background settings
  - Wireless Adapter Settings
  - Sleep
  - USB settings

OK Cancel Apply

4

### Power Options

Are you sure you want to restore this plan's default settings?

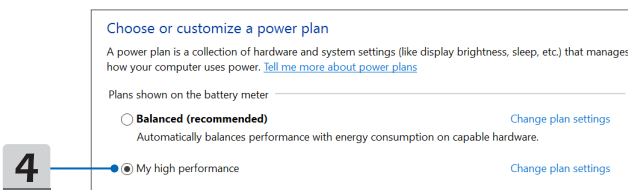
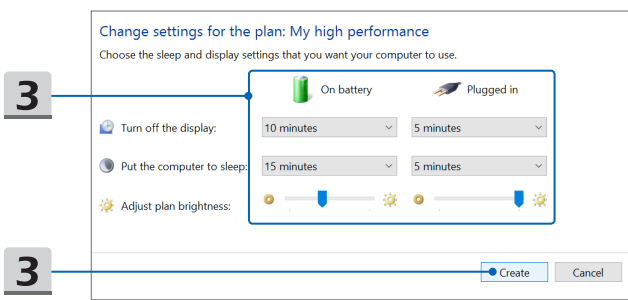
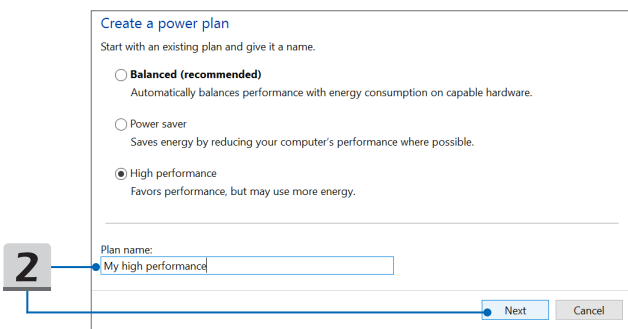
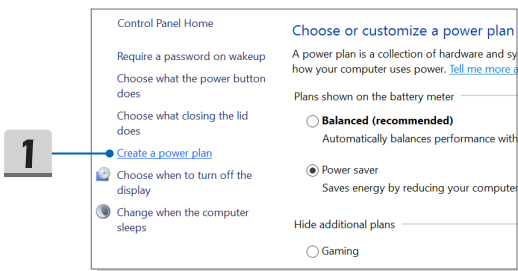
Clicking "Yes" immediately restores all of the plan's default settings.

Yes No

## Create Your Own Power Plan

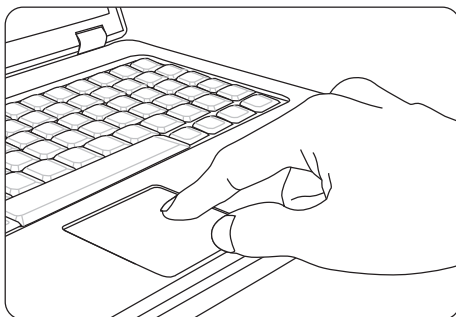
You can create your own power plan and customize it as your requirement. However, it will be recommended to use ECO Engine power saving function to optimize the battery life while using this notebook. Please refer to the section of System Control Manager (SCM) in the Notebook Software Application Manual for details.

1. Select Power Options in the menu. Click [Create a power plan] in the left pane.
2. Select an existing plan that meet your needs most, and give the plan a name. Click [Next] to continue.
3. Change the settings for the new power plan. Click [Create] to make the customized power plan taking effect.
4. Now you have a new power plan that is automatically set as active.



## How to Use the Touchpad

The touchpad integrated in your notebook is a pointing device that is compatible with standard mouse, allowing you to control the notebook by pointing the location of the cursor on the screen.



### ► Configure the Touchpad

You can customize the pointing device to meet your personal needs. For example, if you are a left-handed user, you may want to swap the functions of the two buttons. In addition, you can change the size, shape, moving speed and other advanced features of the cursor on the screen.

To configure the touchpad, you can use the standard Microsoft or IBM PS/2 driver in your Windows operating system. The Mouse Properties in Control Panel allows you to change the configuration.

### ► Position and Move

Place your finger on the touchpad (usually using the forefinger), and the rectangular pad will act as a miniature duplicate of your display. When you move your fingertip across the pad, the cursor on the screen will move simultaneously to the same direction. When your finger reaches the edge of the pad, lift your finger and place it on a proper location of the touchpad to continue the movement.

- ▶ **Point and Click**

When you have moved and placed the cursor over an icon, a menu item or a command that you want to execute, simply tap slightly on the touchpad or press the left button to select. This procedure, called as point and click is the basics of operating your notebook. Unlike the traditional pointing device such as the mouse, the whole touchpad can act as a left button, so that your each tap on the touchpad is equivalent to pressing the left button. Tapping twice more rapidly on the touchpad is to execute a double-click.

- ▶ **Drag and Drop**

You can move files or objects in your notebook by using drag-and-drop. To do so, place the cursor on the desired item and slightly tap twice on the touchpad, and then keep your fingertip in contact with the touchpad on the second tap. Now, you can drag the selected item to the desired location by moving your finger on the touchpad, and then lift your finger from the touchpad to drop the item into place. Alternately, you can press and hold the left button when you select an item, and then move your finger to the desired location; finally, release the left button to finish the drag-and-drop operation.

## About HDD and SSD

This notebook may be equipped with hard disk drive (HDD) or solid state drive (SSD) depending on the models users purchased.

The hard disk drive and solid state drive are the data storage devices used for storing and retrieving digital information. Most SSDs use NAND-based flash memory, and have higher data transfer rates, lower power consumption, and faster read/write speed than HDDs.

Do not attempt to remove or install the HDD and SSD when the notebook is powered on. Please consult an authorized retailer or service center for the replacement of the HDDs and SSDs.

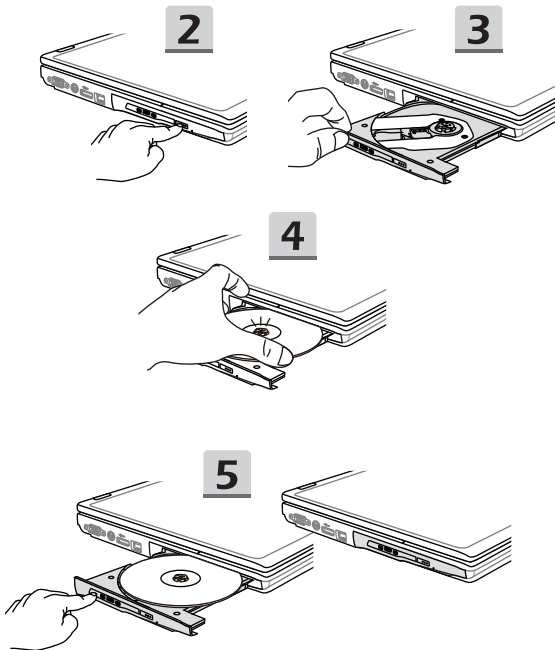
## About M.2 SSD Slot

The notebook may be equipped with M.2 SSD slots for M.2 SSD cards, which are compatible with SATA or PCIe interfaces, providing diverse features and usages to users. Consult an authorized retailer or service center for correct specifications and installations.

## How to Use Optical Disc Drive

This notebook may be equipped with an optical disc drive. Follow the instructions below to insert a disc. Devices shown here are for reference only.

1. Confirm that the notebook is turned on.
2. Press the eject button on the panel and the disc tray will slide out partially.
3. Gently pull the tray out until fully extended.
4. Place the disc in the tray and confirm the disc is placed correctly. Slightly press the center of the disc to secure it into place.
5. Push the tray back into the drive.






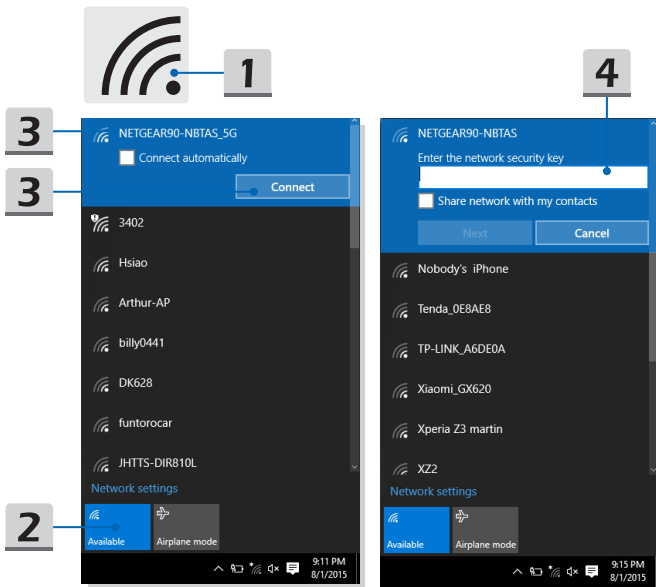
# How to Connect the Internet

## Wireless LAN

Wireless LAN is a wireless broadband connection that allows you to connect to the Internet without using any cables. Follow the instructions below to set up a Wireless LAN connection.


▶ Wireless LAN Connection

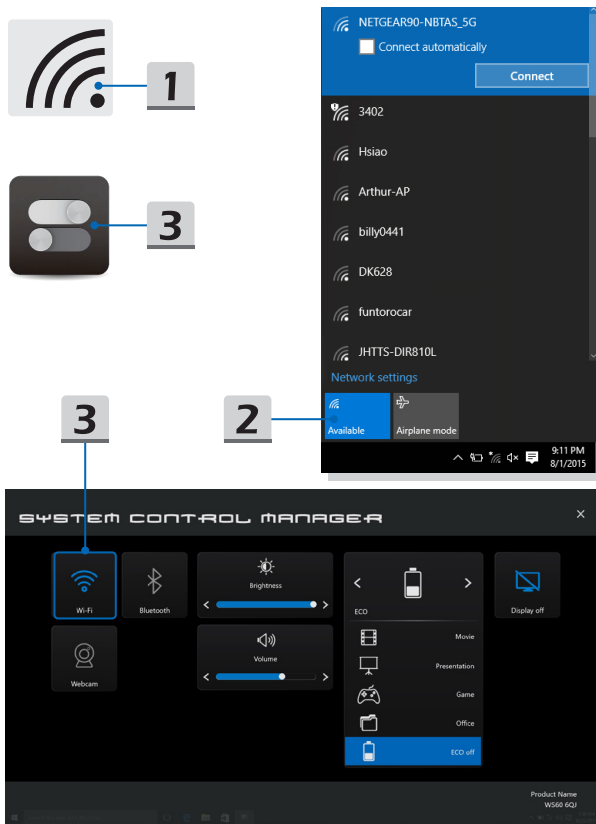
1. Go to the desktop. Find the  icon in the lower-right corner of the task bar and click on it to unfold the settings menu.
2. There are [Wi-Fi] and [Airplane mode] two options in the Network settings, select [Wi-Fi] here.
3. Choose one Wireless LAN connection from the network list to connect to the Internet. Click [Connect] to continue.
4. A security key may be required for connecting the selected network. Then click [Next].



► Check the Wireless LAN status

When Airplane mode is enabled, Wireless LAN connection will be turned off. Before setting up a Wireless LAN connection, make sure that Airplane mode is turned off.


1. Go to the desktop. Find the  icon in the lower-right corner of the task bar and click on it to unfold the settings menu.
2. Check if Wireless LAN mode is available in the Network settings.
3. Or, find the [SCM] icon in the lower-right corner of the task bar and click on it to bring out the main window of System Control Manager, please check if Wireless LAN mode is turned on.

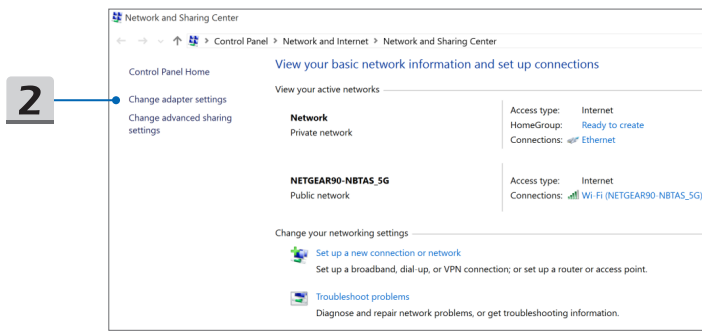
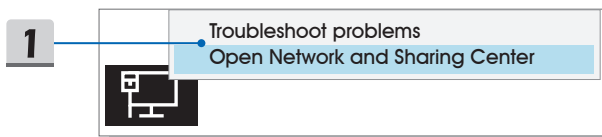


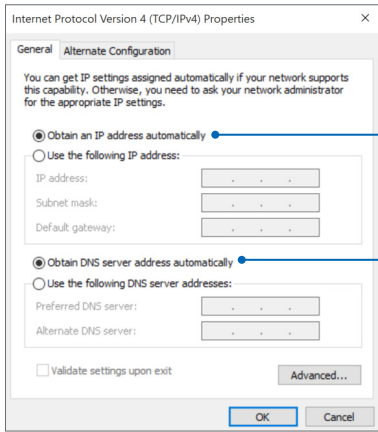
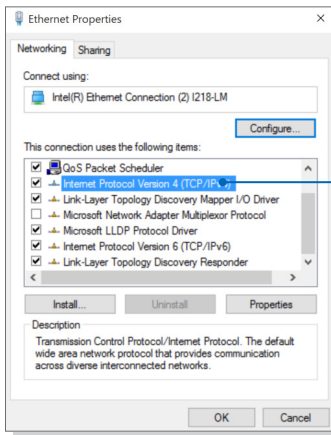
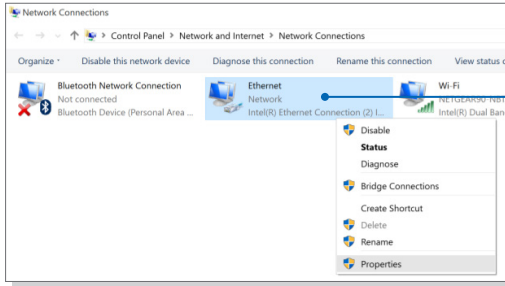
## Wired LAN

Using cables and network adapters to connect to the Internet. Before setting up the connection of Dynamic IP/PPPoE or Broadband (PPPoE) or Static IP, contact your Internet Service Provider (ISP) or network administrator for assistance of setting up Internet connection.


### ► Dynamic IP/PPPoE Connection

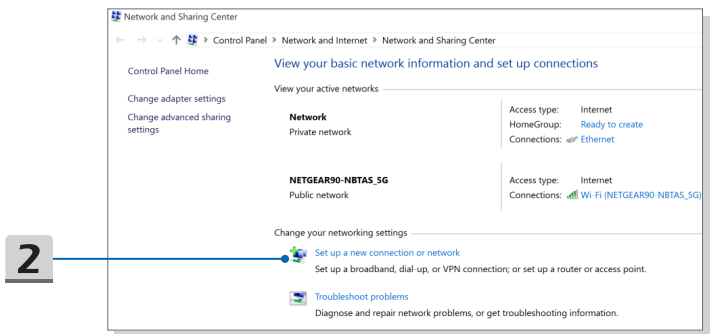
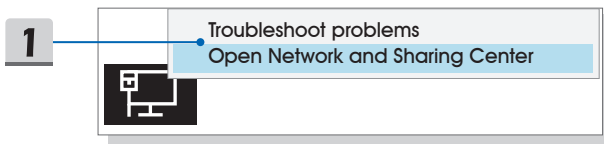
1. Go to the desktop. Find the  icon in the lower-right corner of the task bar, and then right click on it to select [Open Network and Sharing Center].
2. Choose [Change adapter settings].
3. Right click on [Ethernet] to select [Properties] from the drop-down menu.
4. In the Ethernet Properties window, select [Networking] tab and check [Internet Protocol Version 4 (TCP/IPv4)]. Then click [Properties] to continue.
5. Select [General] tab, click [Obtain an IP address automatically] and [Obtain DNS server address automatically]. Then click [OK].

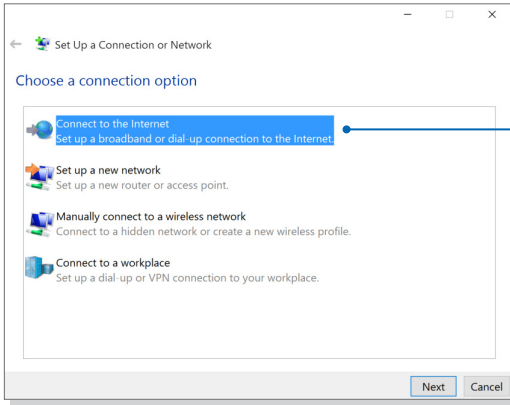




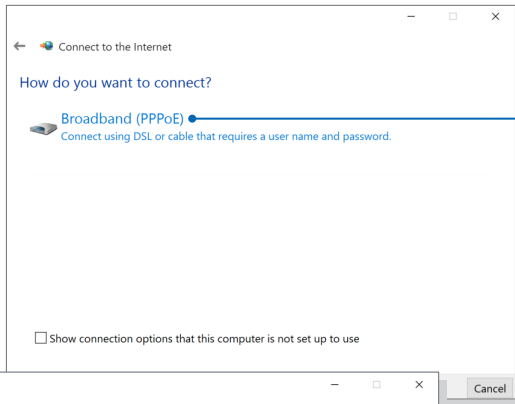
► Broadband (PPPoE) Connection

1. Go to the desktop. Find the  icon in the lower-right corner of the task bar, right click on it to select [Open Network and Sharing Center].
2. Select [Set up a new connection or network] under [Change your networking settings].
3. Select [Connect to the Internet], and then click [Next].
4. Click [Broadband (PPPoE)].
5. Fill User name, Password, and Connection name fields. Then click [Connect].

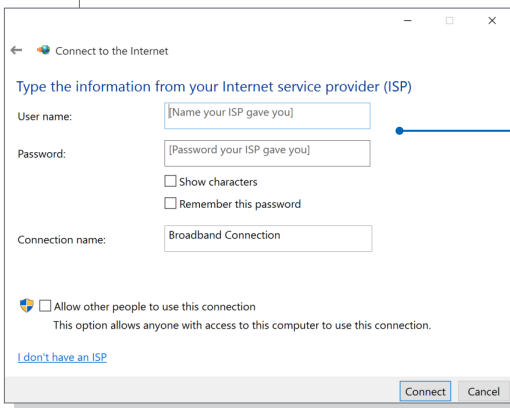




3



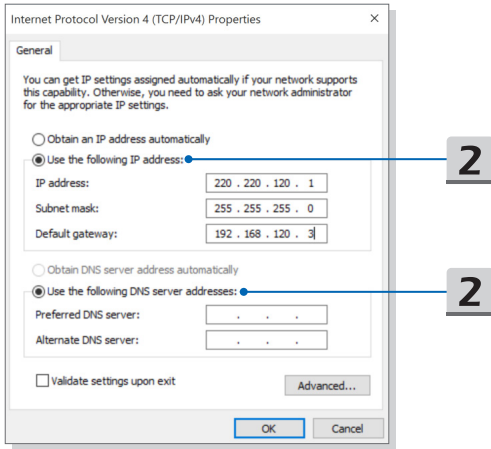
4



5

► Static IP Connection

1. Follow the previous steps 1 to 4 in Dynamic IP/PPPoE Connection.
2. Select [General] tab and click [Use the following IP address] and [Use the following DNS server addresses]. You will be asked to fill the IP address, Subnet mask, and Default gateway, and then click [OK].




# How to Set Up Bluetooth Connection

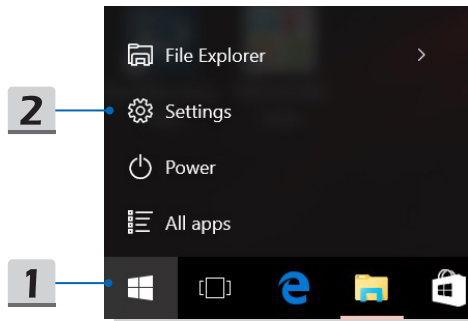
Bluetooth pairing is a process in which two Bluetooth devices communicate with each other through an established connection.

## Activating Bluetooth Connection

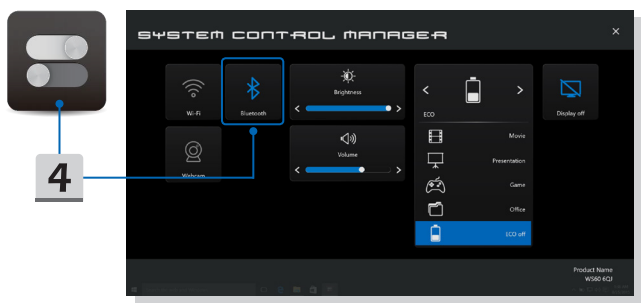
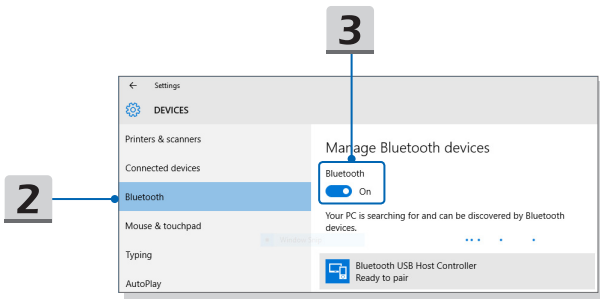
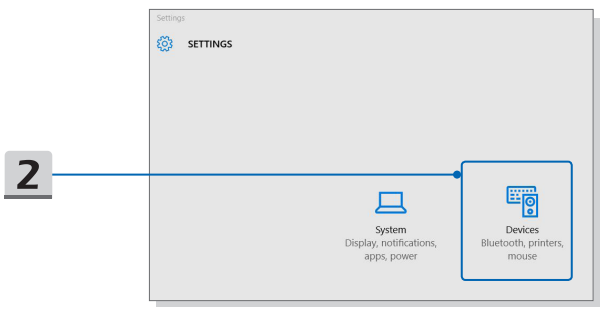
▶ Checking the Bluetooth status

When Airplane mode is enabled, Bluetooth connection will be turned off. Before setting up a Bluetooth connection, make sure that Airplane mode is turned off.

1. Go to the desktop. Find the  icon in the lower-left corner of the screen and click on it.
2. Select [Settings], and then go to [Devices/ Bluetooth] to check if the Bluetooth connection is available.
3. Switch [On] the Bluetooth connection if it is set to [Off].
4. Or, find the [SCM] icon in the lower-right corner of the task bar and click on it to bring out the main window of System Control Manager. Check if Bluetooth connection is switched on.

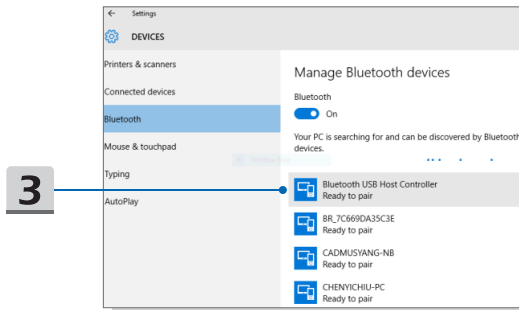
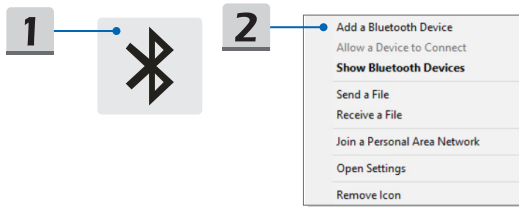


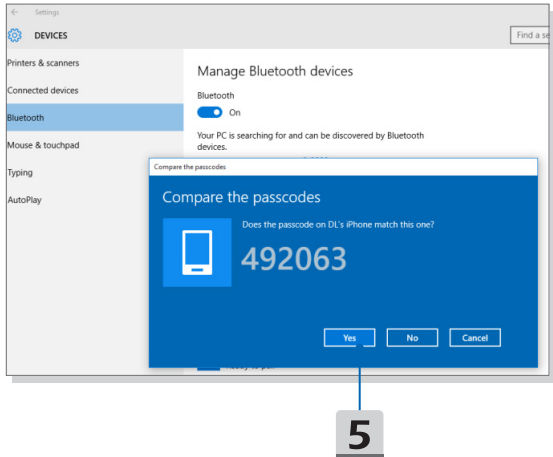
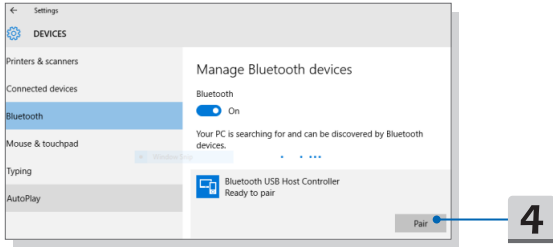




► Pairing the Bluetooth devices

1. Go to the desktop. Find the [Bluetooth] icon in the lower-right corner of the task bar and click on it.
2. Choose [Add a Bluetooth Device].
3. Select one Bluetooth connection from the network list.
4. Click [Pair] to continue.
5. Match the passcode between the notebook and the selected Bluetooth device, click [Yes] to finish.

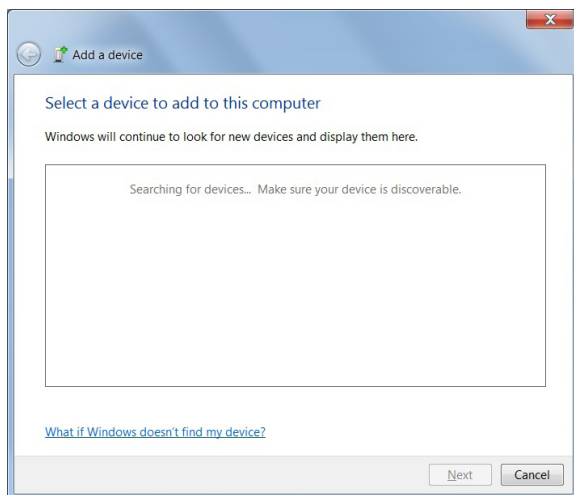
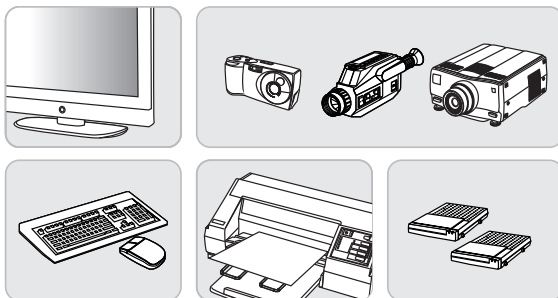




## How to Connect External Devices

This notebook may be equipped with various connecting I/O (input/output) ports, such as USB, HDMI, DisplayPort, and mini DisplayPort. Users will be able to connect diverse peripheral devices to the notebook.

To connect these devices, refer to the instruction manuals of each device first, and then connect the device to the notebook. This notebook is capable to auto detect the connected devices, and if there is no detection of the devices, please manually enable the devices by going to [Start Menu/ Control Panel/ Hardware and Sound/ Add a device] to add the new devices.



## How to Select Boot Mode in BIOS

1. Power on the system. As soon as the first logo screen appears, press the DEL key immediately and enter the BIOS menu.
2. Move the cursor to [Boot] tab, and select [Boot mode select] in Boot Configuration.
3. For operating systems support UEFI-based BIOS (Windows 10 and Windows 8.1), it is suggested to select [UEFI].
4. For Windows 7 or previous versions of Windows, select [Legacy] mode.

