

***msi***<sup>®</sup>

**User's Manual**  
DESKTOP

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## Copyright and Trademarks Notice

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## Revision History

- ▶ Version: 1.0
- ▶ Date: 03, 2018

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## 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.

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## 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.



廢電池請回收

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

**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/>

### Safety Guideline for Using Lithium Battery

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.

## 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.

## Chemical Substances Information

In compliance with chemical substances regulations, such as the EU REACH Regulation (Regulation EC No. 1907/2006 of the European Parliament and the Council), MSI provides the information of chemical substances in products at:

[http://www.msi.com/html/popup/csr/evmtprrt\\_pcm.html](http://www.msi.com/html/popup/csr/evmtprrt_pcm.html)



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## RoHS Statement

### Japan JIS C 0950 Material Declaration

A Japanese regulatory requirement, defined by specification JIS C 0950, mandates that manufacturers provide material declarations for certain categories of electronic products offered for sale after July 1, 2006.

[http://www.msi.com/html/popup/csr/cemm\\_jp.html](http://www.msi.com/html/popup/csr/cemm_jp.html)

[http://tw.msi.com/html/popup/csr\\_tw/cemm\\_jp.html](http://tw.msi.com/html/popup/csr_tw/cemm_jp.html)

### India RoHS

This product complies with the "India E-waste (Management and Handling) Rule 2011" and prohibits use of lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers in concentrations exceeding 0.1 weight % and 0.01 weight % for cadmium, except for the exemptions set in Schedule 2 of the Rule.

### Turkey EEE regulation

Conforms to the EEE Regulations of the Republic Of Turkey.

### Ukraine restriction of hazardous substances

The equipment complies with requirements of the Technical Regulation, approved by the Resolution of Cabinet of Ministry of Ukraine as of December 3, 2008 № 1057, in terms of restrictions for the use of certain dangerous substances in electrical and electronic equipment.

### Vietnam RoHS

As from December 1, 2012, all products manufactured by MSI comply with Circular 30/2011/TT-BCT temporarily regulating the permitted limits for a number of hazardous substances in electronic and electric products.

### Upgrade and Warranty

Please note that certain components, such as memory modules, 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 to be damaged. It is recommended that you contact the authorized dealer or service center for product service information.

### Acquisition of Replaceable Parts

Please be noticed that the acquisition of replaceable parts (or compatible ones) of the product users purchased in certain countries or territories may be fulfilled by the manufacturer within 5 years at most since the product has been discontinued, depending on the official regulations declared at the time. Please contact the manufacturer via <http://www.msi.com/support/> for the detailed information about the acquisition of spare parts.

## 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 equipment away from humidity and high temperature.

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

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- Do not leave the equipment in an unconditioned environment with a storage temperature above 60°C (140°F) or below 0°C (32°F), which may damage the equipment.
  - This equipment 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.

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

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Never pour liquid into the opening that could 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.
-



# Introductions

**User's Manual**  
DESKTOP

Congratulations on becoming an user of this equipment, the finely designed equipment. You will have a delightful and professional experience in using this exquisite equipment. We are proud to tell users that this equipment 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:

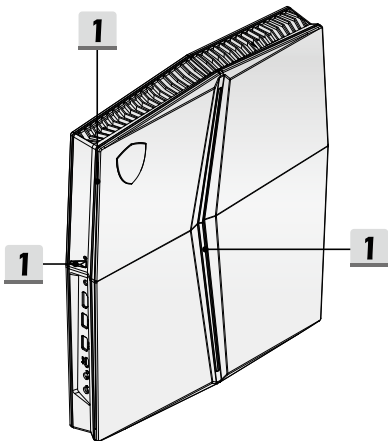
- ▶ The Equipment
- ▶ Quick Start Guide
- ▶ AC/DC adapter and AC power cord

## Product Overview

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

### Top Side View

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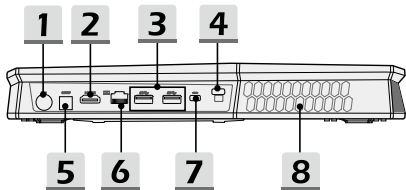


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#### 1. Light Bars/ Power LED

The illuminated activity can be adjusted by the MSI Dragon Center software. Refer to the Notebook Software Application Manual for details.

### Rear Side View



**1. Power Connector**

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

**2. 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.

**3. USB 3.1 Port**

USB 3.1, 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.

**4. Thunderbolt (Type-C)**

Thunderbolt™ 3 supports USB 3.1 connection, 4K display monitor output, up to 40Gbps data rate, and 5V/3A portable charging power when AC power is connected.

**5. S/PDIF-Out**

This S/PDIF connector is provided for digital audio transmission to external speakers through an optical fiber cable.

**6. RJ-45 Connector**

The Ethernet connector, with optionally supported transmitting rate of 10/100/1000 megabits per second, is used to connect a LAN cable for network connection.

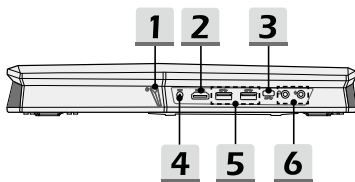
**7. Kensington Lock**

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

### 8. Ventilator

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

## Front Side View



### 1. Power Button / Power LED



#### Power Button

- Use this button to turn the equipment power ON and OFF.
- Use this button to awake the equipment from the sleep state.
- Note: The equipment can also be awakened by any mouse or keyboard activity.

#### Power LED

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

### 2. HDMI Connector **HDMI**

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.

### 3. USB 3.1 Port (Type C) (optional)

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.

The slim and sleek USB Type C connector features reversible plug orientation and cable direction, and supports scalable performance to future-proof solution, including USB 3.x, DisplayPort, PCIe, audio, and optionally supported Thunderbolt™ 3.



#### 4. Power Connector

This connector is to supply power for your VR headset.

#### 5. USB 3.1 Port

USB 3.1, 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.

#### 6. Audio Port Connectors

Make high quality sound blaster with stereo system and Hi-Fi function supported.

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##### Headphone

A connector for speakers or headphones.

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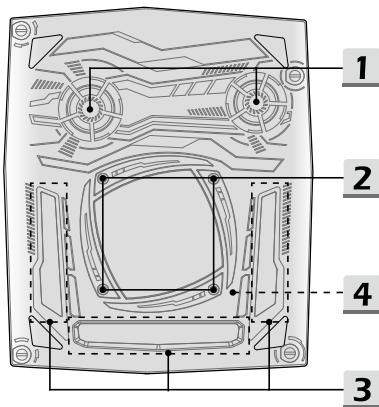


##### Microphone

Used for an external microphone.

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## Bottom Side View



**1. Ventilator**

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

**2. Mounting Holes**

The VESA mounting holes are used to attach a mounting plate. It is necessary to secure the optional mounting plate to a concrete block wall.

**3. Air Inlet**

The air inlet allows for fresh air to enter the system. DO NOT block the air inlet for air circulation.





**4. SSD Slot 1**

This equipment is equipped with a SSD M.2 slot that supports the SSD device with PCIe or SATA interface. Contact the authorized dealer or service center for product service.

## Specifications

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

Visit MSI official website at [www.msi.com](http://www.msi.com), or contact the local retailers to learn the correct specifications of the product user purchased.

<b>Physical Characteristic</b>	
Dimension	279 x 331 x 43 mm
Volume	2.5 Liter
Weight	Up to 2.5 kg
<b>CPU</b>	
Package	LGA1151
Mobile Processor	8th Gen Intel® Core™ Processor Family
<b>Core Chip</b>	
PCH	Intel® 300 series
<b>Memory</b>	
Technology	DDR4, 2400
Memory	4 x SO-DIMM slots, ECC/ non-ECC DDR4 SDRAM
Maximum	Up to 64GB
<b>Power</b>	
AC/DC Adapter (1) (optional)	1 x 230W, 19.5V Input: 100~240V, 50~60Hz Output: 19.5V  11.8A 
AC/DC Adapter (2) (optional)	1 x 330W, 19.5V Input: 100~240V, 50~60Hz Output: 19.5V  16.9A 
RTC Battery	Yes
Power Connector	1 x , AC/DC in 1 x, 12V DC out

<b>Memory</b>	
HDD	1 x SATA interface for 2.5" HDD device
SSD	2 x M.2 slots, support PCIe or SATA SSD device
<b>I/O Port</b>	
USB	1 x USB 3.1 Type-C 4 x USB 3.1
Thunderbolt™ 3	1 x USB 3.1, Type-C interface, 4K output supported, up to 5V/3A portable charging power optionally supported when AC power is connected.
Audio Connectors	1 x Mic-in 1 x Headphone-out 1 x S/PDIF-Out 1 x Line-In 1 x Line-Out
Video Connectors	1 x HDMI
<b>Communication Port</b>	
LAN	Supported
Wireless LAN	Supported
Bluetooth	Supported
<b>Video</b>	
Graphics	<ul style="list-style-type: none"> <li>• NVIDIA® Quadro® discrete graphics</li> <li>• Virtual Reality optionally supported</li> </ul>
VRAM	GDDR5, based on GPU structure

### Security

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TPM 2.0 is a hardware-based encryption device that collaborates with software measures to form a more advanced and secure data protection.

Trusted Platform Module (optional) TPM functionalities can be de/activated in BIOS settings where appropriate.

With professional versions of Windows, BitLocker is the default console available for TPM communications serving data encryption purposes.

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Note: Do not disassemble the equipment while it is in use or is connected to an electrical outlet.

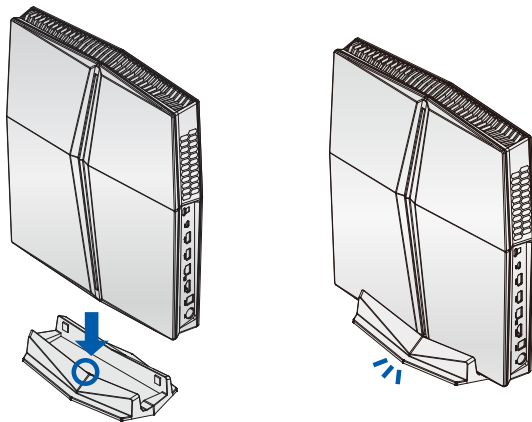


# How to Get Started

**User's Manual**  
DESKTOP

## How to Secure the Desktop Vertically

The package comes with a vertical desktop stand that is a perfect fit for the compact gaming desktop. Please follow the image below for secure installation.



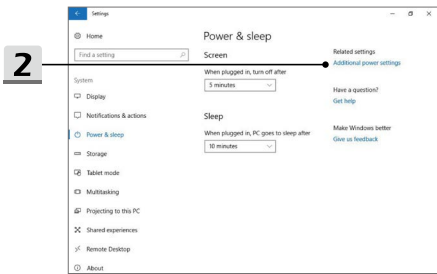
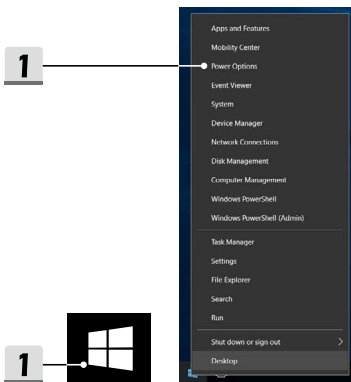


## How to Set Up a Power Plan in Windows 10

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 unfold the selection menu. Select [Power Options] within the menu.
2. Select [Additional power settings] under [Related settings].
3. 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.
4. 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.
5. To restore the selected Power Plan back to its default settings, click on [Restore plan defaults] and then click [Yes] to confirm.
6. Click [OK] to finish.



**3** →

### 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. [Get 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.

**4** →

### Change settings for the plan: Balanced

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

Turn off the display:

Put the computer to sleep:

[Change advanced power settings](#)

[Restore default settings for this plan](#)

**6** →

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.

Balanced [Active]

- Hard disk
- Internet Explorer
- Desktop background settings
- Wireless Adapter Settings
- Sleep
- USB settings
- Power buttons and lid
- PCI Express
- Processor power management
- Display
- Multimedia settings

**5**

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.

### **Create Your Own Power Plan**

You can create your own power plan and customize it as your requirement.

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.

**1** Control Panel Home

Choose what the power buttons do

- Create a power plan
- Choose when to turn off the display
- Change when the computer sleeps

Choose or customize a power plan

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

Preferred plans

- Balanced (recommended)  
Automatically balances performance with energy consumption on capable hardware.
- High performance  
Favors performance, but may use more energy.

Show additional plans \_\_\_\_\_

**2** Create a power plan

Start with an existing plan and give it a name.

- Balanced (recommended)  
Automatically balances performance with energy consumption on capable hardware.
- Power saver  
Saves energy by reducing your computer's performance where possible.
- High performance  
Favors performance, but may use more energy.

Plan name:  
My high performance

Next Cancel

**3** Change settings for the plan: My high performance

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

- Turn off the display: 5 minutes
- Put the computer to sleep: 10 minutes

Create Cancel

**3**

**4** 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)  
Automatically balances performance with energy consumption on capable hardware. [Change plan settings](#)
- My high performance [Change plan settings](#)

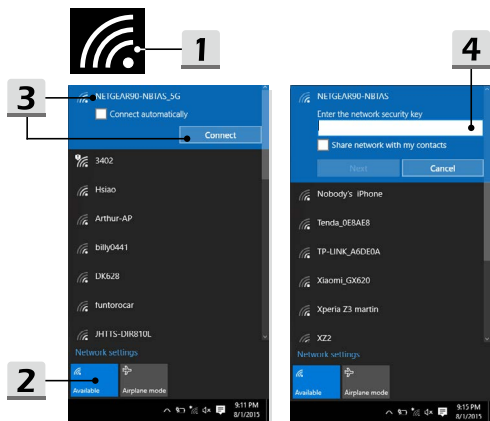
## How to Connect the Internet

### 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

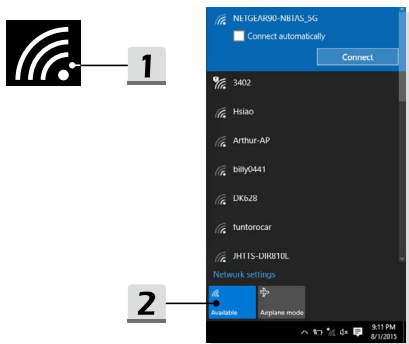
1. Go to the desktop. Find the  icon in the lower-right corner of the task bar and click on it to unfold the settings menu.
2. There are [Wi-Fi] and [Airplane mode] two options in the Network settings, select [Wi-Fi] here.
3. Choose one Wireless LAN connection from the network list to connect to the 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.

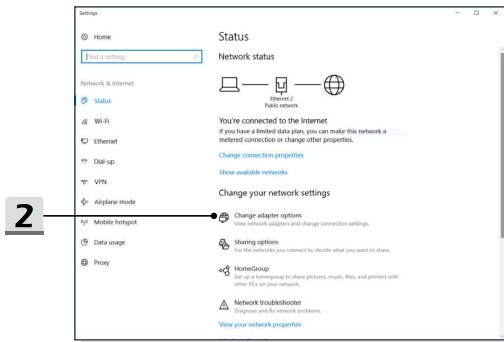
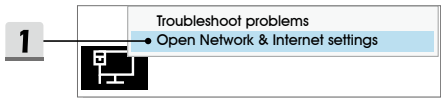


### Wired LAN

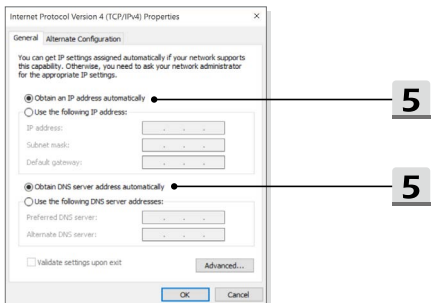
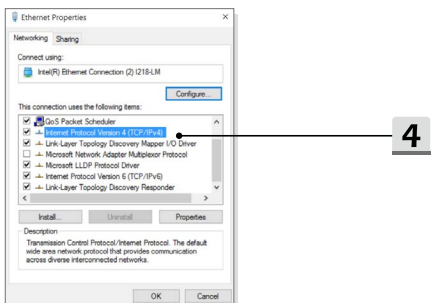
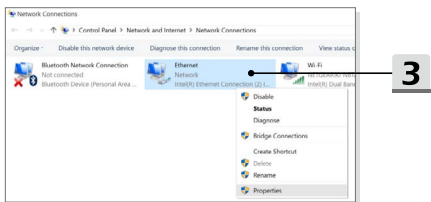
Using cables and network adapters to connect to the Internet. Before setting up the connection of Dynamic IP/PPPoE or Broadband (PPPoE) or Static IP, contact your Internet Service Provider (ISP) or network administrator for assistance of setting up Internet connection.

► 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 & Internet settings].
2. Choose [Change adapter options].
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].

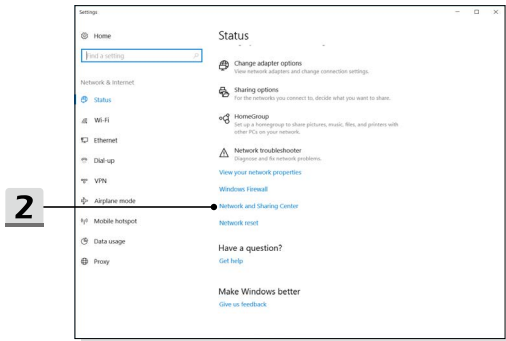
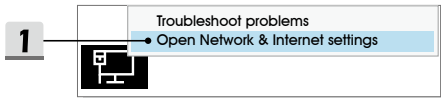


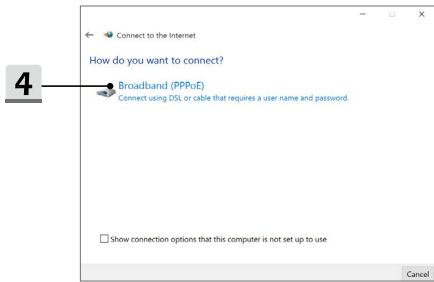
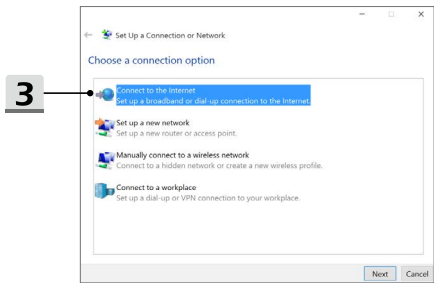
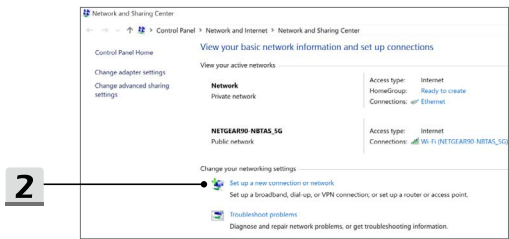


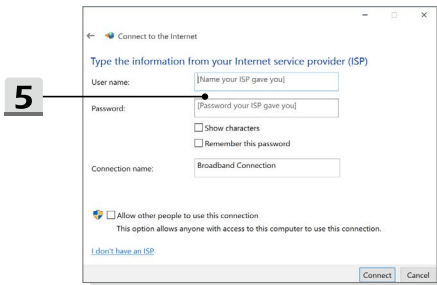


► Broadband (PPPoE) Connection

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 & Internet settings].
2. Select [Network and Sharing Center] and then 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].

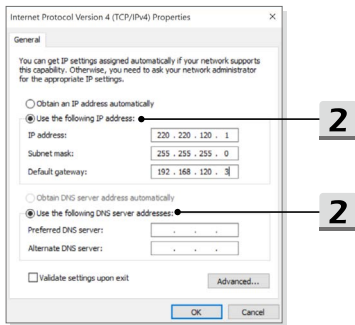






### ► Static IP Connection

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

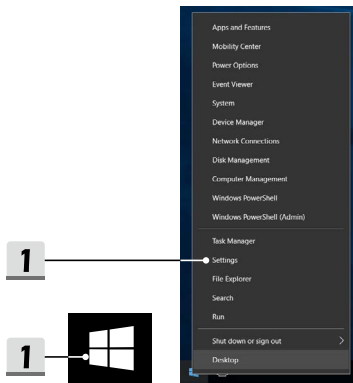
Bluetooth pairing is a process in which two Bluetooth devices communicate with each other through an established connection.

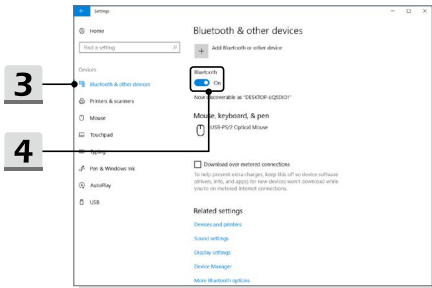
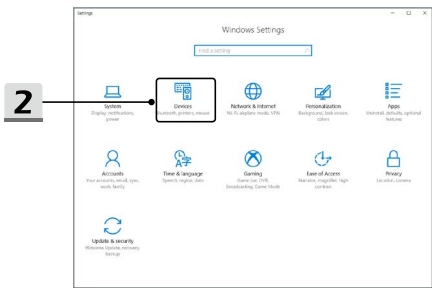
### Activating Bluetooth Connection

► 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 right click on it.
2. Select [Settings] to bring out [Windows Settings] menu, and then select [Devices] to enter the next Settings menu.
3. Select [Bluetooth & other devices].
4. Switch [On] the Bluetooth connection if it is set to [Off].





► Pairing the Bluetooth devices

1. Go to [Start/ Settings/ Devices], and then find [Bluetooth & other devices].
2. Click on [Add Bluetooth or other device].
3. Click on [Bluetooth].
4. Select a device to start pairing.
5. Give the passcode as instructed by the device waiting to be connected, and then click on [Connect] to continue.

