



msi[®]

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.

Manual Map

This User's Manual provides instructions and illustrations on how to operate this notebook. It is recommended to read this manual carefully before using this notebook.

Chapter 1, Preface, gives users the basic safety information and caution that is interrelated to using this notebook.

Chapter 2, Introductions, gives the brief introductions to the notebook, including overviews, function buttons, quick launch buttons, connectors, LEDs, etc.

Chapter 3, How to Get Started, gives the basic operation instructions to help users getting familiar with this notebook.

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:

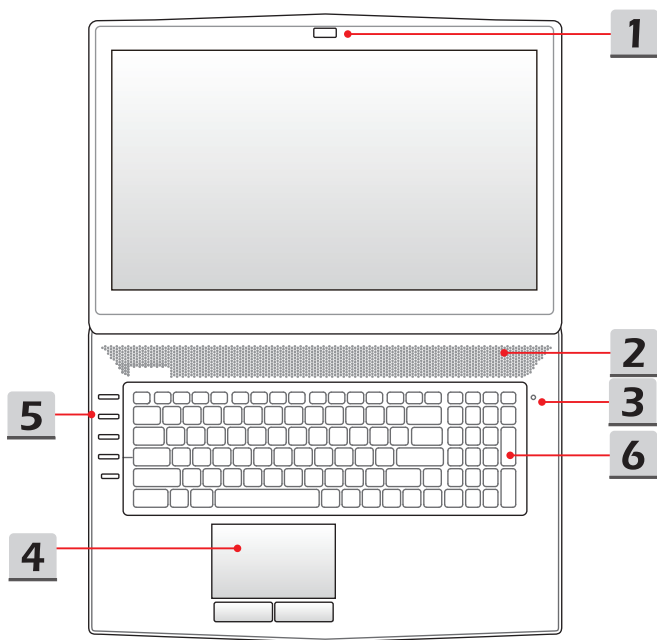
- ▶ Notebook
- ▶ Quick Start Guide
- ▶ AC/DC adapter and AC power cord
- ▶ Optional carry bag
- ▶ Optional all-in-one application disk, containing the full version of user's manual, drivers, utilities, and recovery function

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 any other interactive applications.
- 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

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

3. Status LED



Caps Lock

- LED glows when **Caps Lock** function is enabled.
- LED goes out when this function is disabled.



Num Lock

- LED glows when **Num Lock** function is enabled.
- LED goes out when this function is disabled.

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 application in the optional all-in-one disk that comes with the package for easy and convenient operation. It is strongly recommended to install the SCM application.



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.

GPU Graphics Switch

- Use this button to select either discrete GPU mode or UMA GPU mode.
- Button LED glows white 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.



XSplit Gamecaster/ User Defined Application (optional)

- Use this button to activate video recording and real-time online broadcasting while playing games.
- Button LED glows white when this function is activated.
- If XSplit Gamecaster is not installed, this button will be used to launch the User Defined application.



SSE (optional)

- This notebook may be pre-installed a unique keyboard manager application, SSE (SteelSeries Engine). With this application, users will be able to own several combinations of keyboard hot keys defined separately for specific occasions.
- Use this button repeatedly to switch between keyboard 1 (layer 1,) keyboard 2 (layer 2,) keyboard 3 (layer 3) and keyboard 4 (layer 4) recurrently.

6. Keyboard

The built-in keyboard provides all the functions of a full-sized keyboard.

Quick Launch [Fn] Keys

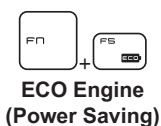
Use the [Fn] keys on the keyboard to activate the specific applications or tools.

With the help of these keys, users will be able to work more efficiently.

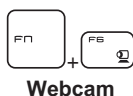
The following keys will only be functional in the operating system with the SCM application installed.



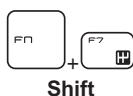
- This notebook may be pre-installed with a gaming utility, **Dragon Gaming Center**, providing users an astonished and efficient solution in game playing.
- With Dragon Gaming Center pre-installed, press and hold the **Fn** key, and then press the **F4** key to bring up the tab of [Instant Play: Play Key Setting] to define the quick launch button for launching a particular application. Once the setting has been made, press **Fn** and **F4** keys to launch the appointed application. If users left this button undefined, press **Fn** and **F4** keys will again bring up the tab of [Instant Play: Play Key Setting].
- However, if Dragon Gaming Center is not installed or removed, press both **Fn** and **F4** keys to launch the User Defined application.



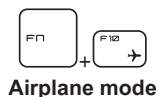
- Press and hold the **Fn** key, and then press the **F5** key repeatedly to switch among various power saving modes provided by **ECO Engine**, or to turn this function off recurrently.



- Press and hold the **Fn** key, and then press the **F6** key to turn the **Webcam** function on. Press again to turn it off.

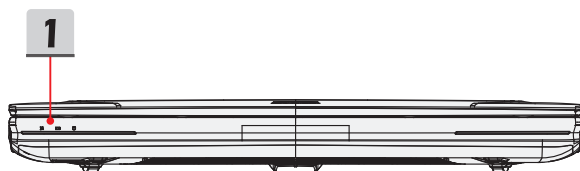


- Press and hold the **Fn** key, and then press the **F7** key to switch among **Sport / Comfort / Green** modes and shift the performance.
- This function will only be activated when AC Power is plugged-in, and the default setting is Sport mode.



- Press and hold the **Fn** key, and then press the **F10** key repeatedly to turn **Airplane mode** on or off recurrently.
- For flight safety consideration, it is always recommended to turn Airplane mode on when you are in flight.
- Refer to the Airplane mode switch icon under [**Start/ Settings/ Change PC settings/ Network / Airplane mode**] on the desktop to check the device status.

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

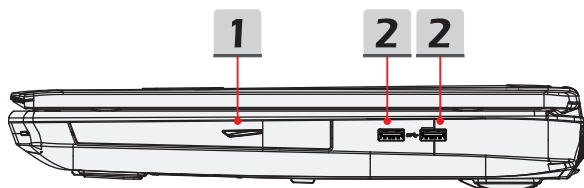
- LED glows when the battery is being charged.
- Continuously blinking if the battery fails and it is recommended to replace a new battery.
- Consult the local dealer for purchasing an equivalent type of battery recommended by the manufacturer.
- Battery LED goes out when it is fully charged or when the AC/DC adapter is disconnected.



Drive Activity Indicator

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

Right Side View



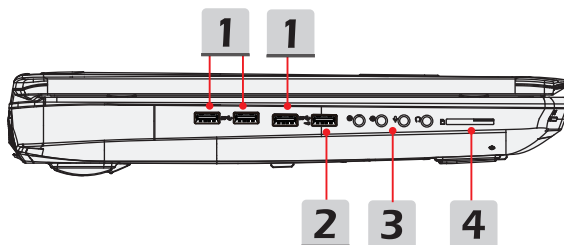
1. Optical Disc Drive

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 Ports

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 Ports

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/ Super Charger USB 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.

Super Charger USB port provides faster power charging function for Apple devices when the notebook is in power off mode.

3. Audio Port Connectors

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



Headphone

A connector for speakers or headphones.



Microphone

Used for an external microphone.



Line In

- Used for an external audio device.
- Connect the Rear speakers here.



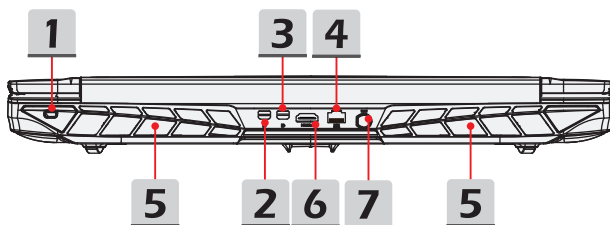
Line Out

- A connector for speakers.
 - Connect the Surround speakers here.
-

4. Card Reader

The built-in card reader may support SD4.0 (Secure Digital) card. Contact the local dealer for further and correct information and be noted that the supported memory cards may vary without notice.

Rear Side View



1. Kensington Lock

This notebook provides a Kensington lock hole, which allows users to secure the notebook in place with a key or some mechanical PIN device and attached through a rubberized metal cable. The end of the cable has a small loop which allows the whole cable to be looped around a permanent object, such as a heavy table or other similar equipment, thus securing 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. USB SuperPort (Type C) (optional)

The USB SuperPort (Type C), exclusively designed by MSI, supports Thunderbolt 3 (optional), DisplayPort and USB 3.1 connections with a single connector.

4. RJ-45 Connector

The 10/100/1000 Ethernet 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.

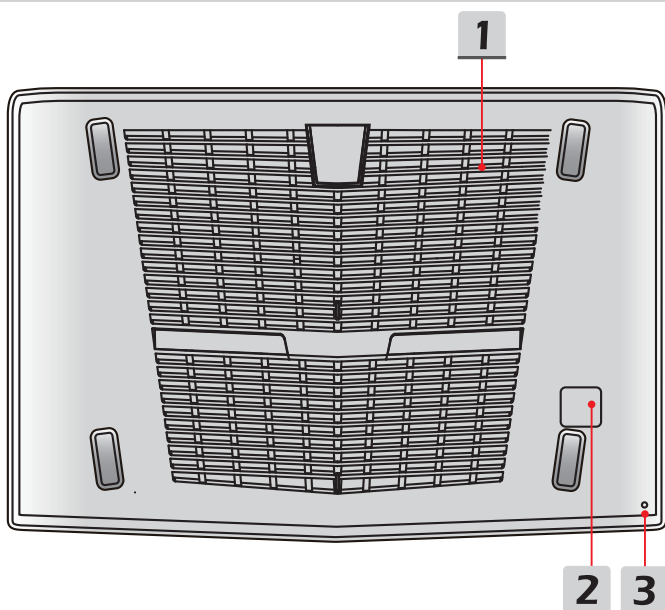
6. HDMI Connector

HDMI (High Definition Multimedia Interface) is a new interface standard for PCs, displays and consumer electronics devices that supports standard, enhanced and high-definition video, plus multi-channel digital audio on a single cable.

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.

Specifications

The specification may change without notice. The actual products sold are different from areas. Please check the detailed specification with your local dealers.

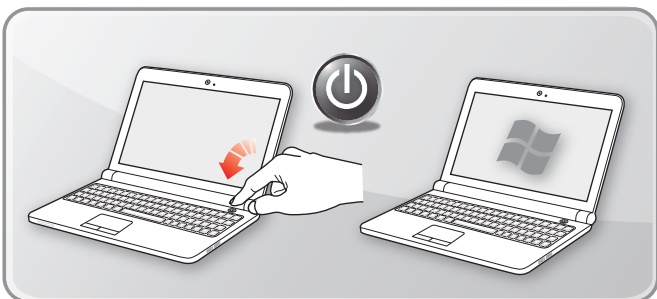
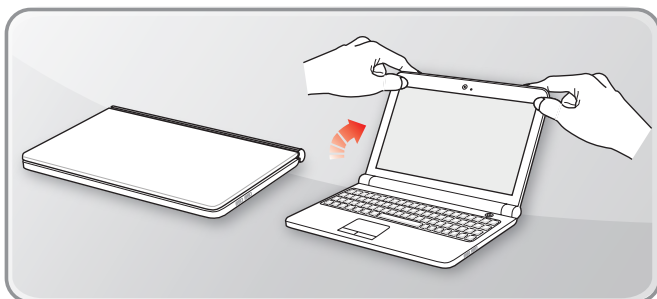
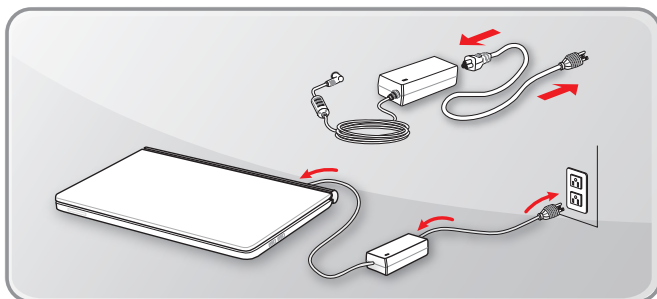
Physical Characteristic	
Dimension	428 (W) x 249 (D) x 48 (H) mm
Weight	3.85kg with battery
CPU	
Package	FCBGA
Processor Type (optional)	Intel® Quad/ Dual Core processor
L3 Cache	Up to 8MB (Based on CPU)
Core Chip	
PCH	Intel® SkyLake HM170/CM236
Memory	
Technology	DDR4 2133/ 2400MHz
Memory	DDR4 SO-DIMM 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  11.8A 
Battery Type	9-cell
RTC Battery	Yes
Storage (items listed here may vary without notice)	
HDD form factor	2.5" HDD

	x2
SSD (optional)	M.2 type (SATA or PCIe type, optional) slots supporting 128GB or larger at RAID 0 mode.
Optical Drive Device (optional)	Super Multi / Blu-ray
MultiBay	Supported
I/O Port	
	x 6 (version 3.0)
USB	x 1 SuperPort (Thunderbolt+DP+USB 3.1 10Gbps)(optional)
Mic-in	x 1
Line-in	x 1
Side-out	x 1
Headphone-out	x 1 (S/PDIF-Out supported)
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.
Communication Port	
LAN	10/ 100/ 1000Mb Ethernet
Wireless LAN+ Bluetooth (optional)	M.2 type
Display	
LCD Type	17.3" LED panel
Brightness	Controlled by K/B hot-keys

Video	
Graphics	NVIDIA® GeForce® discrete MXM graphics card or Intel® HD UMA graphics card
VRAM	3/ 4/ 6/ 8GB, based on GPU structure
HDMI output	Supported
DisplayPort output	Supported
Multi-Display Function	Supported
WebCam	
CMOS Camera	FHD
Audio	
Internal Speaker	2 speakers + 1 subwoofer
Sound Volume	Adjusted by keyboard hot-key and switches.
Software & BIOS	
USB Flash Boot	USB floppy and USB flash boot up DOS
BIOS	Fast Boot Support
Others	
Compatibility	WHQL
Kensington Lock Hole	x 1

Begin to Use the Notebook

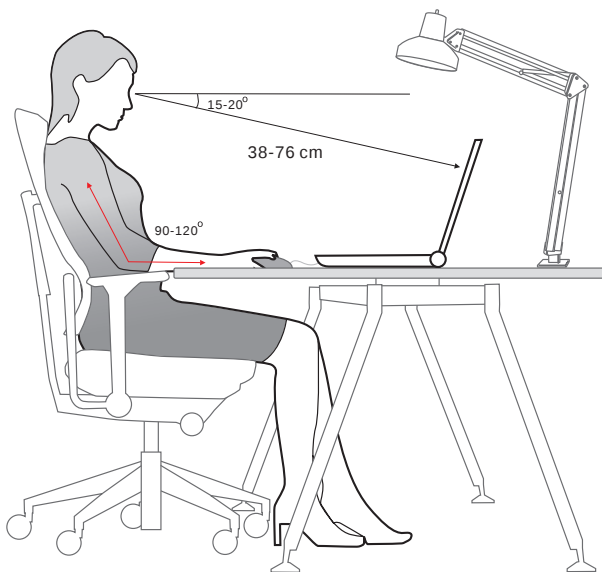
For a new user of this notebook, we would like to suggest you follow the illustrations below to begin to use the notebook.



How to Use the Notebook Safely

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.

- ▶ Your work area should have enough illumination.
- ▶ Choose an ergonomic chair and have it adjusted for your height.
- ▶ 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.
- ▶ Use your notebook where you find easy to stay more comfortable position.
- ▶ Change your sitting posture often.
- ▶ Stretch and exercise your body regularly.
- ▶ Remember to 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

To safely and properly power on a notebook, it is strongly recommended to connect the supplied power adapter before turning it on for the first time. Below are some Do's 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.
- ▶ **DON'Ts**
 - Use other adapter of other brand since it may damage the notebook or devices attached to it.
 - Cover an in-use adapter since it can generate heat.

Battery Power

This notebook may be equipped with a high-capacity Li-ion or Li-polymer battery pack depending on the model you have. The rechargeable Li-Polymer battery pack is an internal power source of the notebook. Be aware of that this battery may not be replaced by users.

▶ **Conserving Battery Power**

Efficient battery power is critical to maintain normal operation. If the battery power is not managed well, the saved data and customized settings may be lost. 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.

► Charging the Battery Pack

The battery pack can be recharged while it is installed in the notebook. Please pay attention to the following tips before recharging the battery:

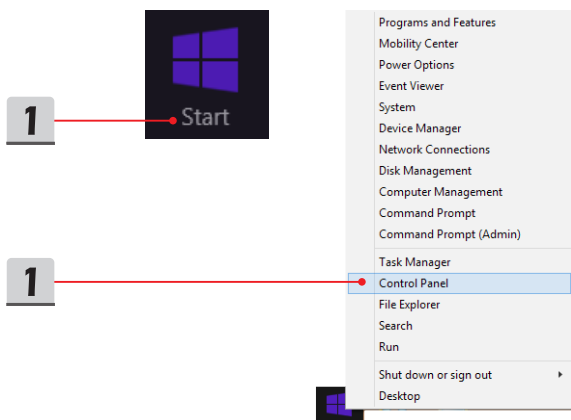
- If a charged battery pack is not available, save your work and close all running programs and shut down the system.
- Plug in an external AC/DC adapter.
- You can use the system, suspend system operation or shut down and turn off the system without interrupting the charging process.
- The Li-ion or 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 Power Plan in Windows

Below steps show you how to save battery power for your notebook by using a power-saving plan. Follow the instructions below to adjust the power management settings in Windows OS:

Power Options in Windows OS allows you to control the power management features of your display, hard drive, and battery.

1. Drag the mouse cursor to the left corner of the screen and [Start] icon will show up. Right click the icon to show selection menu. Select [Control Panel] in the menu.
2. Click [System and Security].
3. Click [Power Options].
4. Then select a power plan that meets your personal needs.
5. The Power icon will present options. You can wake up your computer from power saving mode by clicking the power button.



2



System and Security

Review your computer's status

Save backup copies of your files with File History

Find and fix problems

3



Power Options

Change battery settings | Require a password when the computer wakes |

Change what the power buttons do | Change when the computer sleeps

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](#)

Preferred plans

☒ **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.

Show additional plans



5



How to Use the Keyboard

This notebook provides a full functioned keyboard. To ensure that the keyboard will be functional properly, it is recommended to have the SCM application installed in your operating system.



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.

Switch Display



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

Disable or Enable Touchpad



Enable or disable the touchpad function. (Optional)

Enter Sleep Mode



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

Adjust the Brightness Levels of the Display



Increase the LCD brightness.



Decrease the LCD brightness.

Adjust the Sound Levels of the Speakers



Increase the built-in speaker's volume.



Decrease the built-in speaker's volume.

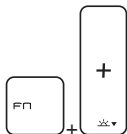


Mute the built-in speakers.

Adjust the Brightness Levels of the Keyboard Backlight LEDs



Increase the brightness level of the keyboard backlight LEDs.



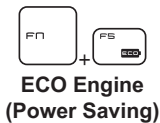
Decrease the brightness level of the keyboard backlight LEDs.

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.



- This notebook may be pre-installed with a gaming utility, **Dragon Gaming Center**, providing users an astonished and efficient solution in game playing.
- With Dragon Gaming Center pre-installed, press and hold the **Fn** key, and then press the **F4** key to bring up the tab of [Instant Play: Play Key Setting] to define the quick launch button for launching a particular application. Once the setting has been made, press **Fn** and **F4** keys to launch the appointed application. If users left this button undefined, press **Fn** and **F4** keys will again bring up the tab of [Instant Play: Play Key Setting].
- However, if Dragon Gaming Center is not installed or removed, press both **Fn** and **F4** keys to launch the User Defined application.



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



Webcam

- Press and hold the **Fn** key, and then press the **F6** key to turn the **Webcam** function on. Press again to turn it off.



Shift

- Press and hold the **Fn** key, and then press the **F7** key to switch among **Sport / Comfort / Green** modes and shift the performance.
- This function will only be activated when AC Power is plugged-in, and the default setting is Sport mode.



Airplane mode

- Press and hold the **Fn** key, and then press the **F10** key repeatedly to turn **Airplane mode** on or off recurrently.
- For flight safety consideration, it is always recommended to turn Airplane mode on when you are in flight.
- Refer to the Airplane mode switch icon under [**Start/ Settings/ Change PC settings/ Network / Airplane mode**] on the desktop to check the device status.

What is 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.



► Configuring 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.

► Positioning and Moving

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.

What is Hard Disk Drive

This notebook is equipped with a large-capacity 2.5" HDD. It is usually used to install the operating system and software applications. Do not remove or install the hard disk drive when the notebook is turned on. The replacement of HDD should be operated by an authorized retailer or a service representative.

What is Solid State Drive

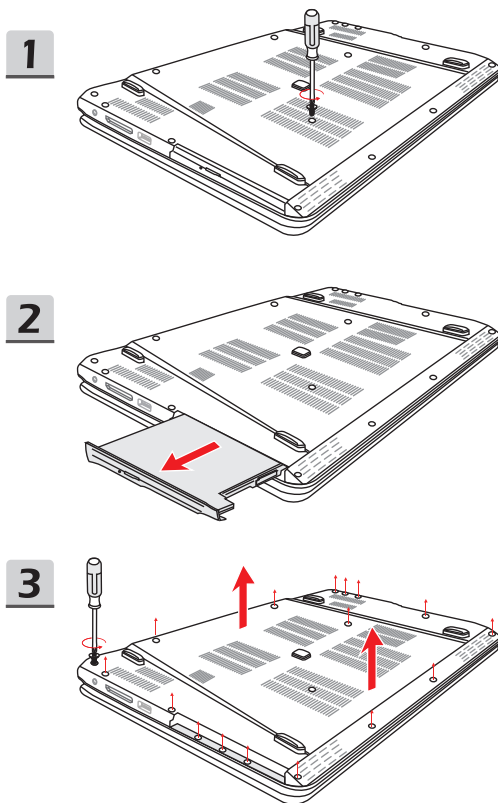
This notebook may be equipped with a Solid State Drive (SSD). The solid state drive is a storage device that stores data on solid state flash memory. Do not remove or install the SSD when the notebook is turned on. The replacement of SSD should be operated by an authorized retailer or a service representative.

How to Use PCIe / SATA SSD Combo Slot

The M.2 SSD slot in the notebook are compatible with SATA and PCIe interfaces, providing diverse features to users . Please follow the instructions below to uninstall or install the PCIe/ SATA SSDs.

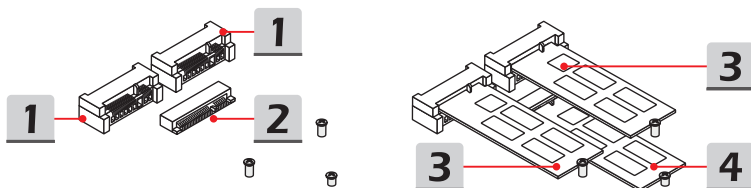
Note: Any damage caused while replacing the device may void the warranty.

1. Loosen the screw that secures the optical disc drive.
2. Pull the optical disc drive out.
3. Loosen the screws that secure the back panel and remove it.



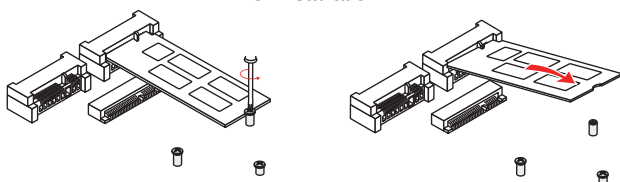
Types of Slot and SSD

1. SATA Gen 3 M.2 Slot
2. SATA Gen 3 M.2 & PCIe 2.0 x2/ x4 Combo Slot
3. SATA Gen 3 M.2 2280 SSD
4. SATA Gen 3 M.2 or PCIe 2.0 x2/ x4 2280 SSD

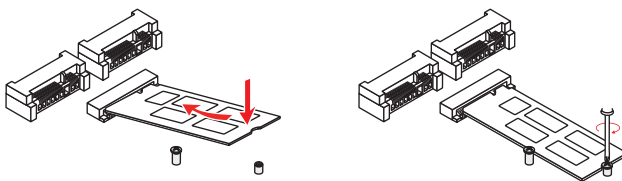


Uninstallation and Installation

Uninstallation



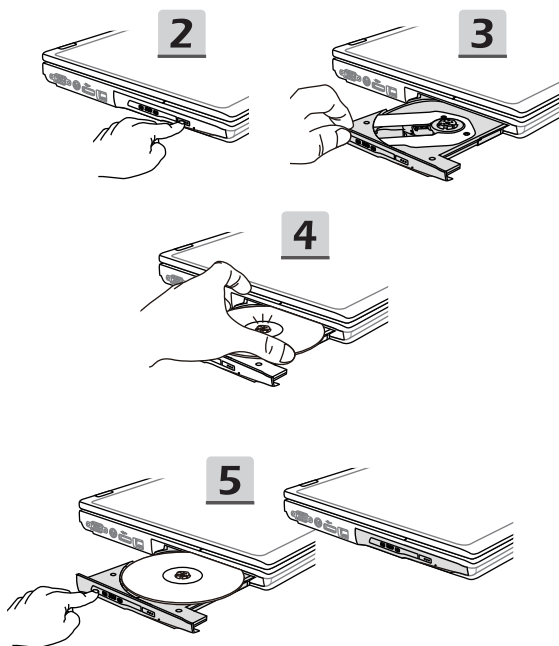
Installation



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 and securely. 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

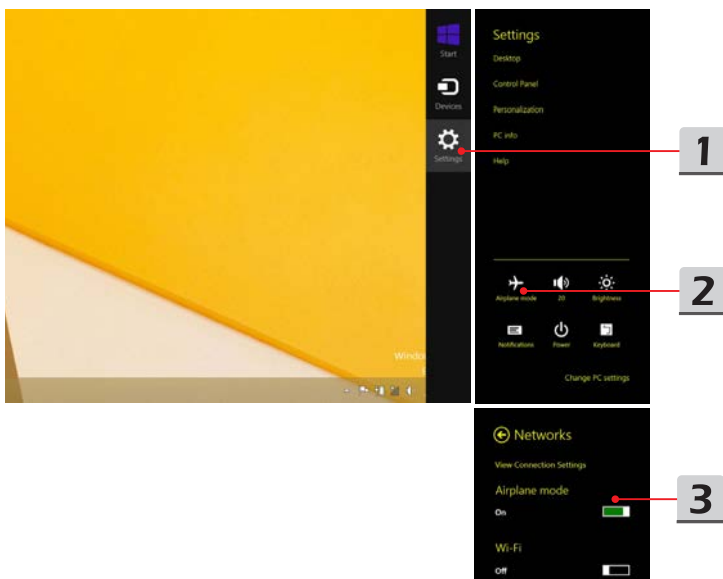
Wireless LAN is a wireless broadband connection that allows you to connect to the internet without using any cables. Please follow the instructions below to set up a Wireless LAN connection.

► Turning Airplane mode off

For flight safety consideration, it is always recommended to turn Airplane mode on when you are in flight. When Airplane mode is enabled, Wireless LAN connection and Bluetooth will be turned off. Please make sure turning Airplane mode off before setting up Wireless LAN connection.

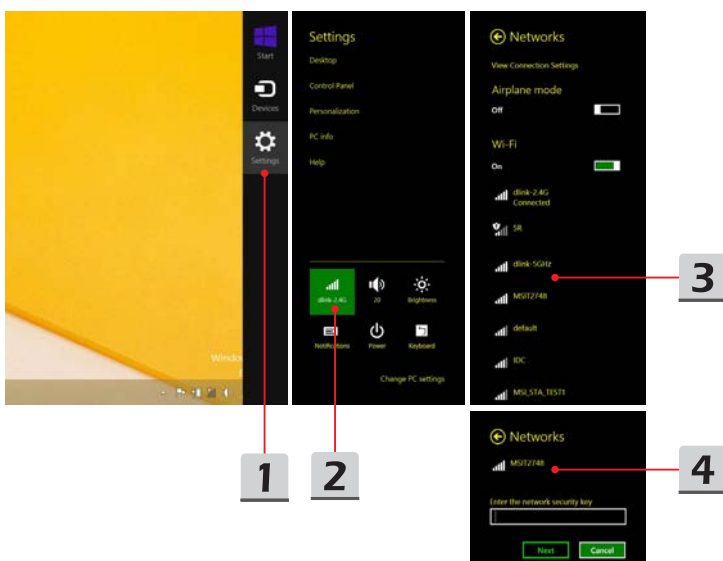
Go to the desktop. (Please launch **Desktop** if you are in Win 8 Start screen.)

1. Find the [Settings] icon on the desktop and click on it.
2. Select [Airplane mode].
3. Unfold [Airplane mode] selections under [Networks]. Make sure [Airplane mode] is set to off here.



► Setup Wireless LAN

1. Unfold the setting menu by pointing the mouse to the lower-right corner of the desktop and clicking it.
2. Click the [Wireless LAN] icon.
3. Select a Wireless LAN connection from the network list.
4. A security key will be required for connecting the selected network. Then click [Next].



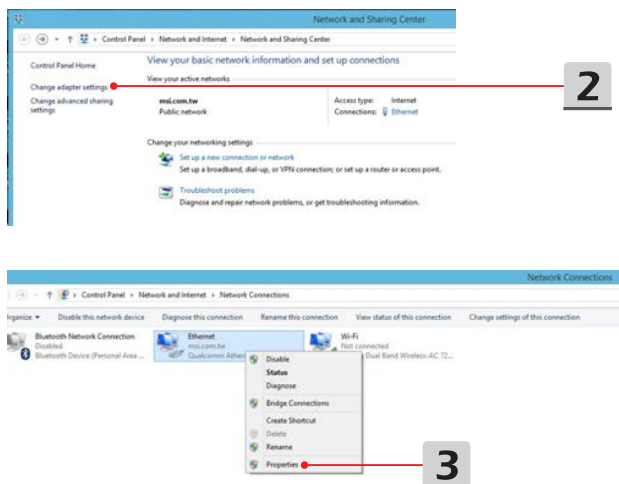
Wired LAN

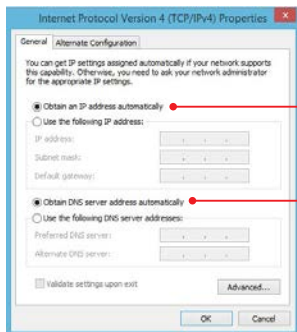
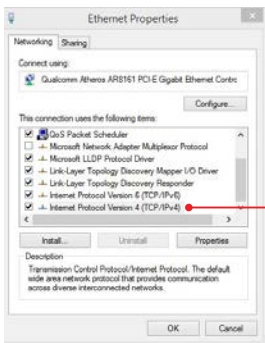
Using cables and network adapters to connect to the internet.

► Setup Dynamic IP/PPPoE connection

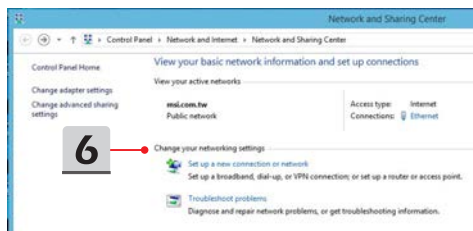
Go to the desktop (Please launch **Desktop** if you are in Win 8 Start screen)

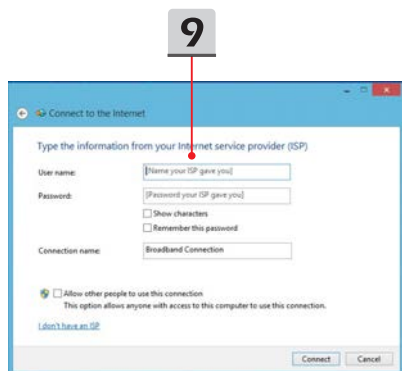
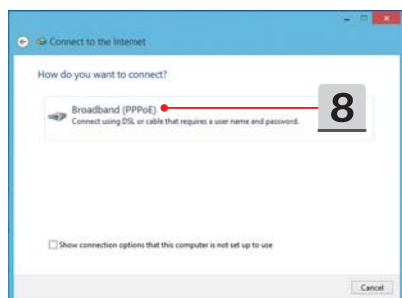
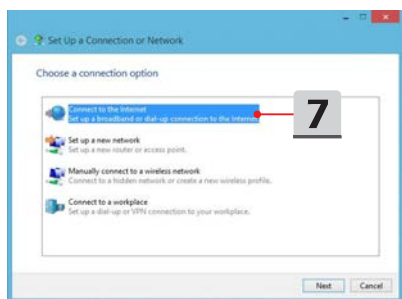
1. Point your mouse cursor to the LAN icon in the taskbar, and then right click to select [Open Network and Sharing Center].
2. Choose [Change adapter settings].
3. Right click on [Ethernet] to select [Properties] from the drop-down menu.
4. In the Ethernet Properties window, select [Networking] tab 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].





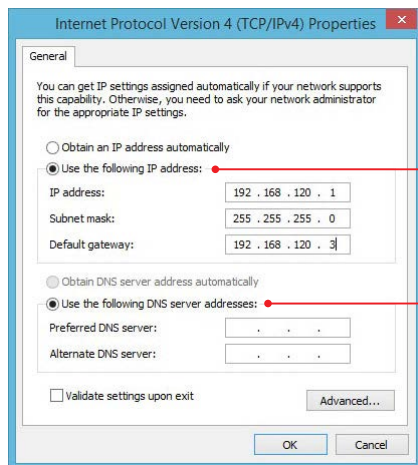
6. Repeat step 1 to launch [Network and Sharing Center] again. Select [Set up a new connection or network] under [Change your networking settings].
7. Choose [Connect to the Internet], and then click [Next].
8. Click [Broadband (PPPoE)].
9. Fill User name, Password, and Connection name fields. Then click [Connect].





► Setup a static IP internet connection

1. Follow the previous steps 1 to 4 in [Setup 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 enter the IP address, Subnet mask, and Default gateway into the empty place , then click [OK].



How to Set Up Bluetooth Connection

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

Activating Bluetooth Connection

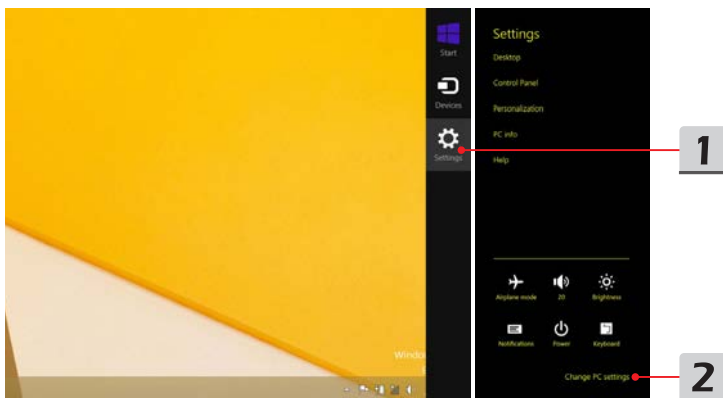
- ▶ Turning Airplane mode off

Refer to the previous Wireless LAN section to turn Airplane mode off before activating Bluetooth connection.

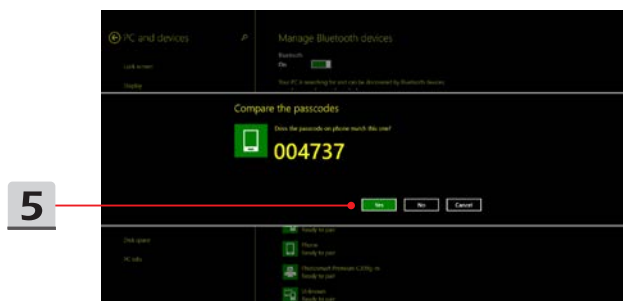
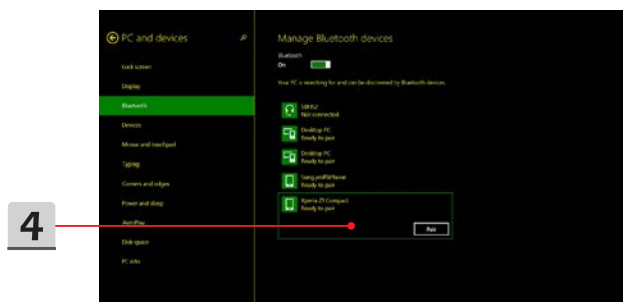
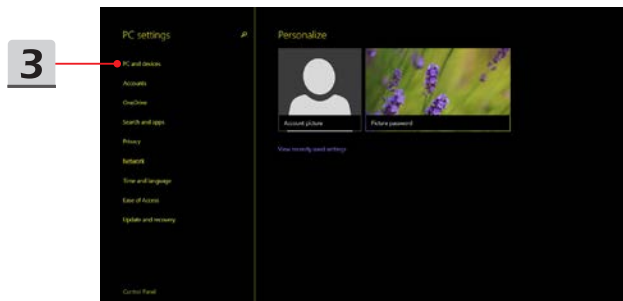
- ▶ Pairing Bluetooth devices

Go to the desktop. (Please launch **Desktop** if you are in Win 8 Start screen.)

1. Point your mouse to the lower-right corner of the screen to bring the taskbar, then click [Settings].
2. Select [Change PC settings].



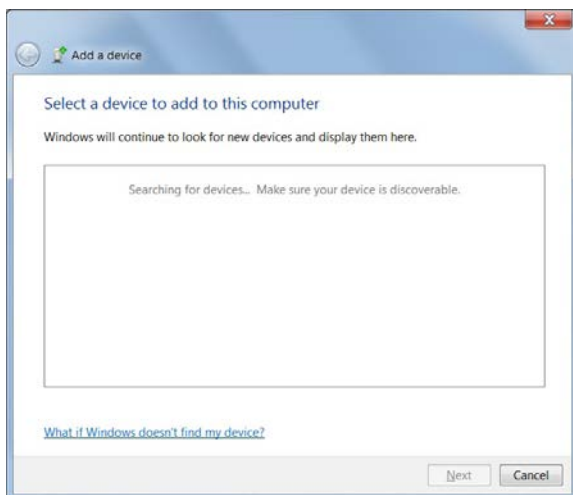
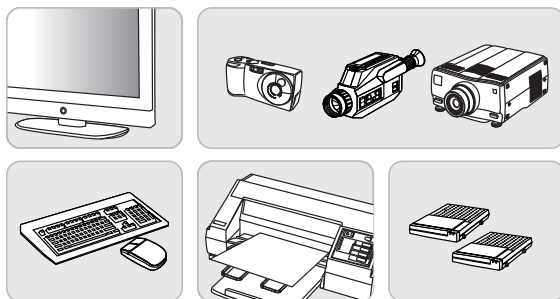
3. Click "PC and devices" from the PC settings list.
4. Choose a desired Bluetooth device from the connection list, and then click [Pair] to continue.
5. Match the passcode between the notebook and the selected Bluetooth device, click [yes] to finish.



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 external devices connected, 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 Use Multiple Monitors

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.

1. Connect the monitor to the notebook.
2. Press and hold the Windows key, and then press [P] key to bring up [Project].
3. Select a desired mode
 - ▶ PC screen only: shows the desktop on the monitor of the notebook only.
 - ▶ Duplicate: the desktop will be displayed on the monitor of the notebook and the external monitor connected.
 - ▶ Extend: Extends the desktop across all of the monitors connected. This option is useful if users want to increase the desktop area.
 - ▶ Second screen only: shows the desktop on the external monitor connected only.



How to Use RAID Function

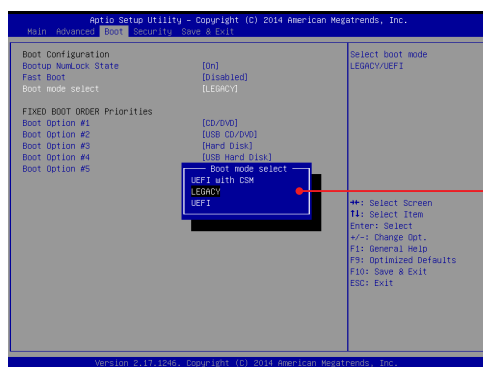
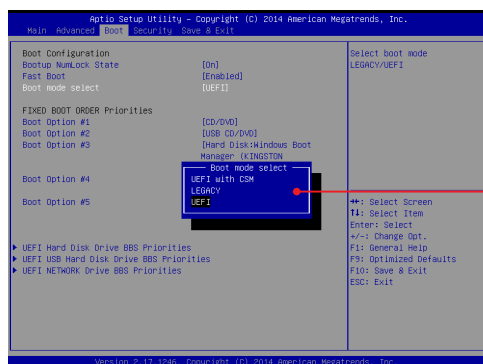
This notebook may support RAID technology of different levels. RAID allows users to store data on multiple hard disk drives or solid-state drives. Contact the local dealer for further and correct information and be noted that the supported RAID functions may vary depending on the models users purchased.

To set up RAID, follow the instructions below:

1. Create a recovery disk with the Recovery Image Backup Tool that comes with the package of the notebook. Users may find the shortcut of BurnRecovery on the Start Screen or Windows desktop.
2. Assemble SSDs or HDDs with exactly the same capacity and brand. Make sure you have proper skills to do the assembly of SSDs or HDDs or you can contact an authorized service center for further assistance.
3. Go to BIOS page, select [RAID] for the SATA Mode in Advanced tab; and select [Legacy] for the Boot Mode in Boot tab .

How to Select Boot Mode in BIOS while installing OS

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 8 and Windows 8.1), it is suggested to select [UEFI].
4. For Windows 7 or previous versions of Windows, select [Legacy] mode.



Where Are Key Components

In this section you will find information about main parts inside a notebook, some may be upgradable or replaceable depending on the model purchased.

Don't try to upgrade your device yourself as unauthorized replacements may void your warranty. To obtain service, please contact a local authorized service center.

1. HDD
2. Memory
3. M.2 SSD
4. Bluetooth/ WiFi combo card
5. ODD

