



User Manual

Eluktronics MECH-15HS

Notice

The information in this user's manual is protected by copyright laws, all parts of this manual, including the products and software described in it, can not be reproduced, transmitted, transcribed, stored in a retrieval system, nor translated into any language.

THE MANUFACTURER OR RESELLER SHALL NOT BE LIABLE FOR ERRORS OR OMISSIONS CONTAINED IN THIS MANUAL AND SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL DAMAGES, WHICH MAY RESULT FROM THE PERFORMANCE OR USE OF THIS MANUAL.

The illustrations in this user's manual are for reference only. Actual product specifications may vary with territories.

The information in this user's manual is subject to change without notice.

TABLE OF CONTENTS

Notice	2
Preface	5
1.1 Regulations Information.....	6
1.2 Safety Instructions	7
1.3 Conventions for this Manual.....	8
1.4 Release History	9
Getting to know the basics	10
2.1 Product Specification.....	11
2.2 Preparing your Computer	15
2.3 Product Overview	16
Getting started	24
3.1 AC Adapter	25
3.2 Knowing the Keyboard	26
3.2.1 For keyboard users.....	27
3.3 Using the touchpad / clickpad.....	30
3.3.1 Windows 10 Touchpad Usage.....	31
BIOS setup	32

4.1 About BIOS Setup	33
4.1.1 When to Use BIOS Setup ?.....	33
4.1.2 How to Run BIOS Setup ?.....	33
4.2 BIOS Setup Menu.....	34
4.2.1 Main Menu.....	36
4.2.2 Advanced Menu	38
4.2.3 Security Menu.....	40
4.2.4 Boot Menu	41
4.2.5 Exit Menu.....	42

Chapter 1

Preface

1.1 Regulations Information

Ⓢ CE compliance

This device is classed as a technical information equipment (ITE) in class B and is intended for use in living room and office. The CE-mark approves the conformity by the EU-guidelines:

- EMC Directive 2014/30/EU,
- Low Voltage Directive 2014/35/EU(equals A2 : 2013) ,
- R&TTE Directive 1999/5/EC



The unit can be operated at an ambient temperature of max. 35° C (95°F). Do not subject it to temperatures below 5°C (41°F) or above 40°C (104 °F).

CAUTION: RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.



PREVENTION OF HEARING LOSS

CAUTION: Listening to music at high volume levels and for extended durations can damage one's hearing. In order to reduce the risk of damage to hearing, one should lower the volume to a safe, comfortable level, and reduce the amount of time listening at high levels. Headsets should comply with EN 50332-2 requirements.



1.2 Safety Instructions



- 1** Do not apply heavy pressure to the computer or subject it to any form of strong impact as this can damage the computer's components or otherwise cause it to malfunction.
- 2** Never cover or block the air vents including those located at the base of the computer. Never cover your computer or AC adapter with any object.
- 3** To keep your computer in prime operating condition, protect your work area from direct sunlight.
- 4** Do NOT expose to or use near liquid, rain, or moisture.
Do NOT use the modem during electrical storms.
- 5** Do not use or expose this device around magnetic fields as magnetic interference may affect the performance of the device.

1.3 Conventions for this Manual



CAUTION : This message contains important information that must be followed for safe operation.



NOTE : This message contains information for special situations.

1.4 Release History

Version	Date	Revision
1.0	09.2017	Initial release

Chapter 2

Getting to know the basics

2.1 Product Specification

This User's Manual provides technical information of instructions and illustrations on how to operate this notebook for the customer. Please read this manual carefully before using this notebook.

• Physical Characteristic

■ Dimension

386.9 x 270 x 35.6mm; Weight: 3.0Kg

• CPU

■ Support Processor

KBLH, 4+2

• GPU

■ Support Processor

NVIDIA Geforce 1070, 256bits(N17E-G2)

• Memory

■ DDR4

DDR4 2400MHz

• Storage

■ HDD

2.5" SATA HDD support

7/9.5mm

• I/O Port

DC-in	x 1
USB	2.0 x 2 + 3.0 x 3 3.1 x 1 (Type C, no Audio and Video support)
RJ45	x 1
Card Reader	x 1 (2 in 1 Card reader connector type)
DP port	x 1
HDMI	x 1
Audio out & Mic in	x 2
Quick launch button	x 1 (FAN full speed ON/OFF)

• Audio

■ Audio Codec

Azalia standard support, D3 mode support

■ Speaker/MIC

Build-in 2 speakers

Speaker : 2W/each

Digital Microphone support w/ Camera

• Input

■ Keyboard

15.6"

■ Pointing Device

PS2 Touch Pad with 2 buttons 92X52mm

• Display

■ LCD

15.6" FHD, 16:9, Glare or AG

• Communication Port

■ LAN

10/100/1000 Mb/Sec

■ Wireless LAN

M.2 2230 w/ PCIE interface
IEEE802.11b/g/n support; AC mode support

• Webcam

■ HD webcam

HD webcam with D-MIC*1

• Power

■ AC Adapter

Automatic Voltage adjustment between 100 and 240VAC 50/60Hz,

230 Watts (19.5V/11.8A), 3 Pins

■ Battery

Li-ion 18650 Battery, hard pack, Removable,

6 cells (High power 3S2P 4300mAh ; or Normal 3S2P 4400mAh)

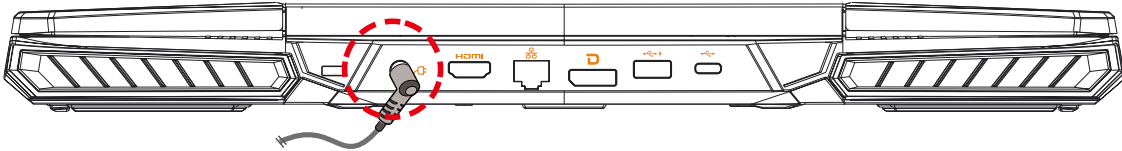


CAUTION: MODEL IS DESIGNED TO USE WITH THE
DC INPUT: 19.5V/11.8A

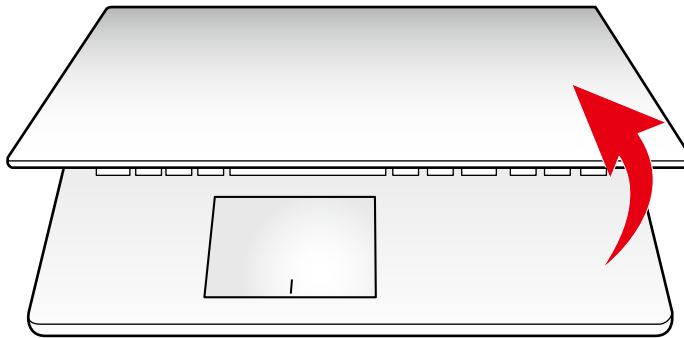
Please use the genuine adapter based on the rating of your PC's model and BIOS. If damage is determined to have been caused by utilization of an unauthorized power supply, the warranty will be void.

2.2 Preparing your Computer

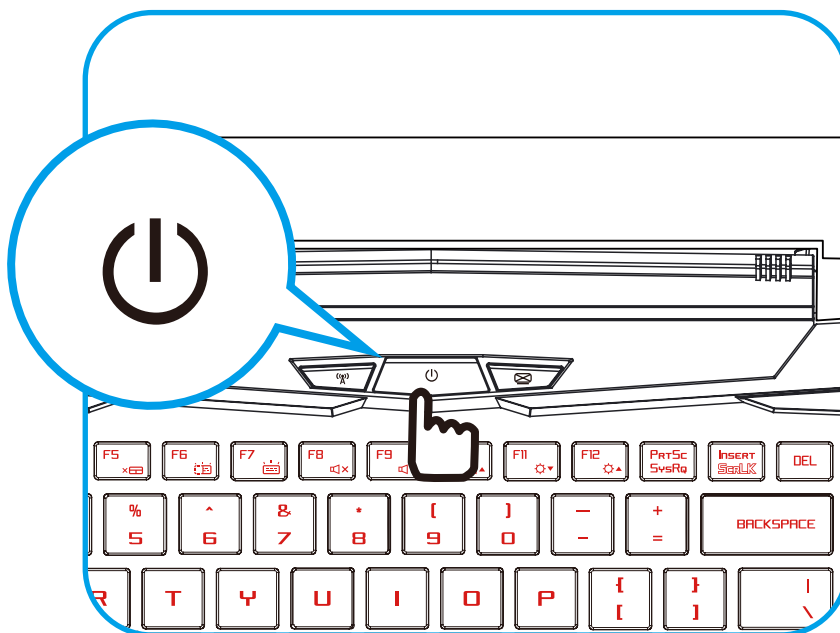
- A** Connect the AC adapter's DC output plug to the DC IN jack.



- B** The display panel can be opened to a wide range of angles for optimal viewing.



- C** Press the power button to turn on your notebook computer.



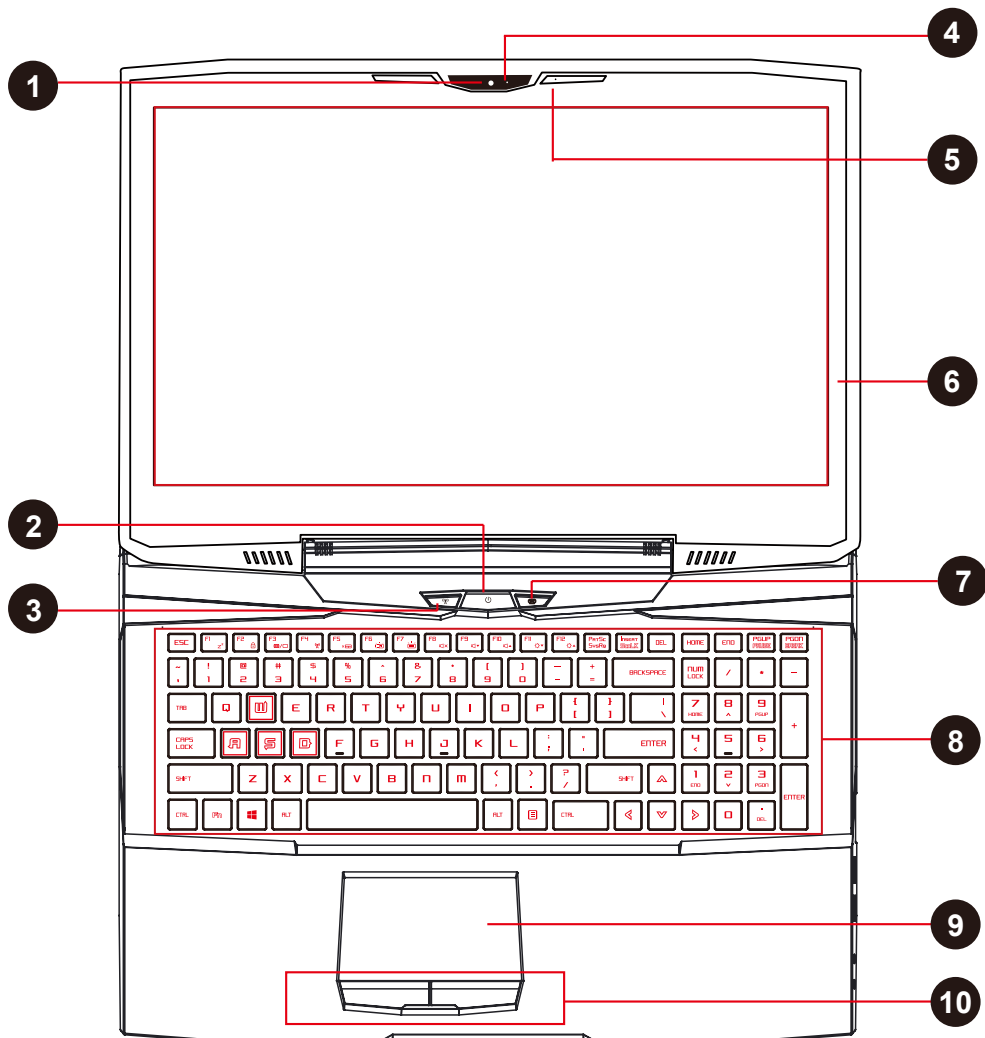
2.3 Product Overview

Please become familiar with each component before you operate the computer.

Top-Open View



NOTE: The product's finish, color, I/O port, indicator location, and specification will depend upon the specific model which was advertised to be included.



CAUTION: When you are not using the computer, keep the LCD-screen closed to protect it from dust.

1 Webcam

A device that allows you to record video or take photographs with your computer.

2 Power Button

Press this button to turn the computer's power on or off.

Power indicator

*Power ON: ON

*Suspend: Slow / Smooth, Blinking Red *FAN full speed: ON

*Power Off: OFF

Charging & Battery indicator

*Charging: Red

*Battery Low (<6%): Blinking Red

*Charging finish : OFF

*Power Mode: Blinking Red between Power & Charging Indicator

3 WIFI CONTROL BUTTON

4 Camera Status LED

The Camera Status LED shows the Camera status.

5 Microphone

Built-in microphone.

6 LCD screen

Displays of your notebook computer.

7 SCREEN CONTROL BUTTON

8 Keyboard

The keyboard provides keys with comfortable travel.

9 Touchpad/Click pad

Touch-sensitive pointing device which functions like the mouse.

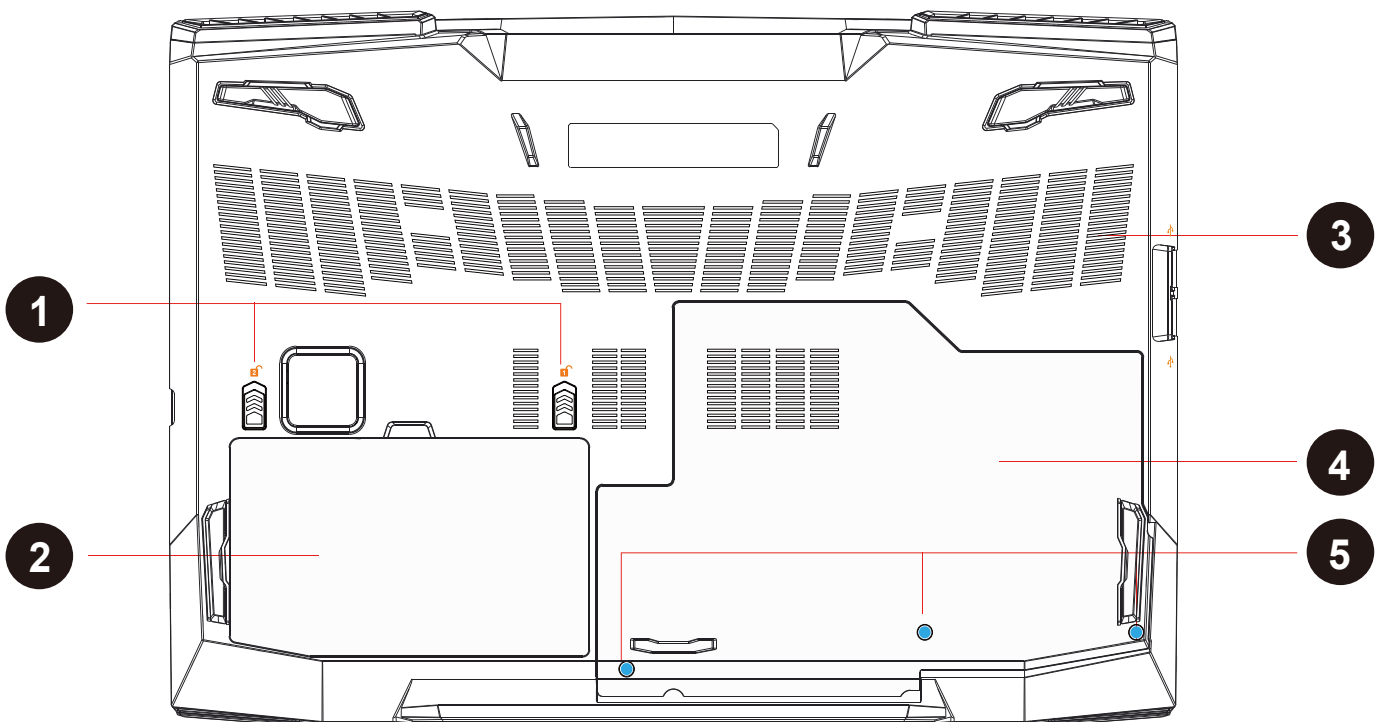
10 Left and right touchpad/Clickpad buttons

The left and right buttons function like the left and right buttons on a standard mouse.

Bottom Side View



NOTE :The product's thermal vent design may vary depending on the model and internal hardware in which you purchased.





CAUTION: Your laptop generates heat while under heavy load. To avoid potential injury, do not place the laptop on any exposed body parts.

1 Battery Lock 1 and 2 - Spring

The spring battery lock 1 and 2 are used to keep the battery pack secured.

Lock 1

Switch lock 1 by manual to lock or unlock.

Lock 2

When the battery pack is inserted, lock 2 will automatically lock. To remove the battery pack, lock 2 must be held in the unlocked position.

2 Battery Module

The thermal vents help the processor to avoid overheating.

3 Vents

The thermal vents are designed to cool the internal components and avoid overheating.

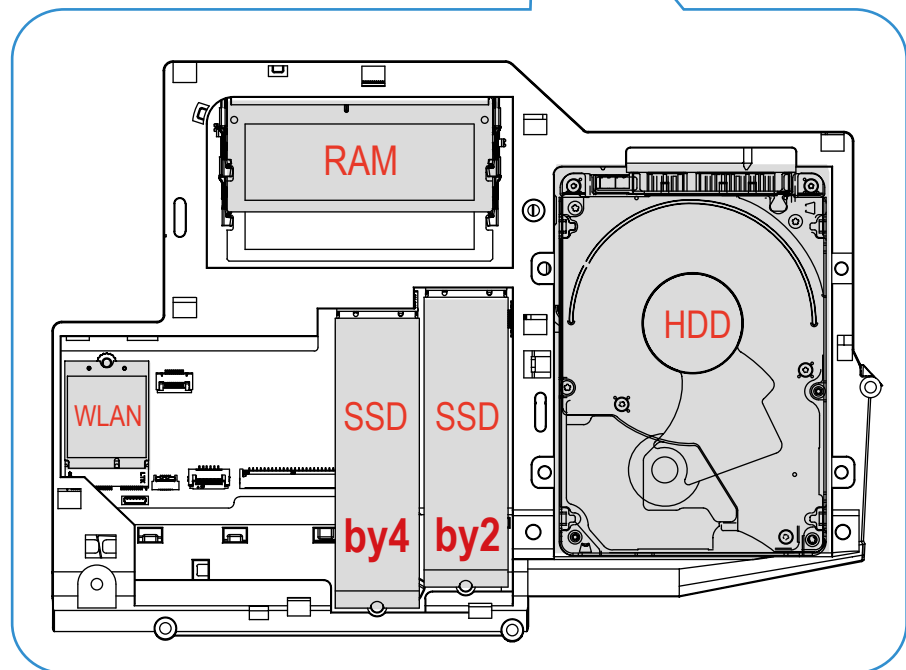
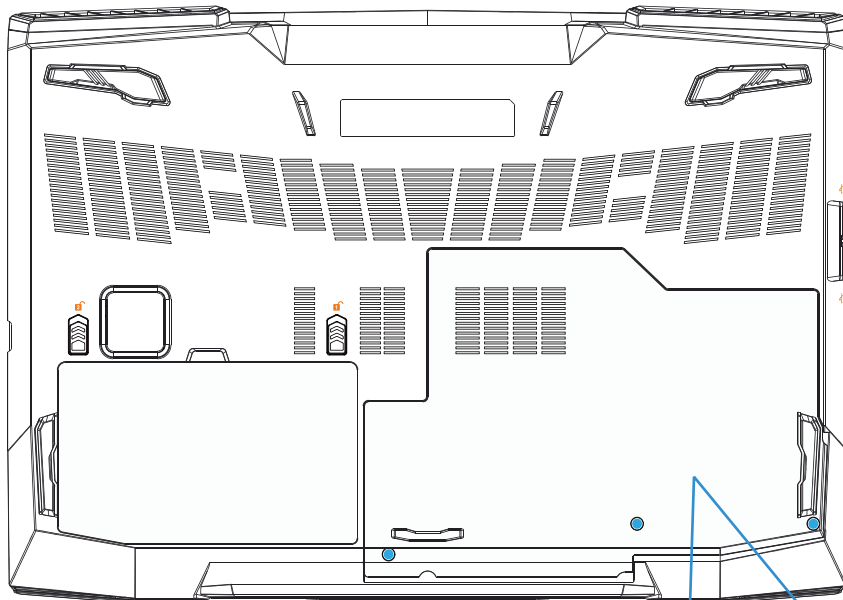
4 HDD / RAM / SSD / WLAN Compartment Cover

The cover can be removed to install or remove the HDD / RAM / SSD / WLAN. If damage occurs while attempting to modify or remove parts, it will not be protected under warranty.

5 HDD / RAM / SSD / WLAN Compartment Cover Screws

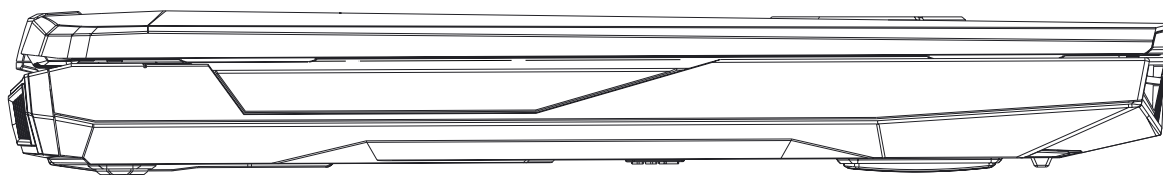
You can remove the screws to install or remove the HDD / RAM / SSD / WLAN compartment cover. (Please refer to the HDD / RAM / SSD / WLAN compartment view on the following page.)

HDD / RAM / SSD / WLAN Compartment View (Optional)

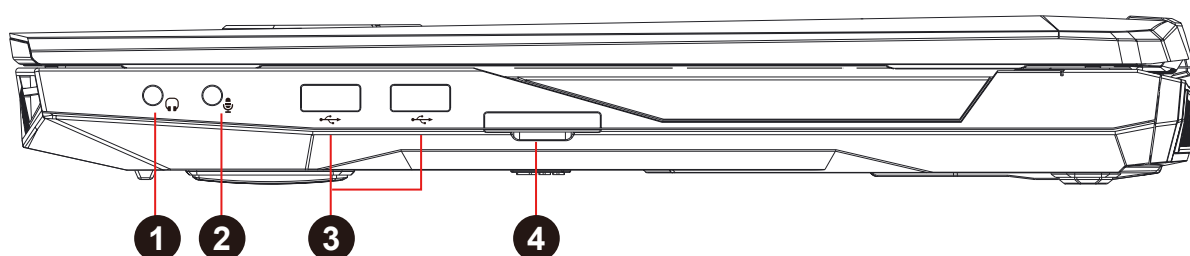


If you intend to modify or upgrade your SSD, RAM or WLAN parts, please contact Eluktronics at support@Eluktronics.com. The use of unauthorized parts will not void your warranty. However, any aftermarket or third party part must be removed before requesting warranty assistance.

Left Side View



Right Side View



1 Audio Out Jack

Connects amplified speakers, headphones or microphone into this jack.

2 Mic In Jack

Connects amplified speakers, headphones or microphone into this jack.

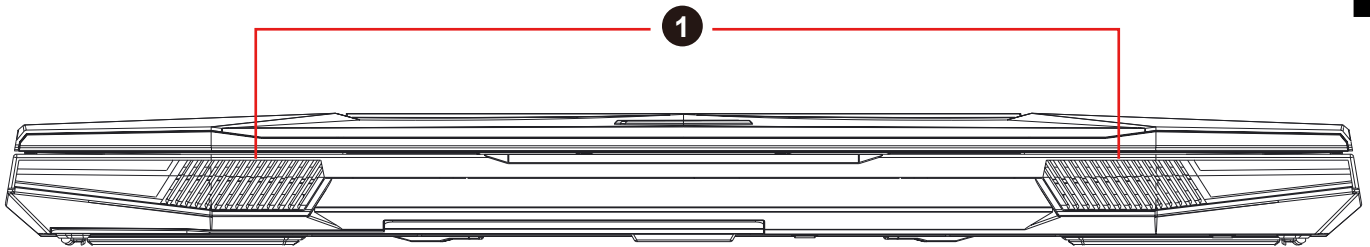
3 USB Ports

Connects an USB device.
(such as USB Zip drive, keyboard or mouse) into this jack.

4 2 in 1 Card Reader

Insert Memory Card.

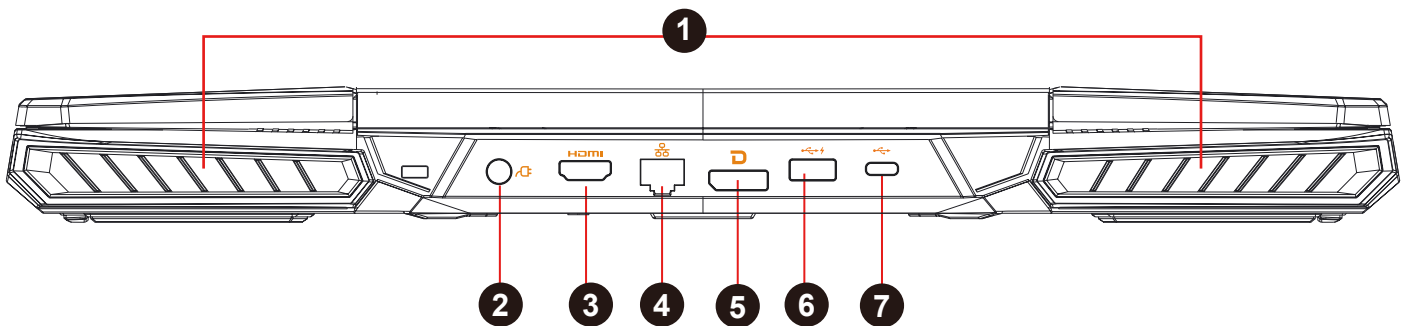
Front Side View



1 Stereo speakers

Produce stereo sound.

Back Side View



1 Vents

The thermal vents are designed to cool the internal components and avoid overheating.

2 Power Connector

Connects the AC adapter into this connector.

3 HDMI port

Supports high-definition digital video connections.

4 Network Jack

This jack allows you to connect to a Local Area Network (LAN) connection.

5 Display Port

Connected to the screen, or home theater system.

6 USB Port

Connects an USB device (such as USB Zip drive, keyboard or mouse) into this jack.

-Intelligent charging 1.8A function for external USB device in power off mode.

Shutdown state, continue to press the power button for about 6 seconds, Power USB is enabled; under-powered USB shutdown state, rst press the power button to cancel this function, press the power button is turned on.

7 USB Port

Connects an USB device (such as USB Zip drive, keyboard or mouse) into this jack.

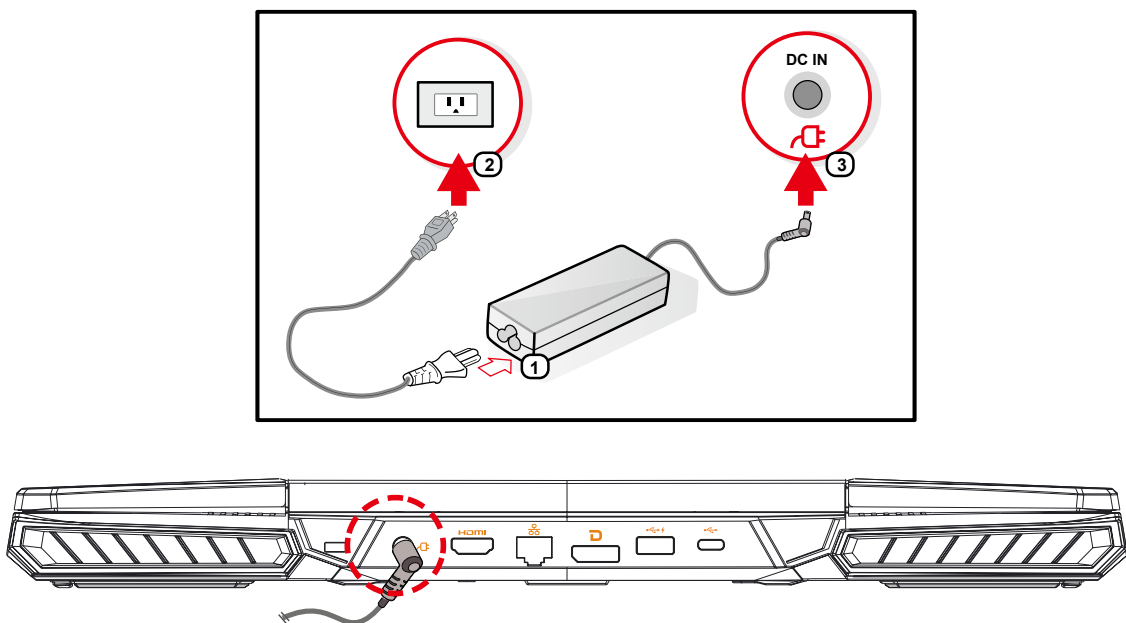
Chapter 3

Getting started

3.1 AC Adapter

Please plug in the AC adapter for initial use of your notebook until your battery levels are verified to provide sufficient power. The AC adapter should be plugged back in as soon as your PC indicates the battery level is low. If the battery is continuously utilized past the point of indication of a low battery, it can affect the longevity of your battery. If you intend to remove the battery and use the PC under AC power only, the battery should be stored at room temperature at a charge level between 55-65% before removal.

Note that the AC adapter included in the package is approved for your notebook; using other adapter model may damage either the notebook or other devices attached to it.



CAUTION: The use of inferior extension cords may result in damage to your notebook. Your notebook comes with its own authorized AC adapter. Use of a different AC adapter or cable extension which is not authorized for use will void warranty protection if damage to hardware is found in association to said adapter or extension cable.



NOTE: The power adapter can become hot when in use. Please be sure the AC adapter is not covered with any materials keep it away from exposed parts of your body. The AC adapter appearance may vary depending on your region.

3.2 Knowing the Keyboard

The following defines the colored hot keys on the Keyboard.

The colored commands can only be accessed by first pressing and holding the function key while pressing a key with a colored command.













NOTE: The number of keys available on your keyboard will depend on the country/region in which the keyboard was designed and built.















3.2.1 For keyboard users

To activate these functions, press the hot key associated with the desired function as below :

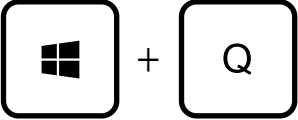
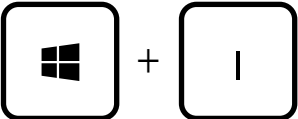
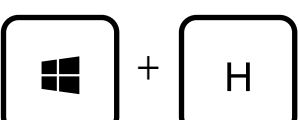
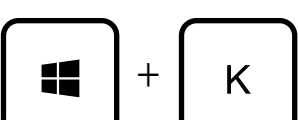
Function Keys

Keypad	Function Description
 +  Suspend:	Press this key combination (Fn+F1) to enter sleep mode.
 +  Home Lock/On:	Press this key combination (Fn+F2) to turn Home Lock/On .
 +  LCD/CRT/ HDMI mode:	Press this key combination (Fn+F3) to enter LCD/CRT/HDMI mode. Changes Display Mode: LCD only, LCD+ CRT, CRT only, HDMI+CRT, HDMI only, LCD+HDMI simultaneously.
 +  RADIO on/off:	Press this key combination (Fn+F4) to turn all radios on or off.
 +  Touch pad:	Press this key combination (Fn+F5) to enter Touch pad mode.

Function Keys

Keypad	Function Description
 + 	Keyboard Brightness down: Press this key combination (Fn+F6) to decrease brightness of Keyboard.
 + 	Keyboard Brightness up: Press this key combination (Fn+F7) to increase brightness of Keyboard.
 + 	MUTE: Press this key combination (Fn+F8) to enter MUTE mode.
 + 	Volume down: Press this key combination (Fn+F9) to enter Volume down mode.
 + 	Volume up: Press this key combination (Fn+F10) to enter Volume up mode.
 + 	Brightness down: Press this key combination (Fn+F11) to decrease brightness of LCD display.
 + 	Brightness up: Press this key combination (Fn+F12) to increase brightness of LCD display.

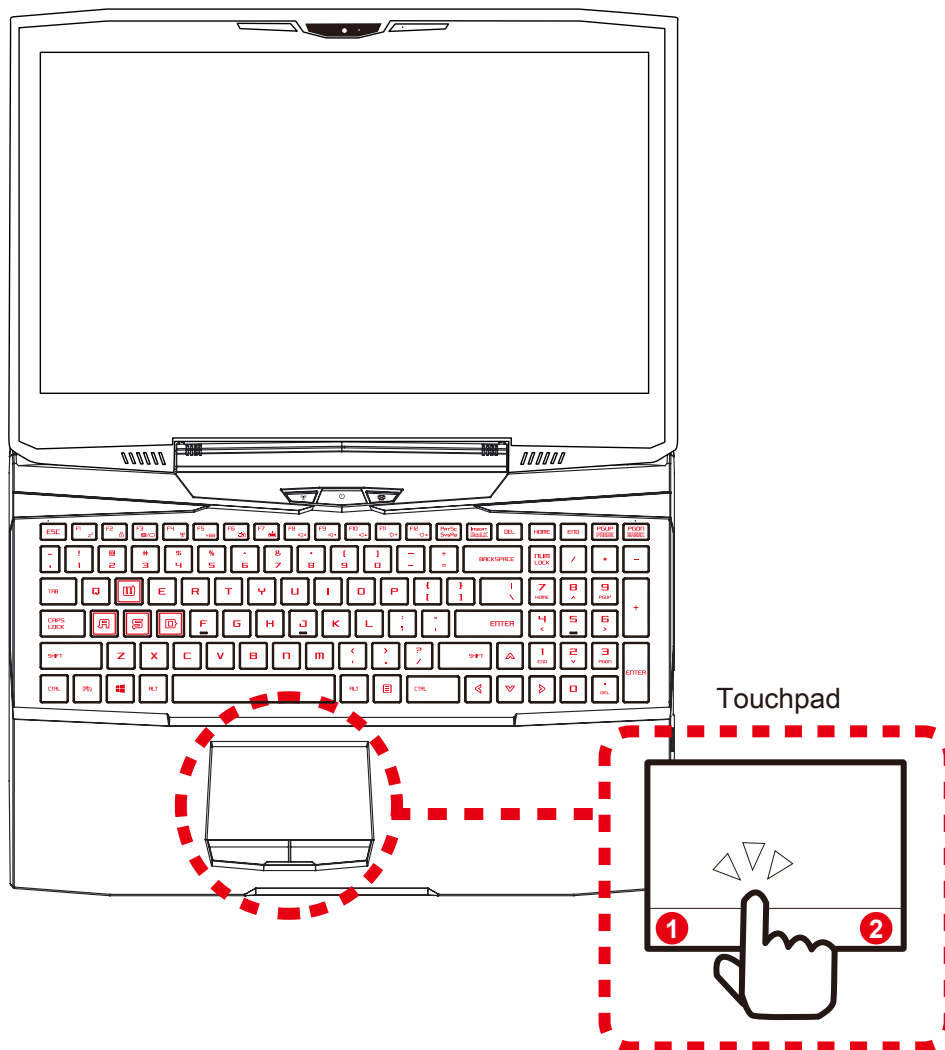
Function Keys

Keypad	Function Description
 <p>Search Charm : (Optional)</p>	<p>Press this key combination (Windows logo key+Q) to open the search charm and search apps.</p>
 <p>Settings Charm : (Optional)</p>	<p>Press this key combination (Windows logo key+I) to open the settings charm.</p>
 <p>Share Charm : (Optional)</p>	<p>Press this key combination (Windows logo key+H) to open the share charm.</p>
 <p>Devices Charm : (Optional)</p>	<p>Press this key combination (Windows logo key+K) to open the devices charm.</p>

3.3 Using the touchpad / clickpad

The touchpad / clickpad is a rectangular electronic panel located just below your keyboard. You can use the static-sensitive panel of the touchpad / clickpad and slide it to move the cursor. You can use the buttons below the touchpad as left and right mouse buttons.

Press the left **1** and right **2** buttons located on the edge of the touchpad / clickpad to make selections and run functions. These two buttons are similar to the left and right buttons on a mouse. Tapping on the touchpad / clickpad produces similar results.


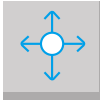
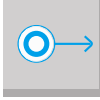
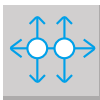
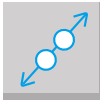
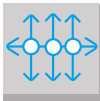


3.3.1 Touchpad Usage

Touch Pad Gesture

Modern touchpad gesture:

A modern touchpad should support the core touch gestures described in the following table.

Item	Gesture name	Gesture
1	one finger	 left click/double click
2		 move cursor
3		 tap+slide
4	two finger	 scroll/pan
5		 pinch/zoom
6	three finger	 multitasking gesture

Chapter 4

BIOS setup

4.1 About BIOS Setup

4.1.1 When to Use BIOS Setup ?

You may need to run the BIOS Setup when:

- An error message appears on the screen during the system booting up and is requested to run SETUP.
- You want to change the default settings for customized features.
- You want to reload the default BIOS settings.

4.1.2 How to Run BIOS Setup ?

To run the BIOS Setup Utility, turn on the notebook and press the [Del] key during the POST procedure.

If the message disappears before you respond and you still wish to enter Setup, either restart the system by turning it OFF and ON, or simultaneously pressing [Ctrl]+[Alt]+[Del] keys to restart.

Be noted that the screen snaps and setting options in this chapter are for your references only. The actual setting screens and options on your Notebook may be different because of BIOS update.

The setup function only can be invoked by pressing [Del] or [F2] key during POST that provide a approach to change some setting and configuration the user prefer, and the changed values will save in the NVRAM and will take effect after the system rebooted. The setup uses a menu interface to allow the user to configure their system and the features are briefly listed as follow.

Press [F7] key for Boot Menu.



NOTE : The drivers, BIOS and utilities bundled in the support DVD may vary by models and are subject to change without notice.

4.2 BIOS Setup Menu

Once you enter the BIOS Setup Utility, the Main Menu will appear on the screen. Select the tags to enter the other menus.

Main Menu

Show system overview about memory size, setting of system time and date.

Advanced Menu

To select the XD feature enable or disable XD feature only work with Intel platform + Windows.

Security Menu

Install or clear the password settings for supervisor and user.

Boot Menu

Configure Settings during System Boot.

EXIT Menu

Save or discard the changes before leaving the BIOS Setup Menu.

4.2.1 Main Menu



- System Time

This item allows you to set the system time. There is a small internal (CMOS) battery which is designed to maintain your system clock. It is designed to maintain time even when the PC is powered down or in sleep mode. The time format is [hour:minute:second].

Use [+] or [-] to configure system Time.

- System Date

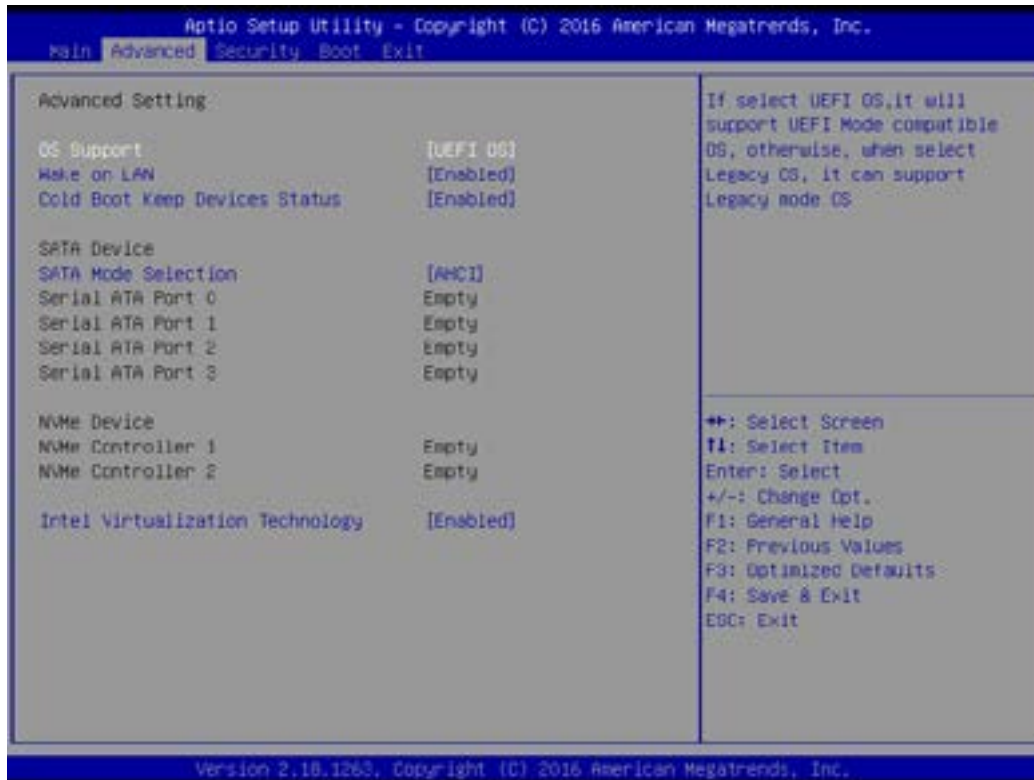
This item allows you to set the system date. The date format is [day:month:date:year].

Day	Day of the week, from Sun to Sat, which is determined by BIOS (read-only).
Month (Month)	The month from 01 (January) to 12 (December).
Date (Date)	The date from 01 to 31.
Year (Year)	The year can be adjusted by users.

- Total Memory

This allows you to see the total amount of memory.

4.2.2 Advanced Menu



- Wake on LAN
Enable/Disable
integrated LAN to wake the system.
- Serial ATA HDD
It will show AHCI SATA HDD info.

- NVMe Device

Enable/Disable

integrated NVMe to wake the system.

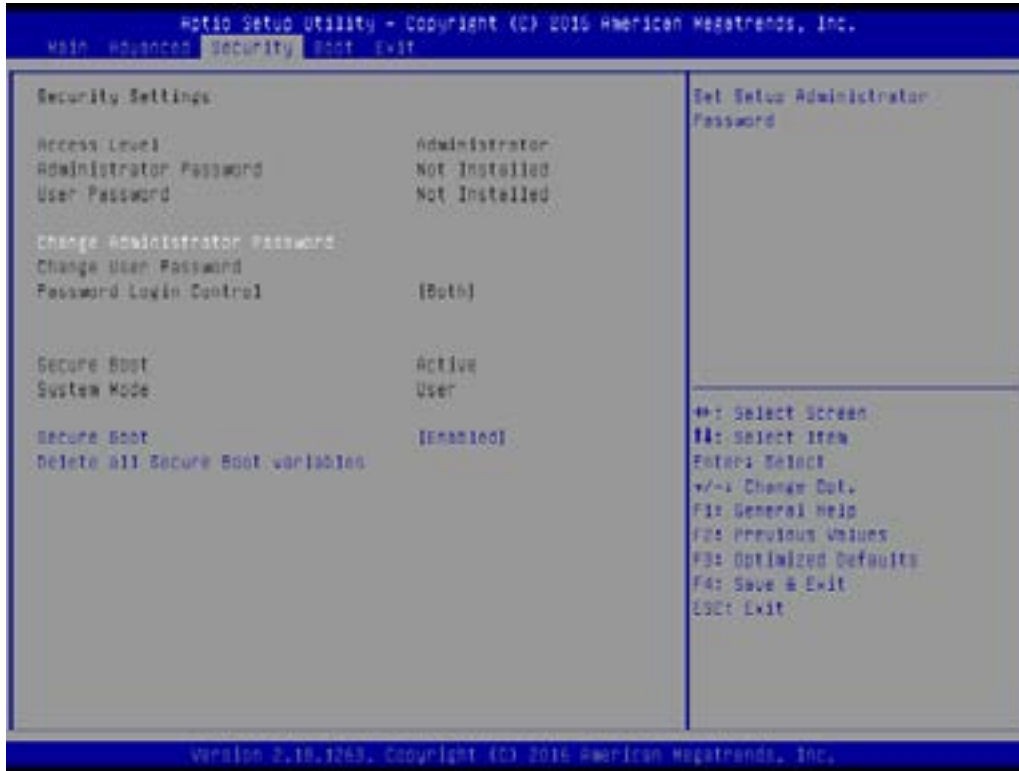
- Intel Virtualization Technology

When enabled, a VMM can utilize the additional hardware capabilities provided by Vanderpool Technology.

- RAID mode reminder

Please update strip size in BIOS to 128K in order for RAID to optimize performance.

4.2.3 Security Menu



- Change Administrator Password

When this item is selected, a message box shall appear on the screen as below:

Enter New Password

Type a maximum of 20-digit password and press [Enter].

The password typed now will replace any previously set password from CMOS memory. You may also press [ESC] to abandon new password setting. It is extremely important to keep record for any BIOS password which is set as it can not be reset even with the removal of a CMOS battery for the security of your PC.

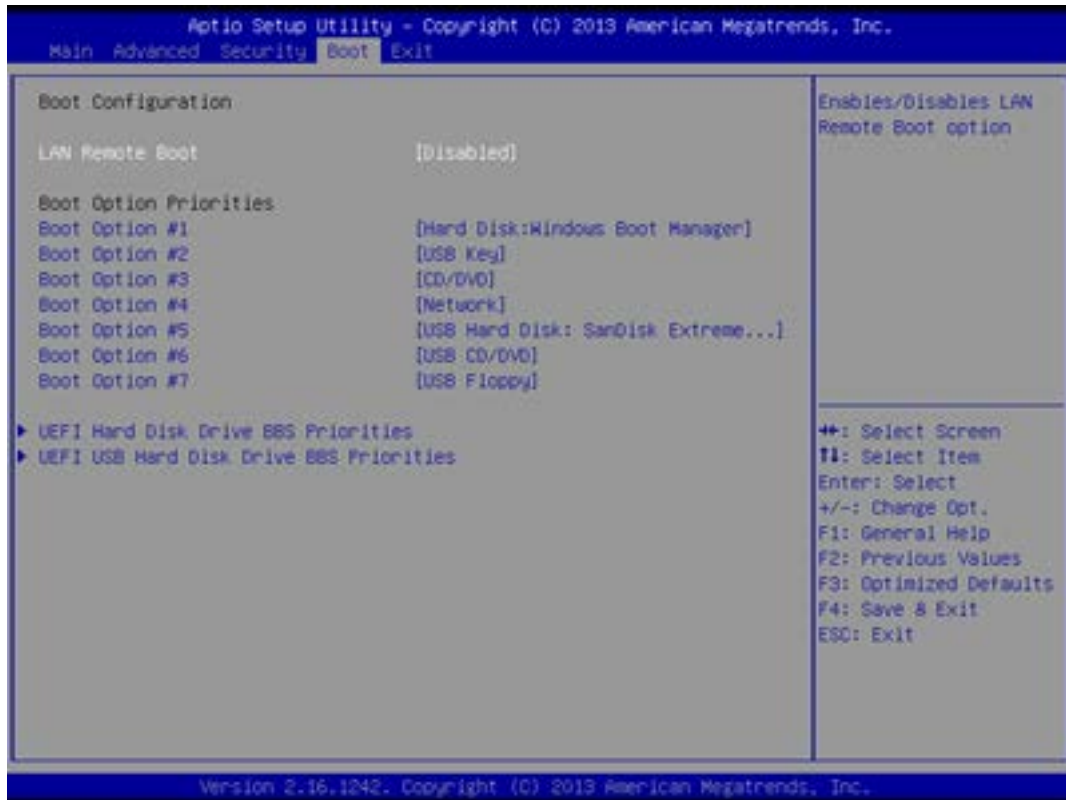
Select Change User Password to give or to abandon password setting same as Change Administrator Password item above.

Note that Administrator Password field allows users to enter and change the settings of the BIOS SETUP UTILITY, while User Password field only allows users to enter the BIOS SETUP UTILITY without having the authorization to make any change.

The Password Check item is used to specify the type of BIOS password protection that is implemented.

To clear a set Administrator Password/ User Password, just press [Enter] under Change Administrator Password/ Change User Password field when you are prompted to enter the password. A message box will pop up confirming password will be disabled. Once the password is disabled, the system will boot and user can enter setup without entering password.

4.2.4 Boot Menu



- **Boot Configuration**
Configure Settings during System Boot.
- **LAN Remote Boot [Disable]:** Boot from LAN or not.
- **Set Boot Priority (1st/2nd/3rd/..... Boot)**
Specifies the boot sequence from the available devices.
A device enclosed in parenthesis has been disabled in the corresponding type menu.
- **Hard Disk Drive / USB HardDisk Drive**
Specifies the Boot Device Priority sequence.

4.2.5 Exit Menu



- **Save Changes and Reset**
Exit system setup after saving the changes. F4 key can be used for this operation.
- **Discard Changes and Exit**
Exit system setup without saving any changes. ESC key can be used for this operation.
- **Restore Defaults**
Restore/Load Defaults values for all the setup options. F3 key can be used for this operation.