

# **User Manual**

Eluktronics MECH-15 G2

#### **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 Regulation Information        | . 6 |
| 1.2 Safety Instructions           | . 7 |
| 1.3 Warranty Void Warning         | 8   |
| 1.4 Release History               | . 9 |
| Get to Know the Basics            | 10  |
| 2.1 Product Specifications        | .11 |
| 2.2 Preparing Your Computer       | 15  |
| 2.3 Product Overview              | 16  |
| Getting Started                   | 25  |
| 3.1 AC Adapter                    | 26  |
| 3.2 Understanding the Keyboard    | 27  |
| 3.2.1 Keyboard Shorcuts           | 28  |
| 3.3 Using the Touchpad / Clickpad | .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          | . 35 |
| 4.2.1 Main Menu              | . 35 |
| 4.2.2 Advanced Menu          | . 37 |
| 4.2.3 Security Menu          | . 39 |
| 4.2.4 Boot Menu              | . 40 |
| 4.2.5 Exit Menu              | . 42 |
|                              |      |

# **Chapter 1**

# **Preface**

## 1.1 Regulation 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-quidelines:

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



Do not subject the unit to temperatures below  $5^{\circ}$ 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



- 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.
- 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.
- To keep your computer in prime operating condition, protect your work area from direct sunlight.
- Do NOT expose to or use near liquid, rain, or moisture.
  Do NOT use the modem during electrical storms.
- Do NOT use or expose this device around magnetic fields as magnetic interference may affect the performance of the device.

# 1.3 Warranty Void Warning



**WARNING:** The thermal system is not meant to be tampered with. Any adjustment or modification to the thermals on this PC <u>will void your warranty</u>.



NOTE: If you're encountering an issue with heat or believe your PC is running warmer than it should, please contact technical support. We are here to assist you.

# 1.4 Release History

| Version | Date    | Revision        |
|---------|---------|-----------------|
| 1.0     | 04/2018 | Initial release |

# Chapter 2

# Get 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. Please read this manual carefully before using this notebook.

# · Physical Characteristic

Dimension

359\* 242\* 19~(23)mm

2.1kg+/- 5%

#### · CPU

Supported Processor

Intel CFL-H

#### · GPU

Supported Graphics Card

**NVIDIA GTX 1060** 

# · Memory

■ DDR Memory Type

DDR4 2400MHz to 2666MHz

### · I/O Port

DC-in x 1

USB 3.1 X 2 (Gen1)

USB 2.0 X 1

USB type C USB 3.1 X 1 (Gen1)

RJ45 x 1

Card Reader x 1 (2 in 1 Card reader-support MMC/SD/SDHC/SDXC card)

HDMI x 1

Audio out & Mic in x 2

Mini DP x 2

### · Audio

Audio Codec

Azalia standard support, D3 mode support, 2.1 Channels support

■ Speaker/MIC

Built-in 2 speakers

Speaker: 2W/each

Digital Microphone support w/ Camera

Sound Baster Cinema

# · Storage

HDD

7mm height

- SSD
  - \*2 Slots (NVMe)
  - \*M.2 2280, PCIE/SATA\*1
  - \*RAID 0/1 support

### Power

#### AC Adapter

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

- 1. 150 Watts (19V/7.89A), 3 Pins
- 2. 180 Watts (19.5V/9.23A), 3 Pins (Option)

#### Battery

Li-polymer Battery, SW Gas Gauge IC, soft pack,

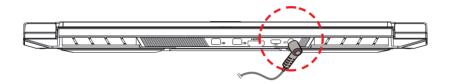
3 cells (3s1p 4100mAh) 46.74Wh



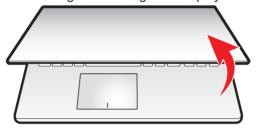
CAUTION: MODEL IS DESIGNED TO USED WITH DC INPUT: 19.5V/9.23A (Option) or 19V/7.89A

# 2.2 Preparing your Computer

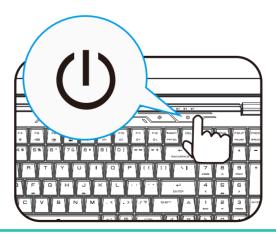
A Connect the AC adapter's DC output plug to the DC IN jack.



The display panel can be opened to a wide range of angles for optimal viewing. Please be careful not to bend the panel back too far to avoid potential damage to the hinges or display.



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



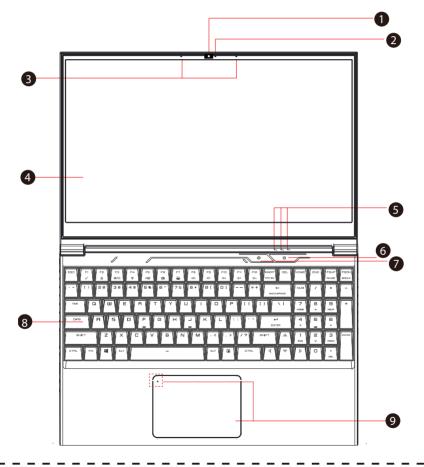
#### 2.3 Product Overview

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

# **Top-Open View**



NOTE: The product's color/LED color, I/O port, indicator location & specification will depend upon the advertised product you purchased.





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

Webcam

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

2 Camera Status LED

The camera status LED indicates if the camera is active.

3 Microphone

Built-in microphone.

4 LCD screen

Internal display/panel of your notebook computer.

**6** Caps Lock Status LED

Default: Green

#### **Charging & Battery Indicator**

Charging(Power ON): Orange

Charging(Power Off): Orange

Battery Low (<6%): Orange (3 Sec/Cycle) Charging finish (w/AC): Green, (w/o AC): Off

#### **Power Indicator**

Power On: Green

Suspend: Green, Slow / Smooth, Blinking Green (3 Sec/Cycle)

No Light: Off

## 6 Power Button

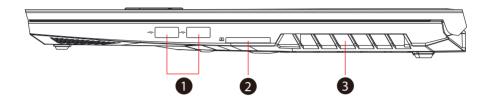
Press this button to turn the computer's power on or off.

NOTE: Holding the power button for 4-5 seconds will hard power the PC down.

- Quick Launch Button
  Fan full speed On/Off
- **8 Keyboard** Full 15.6" KB with RGB backlight support.
- 9 Touchpad/Clickpad
  Touch-sensitive pointing device which functions like the mouse.

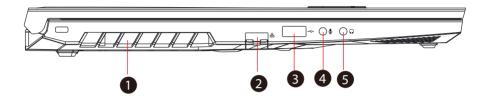
Tochpad LED indicator/ Touchpad switch

# **Right Side View**



- **1** USB Ports ←
  - Connects an USB device. (such as USB flash drive, keyboard or mouse) into this jack.
- 2 in 1 Card Reader
  - Insert Memory Card.
- Wents
  The thermal vents are designed to cool the internal components and avoid overheating.

#### **Left Side View**

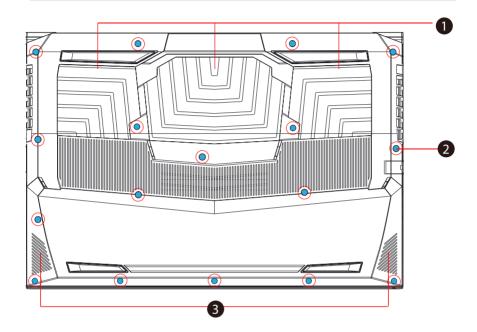


- Vents
  - The thermal vents are designed to cool the internal components and avoid overheating.
- 2 Network Jack 🖧
  - This jack lets you connect to a Local Area Network (LAN).
- USB Ports ← Connects an USB device.
   (such as USB Zip drive, keyboard or mouse) into this jack.
- 5 Audio Out Jack
  - Connects amplified speakers, headphones or microphone into this jack.

### **Bottom Side View**



NOTE : The product's thermal vent appearance can vary depending on the configuration you purchased.



Vents

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

2 HDD / RAM / SSD / WLAN Compartment Cover Screws

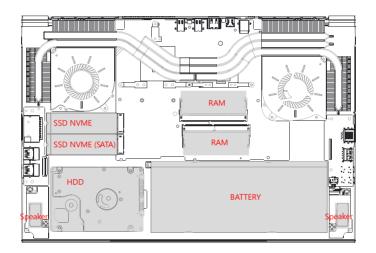
You can remove the screws to install or remove the HDD / RAM / SSD / WLAN compartment cover. ( Please refer to the HDD / RAM / SSD / WLAN compartment view on the following page.)

Modification of any other parts or components aside from the HDD, RAM, SSD or WLAN will void your warranty.

### Speakers

Outputs audio. Adjust the speakers to your liking with the included Sound Blaster Cinema application.

# HDD / RAM / SSD / WLAN Compartment View



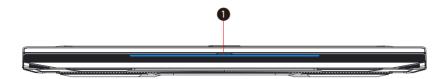


If you need to upgrade your SATA SSD to PCIe SSD, Please contact technical support / after-sales service.



CAUTION: Do not put the computer on your lap or parts of the body for prolonged periods of time to avoid potential injury from heat.

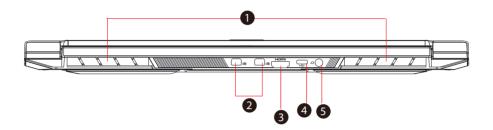
# **Front Side View**



# 1 Light-bar

Customize colors of your choice with the included application.

# **Back Side View**



Vents

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

- Mini Display Port ‡ D

  Connectivity to external video connections
- 3 HDMI Port H□mI
  Supports high-definition digital video connections.
- USB Port (USB Type C)

  Connects a USB device such as USB Flash drive, keyboard or mouse into this jack. (USB Type-C supports data transfer only)
- Power Connector
  Connect the AC adapter into this connector.

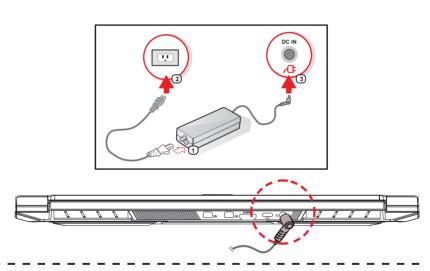
# **Chapter 3**

# **Getting Started**

# 3.1 AC Adapter

It is strongly recommended to connect the AC adapter and use the AC power while using this notebook for your first use. Attach the AC adapter whenever you need to charge the battery. Operation while on AC power will provide the highest level of performance results. The battery should be fully charged for your first use before you remove the AC adapter and operate from battery power.

Use of an unauthorized adapter may damage the notebook or other devices attached to it and will not be covered under warranty.





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 AC 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 Understanding the Keyboard

The following defines the colored hotkeys 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 Keyboard Shortcuts

To activate these functions, press the hotkey associated with the desired function as indicated below:

# **Function Keys**

| Keypad  |                      | Function Description   |
|---------|----------------------|--|
| - FI z* | Suspend:             | Press this key combination (Fn+F1) to enter sleep mode.          |
| F       | Windows<br>Lock/On:  | Press this key combination (Fn+F2) to turn Windows Lock/On .     |
| F3 8/0  | Display<br>mode:     | Press this key combination (Fn+F3) to enable Display Mode.       |
| F1 99   | RADIO<br>On/Off:     | Press this key combination (Fn+F4) to turn all radios on or off. |
| F5   ×田 | Touch pad<br>On/Off: | Press this key combination (Fn+F5) to On/Off Touch pad mode.     |

# Function Keys

| Keypad       |                                 | Function Description   |
|--------------|---------------------------------|--|
| F6 th        | Keyboard<br>Brightness<br>down: | Press this key combination (Fn+F6) to decrease brightness of Keyboard.     |
| F7 in        | Keyboard<br>Brightness<br>up:   | Press this key combination (Fn+F7) to increase brightness of Keyboard.     |
|              | MUTE:                           | Press this key combination (Fn+F8) to enter MUTE mode.                     |
| F9 4 F9 4 F9 | Volume<br>down:                 | Press this key combination (Fn+F9) to enter Volume down mode.              |
|              | Volume<br>up:                   | Press this key combination (Fn+F10) to enter Volume up mode.               |
| FII          | Brightness<br>down:             | Press this key combination (Fn+F11) to decrease brightness of LCD display. |
|              | Brightness<br>up:               | Press this key combination (Fn+F12) to increase brightness of LCD display. |

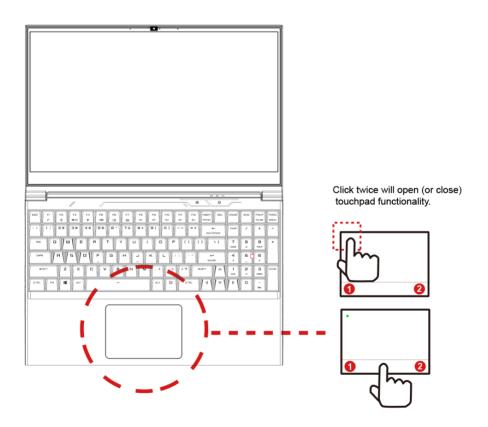
# **Function Keys**

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

## 3.3 Using the Touchpad / Clickpad

The touchpad / clickpad is a rectangular electronic panel located just below your keyboard. Clicking twice within the 15x15mm corner in the top left will enable or disable (lighted indicator) touchpad functionality. 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.



# **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.

The screen snapshots and setting options in this chapter are for reference only. The actual setting screens and options on your notebook model may be different because of BIOS update.

The setup function will only be initiated by pressing [Del] or [F2] key during POST. Changing options in the BIOS allows the user to change some settings and configuration to their preference. The changed values will save in the NVRAM and will take effect after the system is rebooted. The setup uses a menu interface to allow the user to configure their system and the features are briefly listed below.

Press [F7] key for Boot Menu.



NOTE: The drivers, BIOS and utilities included with your system 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, main HDD or ODD (if applicable) and setting of system time and date.

#### Advanced Menu

To select the XD feature enable or disable XD feature only works 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

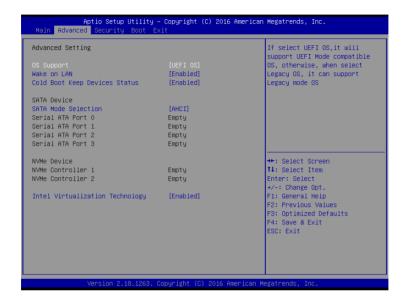
This item allows you to set the system date. The date format is [day:month:date:year].

Use [ENTER], [TAB] or [SHIFT-TAB] to select a field.

| 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 (RAM).

#### 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
It will show NVMe Device info.

- · Intel Virtualization Technology
  When enabled, a VM 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.

CAUTION: It is strongly advised to keep an external record of your BIOS password [ex: Writing the password (including case sensitivity) down on a piece of paper and storing in a safe]. If you are unable to log in to your BIOS because of a password you have forgotten, there is not a method to override for security purposes.

#### 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.

