

ASUS GU502GW-AH76

ROG Zephyrus M GU502GW-AH76 Gaming Laptop

Instruction Manual

INTRODUCTION

Welcome to the comprehensive instruction manual for your new **ROG Zephyrus M GU502GW-AH76** gaming laptop. This powerful and portable device is engineered for an exhilarating gaming experience, featuring a 9th Gen Intel Core i7 processor, NVIDIA GeForce RTX 2070 Max-Q graphics, and a vibrant 15.6-inch 240Hz FHD IPS Pantone Validated display. This manual provides essential information to help you set up, operate, maintain, and troubleshoot your laptop, ensuring optimal performance and longevity.



Figure 1: The ROG Zephyrus M GU502GW-AH76 Gaming Laptop.

SETUP

Follow these steps to set up your ROG Zephyrus M laptop for the first time:

1. **Unboxing:** Carefully remove the laptop and all accessories from the packaging. Ensure all items listed in the 'What's in the Box' section are present: GU502GW-AH76 Zephyrus M Laptop, Power Adapter & Cord, User Guide, and Warranty Card.
2. **Power Connection:** Connect the power adapter to the laptop's power input port and then plug it into a wall outlet. It is recommended to fully charge the battery before initial use.
3. **Initial Boot-up:** Open the laptop lid and press the power button. The laptop will guide you through the Windows

10 Home setup process. Follow the on-screen instructions to configure your operating system settings.

4. **Network Connection:** During the setup, you will be prompted to connect to a Wi-Fi network. Select your preferred network and enter the password. The laptop supports Gigabit Wave 2 Wi-Fi 5 (802.11ac 2x2) for fast wireless connectivity.

OPERATING YOUR LAPTOP

Keyboard and Touchpad

The laptop features a comfortable keyboard with per-key RGB lighting, allowing for personalized illumination. The touchpad provides precise cursor control. For advanced keyboard lighting customization, use the AURA Creator application.



Figure 2: Keyboard and Touchpad Layout.

Display Features

Experience stunning visuals on the 15.6-inch Full HD (1920x1080) IPS Type Pantone Validated Display with a 240Hz refresh rate and 3ms response time. This display ensures smooth gameplay and accurate color reproduction for creative tasks.

Amazing Visuals



81%

SCREEN-TO-BODY
RATIO

6.2mm

SLIM BEZELS



Figure 3: Display with Slim Bezels.

Connectivity

The laptop offers a variety of ports for connecting peripherals and external displays:

- **USB 3.1 Gen 1 Type-A Ports:** For standard USB devices.
- **USB 3.1 Gen 2 Type-A Port:** For high-speed USB devices.
- **USB 3.1 Gen 2 Type-C Port:** Supports power delivery (PD 1.4) and DisplayPort output.
- **HDMI 2.0B:** For connecting to external monitors or TVs.
- **RJ45:** For wired Ethernet connection.
- **Audio Jack:** Combined 3.5mm audio jack for headphones/headset.
- **Mic-In:** Dedicated microphone input.
- **Kensington Lock:** For physical security.

Complete Connectivity



Figure 4: Complete Connectivity Ports.

ASUS Software

Your laptop comes with pre-installed ASUS software to enhance your experience:

- **Armoury Crate:** The central control panel for ROG devices. It allows you to monitor system performance, customize fan modes, and manage game profiles.
- **AURA Creator:** Used for advanced customization of the per-key RGB keyboard lighting.

MAINTENANCE

Cooling System

The ROG Zephyrus M features an Intelligent Cooling thermal system with dual 12V fans and anti-dust technology. This system is designed to maintain optimal temperatures during intense gaming sessions. You can adjust fan modes via Armoury Crate.

Intelligent Cooling



Figure 5: Intelligent Cooling System.

Battery Care

To prolong battery life, utilize the battery care features available in Armoury Crate, which allow you to set charging limits (e.g., 60% or 80%) if you frequently keep the laptop plugged in.

Cleaning

Regularly clean the laptop's surfaces and air vents to prevent dust buildup, which can affect cooling performance. Use a soft, dry cloth for external surfaces and compressed air for vents.

TROUBLESHOOTING

- **Fan Noise:** High fan noise during intensive tasks is normal due to the powerful components. Ensure the laptop's vents are not obstructed. Consider using a laptop cooler for improved airflow.
- **Display Brightness:** If the screen appears dim, adjust the brightness settings in Windows or through the function keys on the keyboard. For outdoor use, maximum brightness may still be limited.




- **Touchpad Glitches:** If you experience occasional glitches with touchpad gestures, ensure your drivers are up to date. Restarting the laptop can often resolve minor software-related issues.
- **Performance Issues:** If performance degrades, check for background applications, update drivers, and ensure the laptop is running in a high-performance power mode via Armoury Crate or Windows settings.

SPECIFICATIONS

Feature	Detail
Model Name	ROG Zephyrus M GU502GW
Item Model Number	GU502GW-AH76
Screen Size	15.6 Inches
Screen Resolution	1920 x 1080 pixels
Processor	4.5 GHz core_i7 (Intel Core i7-9750H Hexa-core)
RAM	16 GB DDR4 (2666 MHz)
Hard Drive	1 TB SSD (PCIe NVMe)
Graphics Coprocessor	NVIDIA GeForce RTX 2070 Max-Q (8GB GDDR6)
Operating System	Windows 10 Home
Wireless Type	802.11b/n/ac, Bluetooth
Number of USB 3.0 Ports	4
Item Weight	4.6 pounds
Product Dimensions	14.2 x 9.9 x 0.8 inches

WARRANTY AND SUPPORT

Your ROG Zephyrus M laptop comes with a warranty card included in the box. Please refer to this card for detailed warranty terms and conditions. For technical support, driver downloads, and additional resources, please visit the official ASUS support website or the [ASUS Store on Amazon](#).

	<p>ASUS ZenBook Duo 14 (UX482) and ASUS Product Guide</p> <p>Discover the latest ASUS laptops and computing devices, including the innovative ZenBook Duo 14 (UX482), VivoBook, ExpertBook, and ProArt series. This guide provides product details, specifications, warranty, and service information.</p>
	<p>ASUS Product Guide 2020: ZenBook, VivoBook, and Laptop Series Specs & Warranty</p> <p>Explore the ASUS Product Guide for October-December 2020, featuring the latest ZenBook, VivoBook, and Laptop series. Discover detailed specifications, features, warranty information, and store locations for ASUS's innovative range of notebooks.</p>
	<p>Panduan Produk ASUS Q1 2022: Laptop Zenbook, Vivobook, ROG, Expertbook</p> <p>Jelajahi ASUS Product Guide Q1 2022, menampilkan rangkaian laptop inovatif ASUS seperti Zenbook, Vivobook, ROG, dan Expertbook. Temukan teknologi terbaru, desain premium, dan performa unggul untuk setiap kebutuhan.</p>
	<p>ASUS NUC 14 Performance: Powerful Mini PC for Business, AI, and Creators</p> <p>Explore the ASUS NUC 14 Performance, a compact and powerful mini PC featuring Intel® Core™ Ultra processors and NVIDIA® GeForce RTX™ 40 series graphics. Ideal for AI, business, STEM, and creative professionals, offering high performance, multiple 4K display support, and extensive connectivity.</p>
	<p>ASUS Dual GeForce RTX 4060 Ti SSD Motherboard Compatibility List</p> <p>This document provides a comprehensive list of compatible ASUS motherboards for the Dual GeForce RTX 4060 Ti SSD, detailing PCIe lane configuration requirements and BIOS settings for optimal performance.</p>
	<p>ASUS PRIME B360M-K Motherboard User Manual</p> <p>Comprehensive user manual for the ASUS PRIME B360M-K motherboard, detailing specifications, features, package contents, installation guides for CPU, RAM, M.2 SSD, and BIOS setup for Intel 8th Gen processors.</p>