ASUS GZ700GX-XB98K

ROG Mothership GZ700 Gaming Laptop User Manual

Model: GZ700GX-XB98K

INTRODUCTION

The ROG Mothership GZ700 is a high-performance gaming laptop designed for an immersive and adaptable gaming experience. Its unique standing design optimizes cooling for the powerful internal components, including an overclocked NVIDIA GeForce RTX 2080 GPU and an Intel Core i9-9980HK CPU. Featuring a 144Hz Full HD G-SYNC display and a detachable keyboard, this system offers flexibility and top-tier performance for demanding applications and games.

Key features include:

- Overclocked NVIDIA GeForce RTX 2080 8GB GDDR6 GPU
- Overclocked Intel Core i9-9980HK Hexa-Core Processor with liquid metal cooling
- 17.3" 144Hz Full HD IPS Type display with NVIDIA G-SYNC
- 64GB DDR4 2666MHz RAM
- 1.5TB PCIe M.2 SSD in RAID 0 (512GB x3)
- Windows 10 Pro operating system
- Gigabit Wi-Fi 6 (802.11ax) and Thunderbolt 3 connectivity

SETUP

This section guides you through the initial setup of your ROG Mothership GZ700.

Unboxing and Contents

Carefully unpack all components from the packaging. The ROG Mothership comes with a comprehensive set of accessories to enhance your experience.

The ROG Ranger Backpack, designed to comfortably carry your Mothership laptop and accessories.

The included ROG Gladius II Gaming Mouse, a wired peripheral for precise control.

The box should contain:

- ROG Mothership Gaming Laptop
- ROG Ranger Backpack
- ROG Gladius II Gaming Mouse
- 2x Power Adapters & Cords
- User Guide
- Warranty Card

Power Connection

For optimal performance, especially during gaming or demanding tasks, ensure both power adapters are connected to the laptop and plugged into separate power outlets. This provides sufficient power for the high-performance components.

Initial Software Configuration

Upon first boot, it is recommended to open the pre-installed Armoury Crate application. Navigate to the GPU Mode settings and switch it from "Optimus" to "Discrete". This ensures the dedicated NVIDIA GeForce RTX 2080 GPU is always active, maximizing graphics performance. Optimus mode, while conserving battery, may limit performance in graphically intensive applications.

OPERATING THE ROG MOTHERSHIP

The ROG Mothership offers a unique form factor and various features for an enhanced user experience.

Standing Design and Display

The innovative standing design allows for improved airflow and cooling. The 17.3-inch Full HD display features a 144Hz refresh rate and 3ms response time, coupled with NVIDIA G-SYNC technology for smooth, tear-free visuals during fast-paced gaming.

The 144Hz 3ms display provides epic visuals for gaming and multimedia.

Detachable Keyboard

The keyboard can be detached from the main unit for flexible positioning, allowing for a more comfortable gaming setup. It connects wirelessly and features per-key RGB lighting, which can be customized via the Armoury Crate software. The keyboard is designed for durability with a 20 million key press lifespan.

Detachable Desktop-Style Keyboard

| Wireless KB | 20 Million press durable | Per-key RGB |

The detachable desktop-style keyboard offers flexibility and customizable RGB lighting.

Performance Modes

The Armoury Crate application allows you to select different performance profiles. The "Turbo" mode provides the highest performance by applying an overclock to the CPU and GPU, but this will result in significantly increased fan noise. For less demanding tasks, other modes can be selected to balance performance and acoustics.

Connectivity

The Mothership is equipped with a range of ports for versatile connectivity:

- Multiple USB 3.0 ports
- Thunderbolt 3 port
- USB-C with DisplayPort 1.2 support
- HDMI 2.0 output
- Gigabit Wi-Fi 6 (802.11ax) for high-speed wireless networking
- Bluetooth for wireless peripherals

MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your ROG Mothership.

Cooling and Airflow

Due to its high-performance components, the laptop generates significant heat. The standing design aids in cooling, but ensure the rear vents are unobstructed. Operating the laptop on a hard, flat surface is recommended. For extended heavy loads, consider using an external cooling pad or directing a desk fan towards the rear of the unit to assist with heat dissipation.
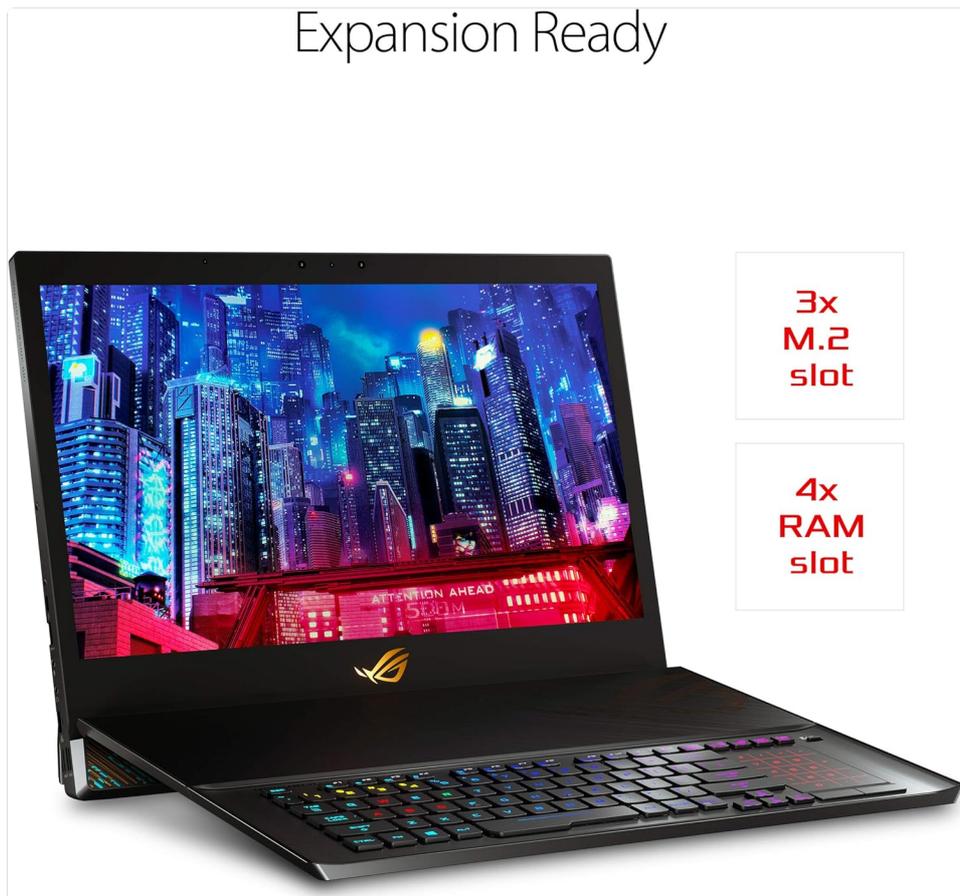
Cleaning

Regularly clean the display with a soft, lint-free cloth. Use compressed air to clear dust from the cooling vents. For the chassis and keyboard, a slightly damp cloth can be used, ensuring no liquid enters the ports or internal components.

Driver and Software Updates

Keep your system drivers, especially graphics drivers (NVIDIA GeForce Experience), and the Armoury Crate software updated to the latest versions. Regular updates ensure compatibility, performance improvements, and security patches. It is advisable to back up important data before performing major system or driver updates.

Storage Management

The ROG Mothership features a 1.5TB PCIe M.2 SSD configured in RAID 0 for maximum speed. There are no additional M.2 slots for internal storage expansion. Manage your storage space effectively, especially with large game installations. External storage solutions can be utilized via the available USB and Thunderbolt ports.

The system is designed with 3x M.2 slots for SSDs (configured in RAID 0) and 4x RAM slots for memory expansion.

Troubleshooting

This section addresses common issues you might encounter with your ROG Mothership.

Keyboard Connectivity Issues

If you experience dropped keypresses, phantom keypresses, or inconsistent RGB lighting with the wireless keyboard, ensure it is fully charged and within optimal range of the laptop. Interference from other wireless devices can also affect performance. Try re-pairing the keyboard if issues persist. Using the keyboard in its attached configuration can also resolve wireless-related issues.

Low Performance / Graphics Issues

Verify that both power adapters are securely connected to the laptop and active power outlets. Insufficient power can throttle performance. Confirm that the GPU Mode in Armoury Crate is set to "Discrete" for maximum graphics performance, especially when running demanding applications or games.

Excessive Fan Noise

When operating in "Turbo" mode, the fans will run at high speeds to dissipate heat from the overclocked components, resulting in significant noise. This is normal behavior for maximum performance. If fan noise is excessive in other modes, ensure vents are clear of obstructions and consider cleaning them. If the noise is unusual or persistent, contact support.

System Not Booting / RAID Issues

If the system fails to boot or you encounter RAID errors, this may indicate a serious issue with the storage configuration. Do not attempt to reconfigure the RAID without proper knowledge, as this can lead to data loss. Refer to the ASUS support website for detailed documentation or contact technical support immediately.

SPECIFICATIONS

Detailed technical specifications for the ROG Mothership GZ700GX-XB98K.

Feature	Specification
Brand	ASUS
Model Name	ROG Mothership GZ700GX-XB98K
Standing Screen Display Size	17.3 Inches
Screen Resolution	1920 x 1080 pixels (Full HD)
Processor	Intel Core i9-9980HK (up to 5 GHz)
RAM	64 GB DDR4 2666MHz
Hard Drive	1.5 TB SSD (3x 512GB PCIe M.2 in RAID 0)
Graphics Coprocessor	NVIDIA GeForce RTX 2080 8GB GDDR6
Wireless Type	802.11ax (Wi-Fi 6), Bluetooth
Operating System	Windows 10 Pro
Item Weight	10.58 pounds
Product Dimensions	16.1 x 12.6 x 1.3 inches

Feature	Specification
Number of USB 3.0 Ports	6
Batteries	1 Lithium Polymer battery (included)

WARRANTY AND SUPPORT

For warranty information, please refer to the Warranty Card included with your product. ASUS provides technical support for its products. If you encounter issues that cannot be resolved using this manual or require further assistance, please contact ASUS customer support through their official website or designated support channels. When contacting support, have your product model number (GZ700GX-XB98K) and serial number ready.