

ASUS ROG Maximus XI Hero (Wi-Fi)

ASUS ROG Maximus XI Hero (Wi-Fi) Z390 Gaming Motherboard Instruction Manual

Model: ROG Maximus XI Hero (Wi-Fi)

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your **ASUS ROG Maximus XI Hero (Wi-Fi) Z390 Gaming Motherboard**. Designed for 9th and 8th Generation Intel Core processors, this motherboard maximizes connectivity and speed with features like Dual M.2, USB 3.1 Gen 2, onboard 802.11AC Wi-Fi, and ASUS OptiMem II for enhanced DRAM overclocking stability. It also includes the revamped 5-Way Optimization for intelligent overclocking and FanXpert 4 for dynamic system cooling. Aura Sync RGB lighting offers extensive customization options.

2. WHAT'S IN THE BOX

Carefully unpack your motherboard and check for the following items:

- ROG Maximus XI Hero (Wi-Fi) motherboard
- User guide
- ROG motherboard support DVD
- 2-in-1 SATA 6Gb/s cables (2)
- Extension Cable for RGB strips
- Extension Cable for RGB Addressable strips
- SLI™ HB bridge (2-way-M)
- Q-Connector
- M.2 screws package
- ASUS 2x2 dual band Wi-Fi antenna (Wi-Fi 802.11a/b/g/n/ac compliant)
- ROG Thank you card
- ROG sticker



Figure 2.1: Contents of the ASUS ROG Maximus XI Hero (Wi-Fi) motherboard package.

3. PRODUCT OVERVIEW

The ASUS ROG Maximus XI Hero (Wi-Fi) is an ATX gaming motherboard featuring the LGA1151 socket, compatible with 8th and 9th Generation Intel Core processors. It supports DDR4 RAM, DisplayPort, HDMI, Dual M.2, USB 3.1 Gen2, and integrated 802.11AC Wi-Fi.



Figure 3.1: Top-down view of the ASUS ROG Maximus XI Hero (Wi-Fi) motherboard.



Figure 3.2: Angled view of the ASUS ROG Maximus XI Hero (Wi-Fi) motherboard, highlighting its design elements.

Key Features:

- **CPU Compatibility:** Designed for 9th and 8th Generation Intel Core processors (LGA1151 socket).
- **Memory:** Four DDR4 DIMM slots supporting up to 64GB RAM with ASUS OptiMem II for enhanced stability.
- **Storage:** Dual M.2 NVMe sockets for high-speed storage.
- **Connectivity:** USB 3.1 Gen 2, onboard 802.11AC Wi-Fi, and Gigabit LAN.
- **Cooling:** Robust thermal design with two-stage heat pipes, large finned heatsinks on VRM, five fan headers, and water pump headers for efficient heat dissipation.
- **Overclocking:** Revamped 5-Way Optimization for intelligent, automated overclocking based on smart prediction and thermal telemetry.
- **Audio:** ROG SupremeFX S1220 8-channel High Definition Audio Codec with Sonic Radar III and Sonic Studio III support.

- **Aesthetics:** Aura Sync RGB lighting with addressable and standard RGB headers for customizable lighting effects.
- **Ease of Installation:** Pre-mounted I/O shield for streamlined setup.

4. SETUP AND INSTALLATION

4.1 CPU Installation

The motherboard is equipped with an LGA1151 CPU socket. Carefully align your 8th or 9th Generation Intel Core processor with the socket, ensuring the notches on the CPU match the alignment keys on the socket. Gently lower the CPU into place without forcing it, then secure the retention arm.

4.2 Memory (RAM) Installation

Insert DDR4 memory modules into the four DIMM slots. Ensure the modules are correctly oriented and press down firmly on both ends until the retention clips snap into place. The motherboard supports up to 64GB of DDR4 RAM.

4.3 M.2 SSD Installation

The motherboard features dual M.2 NVMe sockets. To install an M.2 SSD, remove the M.2 heatsink screws and heatsink. Insert the M.2 SSD into the slot at an angle, then gently push it down and secure it with the provided M.2 screws. Reattach the heatsink for optimal thermal performance.

4.4 Connecting Power and Peripherals

Connect the 24-pin ATX power connector and the 8-pin CPU power connector from your power supply to the motherboard. Connect your storage devices (SATA drives, M.2 SSDs), graphics card(s) into the PCIe 3.0 x16 slots, and other peripherals. The motherboard features ASUS SafeSlot technology for reinforced PCIe slots, providing secure GPU installation.

4.5 Rear I/O Panel Overview

The rear I/O panel comes pre-mounted for easy installation. It includes various ports for external devices:

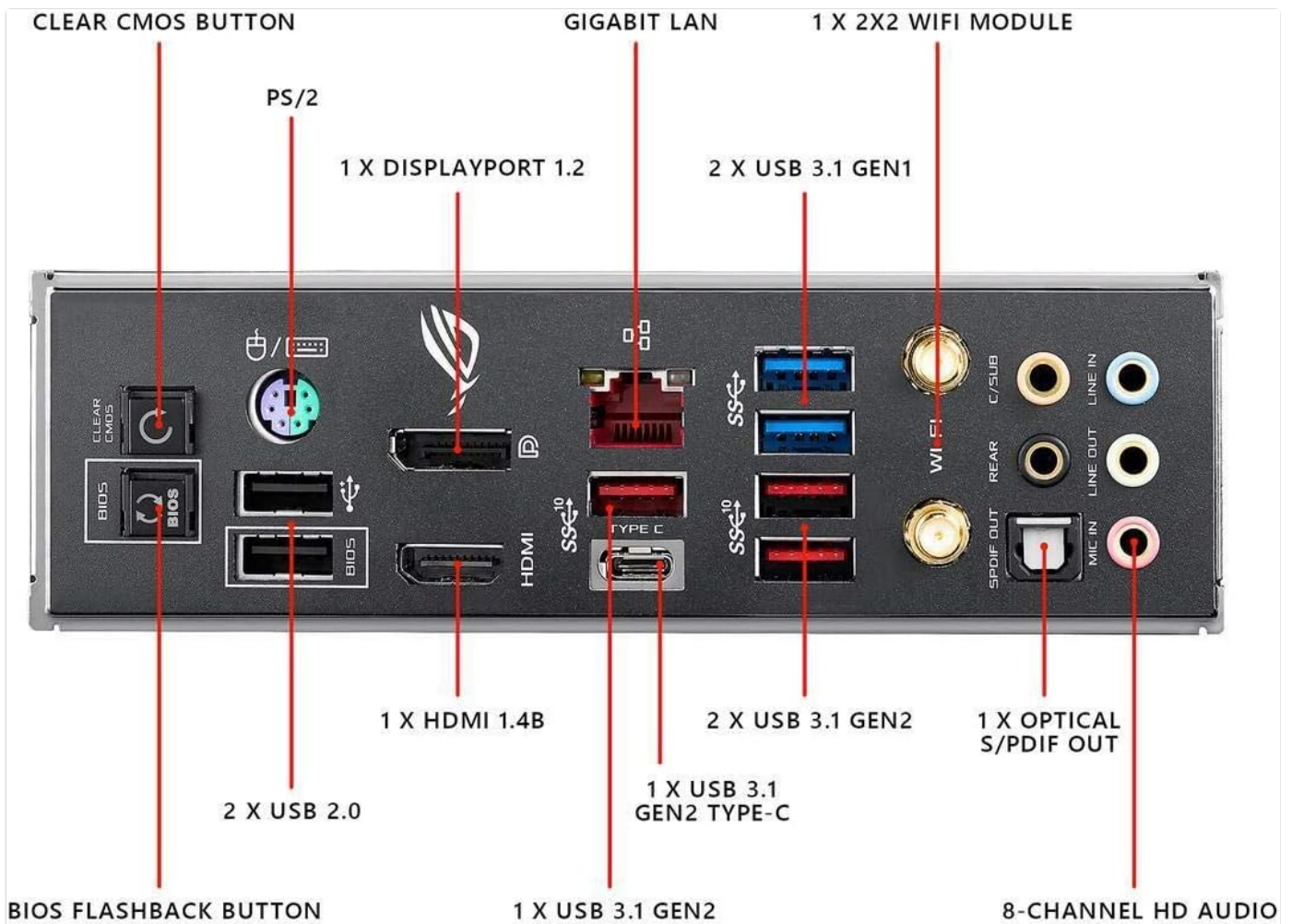


Figure 4.1: Detailed view of the ASUS ROG Maximus XI Hero (Wi-Fi) motherboard's rear I/O panel, showing all available ports.

- 2 x USB 2.0 Ports
- 1 x PS/2 Mouse/Keyboard Combo Port
- 1 x HDMI 1.4b Connection
- 1 x DisplayPort 1.2
- 1 x Gigabit LAN Port
- 3 x USB 3.1 Gen 2 Ports
- 1 x USB 3.1 Gen 2 Type-C Connection
- Dual Wi-Fi Antenna Connections
- 5 x Audio Jacks (8-channel HD Audio)
- 1 x Optical S/PDIF Out
- BIOS Flashback Button
- Clear CMOS Button

5. OPERATING INSTRUCTIONS

5.1 Initial Boot and BIOS Setup

Upon first boot, enter the BIOS/UEFI setup to configure system settings. The ASUS 5-Way Optimization feature can intelligently overclock your system, optimizing performance based on smart prediction and thermal telemetry. Ensure all connected components are recognized.

5.2 Driver Installation

Install all necessary drivers from the provided support DVD or download the latest versions from the ASUS support website. This includes chipset drivers, audio drivers, LAN drivers, and Wi-Fi drivers. For optimal network performance, ensure the correct Ethernet driver is installed, as some operating systems may install an older version by default.

5.3 Software Utilities

Utilize ASUS software utilities for enhanced control and customization:

- **FanXpert 4:** Provides dynamic system cooling control.
- **Aura Sync:** Customize the motherboard's RGB lighting and synchronize effects with other Aura Sync-enabled products.
- **Sonic Radar III & Sonic Studio III:** Enhance your audio experience with advanced sound processing and in-game audio visualization.

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Video 5.1: An overview of the ASUS ROG Maximus XI Hero (Wi-Fi) Z390 Gaming Motherboard, detailing its features and capabilities.

6. MAINTENANCE

6.1 Cleaning

Regularly clean your system to prevent dust buildup, which can affect performance and longevity. Use compressed air to clear dust from fans, heatsinks, and other components. Ensure the system is powered off and unplugged before cleaning.

6.2 BIOS Updates

Periodically check the ASUS support website for BIOS updates. BIOS updates can improve system stability, compatibility, and performance. Follow the instructions provided by ASUS carefully when updating the BIOS.

6.3 Driver Updates

Keep your drivers updated to ensure optimal performance and compatibility with new software and hardware. Regularly check the ASUS support website for the latest drivers for your motherboard.

7. TROUBLESHOOTING

7.1 No Display / System Not Booting (No POST)

- Verify all power connections (24-pin ATX, 8-pin CPU) are securely seated.
- Ensure RAM modules are correctly installed in their slots.
- Check that the graphics card is properly seated in its PCIe slot and has adequate power.
- Try clearing the CMOS using the **Clear CMOS Button** on the rear I/O panel or by removing the CMOS battery for a few minutes.

7.2 Ethernet Port Not Functioning

- Ensure the Ethernet cable is securely connected to both the motherboard and your network device.
- Verify that the latest LAN drivers are installed. If issues persist, try uninstalling the current driver and manually installing the specific version from the ASUS support website.
- Check your operating system's network settings.

7.3 M.2 Drive Not Detected

- Ensure the M.2 SSD is fully seated in its slot and secured with the screw.
- Check BIOS settings to ensure the M.2 slot is enabled and configured correctly (e.g., NVMe mode).
- If using an older operating system like Windows 8.1 or 7, ensure compatibility and necessary drivers are installed, as newer chipsets may not natively support them.

8. SPECIFICATIONS

Feature	Specification
Brand	ASUS
Model Name	ROG Maximus XI Hero (Wi-Fi)
CPU Socket	LGA 1151
Compatible Processors	8th and 9th Generation Intel Core
Chipset Type	Intel Z390
RAM Memory Technology	DDR4
Memory Storage Capacity	Up to 64 GB
Wireless Type	802.11a/b/g/n/ac
Product Dimensions	14.57 x 4.25 x 12.28 inches
Item Weight	2.2 pounds

9. WARRANTY AND SUPPORT

For warranty information, please refer to the warranty card included in your product package or visit the official ASUS support website. ASUS provides comprehensive support resources, including FAQs, driver downloads, and contact information for technical assistance.

ASUS Support Website: <https://www.asus.com/support/>