



# Asus ROG STRIX H470-I GAMING Manual



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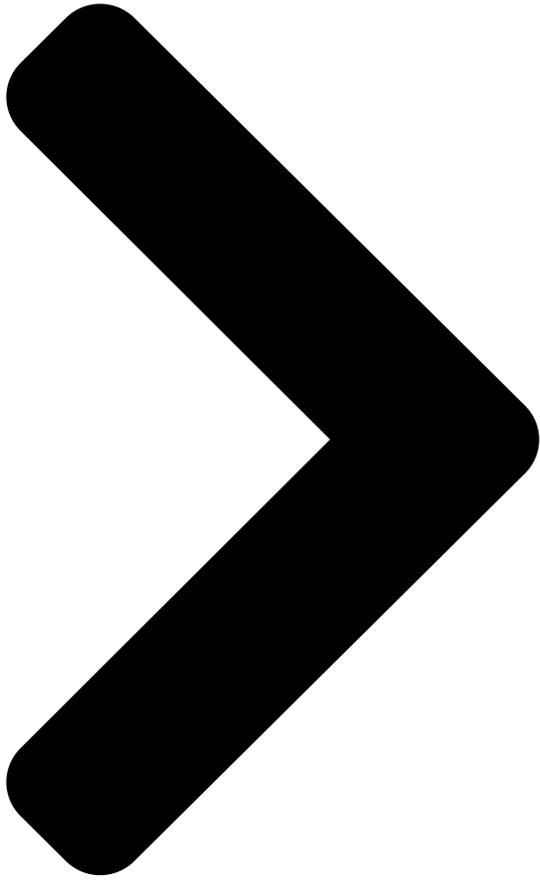
## Quick Links

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**ROG STRIX  
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## Related Manuals for Asus ROG STRIX H470-I GAMING

[Motherboard Asus PRIME H470-PLUS Manual](#)

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[Motherboard Asus PRIME H470-PLUS Quick Start Manual](#)

(2 pages)

[Motherboard Asus TUF GAMING H470-PRO Manual](#)

(62 pages)

[Motherboard Asus TUF GAMING H470-PRO \(WI-FI\) Manual](#)

(64 pages)

[Motherboard Asus TUF GAMING H470-PRO WI-FI Manual](#)

(20 pages)

[Motherboard Asus TUF GAMING H470-PRO WI-FI Quick Start Manual](#)

(2 pages)

[Motherboard Asus TUF GAMING H470-PRO Quick Start Manual](#)

(2 pages)

[Motherboard Asus Prime H470M-PLUS Manual](#)

(32 pages)

[Motherboard Asus PRIME H470M-PLUS Quick Start Manual](#)

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[Motherboard Asus PRIME H410M-K R2.0 Manual](#)

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[Motherboard Asus PRIME H410I-PLUS Manual](#)

(30 pages)

[Motherboard Asus Pro H410T Manual](#)

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## Summary of Contents for Asus ROG STRIX H470-I GAMING

[Page 1](#) ROG STRIX H470-I GAMING...

[Page 2](#) Product warranty or service will not be extended if: (1) the product is repaired, modified or altered, unless such repair, modification or alteration is authorized in writing by ASUS; or (2) the serial number of the product is defaced or missing.

### [Page 3: Table Of Contents](#)

Contents Safety information ..... iv About this guide .....v ROG STRIX H470-I GAMING specifications summary .....vi Package contents .....x Installation tools and components .....xi Chapter 1: Product Introduction Before you proceed .....

1-1 Motherboard layout .....1-2...

## [Page 4: Safety Information](#)

Safety information Electrical safety • To prevent electrical shock hazard, disconnect the power cable from the electrical outlet before relocating the system. • When adding or removing devices to or from the system, ensure that the power cables for the devices are unplugged before the signal cables are connected. If possible, disconnect all power cables from the existing system before you add a device.

## [Page 5: About This Guide](#)

Refer to the following sources for additional information and for product and software updates. ASUS website The ASUS website (www.asus.com) provides updated information on ASUS hardware and software products. Optional documentation Your product package may include optional documentation, such as warranty flyers, that may have been added by your dealer.

## [Page 6: Rog Strix H470-I Gaming Specifications Summary](#)

Core™ i9/i7 CPUs support ® 2933/2800/2666/2400/2133 natively, others will run at the maximum transfer rate of DDR 2666 MHz. \*\* Refer to www.asus.com for the Memory QVL (Qualified Vendors Lists). 1 x DisplayPort 1.2 Graphics 1 x HDMI™ 1.4b \* Graphics specifications may vary between CPU types.

[Page 7](#) ROG STRIX H470-I GAMING specifications summary Rear USB (Total 6 ports) 2 x USB 3.2 Gen 2 ports (1 x Type-A + 1 x USB Type-C ® 4 x USB 3.2 Gen 1 ports (4 x Type-A) Front USB (Total 4 ports) 1 x USB 3.2 Gen 1 header supports additional 2 USB 3.2 Gen 1 ports...

[Page 8](#) Extreme Engine Digi+ - 5K Black Metallic Capacitors ASUS Q-Design - ASUS Q-Connector - ASUS Q-DIMM - ASUS Q-LED (CPU [red], DRAM [yellow], VGA [white], Boot Device [yellow green]) - ASUS Q-Slot ASUS Thermal Solution Special Features - Aluminum M.2 heatsink...

[Page 9](#) Windows 10 - 64 bit ® Operating System Mini-ITX Form Factor Form Factor 6.7 inch x 6.7 inch (17 cm x 17 cm) Specifications are subject to change without notice. Please refer to the ASUS website for the latest specifications.

## [Page 10: Package Contents](#)

2 x M.2 SSD screw packages 1 x Q-connector Miscellaneous 1 x ROG Strix stickers 1 x ROG Strix thank you card 1 x ASUS 2x2 dual band Wi-Fi moving antennas Installation Media 1 x Support DVD Documentation 1 x User manual...

## [Page 11: Installation Tools And Components](#)

Installation tools and components Phillips (cross) screwdriver PC chassis Power supply unit Intel LGA 1200 CPU Intel LGA 1200 compatible CPU Fan ® ® DDR4 DIMM SATA hard disk drive SATA optical disc drive (optional) Graphics card (optional) M.2 SSD module (optional) 1 Bag of screws The tools and components in the table above are not included in the motherboard package.

## [Page 13: Chapter 1: Product Introduction](#)

Before you install or remove any component, ensure that the ATX power supply is switched off or the power cord is detached from the power supply. Failure to do so may cause severe damage to the motherboard, peripherals, or components. ROG STRIX H470-I GAMING...

## [Page 14: Motherboard Layout](#)

Motherboard layout Chapter 1: Product Introduction...

[Page 15](#) 1-12 10. AURA Addressable Gen2 header 1-13 11. AURA RGB header 1-14 12. Clear CMOS header 1-15 13. Front Panel Audio header 1-16 14. S/PDIF Out header 1-16 15. System Panel header 1-17 16. Q-LEDs 1-18 ROG STRIX H470-I GAMING...

[Page 16](#) Contact your retailer immediately if the PnP cap is missing, or if you see any damage to the PnP cap/socket contacts/motherboard components. ASUS will shoulder the cost of repair only if the damage is shipment/ transit-related.

[Page 17](#) (Double Data Rate 4) memory modules. A DDR4 memory module is notched differently from a DDR, DDR2, or DDR3 module. DO NOT install a DDR, DDR2, or DDR3 memory module to the DDR4 slot. Recommended memory configurations ROG STRIX H470-I GAMING...

[Page 18](#) (D/C) from the same vendor. Check with the vendor to get the correct memory modules. • Visit the ASUS website for the latest QVL. Chapter 1: Product Introduction...

[Page 19](#) Expansion slots Unplug the power cord before adding or removing expansion cards. Failure to do so may cause you physical injury and damage motherboard components. ROG STRIX H470-I GAMING...

[Page 20](#) Fan and Pump headers The Fan and Pump headers allow you to connect fans or pumps to cool the system. • DO NOT forget to connect the fan cables to the fan headers. Insufficient air flow inside the system may damage the motherboard components. These are not jumpers! Do not place jumper caps on the fan headers! •...

[Page 21](#) • We recommend that you use a PSU with a higher power output when configuring a system with more power-consuming devices. The system may become unstable or may not boot up if the power is inadequate. ROG STRIX H470-I GAMING...

[Page 22](#) M.2 slot The M.2 slot allows you to install M.2 SSD modules. • M.2\_1 slot supports PCIe 3.0 x4 and SATA mode Key M design and type 2242 / 2260 / 2280 storage devices. • M.2\_2 slot supports PCIe 3.0 x4 mode Key M design and type 2242 / 2260 / 2280 storage devices.

[Page 23](#) When the M.2\_2 Socket is operating in SATA mode, SATA port 2 will be disabled. • Before creating a RAID set, refer to the RAID Configuration Guide. You can download the RAID Configuration Guide from the ASUS website. ROG STRIX H470-I GAMING 1-11...

[Page 24](#) USB 3.2 Gen 1 header The USB 3.2 Gen 1 header allows you to connect a USB 3.2 Gen 1 module for additional USB 3.2 Gen 1 ports. The USB 3.2 Gen 1 header provides data transfer speeds of up to 5 Gb/s. The USB 3.2 Gen 1 module is purchased separately.

[Page 25](#) 5V connector is aligned with the 5V header on the motherboard. • The addressable RGB LED strip will only light up when the system is powered on. • The addressable RGB LED strip is purchased separately. ROG STRIX H470-I GAMING 1-13...

[Page 26](#) AURA RGB header The AURA RGB header allows you to connect RGB LED strips. The AURA RGB header supports 5050 RGB multi-color LED strips (12V/G/R/B), with a maximum power rating of 3A (12V). Before you install or remove any component, ensure that the power supply is switched off or the power cord is detached from the power supply.

[Page 27](#) If the steps above do not help, remove the onboard button cell battery and move the jumper again to clear the CMOS RTC RAM data. After clearing the CMOS, reinstall the button cell battery. ROG STRIX H470-I GAMING 1-15...

[Page 28](#) Front Panel Audio header The front panel audio header is for a chassis-mounted front panel audio I/O module that supports HD Audio. Connect one end of the front panel audio I/O module cable to this header. We recommend that you connect a high-definition front panel audio module to this connector to avail of the motherboard's high-definition audio capability.

[Page 29](#) (depending on the operating system settings). • Reset button header (RESET) The 2-pin header allows you to connect the chassis-mounted reset button. Press the reset button to reboot the system. ROG STRIX H470-I GAMING 1-17...

[Page 30](#) Q-LEDs The Q-LEDs check key components (CPU, DRAM, VGA, and booting devices) during the motherboard booting process. If an error is found, the critical component's LED stays lit up until the problem is solved. The Q-LEDs provide the most probable cause of an error code as a starting point for troubleshooting.

## [Page 31: Building Your Pc System](#)

DO NOT install a CPU designed for LGA1155, LGA1156, and LGA1151 sockets on the LGA1200 socket. • ASUS will not cover damages resulting from incorrect CPU installation/removal, incorrect CPU orientation/placement, or other damages resulting from negligence by the user.

ROG STRIX H470-I GAMING...

[Page 32](#) Chapter 2: Basic Installation...

### [Page 33: Cooling System Installation](#)

2.1.2 Cooling system installation Apply Thermal Interface Material to the CPU cooling system and CPU before you install the cooling system, if necessary. To install a CPU heatsink and fan assembly ROG STRIX H470-I GAMING...

[Page 34](#) To install an AIO cooler If you wish to install an AIO cooler, we recommend installing the AIO cooler after installing the motherboard into the chassis. AIO\_PUMP CPU\_FAN CHA\_FAN Chapter 2: Basic Installation...

### [Page 35: Dimm Installation](#)

2.1.3 DIMM installation To remove a DIMM ROG STRIX H470-I GAMING...

### [Page 36: M.2 Installation](#)

2.1.4 M.2 installation M.2\_1 Socket (Top side) The M.2 is purchased separately. Chapter 2: Basic Installation...

[Page 37](#) M.2\_2 Socket (Bottom side) The M.2 is purchased separately. ROG STRIX H470-I GAMING...

### [Page 38: Motherboard Installation](#)

2.1.5 Motherboard installation Place the motherboard into the chassis, ensuring that its rear I/O ports are aligned to the chassis' rear I/O panel. Place four (4) screws into the holes indicated by circles to secure the motherboard to the chassis. DO NOT over tighten the screws! Doing so can damage the motherboard.

### [Page 39: Atx Power Connection](#)

2.1.6 ATX power connection Ensure to connect the 8-pin power plug. ROG STRIX H470-I GAMING...

### [Page 40: Sata Device Connection](#)

2.1.7 SATA device connection Chapter 2: Basic Installation 2-10...

### [Page 41: Front I/O Connector](#)

To install the front panel connector To install system speaker connector To install USB 3.2 Gen 1 connector To install USB 2.0 connector USB 3.2 Gen 1 USB 2.0 To install front panel audio connector AAFP ROG STRIX H470-I GAMING 2-11...

### [Page 42: Expansion Card Installation](#)

2.1.9 Expansion card installation To install PCIe x16 cards Chapter 2: Basic Installation 2-12...

### [Page 43: Wi-Fi Antenna Installation](#)

2.1.10 Wi-Fi antenna installation Installing the ASUS 2x2 dual band W-Fi antenna Connect the bundled ASUS 2x2 dual band Wi-Fi antenna connector to the Wi-Fi ports at the back of the chassis. • Ensure that the ASUS 2x2 dual band Wi-Fi antenna is securely installed to the Wi-Fi ports.

### [Page 44: Motherboard Rear And Audio Connections](#)

Motherboard rear and audio connections 2.2.1 Rear I/O connection Rear panel connectors DisplayPort Intel I219-V 1Gb Ethernet port\* ® Realtek RTL8111H 1Gb Ethernet port\* ® Wi-Fi 6 (802.11 a/b/g/n/ac/ax), Bluetooth V5.1 HDMI™ port USB 3.2 Gen 1 ports 5 and 6 USB 3.2 Gen 1 ports 3 and 4 USB 3.2 Gen 2 Type-A port 2 USB 3.2 Gen 2 Type-C...

[Page 45](#) Front Speaker Out Front Speaker Out Front Speaker Out Pink Mic In Mic In Mic In Mic In Orange - - Center/Sub Center/Sub woofer woofer Black - Rear Speaker Out Rear Speaker Out

Rear Speaker Out ROG STRIX H470-I GAMING 2-15...

## [Page 46: Audio I/O Connections](#)

2.2.2 Audio I/O connections Audio I/O ports Connect to Headphone and Mic Connect to Stereo Speakers Connect to 2-channel Speakers Chapter 2: Basic Installation 2-16...

[Page 47](#) Connect to 4-channel Speakers Connect to 5.1-channel Speakers Connect to 7.1-channel Speakers ROG STRIX H470-I GAMING 2-17...

## [Page 48: Starting Up For The First Time](#)

Starting up for the first time After making all the connections, replace the system case cover. Ensure that all switches are off. Connect the power cord to the power connector at the back of the system chassis. Connect the power cord to a power outlet that is equipped with a surge protector. Turn on the devices in the following order: Monitor External storage devices (starting with the last device on the chain)

## [Page 49: Chapter 3: Bios And Raid Support](#)

Knowing BIOS The new ASUS UEFI BIOS is a Unified Extensible Interface that complies with UEFI architecture, offering a user-friendly interface that goes beyond the traditional keyboard- only BIOS controls to enable a more flexible and convenient mouse input. You can easily navigate the new UEFI BIOS with the same smoothness as your operating system.

## [Page 50: Bios Setup Program](#)

BIOS setup program Use the BIOS Setup to update the BIOS or configure its parameters. The BIOS screen include navigation keys and brief onscreen help to guide you in using the BIOS Setup program. Entering BIOS at startup To enter BIOS Setup at startup, press <Delete> or <F2> during the Power-On Self Test (POST).

## [Page 51: Asus Ez Flash 3](#)

ASUS EZ Flash 3 The ASUS EZ Flash 3 feature allows you to update the BIOS without using an OS-based utility. Ensure to load the BIOS default settings to ensure system compatibility and stability. Select the Load Optimized Defaults item under the Exit menu or press hotkey <F5>.

## [Page 52: Asus Crashfree Bios 3](#)

The BIOS file in the motherboard support DVD may be older than the BIOS file published on the ASUS official website. If you want to use the newer BIOS file, download the file at <https://www.asus.com/support/> and save it to a USB flash drive.

## [Page 53: Raid Configurations](#)

For more information on configuring your RAID sets, please refer to the RAID Configuration Guide which you can find at <https://www.asus.com/support/>, or by scanning the QR code. RAID definitions RAID 0 (Data striping) optimizes two identical hard disk drives to read and write data in parallel, interleaved stacks.

[Page 54](#) Chapter 3: BIOS Setup...

## [Page 55: Appendix](#)

Appendix Appendix Notices FCC Compliance Information Responsible Party: Asus Computer International Address: 48720 Kato Rd., Fremont, CA 94538, USA Phone / Fax No: (510)739-3777 / (510)608-4555 Identification of the assembled product: INTEL WI-FI 6 AX201 ® Identification of the modular components used in the assembly:...

[Page 56](#) Compliance Statement of Innovation, Science and Economic Development Canada (ISED) This device complies with Innovation, Science and Economic Development Canada licence exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

[Page 57](#) Tenez cet appareil à distance du ventre des femmes enceintes et du bas-ventre des adolescents. ROG STRIX H470-I GAMING...

[Page 58](#) ASUS products sold in Vietnam, on or after September 23, 2011, meet the requirements of the Vietnam Circular 30/2011/TT-BCT. Các sản phẩm ASUS bán tại Việt Nam, vào ngày 23 tháng 9 năm 2011 trở về sau, đều phải đáp ứng các yêu cầu của Thông tư 30/2011/TT-BCT của Việt Nam.

[Page 59](#) DO NOT throw the mercury-containing button cell battery in municipal waste. This symbol of the crossed out wheeled bin indicates that the battery should not be placed in municipal waste. Regional notice for California WARNING Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov) ROG STRIX H470-I GAMING...

[Page 60](#) 2014/53/EU. Cijeli di: <https://www.asus.com/support/> tekst EU izjave o sukladnosti dostupan je na <https://www.asus.com/support/> WiFi yang Beroperasi pada 5150-5350 MHz akan terbatas untuk penggunaan WiFi koji radi na opsegu frekvencija 5150-5350 MHz bit će ograničen na...

[Page 61](#) MR 18750 ANRT 2019 05/02/2019 2014/53/EU. En <https://www.asus.com/support/> está disponible el texto completo de la declaración de conformidad para la UE. La conexión WiFi con una frecuencia de funcionamiento de 5150-5350 MHz...

### [Page 62: Asus Contact Information](#)

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