ASUS ROG RYUO III 240 ARGB

ASUS ROG RYUO III 240 ARGB Liquid CPU Cooler Instruction Manual

1. Product Overview

The ASUS ROG RYUO III 240 ARGB is an all-in-one (AIO) liquid CPU cooler designed to provide high-performance thermal management for gaming systems and demanding workloads. It features an Asetek 8th generation pump solution for efficient cooling, an Anime Matrix™ LED display for customizable visuals, and ROG AF 12S ARGB fans for optimal airflow and quiet operation.

Key Features

- **8th Gen Asetek Pump:** Equipped with the latest Asetek 8th generation 3-phase motor pump for superior cooling performance, higher flow, and lower impedance.
- **Anime Matrix™ LED Display:** A mini LED array on the pump housing capable of displaying ROG-exclusive anime content, core system statistics, and custom animations.
- **Premium ROG ARGB Fans:** Includes ROG AF 12S ARGB fans that deliver high airflow while maintaining low noise levels.
- **Durable Construction:** Features aluminum craftsmanship with a vacuum-coated lens for a premium aesthetic and enhanced durability.
- **Wide Compatibility:** Supports a broad range of CPU sockets including AMD AM4, AM5, TR4 and Intel LGA 1700, 1200, 115x, 1366, 2011, 2011-3, 2066.



Figure 1: The ASUS ROG RYUO III 240 ARGB Liquid CPU Cooler, showcasing its illuminated fans and customizable pump display.

2. Safety Information

Please read and understand all safety instructions before installing or operating this product. Failure to follow these instructions may result in product damage, personal injury, or voiding of your warranty.

- Ensure your system is powered off and unplugged from the wall outlet before installation.
- Handle components with care to avoid damage to delicate parts, especially the radiator fins and pump cold plate.
- Do not open the liquid cooler's sealed loop. It contains coolant that is not user-serviceable.
- Keep the product away from extreme temperatures, humidity, and direct sunlight.
- Use only the accessories and mounting hardware provided by ASUS.
- If you encounter any issues during installation or operation, refer to the troubleshooting section or contact ASUS support.

3. Package Contents

Verify that all items listed below are present in your product packaging:

- ROG RYUO III 240 ARGB Liquid CPU Cooler (Radiator with pre-attached tubes and pump/cold plate)
- 2 x ROG AF 12S ARGB Fans
- Accessory Pack (Mounting brackets for Intel and AMD sockets, screws, thermal paste, fan splitter cables, USB cable, ARGB cable)
- Quick Start Guide
- ROG Stickers



Figure 2: All components included in the ASUS ROG RYUO III 240 ARGB retail package.

4. Installation Guide

Follow these steps carefully to install your ASUS ROG RYUO III 240 ARGB Liquid CPU Cooler.

4.1 Before You Begin

- Ensure your motherboard and CPU are compatible with the cooler (refer to specifications).
- Gather necessary tools: Phillips head screwdriver.
- Prepare your PC case for radiator mounting (top or front mounting options depending on case compatibility).

4.2 Mounting the Radiator and Fans

1. Attach the two ROG AF 12S ARGB fans to the radiator using the long screws provided. Ensure the fan airflow direction is appropriate for your case's cooling strategy (intake or exhaust).
2. Mount the assembled radiator and fans to your desired location in the PC case (e.g., top panel, front panel) using the shorter screws.

4.3 Installing the Pump/Cold Plate

1. Select the appropriate mounting bracket for your CPU socket (Intel or AMD) from the accessory pack.
2. Attach the selected mounting bracket to the pump/cold plate unit.
3. For Intel sockets, install the backplate onto the rear of your motherboard. For AMD sockets, use the motherboard's existing backplate.
4. Apply a thin, even layer of thermal paste to the center of your CPU's integrated heat spreader (IHS). The cooler may come with pre-applied thermal paste; if so, remove the protective film.
5. Carefully place the pump/cold plate unit onto the CPU, aligning the mounting holes.
6. Secure the pump/cold plate unit with the thumb screws or standoffs, tightening them in a diagonal pattern until snug. Do not overtighten.

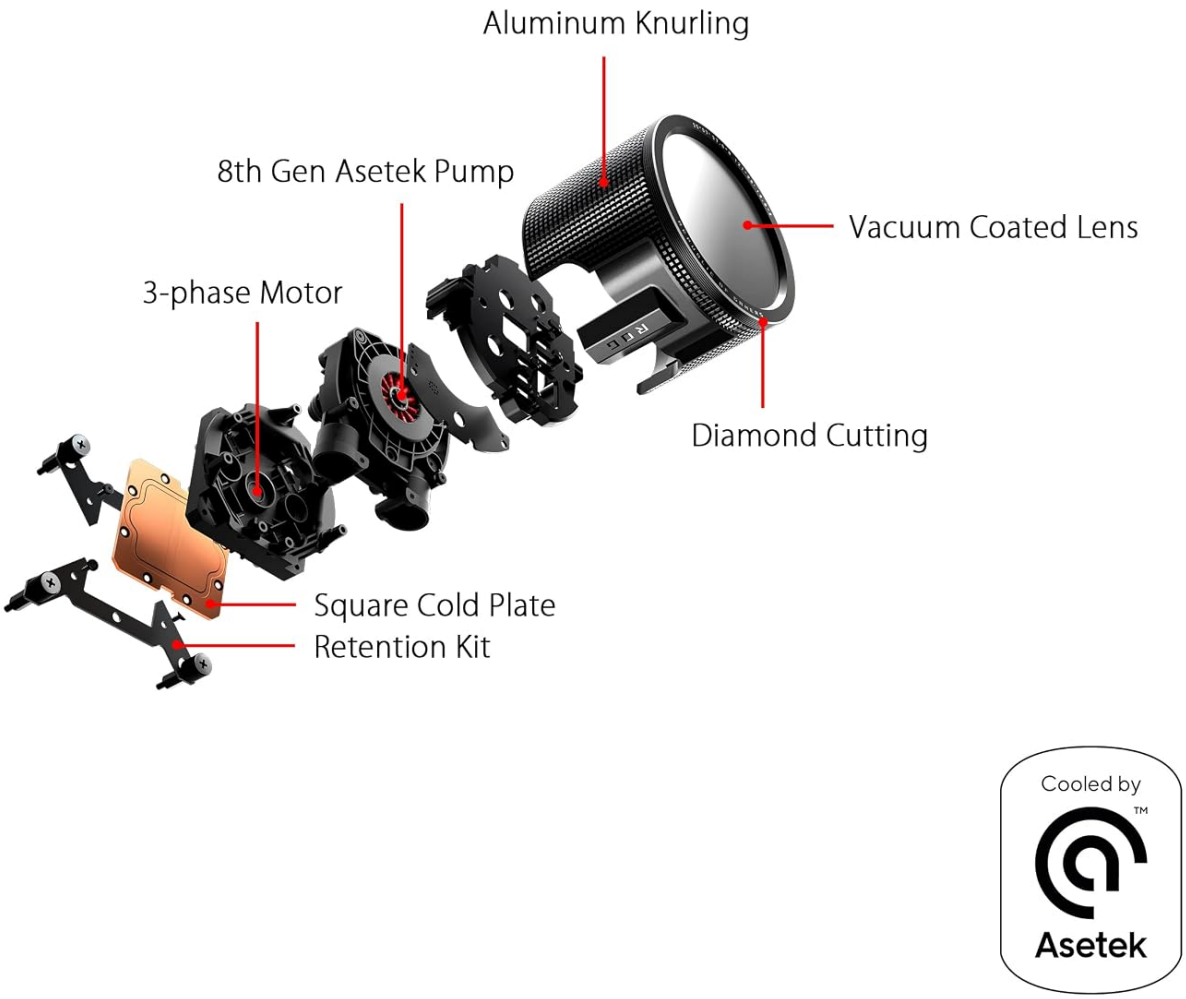


Figure 3: Exploded view of the Asetek 8th generation pump, illustrating its internal components and mounting hardware.

4.4 Connecting Cables

1. Connect the pump's 3-pin power cable to an available CPU_FAN or AIO_PUMP header on your motherboard.
2. Connect the pump's USB cable to an available internal USB 2.0 header on your motherboard. This is required for Anime Matrix™ display and software control.
3. Connect the ARGB cables from the fans to the included ARGB splitter cable, then connect the splitter cable to an available 3-pin 5V ARGB header on your motherboard.
4. Connect the fan PWM cables to the included fan splitter cable, then connect the splitter cable to an available CPU_OPT or CHA_FAN header on your motherboard.

5. Operating Instructions

5.1 Initial Power On

After completing the installation and ensuring all connections are secure, power on your system. The cooler's fans and

Anime Matrix™ display should illuminate.

5.2 Software Control (Armoury Crate)

To unlock the full potential of your ROG RYUO III 240 ARGB cooler, download and install the ASUS Armoury Crate software from the official ASUS website.

- **Anime Matrix™ Customization:** Use Armoury Crate to select pre-loaded animations, upload custom images or GIFs, and display real-time system information such as CPU temperature, voltage, and fan speed on the Anime Matrix™ LED display.
- **Fan and Pump Control:** Adjust fan curves and pump speeds to optimize cooling performance and noise levels according to your preferences.
- **ARGB Lighting Sync:** Synchronize the ARGB lighting of your cooler with other ASUS Aura Sync compatible components for a unified lighting effect across your system.

6. Maintenance

Regular maintenance ensures optimal performance and longevity of your liquid CPU cooler.

- **Dust Cleaning:** Periodically clean dust from the radiator fins and fan blades using compressed air or a soft brush. Ensure fans are not spinning during cleaning.
- **Check Connections:** Occasionally inspect all cable connections (power, USB, ARGB) to ensure they are secure.
- **Coolant Check:** The liquid loop is sealed and does not require refilling. Monitor CPU temperatures via software to ensure proper cooling.

7. Troubleshooting

If you encounter any issues, refer to the table below for common problems and solutions.

Problem	Possible Cause	Solution
High CPU Temperatures	Insufficient thermal paste, poor cold plate contact, clogged radiator, low fan speed.	Reapply thermal paste, ensure proper mounting pressure, clean radiator, increase fan/pump speeds via Armoury Crate.
Fans/Pump Not Spinning	Power cable disconnected, faulty header, pump failure.	Check 3-pin power connection, try a different motherboard header, contact ASUS support if issue persists.
Anime Matrix™ Display Not Working/Customizing	USB cable disconnected, Armoury Crate not installed/updated, software conflict.	Ensure internal USB 2.0 cable is connected, install/update Armoury Crate, restart PC, reinstall software.
ARGB Lighting Not Synchronizing	ARGB cable disconnected, incorrect motherboard header, Aura Sync not configured.	Check 3-pin 5V ARGB connection, ensure correct header type (not 12V RGB), configure Aura Sync in Armoury Crate.

8. Specifications

Feature	Detail

Feature	Detail
Model Number	ROG RYUO III 240 ARGB
Product Dimensions	14.17"L x 12.28"W x 6.65"H
Material	Aluminum
Cooling Method	Liquid and Fan
Compatible Devices	Desktop, Server
CPU Socket Support	AMD: AM4, AM5 TR4; Intel: LGA 1700, 1200, 115x, 1366, 2011, 2011-3, 2066
Power Connector Type	3-Pin (Pump)
Voltage	12 Volts
Wattage	3 watts
Noise Level	36.45 Decibels
Maximum Rotational Speed	1200 RPM



Figure 4: Detailed specifications of the ROG AF 12S ARGB fan.

9. Warranty and Support

This ASUS ROG RYUO III 240 ARGB Liquid CPU Cooler comes with a manufacturer's warranty. Please refer to the warranty card included in your package for specific terms and conditions, including warranty period and coverage details.

For technical support, product registration, or further assistance, please visit the official ASUS support website or contact your regional ASUS customer service center. Keep your proof of purchase for warranty claims.

- **ASUS Support Website:** www.asus.com/support/

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

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After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question