

## Thermalright AQUA ELITE 240 ARGB V4

# Thermalright Aqua Elite 240 ARGB CPU Water Cooler User Manual

Model: AQUA ELITE 240 ARGB V4

## 1. INTRODUCTION

The Thermalright Aqua Elite 240 ARGB CPU Water Cooler is an all-in-one liquid cooling solution designed to provide efficient thermal management for your CPU. It features a 240mm radiator, dual PWM fans, and addressable RGB lighting for customizable aesthetics. This manual provides detailed instructions for installation, operation, and maintenance to ensure optimal performance and longevity of your cooler.



Image: Overview of the Thermalright Aqua Elite 240 ARGB High Performance CPU Water Cooler.

## 2. SAFETY INFORMATION

Please read and understand all safety instructions before installing or operating this product. Failure to do so may result in damage to the product, other components, or personal injury.

- Ensure your system is powered off and unplugged from the wall outlet before installation.
- Handle components with care to avoid damage.
- Do not open the liquid cooler's sealed components.
- Keep out of reach of children.
- Use only the provided accessories and mounting hardware.

### 3. PACKAGE CONTENTS

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Verify that all components listed below are present in your package:

- Thermalright Aqua Elite 240 ARGB CPU Water Cooler (Radiator with attached pump/waterblock and fans)
- Mounting Brackets for Intel (LGA1851/1700/1150/1151/1155/1156/1200/2011/2066)
- Mounting Brackets for AMD (AM4/AM5)
- Backplate for Intel LGA115X/1200/1700
- Mounting Screws and Standoffs
- Thermal Compound
- PWM Fan Splitter Cable
- ARGB 3-pin Connector Cables
- User Manual

### 4. INSTALLATION GUIDE

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This section details the installation process for your Thermalright Aqua Elite 240 ARGB CPU Water Cooler. Please follow the steps carefully for your specific CPU socket type.

#### 4.1. General Preparation

1. Ensure your computer is powered off and unplugged.
2. Open your PC case and locate the CPU socket area on your motherboard.
3. Remove any existing CPU cooler. Clean the CPU surface thoroughly to remove old thermal paste.

#### 4.2. AMD AM4/AM5 Installation

1. Remove the protective sticker from the coldplate of the water block.
2. Align the arrow on the AMD bracket with the arrow on the water block and rotate to install the AMD bracket onto the water block.
3. Apply thermal compound to the CPU Integrated Heat Spreader (IHS).
4. Place the water block onto the CPU. Use the buckles on the AMD bracket to secure the water block to the motherboard's existing retention module.
5. Tighten both screws on the bracket with a screwdriver to apply mounting pressure evenly.

## ADDRESSABLE RGB LIGHTING

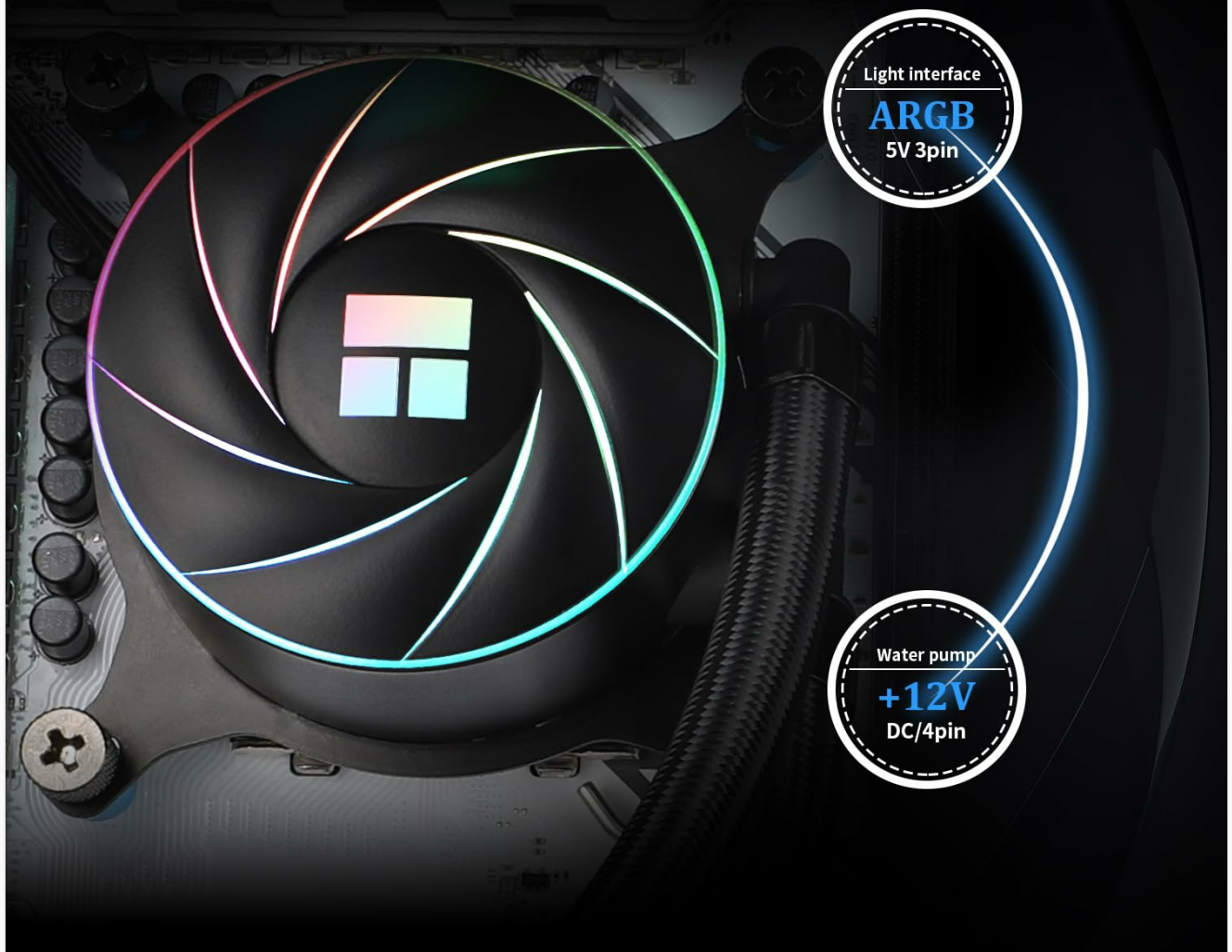


Image: Close-up of the water block, showing the copper coldplate and ARGB lighting interface.

### 4.3. Intel LGA1700 Installation

1. Adjust the mounting hole position on the Intel backplate to "1700".
2. Install the backplate from the backside of the motherboard, ensuring the screws pass through the mounting holes.
3. Install the 1700 standoffs onto the backplate screws from the front side of the motherboard.
4. Remove the protective sticker from the coldplate of the water block.
5. Align the arrow on the Intel bracket to the water block and rotate to lock it in place.
6. Apply thermal compound to the CPU Integrated Heat Spreader (IHS).
7. Align the mounting holes on the bracket with the standoffs and install the water block.
8. Secure the metal brackets and water block with the four nuts, applying appropriate mounting pressure.

# PERFORMANCE AROUND DESIGN



With extra micro fins on full Copper cold plates and a large surface area radiator pairing TL-C12C-S balance performance fans. Thermalright AQUA ELITE 240 ARGB AIO liquid cooler is pack with advanced methods for cooling down CPUs

Image: Illustrates Intel and AMD compatibility, special water channels within the radiator, and polymer-protected water tubes for durability.

## 4.4. Wiring Connections

1. Connect the pump power cable to the CPU\_OPT or AIO\_PUMP header on your motherboard.
2. Connect the fan PWM cables to the fan splitter cable for synchronized fan speed control.
3. Connect the PWM splitter cable to the motherboard's CPU\_FAN socket to power the fans.
4. Remove the protective caps from the ARGB 3-pin connectors.
5. Connect the fan ARGB cables to sync the lighting signal.
6. Connect the ARGB lighting cable to the motherboard's 3-pin +5V ARGB socket for lighting control.



## SHINE YOUR SETUP

Both water block and fans are equipped with addressable RGB lighting, which can be controlled and synchronized by supported motherboard software.

Image: Shows the water block with clear labels for the ARGB light interface (5V 3pin) and water pump power (12V DC/4pin) connections.

## SIMPLE INSTALL



New cooler mounting kits offers easy experience and secure mounting pressure. Fans are factory pre-mounted to simplify installation process. Paired Premium accessories, it ensures best out-of-box performance on any system.

Image: Details the PWM intelligent control features of the fans, including high airflow (66.17 CFM), S-FDB bearing, quiet operation (1550 RPM), and 4-pin PWM connector.

### 4.5. Installation Video Guide

Your browser does not support the video tag.

Video: Detailed installation guide for the Thermalright Aqua Elite ARGB V4 CPU Cooler series, covering both AMD AM4/AM5 and Intel LGA1700 platforms, including thermal paste application and wiring connections.



## 5. OPERATING INSTRUCTIONS

Once installed, the Thermalright Aqua Elite 240 ARGB CPU Water Cooler operates automatically based on your motherboard's settings.

- **Fan Control:** The PWM fans will adjust their speed automatically via the motherboard's 4-pin PWM header based on CPU temperature. You can configure fan curves in your motherboard's BIOS/UEFI settings or through compatible software.
- **ARGB Lighting:** The addressable RGB lighting on the fans and water block can be controlled via your motherboard's 5V 3-pin ARGB header. Use your motherboard's RGB synchronization software (e.g., ASUS Aura Sync, MSI Mystic Light, Gigabyte RGB Fusion, ASRock Polychrome Sync) to customize lighting effects. Ensure your motherboard supports 5V 3-pin ARGB; this cooler is not compatible with 12V 4-pin RGB headers.
- **Pump Operation:** The water pump operates continuously to circulate coolant. Ensure the pump power cable is securely connected to a dedicated AIO\_PUMP or CPU\_OPT header for stable operation.



Image: Emphasizes that the cooler supports only 5V 3-pin ARGB and is not compatible with 12V 4-pin RGB connections.

## 6. MAINTENANCE

Regular maintenance helps ensure the longevity and optimal performance of your liquid cooler.

- **Dust Cleaning:** Periodically clean dust from the radiator fins and fan blades using compressed air. Ensure fans are not spinning during cleaning to prevent damage.
- **Tube Inspection:** Check the water tubes for any signs of kinks, damage, or leaks. While the polymer compilation protection water pipes are designed for low evaporation and high life, regular visual inspection is recommended.
- **Thermal Paste:** Re-applying thermal paste is generally not required unless the cooler is removed. If re-installation is necessary, clean off old thermal paste and apply new compound.

## 7. TROUBLESHOOTING

If you encounter issues with your Thermalright Aqua Elite 240 ARGB CPU Water Cooler, refer to the following common troubleshooting steps:

- **No Power/Fans Not Spinning:**
  - Check all power connections, especially the pump power cable to the motherboard's AIO\_PUMP/CPU\_OPT header and the fan splitter cable to the CPU\_FAN header.
  - Ensure the cables are fully seated.
  - Verify fan settings in BIOS/UEFI are not set to "0 RPM" or a very low threshold.
- **No ARGB Lighting:**
  - Confirm the ARGB 3-pin cable is correctly connected to a +5V ARGB header on your motherboard.
  - Ensure your motherboard's RGB software is installed and configured correctly.
  - Verify that the ARGB header is enabled in your motherboard's BIOS/UEFI.
  - Remember, this cooler supports 5V 3-pin ARGB only, not 12V 4-pin RGB.
- **High CPU Temperatures:**
  - Check if the water block is securely mounted to the CPU with adequate pressure.
  - Ensure thermal paste was applied correctly and evenly.
  - Verify that the pump is running (you might hear a faint hum or feel vibrations).
  - Check fan orientation on the radiator for proper airflow (intake or exhaust, depending on case setup).
  - Clean any dust buildup on the radiator fins.

## 8. SPECIFICATIONS

Thermalright Aqua Elite 240 ARGB Specifications

Feature	Specification
Brand	Thermalright
Model Number	AQUA ELITE 240 ARGB V4
Cooling Method	Water (Liquid Cooling)
Compatible Devices	Desktop CPUs
CPU Socket Compatibility	Intel: LGA1851/1700/1150/1151/1155/1156/1200/2011/2066; AMD: AM4/AM5
Radiator Size	240mm (270mm x 120mm x 27mm)
Fan Size	120mm x 120mm x 25mm (x2)
Maximum Fan Rotational Speed	1550 RPM ±10%
Fan Air Flow Capacity	66.17 Cubic Feet Per Minute (CFM) (MAX)
Fan Noise Level	≤25.6 Decibels (dBA)
Fan Bearing Type	S-FDB Bearing
Pump Speed	2600 RPM ±10%

Feature	Specification
Pump Noise Level	≤30 dBA
Material	Aluminum (radiator), Copper (coldplate)
Power Connector Type	4-Pin (PWM for fans), 3-Pin (+5V ARGB for lighting)
Voltage	12 Volts (DC)
Item Weight	4.13 pounds
Package Dimensions	12.99 x 8.9 x 5.47 inches



### AQUA ELITE 240 ARGB SPECIFICATION

HEATSINK	SPECIFICATION	TL-C12C-S	SPECIFICATION
Water Block Dimensions	72mm * 72mm * 48mm	Fan Dimensions	120mm * 120mm * 25mm
Radiator Dimensions	270mm * 120mm * 27mm	Fan Rated Speed	1550RPM±10%
Water Pump Noise	≤30dBA	Fan Rated Noise	≤25.6dBA
Water Pump Speed	2600RPM±10%	Fan Air Flow	66.17CFM(MAX)
Pump Rated Current	0.24±20%A	Fan Static Pressure	1.53mm/H <sub>2</sub> O(MAX)
Pump Rated Power	≤3.0W	Fan Connector	4PIN PWM
Pump Bearing	Cermic bearing	Fan Rated Voltage	DC 12V
Pump Power	+DC 12V 3PIN	Fan Rated Current	0.20A(MAX)
Water Block Lighting Port	+5V 3PIN	Fan Bearing Type	S-FDB Bearing

Image: A detailed table outlining the specifications of the Thermalright Aqua Elite 240 ARGB, including dimensions, fan speeds, noise levels, and power requirements.

## 9. WARRANTY AND SUPPORT

Thermalright products are manufactured to high quality standards. For warranty information, technical support, or service inquiries, please refer to the official Thermalright website or contact your local retailer. Keep your proof of purchase for warranty claims.