Thermalright Aqua Elite 240 ARGB V2

Thermalright Aqua Elite 240 ARGB V2 Liquid CPU Cooler User Manual

Model: Aqua Elite 240 ARGB V2

1. Introduction

The Thermalright Aqua Elite 240 ARGB V2 is an all-in-one (AIO) liquid CPU cooler designed to provide efficient thermal management for your computer's processor. This cooler features a 240mm radiator, dual PWM fans, and addressable RGB lighting on both the fans and the pump head, offering both performance and aesthetic appeal. This manual provides essential information for proper installation, operation, and maintenance to ensure optimal performance and longevity of your cooling system.

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 computer system is powered off and unplugged from the wall outlet before installation.
- Handle components with care to avoid damage. Avoid touching the base of the cold plate directly to prevent contamination.
- Do not open the liquid cooling loop. The system is pre-filled and sealed. Opening it will void the warranty and may cause leaks.
- Keep the product away from children and pets.
- Use only the provided mounting hardware. Using incompatible parts may cause damage.
- Ensure proper electrical connections. Incorrect wiring can damage the cooler or motherboard.

3. Package Contents

Verify that all components are present and in good condition before proceeding with installation. If any parts are missing or damaged, contact Thermalright support.

- 240mm Radiator with Integrated Pump/Water Block
- 2x 120mm PWM ARGB Fans (pre-installed on some models)
- Intel Mounting Bracket Kit (LGA115x/1200/1700/2011/2066)
- AMD Mounting Bracket Kit (AM4/AM5)
- Backplate (for Intel sockets)
- Mounting Screws and Standoffs
- Thermal Paste (pre-applied or in a tube)
- Fan Splitter Cable (if not integrated)
- ARGB Controller Cable (if not integrated)
- User Manual

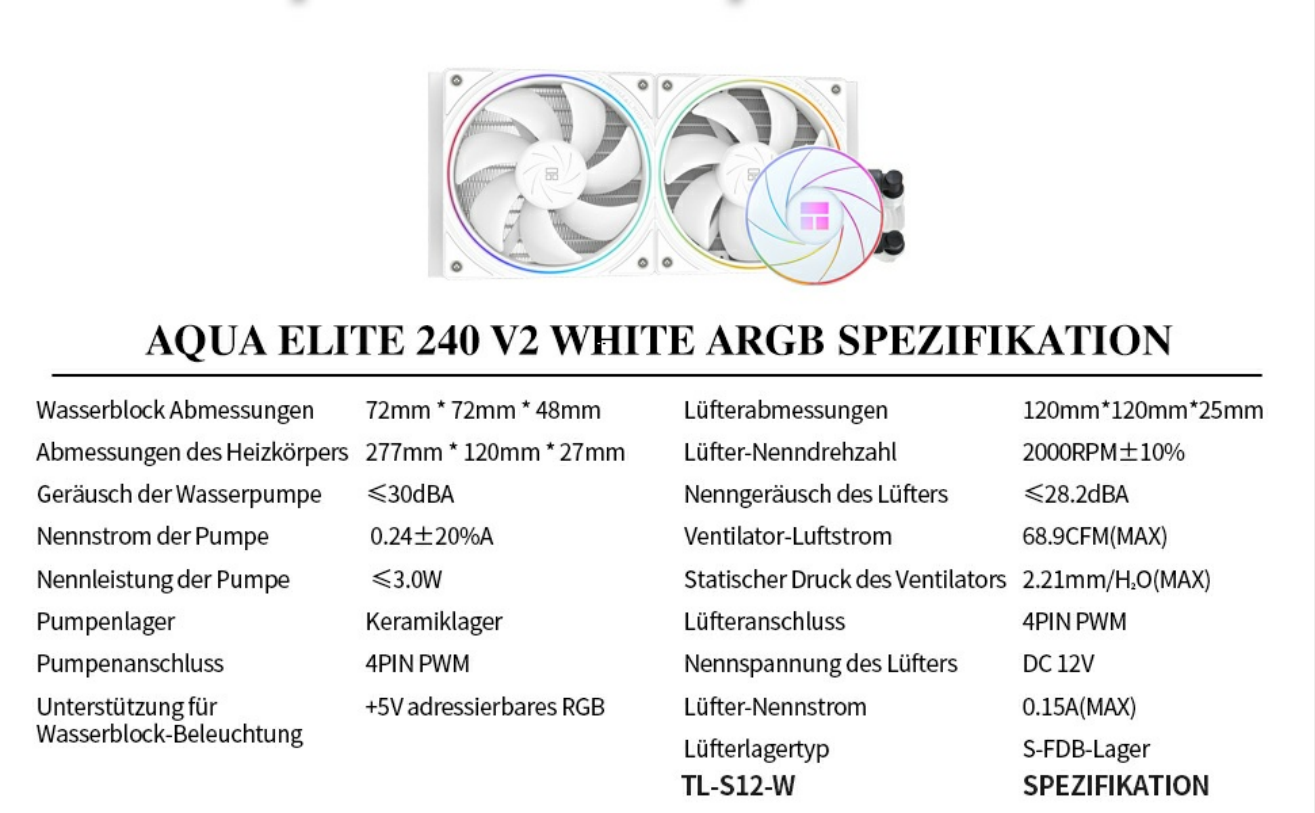

Image: Overview of the Thermalright Aqua Elite 240 ARGB V2 Liquid CPU Cooler and its main components.

4. Setup and Installation

This section guides you through the installation process. Ensure your PC case has adequate space for a 240mm radiator (typically 277mm x 120mm x 27mm for the radiator itself, plus fan thickness).

4.1. Pre-Installation

- Power off your computer and unplug it from the power outlet.
- Open your computer case and remove any existing CPU cooler. Clean the CPU surface thoroughly to remove old thermal paste.
- Identify your CPU socket type (Intel LGA or AMD AM series) to select the correct mounting hardware.

4.2. Radiator and Fan Installation

The two 120mm fans are often pre-installed on the radiator. If not, attach them to the radiator using the long screws provided, ensuring the airflow direction is as desired (typically exhausting air out of the case or intaking air into the

case, depending on your case's airflow design).

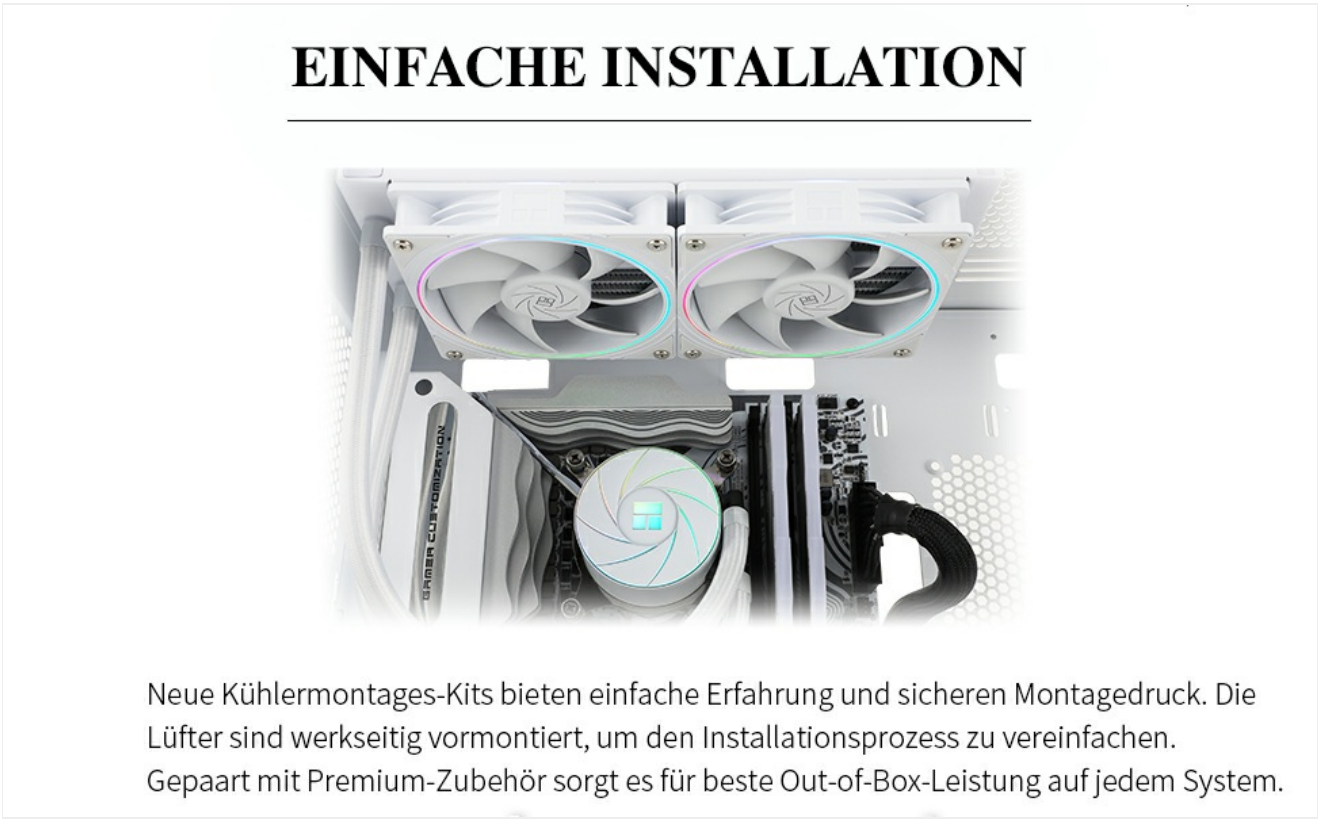

Image: The radiator with pre-installed fans mounted at the top of a PC case, showing the water block on the CPU.

Mount the radiator assembly to an available 240mm fan mount location in your PC case (e.g., top, front, or side). Secure it with the appropriate screws.

4.3. Water Block Installation (Intel LGA1700/1200/115x)

1. Place the Intel backplate behind the motherboard, aligning the holes with the CPU socket.
2. Insert the correct standoffs through the motherboard mounting holes and into the backplate.
3. Apply thermal paste to the center of your CPU if it's not pre-applied to the cooler's cold plate.
4. Attach the Intel mounting brackets to the pump head.
5. Carefully place the pump/water block onto the CPU, aligning the holes in the mounting brackets with the standoffs.
6. Secure the pump/water block by tightening the thumb screws onto the standoffs in a cross pattern until snug. Do not overtighten.

4.4. Water Block Installation (AMD AM4/AM5)

1. Remove the plastic retention clips from the stock AMD backplate, but keep the backplate in place.
2. Screw the AMD standoffs into the stock backplate's mounting holes.
3. Apply thermal paste to the center of your CPU if it's not pre-applied to the cooler's cold plate.
4. Attach the AMD mounting brackets to the pump head.
5. Carefully place the pump/water block onto the CPU, aligning the holes in the mounting brackets with the standoffs.
6. Secure the pump/water block by tightening the thumb screws onto the standoffs in a cross pattern until snug. Do not overtighten.

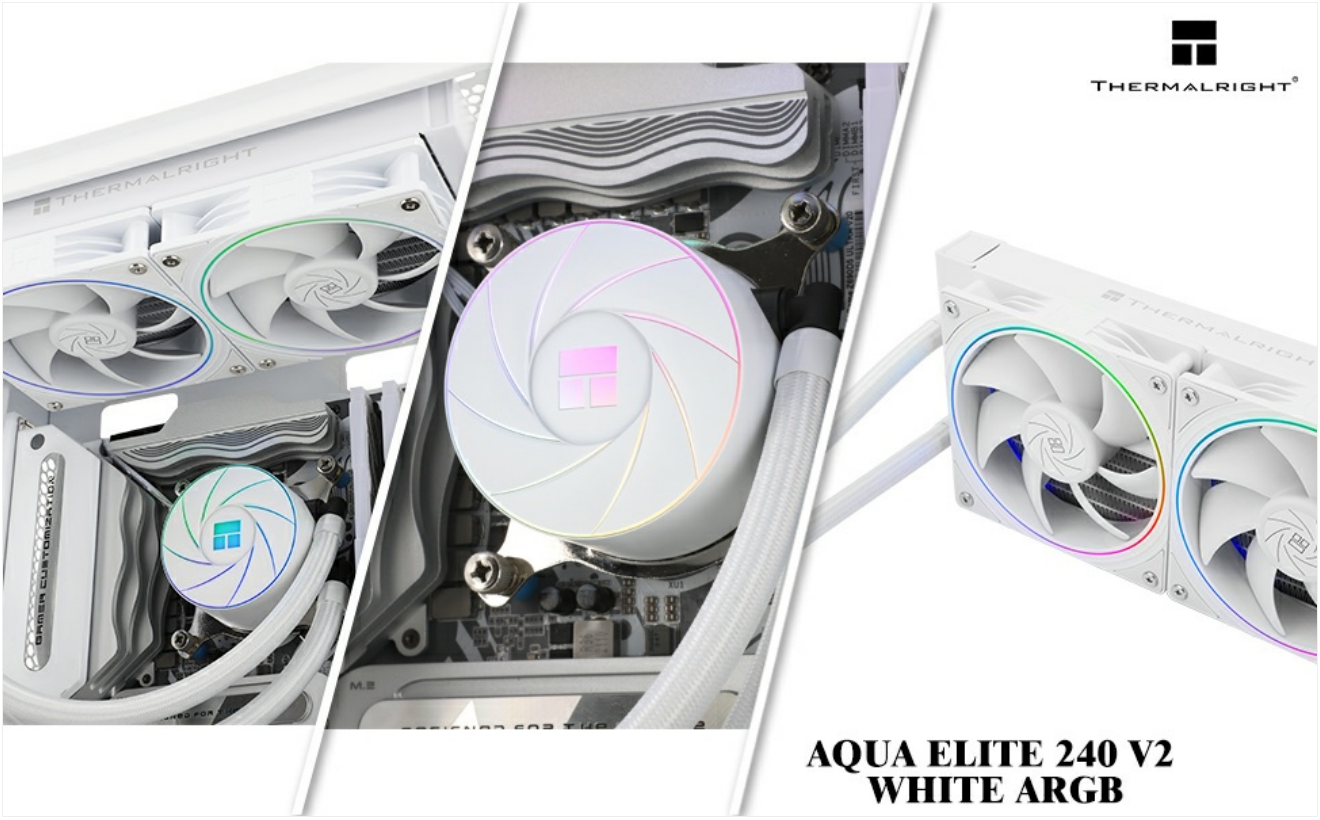

Image: Illustrates CPU socket compatibility for Intel (LGA115X/1200/1700/2011/2066) and AMD (AM4/AM5), along with details of the radiator's micro-fin design and polymer-protected tubing.

4.5. Cable Connections

- **Pump Power:** Connect the pump's 3-pin power cable to a dedicated AIO_PUMP or CPU_FAN header on your motherboard. Ensure it receives full power (usually 12V DC).
- **Fan Power:** Connect the fan's 4-pin PWM cables to the CPU_FAN header or a SYS_FAN header on your motherboard. Use the included fan splitter cable if connecting multiple fans to a single header.
- **ARGB Lighting:** Connect the 3-pin 5V ARGB cable from the pump and fans (if separate) to a compatible 5V ARGB header on your motherboard. **Do not connect to a 12V RGB header, as this will damage the LEDs.**

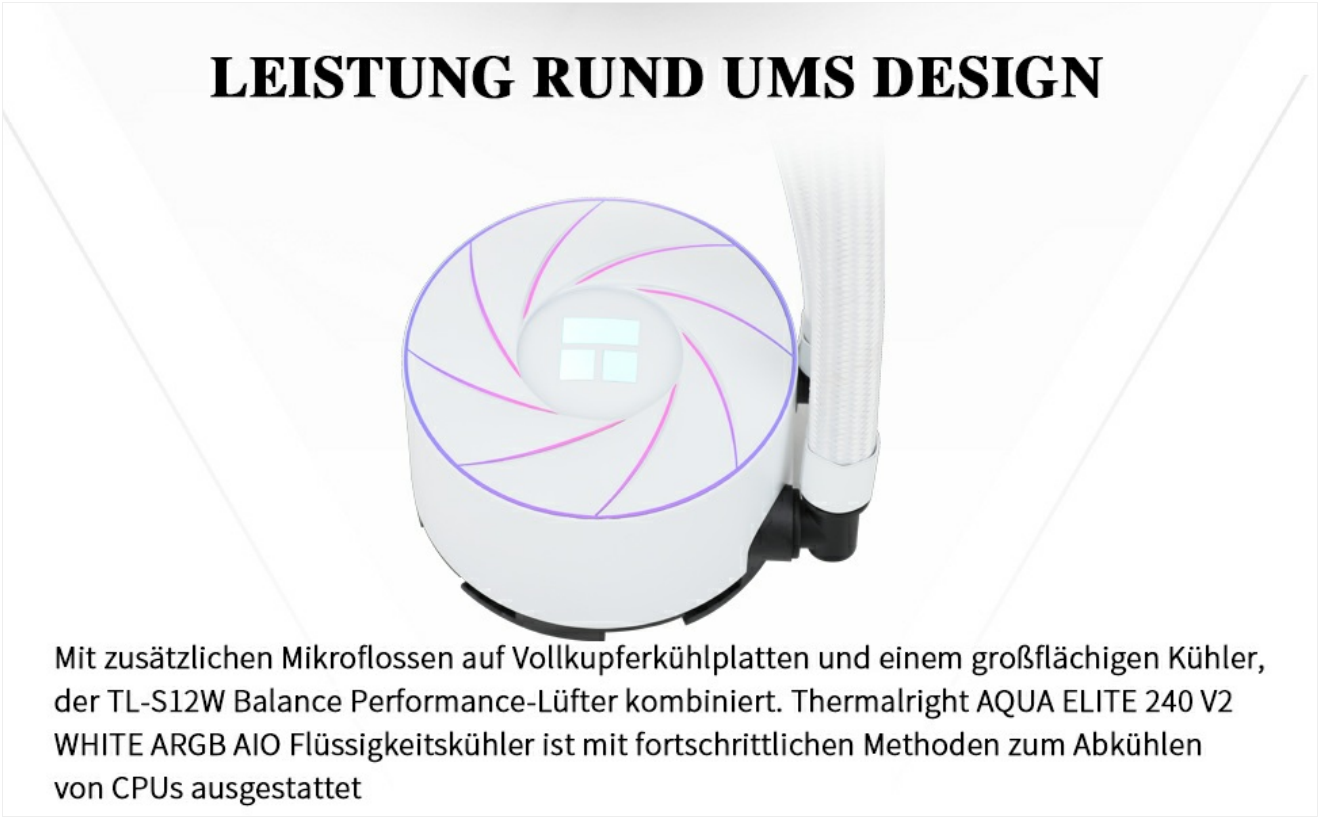

Image: Details of the pump head, highlighting the 5V 3-pin ARGB lighting interface, pump speed (2000 RPM ±10%), and 12V DC 3-pin water pump power connection.

5. Operating Instructions

Once installed, the Thermalright Aqua Elite 240 ARGB V2 operates automatically to cool your CPU.

- **Initial Power On:** After installation, close your PC case, reconnect power, and power on your system. Monitor CPU temperatures using system monitoring software.
- **Fan Control (PWM):** The fans are Pulse Width Modulation (PWM) controlled. Their speed will automatically adjust based on CPU temperature, managed by your motherboard's BIOS/UEFI settings or dedicated software.
- **ARGB Lighting Control:** The addressable RGB lighting on the fans and pump head can be synchronized and controlled via your motherboard's RGB software (e.g., ASUS Aura Sync, MSI Mystic Light Sync, GIGABYTE RGB Fusion, ASRock Polychrome Sync).

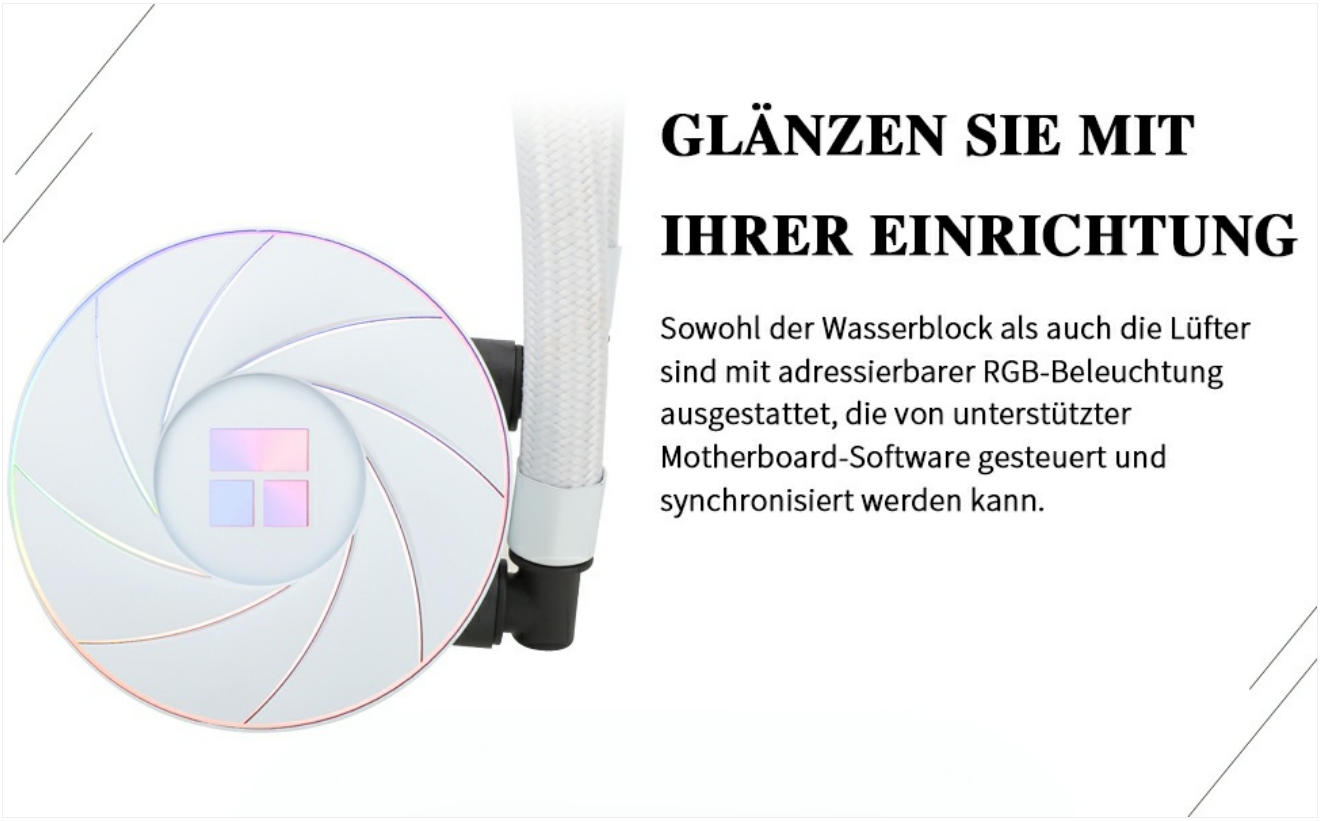

Image: Illustrates the intelligent PWM control of the fans, highlighting features like high static pressure, S-FDB bearing for quiet operation, PBT material, shock-absorbing silicone pads, 68.9 CFM airflow, 2000 RPM ±10% fan speed, and 4-pin PWM connection.

6. Maintenance

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

- **Dust Removal:** Periodically clean dust from the radiator fins and fan blades using compressed air or a soft brush. Excessive dust buildup can impede airflow and reduce cooling efficiency.
- **Fan Inspection:** Check fan blades for any obstructions or signs of wear. Ensure fans spin freely and quietly.
- **Tubing and Connections:** Visually inspect the tubing and connections for any signs of leaks or damage. While AIOs are sealed, it's good practice to check.
- **Thermal Paste:** The thermal paste typically lasts for several years. If you notice a significant increase in CPU temperatures over time, consider reapplying fresh thermal paste.

7. Troubleshooting

If you encounter issues with your Thermalright Aqua Elite 240 ARGB V2, refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution

Problem	Possible Cause	Solution
High CPU Temperatures	• Improper water block mounting • Insufficient thermal paste • Dust buildup on radiator/fans • Pump not functioning • Fans not spinning or spinning too slowly	• Re-seat water block, ensure even pressure. • Reapply thermal paste. • Clean radiator and fans. • Check pump power connection (3-pin). • Check fan power connections (4-pin PWM) and BIOS settings.
Fans Not Spinning	• Loose or incorrect power connection • BIOS fan control settings • Faulty fan	• Verify 4-pin PWM connection to motherboard. • Check BIOS/UEFI for fan speed control settings. • Test fan with another header or replace if necessary.
RGB Lighting Not Working	• Incorrect ARGB connection • Motherboard RGB software issue • Faulty LED	• Ensure 3-pin 5V ARGB connection to motherboard (not 12V RGB). • Update or reinstall motherboard RGB software. • Check for physical damage to ARGB cables.
Unusual Noise from Pump/Fans	• Air bubbles in the loop (pump noise) • Fan bearing noise • Vibrations	• Orient radiator higher than pump if possible, gently tilt case to dislodge air bubbles. • Check fan mounting screws for tightness. • Ensure no cables are hitting fan blades.

8. Specifications

Key technical specifications for the Thermalright Aqua Elite 240 ARGB V2 Liquid CPU Cooler.

Feature	Detail
Model	Aqua Elite 240 White ARGB V2
Radiator Dimensions (L x W x H)	277mm x 120mm x 27mm
Water Block Dimensions	72mm x 72mm x 48mm
Fan Dimensions	120mm x 120mm x 25mm
Fan Speed	Up to 2000 RPM ±10%
Airflow	68.9 CFM (MAX)
Static Pressure	2.21 mmH2O (MAX)

Feature	Detail
Noise Level (Fans)	≤28.2 dBA
Pump Speed	2600 RPM ±10%
Pump Noise Level	≤30 dBA
Pump Rated Current	0.24 ±20% A
Pump Power Consumption	≤3.0 W
Pump Bearing	Ceramic Bearing
Fan Bearing Type	S-FDB Bearing
CPU Socket Compatibility	Intel: LGA1150/1151/1155/1156/1200/1700/2011/2066; AMD: AM4/AM5/AM2/AM2+/AM3/AM3+/FM1/FM2/FM2+
Material	Aluminum, Copper (Cold Plate)
ARGB Lighting	+5V Addressable RGB

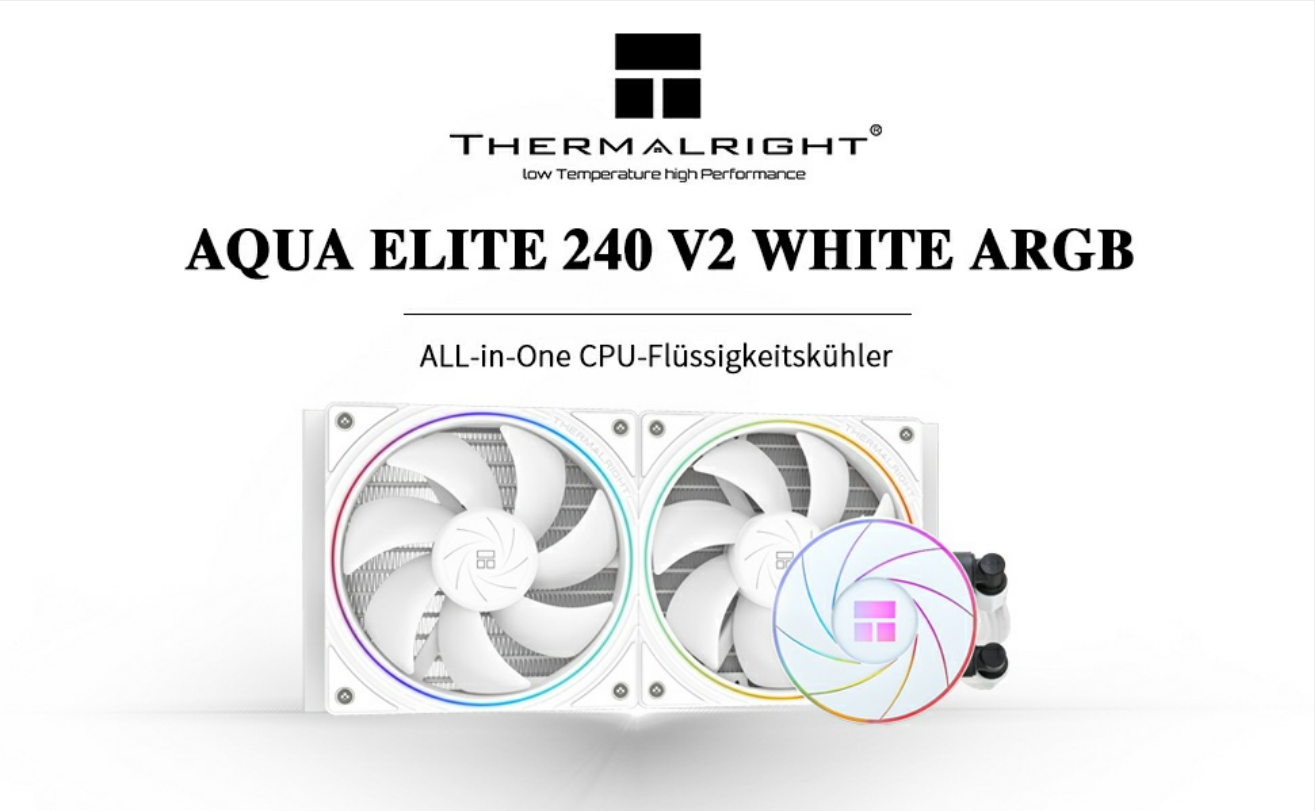

Image: The Thermalright Aqua Elite 240 ARGB V2 liquid CPU cooler installed in a computer case, showcasing its white design and ARGB lighting on the fans and pump.

9. Warranty and Support

Thermalright products are manufactured to the highest quality standards. For warranty information, technical support, or to report any issues, please visit the official Thermalright website or contact your local retailer. Keep your proof of purchase for warranty claims.