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## Cooler Master MLA-D24M-A18PC-R1

# Cooler Master MasterLiquid LC240E RGB User Manual

Model: MLA-D24M-A18PC-R1

## INTRODUCTION

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This manual provides comprehensive instructions for the installation, operation, and maintenance of your Cooler Master MasterLiquid LC240E RGB Close-Loop AIO CPU Liquid Cooler. This liquid cooling system is designed to deliver efficient cooling performance for your CPU, featuring a 240mm radiator, a dual-chamber RGB pump, and dual MF120R RGB fans. It is compatible with both AMD Ryzen and Intel LGA1151 and other specified sockets. Please read this manual thoroughly before installation and use to ensure proper functionality and longevity of your product.



Image: The Cooler Master MasterLiquid LC240E RGB AIO CPU Liquid Cooler, showcasing its 240mm radiator, dual RGB fans, and pump unit with braided tubing. The fans are illuminated with purple RGB lighting.

## WHAT'S IN THE BOX

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Upon unboxing your Cooler Master MasterLiquid LC240E RGB, please verify that all components are present:

- 1 x AIO CPU Cooler (comprising 240mm radiator, pump, and pre-attached tubing)
- 2 x MF120R RGB Fans
- Mounting hardware for Intel and AMD sockets
- RGB Controller (C10L)
- 1-to-3 RGB Splitter Cable
- Thermal Paste
- User Manual (this document)

## SETUP AND INSTALLATION

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Proper installation is crucial for optimal cooling performance. Follow these steps carefully.

### 1. Prepare Your System

1. **Power Off:** Ensure your computer is completely powered off and unplugged from the wall outlet.
2. **Access:** Open your computer case to access the motherboard and CPU area.
3. **Clean CPU:** If replacing an existing cooler, carefully remove it and clean any old thermal paste from the CPU's integrated heat spreader (IHS) using isopropyl alcohol and a lint-free cloth.

### 2. Install Mounting Hardware

The mounting process varies slightly between Intel and AMD platforms. Refer to the specific instructions provided with the mounting kit for your CPU socket type (Intel: LGA2066, LGA2011 v3, LGA2011, LGA1151, LGA1150, LGA1156, LGA1155, LGA1366; AMD: AM4, AM3+, AM3, AM2+, AM2, FM2+, FM2, FM1).

- Attach the correct backplate to the rear of your motherboard.
- Secure the standoffs through the motherboard's CPU mounting holes.

### 3. Apply Thermal Paste

Apply a small amount of thermal paste (pea-sized dot) to the center of your CPU's IHS. Do not spread it; the pressure from the pump will distribute it evenly.

### 4. Mount the Pump

- Carefully align the pump block with the standoffs on the motherboard.
- Gently lower the pump onto the CPU, ensuring even contact.
- Secure the pump with the provided thumb screws or nuts, tightening them in a diagonal pattern until snug. Do not overtighten.

# DUAL DISSIPATION PUMP

Low-profile dual chamber pump, delivering performance leaps over single-chamber pump designs.

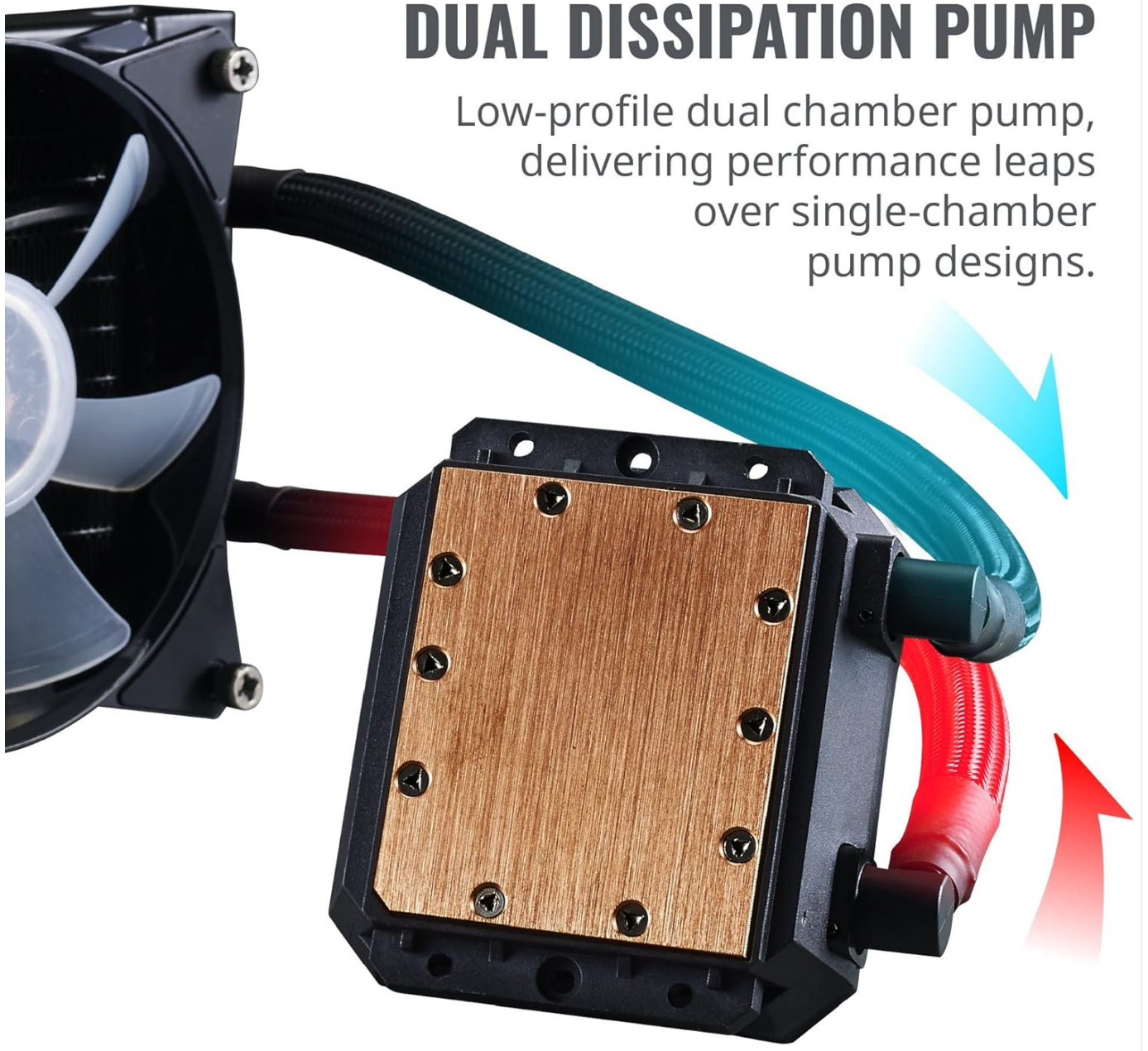


Image: A close-up view of the Cooler Master's dual dissipation pump, highlighting its low-profile dual chamber design which enhances performance compared to single-chamber pump designs.

## 5. Install the Radiator and Fans

- Attach the two MF120R RGB fans to the 240mm radiator using the longer screws provided. Ensure the fan airflow direction is appropriate for your case (typically exhausting air out or pulling air in).
- Mount the radiator assembly to an available 240mm fan mount location in your PC case (e.g., top, front, or rear). Use the shorter screws to secure the radiator to the case.

# LOW-RESISTANCE 240MM RADIATOR

Beautifully designed to maximize  
cooling surface area.



Image: A detailed view of the Cooler Master's low-resistance 240mm radiator, designed to maximize cooling surface area for efficient heat dissipation.

## 6. Connect Cables

- **Pump Power:** Connect the pump's 3-pin power cable to a CPU\_FAN or AIO\_PUMP header on your motherboard.
- **Fan Power:** Connect the two MF120R RGB fans to available fan headers on your motherboard, or use a fan splitter if necessary.
- **RGB Lighting:**
  - Connect the RGB cables from the pump and fans to the included 1-to-3 RGB splitter cable.
  - Connect the splitter cable to the wired C10L RGB controller.
  - Alternatively, if your motherboard supports RGB sync (e.g., ASUS Aura Sync, ASRock RGB LED, GIGABYTE RGB Fusion, MSI Mystic Light Sync), you can connect the RGB splitter directly to your motherboard's 4-pin RGB header (12VGRB) for software control.

# INCLUDED 1-TO-3 RGB SPLITTER

Extend your RGB control to three devices, all with one cable.



Image: The included 1-to-3 RGB splitter cable, which allows extension of RGB control to multiple devices from a single cable.

# WIRED RGB CONTROLLER

With the included C10L controller, choose between 5 brightness levels, 6 lighting modes, and 7 colors — no software required.



Image: The wired C10L RGB controller, used for adjusting RGB lighting effects, brightness levels, and colors without requiring software.

# SILENCE, PERFORMANCE, RGB, ALL-IN ONE.



Image: Illustrates the Cooler Master MasterLiquid LC240E RGB's compatibility with various motherboard RGB sync technologies, including ASUS Aura Sync, ASRock RGB LED, GIGABYTE RGB Fusion, and MSI Mystic Light Sync.

## OPERATING INSTRUCTIONS

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Once installed, the Cooler Master MasterLiquid LC240E RGB operates automatically to cool your CPU.

### Fan and Pump Operation

- The pump and fans will adjust their speed based on CPU temperature, controlled by your motherboard's fan headers and BIOS settings.
- For optimal performance, ensure the CPU\_FAN header is set to PWM mode in your motherboard's BIOS, allowing for dynamic speed control.
- The dual 120mm fans are designed for silent operation, with a noise level of approximately 31.5 dB at maximum speed.

# LIBRARY QUIET

Built sturdy, keeping vibrations and rattle to nearly inaudible levels.



Image: Depicts the Cooler Master fans operating quietly, with an indicator showing noise levels below 15 dBA, emphasizing the "Library Quiet" design.

## RGB Lighting Control

- **Using the C10L RGB Controller:**

The included C10L controller allows you to customize the RGB lighting without software. It typically features buttons to cycle through:

- 5 brightness levels
- 6 lighting modes (e.g., static, breathing, color cycle)
- 7 colors

- **Using Motherboard Software:**

If connected to a compatible motherboard RGB header, you can control the lighting effects through your motherboard's proprietary RGB software (e.g., ASUS Aura Sync, MSI Mystic Light Sync). Refer to your motherboard's manual for specific software instructions.

## MAINTENANCE

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The Cooler Master MasterLiquid LC240E RGB is a closed-loop system and requires minimal maintenance.

- **Dust Cleaning:** Periodically clean dust from the radiator fins and fan blades using compressed air or a soft brush. Excessive dust can impede airflow and reduce cooling efficiency.
- **Tubing Inspection:** Occasionally inspect the sleeved FEP tubing for any signs of kinks or damage. The reinforced tubing is designed to prevent kinks and ensure smooth liquid flow.
- **No Refilling:** Do not attempt to open or refill the liquid cooler. It is a sealed unit and opening it will void the warranty and may cause damage or leaks.

## TROUBLESHOOTING

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If you encounter issues with your liquid cooler, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
<b>High CPU Temperatures</b>	<ul style="list-style-type: none"><li>• Improper thermal paste application</li><li>• Pump not running or running slowly</li><li>• Fans not spinning or spinning slowly</li><li>• Radiator clogged with dust</li><li>• Incorrect mounting pressure</li></ul>	<ul style="list-style-type: none"><li>• Reapply thermal paste, ensuring even coverage.</li><li>• Check pump power connection to motherboard. Verify pump speed in BIOS/monitoring software.</li><li>• Check fan power connections. Verify fan speeds in BIOS/monitoring software.</li><li>• Clean radiator fins with compressed air.</li><li>• Ensure pump is securely mounted with even pressure.</li></ul>
<b>No RGB Lighting</b>	<ul style="list-style-type: none"><li>• Loose RGB cable connections</li><li>• Incorrect RGB header connection</li><li>• Controller malfunction</li><li>• Software conflict (if using motherboard software)</li></ul>	<ul style="list-style-type: none"><li>• Verify all RGB cables are securely connected to the splitter and controller/motherboard.</li><li>• Ensure connection is to a 4-pin 12VRGB header, not a 3-pin 5V addressable RGB header.</li><li>• Test with the included C10L controller.</li><li>• If using motherboard software, try reinstalling or updating it.</li></ul>
<b>Unusual Noise from Cooler</b>	<ul style="list-style-type: none"><li>• Fan bearing noise</li><li>• Pump noise (gurgling, grinding)</li><li>• Vibrations against case</li></ul>	<ul style="list-style-type: none"><li>• Check if fan blades are hitting cables. Ensure fans are securely mounted.</li><li>• Slight gurgling upon first boot is normal as air settles. If persistent, ensure radiator is mounted higher than pump if possible. Grinding noise may indicate pump issue; contact support.</li><li>• Ensure all mounting screws are tightened. Add rubber washers if vibrations persist.</li></ul>

## SPECIFICATIONS

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Detailed technical specifications for the Cooler Master MasterLiquid LC240E RGB:

Feature	Detail
Model Number	MLA-D24M-A18PC-R1
Product Dimensions (L x W x H)	10.9" x 4.7" x 1.1" (27.69 cm x 11.94 cm x 2.79 cm)
Item Weight	2.51 pounds (1.14 kg)
Cooling Method	Liquid (All-in-One Closed Loop)
Radiator Size	240mm
Fan Type	2 x MF120R RGB Fans
Air Flow Capacity	66.7 Cubic Feet Per Minute (CFM)
Noise Level	31.5 dB (max)
Pump Design	Dual Chamber Pump
Tubing Material	Reinforced FEP Tubing (Sleeved)
Power Connector Type	3-Pin (Pump)
Voltage	12 Volts
Wattage	50 Watts
Material	Polycarbonate (housing)
Compatible CPU Sockets	<b>Intel:</b> LGA2066, LGA2011 v3, LGA2011, LGA1151, LGA1150, LGA1156, LGA1155, LGA1366 <b>AMD:</b> AM4, AM3+, AM3, AM2+, AM2, FM2+, FM2, FM1
UPC	884102045561

## WARRANTY AND SUPPORT

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For warranty information and technical support, please refer to the official Cooler Master website or the warranty card included with your product.

- **Official User Manual (PDF):** A digital version of the user manual can be found at: Cooler Master MasterLiquid LC240E User Manual PDF
- **Cooler Master Support:** Visit the Cooler Master official website for the latest drivers, FAQs, and customer support contact information.

