Thermalright PV360 ARGB BLACK

Thermalright Peerless Vision 360 ARGB Black CPU Liquid Cooler

Model: PV360 ARGB BLACK

1. Introduction

The Thermalright Peerless Vision 360 ARGB Black is an all-in-one (AIO) CPU liquid cooler designed for efficient heat dissipation and customizable aesthetics. It features a 3.95-inch IPS LCD screen with 480x480 resolution, allowing for system monitoring, video, and animation display. The cooler includes three TL-M12Q wireless splicing ARGB fans, providing both performance and customizable lighting effects. This manual provides essential information for installation, operation, and maintenance.

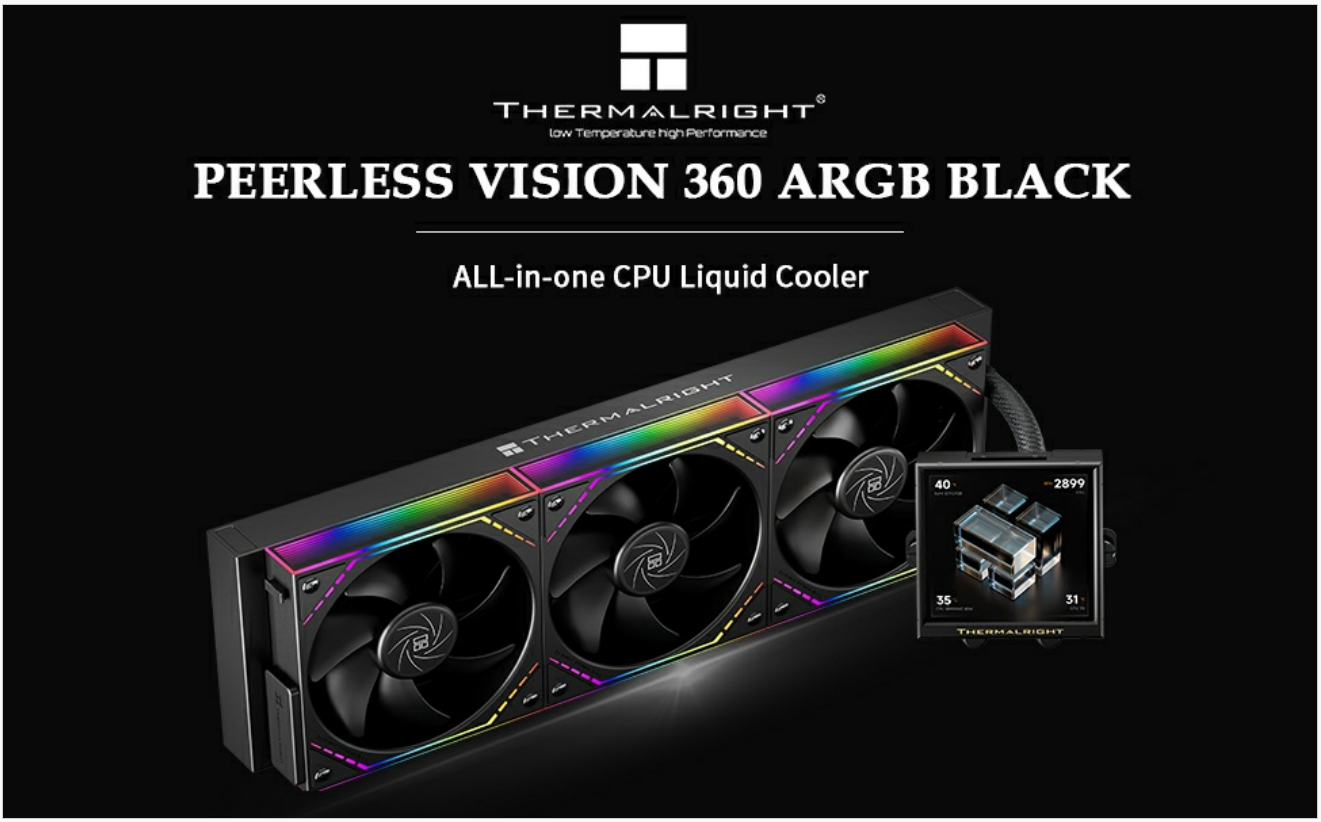

Figure 1: Thermalright Peerless Vision 360 ARGB Black CPU Liquid Cooler

2. Safety Information

- Ensure all power is disconnected from the computer before installation or maintenance.
- Handle components with care to avoid damage.
- Avoid touching the fan blades during operation.
- Do not open the liquid cooler pump or radiator, as this may cause leaks and void the warranty.
- Keep the product away from liquids and extreme temperatures.
- This product contains small parts; keep out of reach of children.

3. Package Contents

Verify that all items are present in the package:

- 1x Radiator with Integrated Pump/Water Block and LCD Screen
- 3x TL-M12Q ARGB Fans
- Mounting Hardware for Intel Sockets (LGA1150/1151/1155/1156/1200/2011/2066/1700/1851)
- Mounting Hardware for AMD Sockets (AM4/AM5)
- Thermal Paste
- PWM Fan Cables
- 5V 3PIN ARGB Cables
- USB Cable for LCD Screen
- User Manual

4. Specifications

Component	Specification
Water Block Dimensions	81mm * 79mm * 67.6mm
Radiator Dimensions	397mm * 120mm * 27mm
Pump Connector	4PIN PWM
Pump Rated Speed	3000RPM ±10% (MAX)
LCD Resolution	480 * 480
Fan Model	TL-M12Q
Fan Dimensions	124mm * 120mm * 25mm
Fan Rated Speed	2000RPM ±10% (MAX)
Fan Rated Noise	≤28.2dBA
Fan Air Flow	68.9CFM (MAX)

Component	Specification
Fan Static Pressure	2.21mm/H2O (MAX)
Fan Connector	4PIN PWM
Fan Bearing Type	S-FDB Bearing
RGB Support	+5V 3PIN ARGB (DO NOT support 12V 4PIN RGB)
Compatible Devices	Desktop
Cooling Method	Water
Material	Aluminum
Item Weight	5.77 pounds

Figure 2: TL-M12Q Fan Specifications

5. Setup and Installation

Follow these general steps for installation. Refer to the specific mounting hardware instructions for your CPU socket type.

5.1 Prepare CPU and Motherboard

1. Ensure your CPU is correctly seated in the motherboard socket.
2. Clean the CPU surface with isopropyl alcohol to remove any residue.

5.2 Install Backplate (Intel)

- For Intel platforms, install the appropriate backplate behind the motherboard.
- Secure the standoffs through the motherboard mounting holes.

Note: AMD platforms typically use the original motherboard backplate.

Figure 3: Motherboard Compatibility and Radiator Design

5.3 Apply Thermal Paste

- Apply a small amount of thermal paste to the center of the CPU's integrated heat spreader (IHS).
- Do not spread the paste manually; the pressure from the cold plate will distribute it evenly.

5.4 Mount Water Block/Pump

1. Align the water block with the standoffs on the motherboard.
2. Gently place the water block onto the CPU.
3. Secure the water block with the provided thumb screws or nuts, tightening in a cross pattern until snug.

5.5 Mount Radiator and Fans

1. Attach the three TL-M12Q fans to the radiator using the included screws. Ensure the fan airflow direction is correct for your case configuration.
2. Mount the radiator assembly to an available fan mounting location in your PC case (e.g., top, front).

5.6 Connect Cables

- Connect the 4-pin PWM cable from the pump to the CPU_FAN or AIO_PUMP header on your motherboard.
- Connect the 4-pin PWM cables from the fans to available fan headers on your motherboard or a fan hub.
- Connect the 5V 3PIN ARGB cables from the fans and pump to a compatible 5V 3PIN ARGB header on your motherboard. **Do not connect to a 12V 4PIN RGB header.**
- Connect the USB cable from the water block to an available internal USB 2.0 header on your motherboard.

This is required for the LCD screen functionality and TRCC software control.

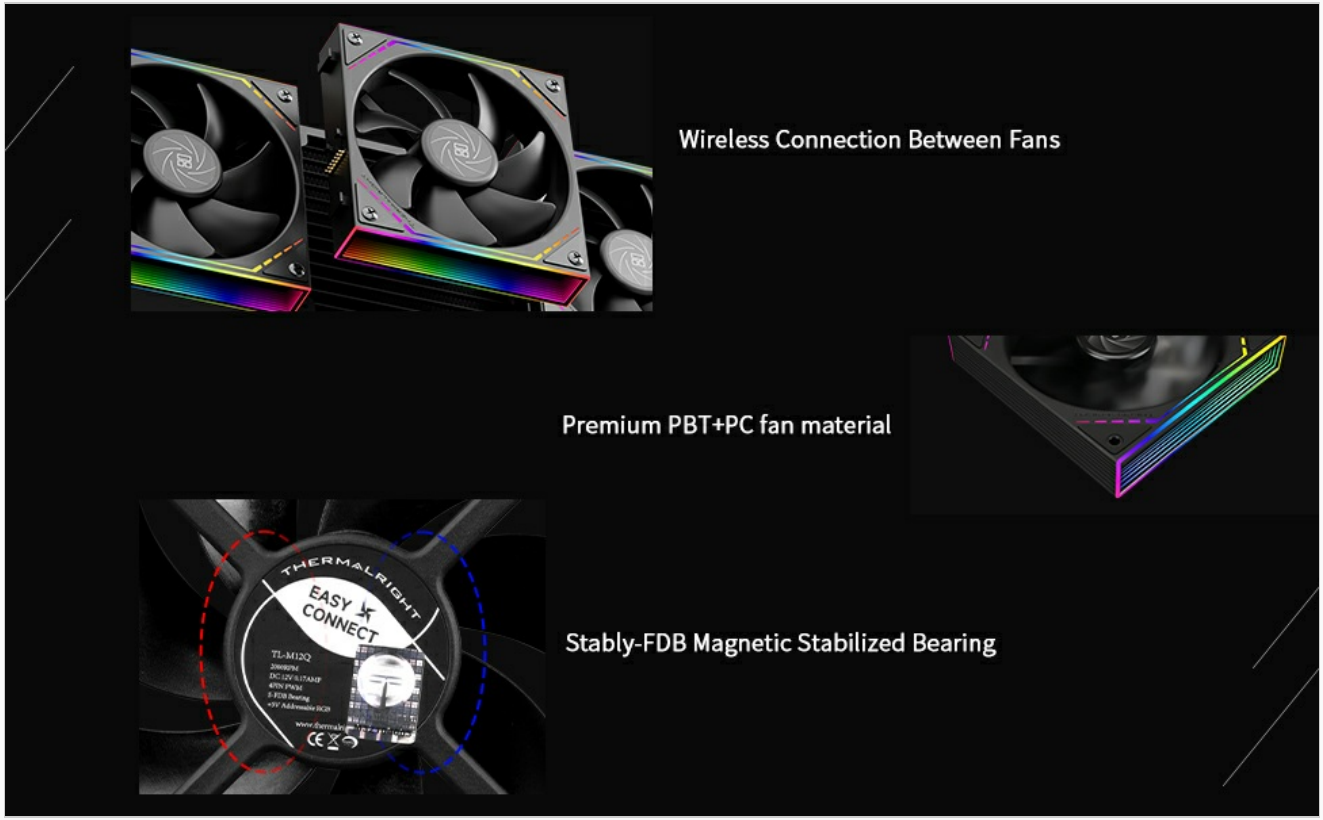

Figure 4: ARGB Connection (5V 3PIN only)

6. Operating Instructions

6.1 LCD Screen Operation

The 3.95-inch IPS LCD screen on the water block displays real-time system information such as CPU temperature, GPU temperature, and clock speeds. It also supports custom images, GIFs, and videos.

- **Software Control:** Download and install the Thermalright Control Center (TRCC) software from the official Thermalright website.
- **Customization:** Use the TRCC software to upload custom images, GIFs, or videos to the LCD screen. You can also select from pre-installed themes or create your own.
- **System Monitoring:** The TRCC software allows you to configure which system parameters are displayed on the screen.

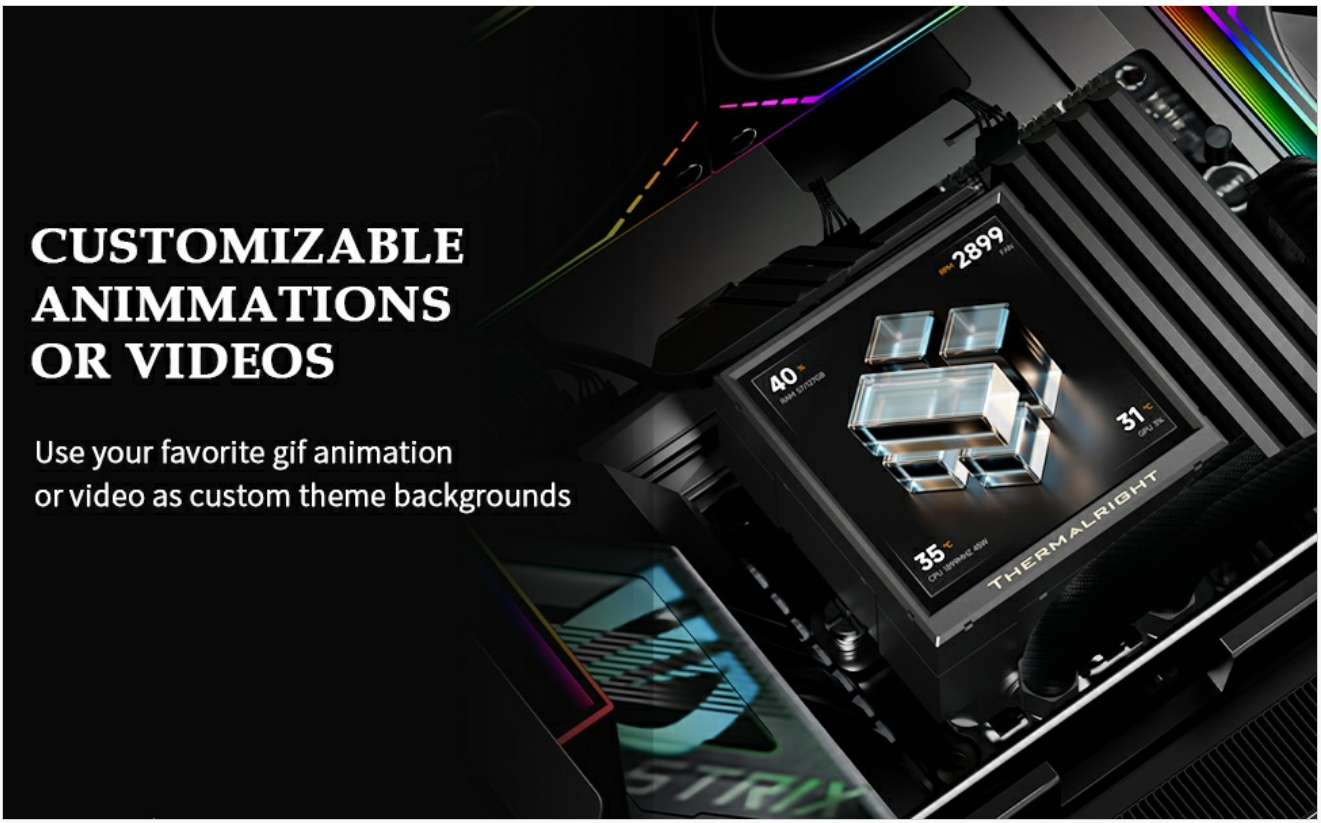

Figure 5: Magnetic LCD Display Module Features

Figure 6: TRCC Software Interface for Customization and Monitoring

6.2 Fan and ARGB Lighting Control

- **PWM Temperature Control:** The TL-M12Q fans support PWM (Pulse Width Modulation) for intelligent temperature control. The fan speed automatically adjusts based on CPU temperature, optimizing cooling performance and noise levels. This is typically controlled via your motherboard's BIOS/UEFI settings or dedicated motherboard software.

- **ARGB Lighting:** The ARGB lighting effects of the fans and pump can be synchronized and controlled using your motherboard's ARGB software (e.g., ASUS Aura Sync, MSI Mystic Light, Gigabyte RGB Fusion, ASRock Polychrome Sync) or the TRCC software. Ensure the 5V 3PIN ARGB headers are correctly connected.

7. Maintenance

- **Radiator Cleaning:** Periodically clean dust from the radiator fins using compressed air. Ensure the fans are not spinning during cleaning to prevent damage.
- **Fan Cleaning:** Gently wipe fan blades with a soft, dry cloth to remove dust buildup.
- **Software Updates:** Regularly check the Thermalright website for updates to the TRCC software to ensure optimal performance and compatibility.
- **Cable Management:** Ensure all cables are securely connected and routed to avoid interference with other components or fan blades.

8. Troubleshooting

- **High CPU Temperatures:**
  - Verify the water block is securely mounted to the CPU and thermal paste is properly applied.
  - Check if the pump is running (listen for a faint hum or check software).
  - Ensure fans are spinning and configured correctly in BIOS/UEFI or software.
  - Clean any dust buildup on the radiator fins.
- **LCD Screen Not Displaying:**
  - Ensure the USB cable from the water block is securely connected to an internal USB 2.0 header on the motherboard.
  - Verify the TRCC software is installed and running.
  - Check for any driver conflicts or software updates.
- **ARGB Lighting Not Working/Incorrect:**
  - Confirm the 5V 3PIN ARGB cables are correctly connected to a compatible motherboard header.
  - Ensure you are using a 5V 3PIN ARGB header, not a 12V 4PIN RGB header.
  - Check your motherboard's ARGB software or TRCC software for lighting control settings.
  - Verify all ARGB connections are secure.
- **Excessive Fan Noise:**
  - Adjust fan curves in your motherboard's BIOS/UEFI or fan control software to reduce speeds at lower temperatures.
  - Check for any obstructions or loose cables hitting the fan blades.
  - Ensure fans are securely mounted to the radiator.

9. Warranty and Support

For warranty information and technical support, please refer to the official Thermalright website or contact your retailer. Keep your proof of purchase for warranty claims.

Contact Information:

- **Website:** www.thermalright.com

- **Email:** Refer to the website for specific support contact details.