

Thermalright TL-C12CW-S X3

Thermalright TL-C12CW-S X3 120mm White ARGB Case Cooler Instruction Manual

Brand: Thermalright | Model: TL-C12CW-S X3

1. PRODUCT OVERVIEW

The Thermalright TL-C12CW-S X3 is a high-performance 120mm ARGB case fan designed for efficient computer cooling. It features automatic speed control via a 4-pin PWM interface, allowing the fan speed to adjust based on motherboard temperature. The fan incorporates S-FDB bearings for quiet operation and extended lifespan, along with high-brightness ARGB lighting for customizable visual effects.

Key Features:

- **High Performance Cooling:** Automatic speed control (PWM) up to 1550 RPM, with 55cm cable for series control.
- **Quality S-FDB Bearings:** Ensures minimal noise and maximum cooling performance, extending fan life.
- **Excellent ARGB Lighting:** High-brightness LED atomizing fan blades with up to 17 modes, controllable and synchronizable via motherboard ARGB port.
- **Versatile Application:** Suitable for use as a case fan, with CPU coolers, or radiators for enhanced thermal management.

2. WHAT'S IN THE BOX

- CPU Fan (Thermalright TL-C12CW-S X3)
- Mounting Screws (for case fan mounting)
- Vibration-free Mounts (for case fan mounting)

Note: The quantity of fans and accessories may vary based on the product package (e.g., 3 Quantities).

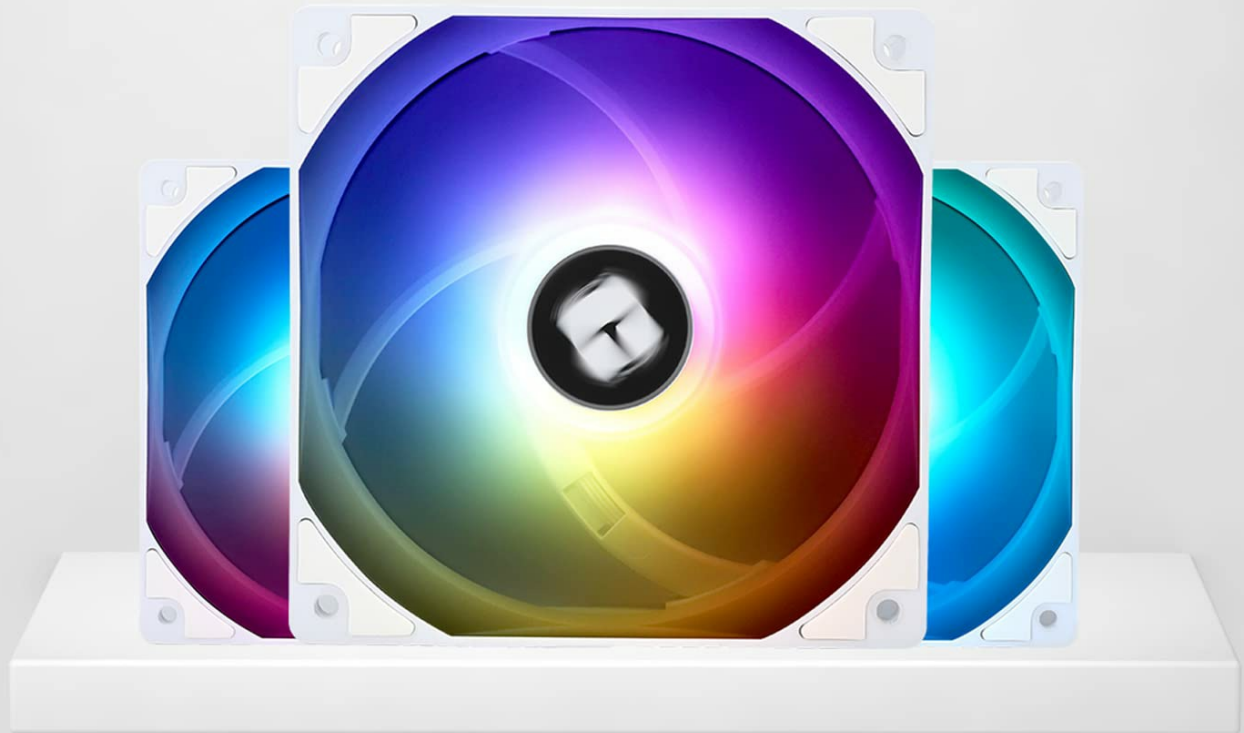
3. INSTALLATION GUIDE

3.1 Airflow Direction

Before installation, identify the airflow direction of the fan. The side with the fan blades visible (without the frame supports) is typically the intake side, pushing air in. The side with the frame supports is typically the exhaust side, where air exits.

TL-C12CW-S X3

120mm ARGB performance fan



Dual Side Pad
Shock Absorption

Airflow Fan Blade
Design

Low Noise S-FDB
Bearing

Image: Thermalright TL-C12CW-S X3 fan illustrating the airflow direction. The fan blade side is intake, and the frame support side is exhaust.

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Video: Official Thermalright case fan installation guide demonstrating airflow direction and mounting methods.

3.2 Mounting with Vibration-Free Mounts

1. Insert the thin end of a vibration-free mount through a fan mounting hole on your PC case.
2. Pull the mount through until the wider part secures it against the case.
3. Align the fan with the mounting holes and push the remaining end of the mount through the corresponding fan hole.
4. Pull the mount firmly to secure the fan in place, ensuring it is snug and vibration-free. Repeat for all four corners.

Industrial Grade PBT+PC material, Strong and Safe

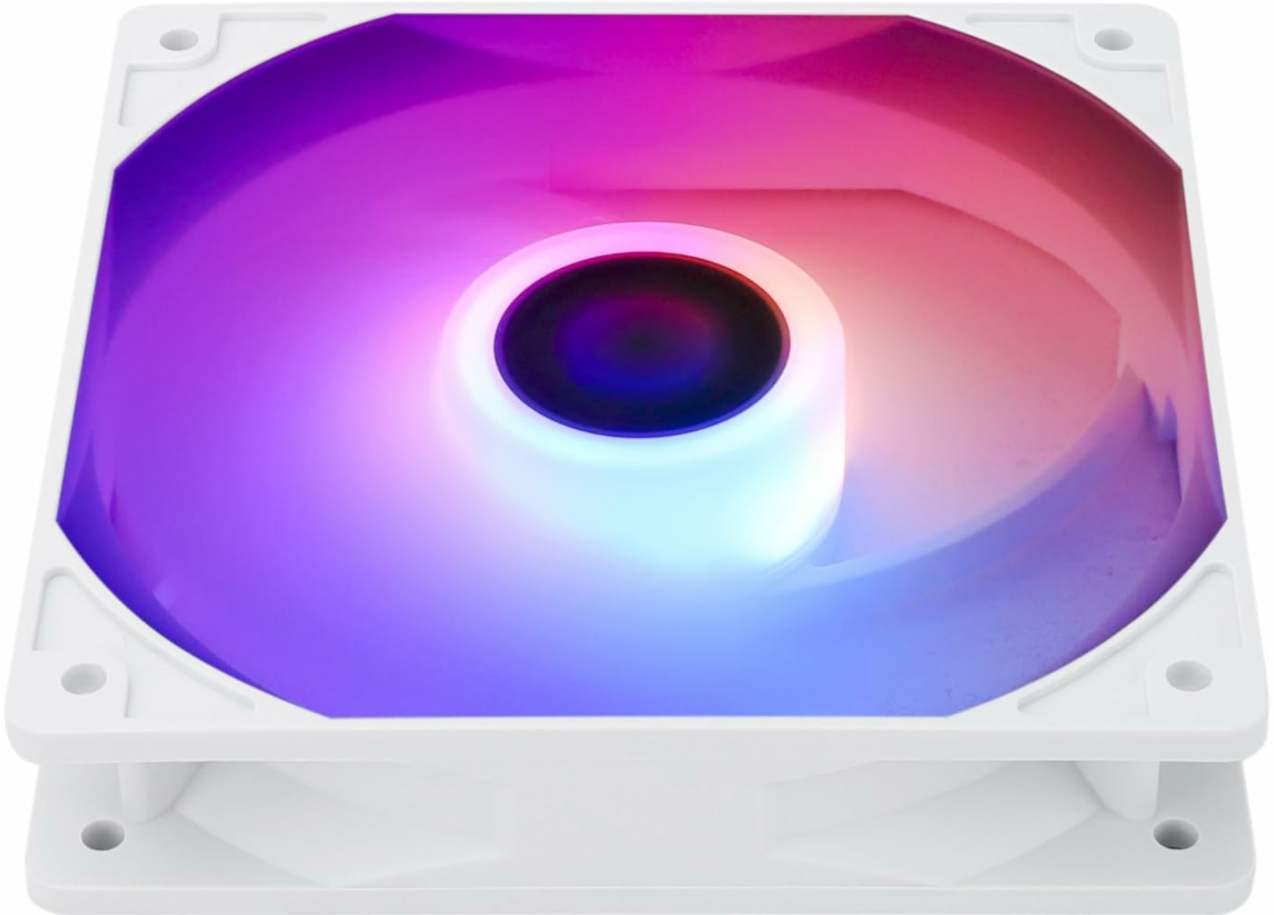


Image: Close-up of the Thermalright TL-C12CW-S X3 fan highlighting the soft-touch corner silicone rubber pads designed for vibration absorption.

3.3 Mounting with Screws

1. Align the fan with the desired mounting location on your PC case.
2. Insert a mounting screw through the fan's mounting hole and into the case.
3. Use a screwdriver to gently tighten the screw. Do not overtighten to avoid damaging the fan or case.
4. Repeat for all four corners to securely mount the fan.

3.4 Connecting the Fan

Connect the 4-pin PWM fan cable from the Thermalright TL-C12CW-S X3 fan to an available 4-pin fan header on your motherboard. For ARGB lighting, connect the 3-pin ARGB cable to a compatible 5V ARGB header on your motherboard. Ensure correct orientation for both connections.



Image: Thermalright TL-C12CW-S X3 fan with its 4-pin PWM cable, indicating support for fan speed synchronization.

4. OPERATING INSTRUCTIONS

4.1 Fan Speed Control (PWM)

The fan's 4-pin PWM connector allows your motherboard to automatically control the fan speed based on system temperature. This ensures optimal cooling performance when needed and quieter operation during lighter loads. You can typically configure fan curves in your motherboard's BIOS/UEFI settings or through manufacturer-provided software.

4.2 ARGB Lighting Control

The Thermalright TL-C12CW-S X3 features Addressable RGB (ARGB) lighting with up to 17 different lighting modes. To control and synchronize the lighting effects, connect the 3-pin ARGB cable to a compatible 5V ARGB header on your motherboard. Lighting can then be managed using your motherboard's ARGB software (e.g., ASUS Aura Sync, MSI Mystic Light Sync, Gigabyte RGB Fusion, ASRock Polychrome Sync).



Image: Three Thermalright TL-C12CW-S X3 fans showcasing their vibrant ARGB lighting capabilities.

5. MAINTENANCE

Regular maintenance helps ensure optimal performance and longevity of your Thermalright TL-C12CW-S X3 fans.

- **Cleaning:** Periodically clean the fan blades and frame to remove dust buildup. Use compressed air or a soft brush. Ensure the fan is powered off before cleaning.
- **Cable Management:** Ensure all cables are neatly routed and secured to prevent interference with fan blades or other components.
- **Inspection:** Occasionally inspect the fan for any signs of wear, damage, or unusual noise.

6. TROUBLESHOOTING

- **Fan Not Spinning:**

- Check if the 4-pin PWM cable is securely connected to the motherboard fan header.
- Verify that the fan header is enabled in the motherboard's BIOS/UEFI settings.
- Ensure the power supply is functioning correctly.

- **ARGB Lights Not Working/Synchronizing:**

- Confirm the 3-pin ARGB cable is correctly connected to a 5V ARGB header on the motherboard.
- Check your motherboard's ARGB software for proper configuration and synchronization settings.
- Ensure the ARGB header is enabled in the motherboard's BIOS/UEFI.

- **Excessive Noise:**

- Check for any cables or obstructions hitting the fan blades.
- Ensure the fan is securely mounted and not vibrating against the case.
- Clean any dust buildup on the fan blades.
- Adjust fan speed settings in BIOS/UEFI or software to a lower RPM if noise is a concern and temperatures allow.

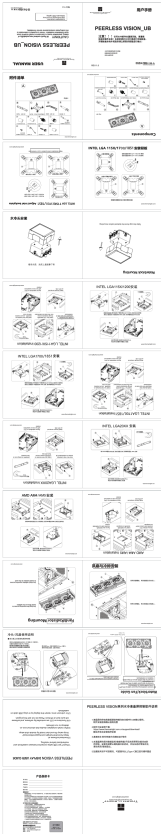
7. SPECIFICATIONS

Model	TL-C12CW-S X3
Dimensions	120 x 120 x 25 mm (4.72"L x 0.98"W x 4.72"H)
Speed	1550 RPM (Max)
Noise Level	25.6 dBA (Max)
Air Flow	66.17 CFM (Max)
Air Pressure	1.53 mm H2O (Max)
Connector	4-Pin PWM
ARGB Lighting	3-Pin 5V ARGB
Bearing Type	S-FDB Bearing
Rated Voltage	12 Volts
Rated Current	0.20 A
Wattage	3.6 Watts
Material	Copper (likely referring to internal components, not frame)
Compatible Devices	Desktop Computers

8. WARRANTY AND SUPPORT

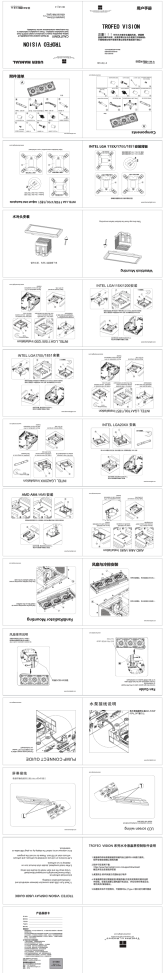
For warranty information and technical support, please refer to the official Thermalright website or contact their customer service. Keep your proof of purchase for warranty claims.

Related Documents - TL-C12CW-S X3



[Thermalright PEERLESS VISION 360 ARGB WHITE User Manual and Component Guide](#)

Comprehensive user manual and component guide for the Thermalright PEERLESS VISION 360 ARGB WHITE All-in-One (AIO) liquid cooler, detailing installation, parts, and software control.



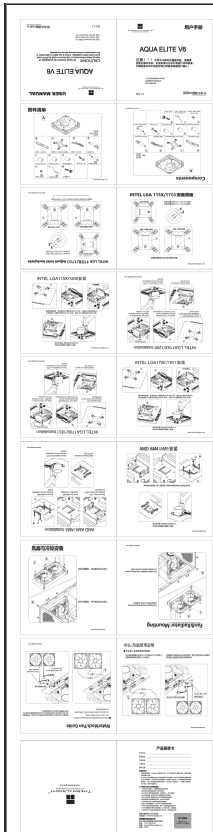
[Thermalright Trofeo Vision 360 ARGB CPU Cooler - Installation and User Guide](#)

Comprehensive guide for the Thermalright Trofeo Vision 360 ARGB CPU cooler, detailing its features, components, and installation process. Available in black and white.



[Thermalright Assassin X 120 Refined SE CPU Cooler Installation Guide](#)

Comprehensive installation guide for the Thermalright Assassin X 120 Refined SE CPU cooler, covering AMD AM4 and Intel LGA 115x, 1200, and 1700 socket compatibility. Includes parts list and fan wiring instructions.

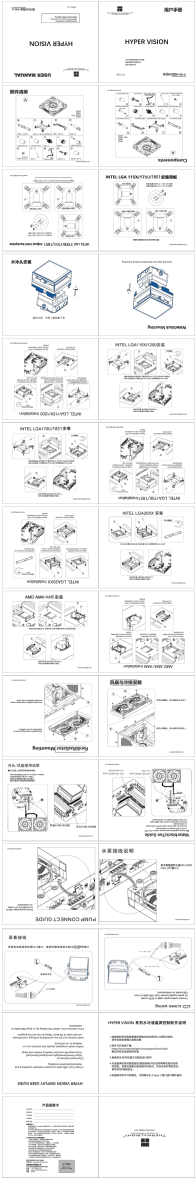


[Thermalright Aqua Elite V6 CPU Cooler User Manual](#)

User manual for the Thermalright Aqua Elite V6 CPU cooler, detailing installation instructions for Intel LGA 1700/1851 and LGA 115X/1200, and AMD AM4/AM5 sockets, along with fan and radiator mounting and RGB connection. Includes warranty information.

[Thermalright Grand Vision ARGB Series AIO Liquid Coolers Installation Guide](#)

Installation and user guide for the Thermalright Grand Vision ARGB series All-In-One liquid CPU coolers, detailing features, installation steps, specifications, and compatibility for PC builders.



[Thermalright Hyper Vision and Hydrography User Manual](#)

Comprehensive user manual for Thermalright Hyper Vision and Hydrography series, detailing installation, connection, and usage for PC cooling components.

