MONTECH NX400ARGBW

MONTECH NX400 ARGB CPU Cooler Instruction Manual

Model: NX400ARGBW

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your MONTECH NX400 ARGB CPU Cooler. Please read this manual thoroughly before installation to ensure correct setup and optimal performance.

Image 1.1: Main view of the MONTECH NX400 ARGB CPU Cooler, showcasing its white design and illuminated ARGB fan.

2. PRODUCT OVERVIEW AND FEATURES

The MONTECH NX400 ARGB is a single-tower CPU cooler designed for efficient heat dissipation and aesthetic appeal. It incorporates several key features to ensure stable and quiet operation.

- **Advanced Heat Pipe Technology:** Utilizes vacuum-enhanced heat pipes for efficient heat transfer.
- **Optimized Heat Sink Design:** Features 52 uniquely shaped fins to maximize surface area and airflow.
- **E28 28mm Thick Fan:** A distinctive 28mm-thick fan provides powerful airflow within a slim, single-tower profile.
- **Static-Pressure Optimized Fan Blades:** Delivers strong, focused airflow through the fin stack.
- **Vibration-Dampening Footpads:** Reduces operational noise and vibration for smoother performance.
- **Vibrant ARGB Lighting:** Customizable lighting effects enhance the visual appeal of your system.
- **Polished Top Cover:** Features a refined aesthetic finish with a striped texture and translucent accents.

Image 2.1: Illustration of the advanced heat pipe design, showing the internal structure for efficient heat transfer.

The cooler's heat sink is engineered with 52 fins, precisely aligned to work with the heat pipes, ensuring smooth airflow and compact performance.
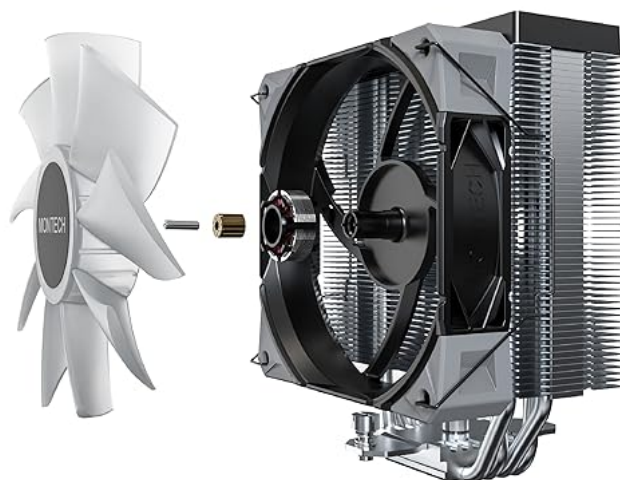

Image 2.2: Close-up view of the optimized heat sink design, highlighting the 52 fins for maximum surface area.

The E28 fan is a key component, delivering powerful airflow through the high-density heat sink. Its 28mm thickness and static pressure optimization contribute to enhanced thermal performance.

E28: The Cooling Hero

Delivers powerful airflow through the high-density heat sink using 28mm-thick blades optimized for static pressure.
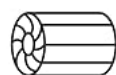
Fluid Dynamic Bearings(FDB)

28mm thickness

Airflow of 85 CFM

Image 2.3: Exploded view of the E28 fan, detailing its fluid dynamic bearings, 28mm thickness, and airflow capacity.

For stable and quiet operation, the E28 fan is equipped with detachable corner-covered footpads that effectively reduce vibration and noise.

Fits All You Need

Interchangeable brackets support
a wide range of CPU sockets,
including Intel® LGA 1851, AMD AM5 and more.
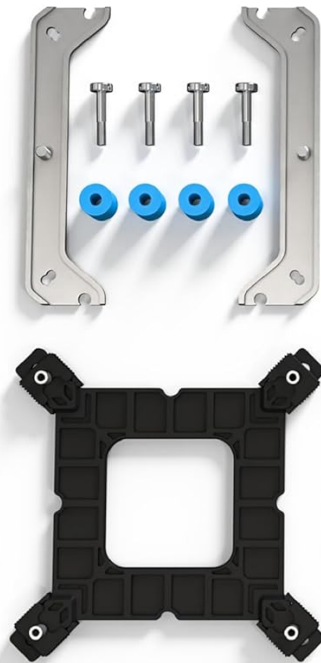
Intel

AMD

Image 2.4: Close-up of the fan showing the corner-covered footpads designed to dampen vibrations.

The top cover features a polished finish with striped and translucent accents, adding a refined aesthetic to the cooler.

E28: The Cooling Hero

Delivers powerful airflow through the high-density heat sink using 28mm-thick blades optimized for static pressure.
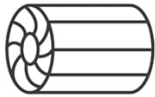
Fluid Dynamic Bearings(FDB)

28mm thickness

Airflow of 85 CFM
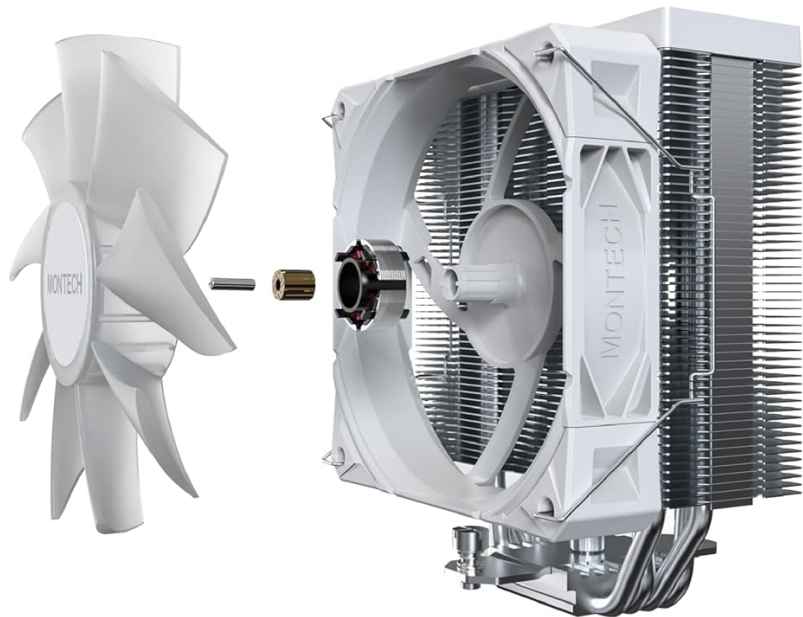
Image 2.5: Side view of the cooler, highlighting the polished top cover with striped texture and translucent accents.

3. SETUP AND INSTALLATION

The MONTECH NX400 ARGB CPU Cooler includes interchangeable brackets to support a wide range of CPU sockets, including Intel LGA 1851 and AMD AM5. Always refer to the physical installation guide included with your product for detailed, step-by-step instructions specific to your CPU socket type.

Polished to Perfection

Striped and translucent accents on the top cover add
a refined touch, delivering a sleek and subtle aesthetic.

Polished Top Cover

Image 3.1: Mounting hardware for Intel and AMD CPU sockets, illustrating the interchangeable brackets.

General Installation Steps (Consult physical manual for specifics):

1. **Prepare Motherboard:** Ensure your motherboard is compatible and the CPU is installed.
2. **Apply Thermal Paste:** Apply a thin, even layer of thermal paste to the CPU's integrated heat spreader (IHS).
3. **Install Mounting Brackets:** Attach the appropriate mounting brackets for your CPU socket (Intel or AMD) to the motherboard.
4. **Secure Cooler:** Place the cooler onto the CPU, aligning it with the mounting brackets, and secure it using the provided screws. Tighten screws evenly in a cross pattern.
5. **Connect Fan Cables:** Connect the 4-pin PWM fan cable to the CPU_FAN header on your motherboard. Connect the ARGB cable to a compatible 3-pin 5V ARGB header on your motherboard or an ARGB controller.
6. **Verify Installation:** Double-check all connections and ensure the cooler is firmly seated.

Important: Incorrect installation can lead to overheating and damage to your CPU.

4. OPERATING INSTRUCTIONS

Once installed, the MONTECH NX400 ARGB CPU Cooler operates automatically, regulating fan speed based on CPU temperature via the PWM connection to your motherboard.

ARGB Lighting Control:

The ARGB lighting can be controlled through your motherboard's RGB software (e.g., ASUS Aura Sync, MSI Mystic Light Sync, GIGABYTE RGB Fusion, ASRock Polychrome Sync) if connected to a compatible 3-pin 5V ARGB header. Alternatively, if connected to a dedicated ARGB controller (sold separately), use the controller's interface to customize lighting effects.

- Refer to your motherboard manual for specific ARGB software instructions.
- Ensure the ARGB cable is correctly connected to a 3-pin 5V header, not a 4-pin 12V RGB header, to prevent damage.

5. MAINTENANCE

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

- **Dust Removal:** Periodically clean dust from the heat sink fins and fan blades using compressed air or a soft brush. Ensure the fan is not spinning during cleaning.
- **Fan Inspection:** Check the fan for any obstructions or unusual noises. If the fan becomes excessively noisy or stops spinning, it may need replacement.
- **Thermal Paste:** Reapply thermal paste if you remove the cooler from the CPU for any reason. Thermal paste typically lasts for several years, but its effectiveness can degrade over time.

6. TROUBLESHOOTING

If you encounter issues with your MONTECH NX400 ARGB CPU Cooler, refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution
CPU Overheating	- Improper cooler installation - Insufficient thermal paste - Fan not spinning or obstructed - Poor case airflow	- Re-seat cooler, ensure even pressure - Reapply thermal paste - Check fan connections, clear obstructions - Improve case fan setup
Fan Not Spinning	- Fan cable disconnected - Faulty fan header - Fan failure	- Ensure 4-pin PWM cable is securely connected to CPU_FAN header - Try connecting to a different fan header - Contact support for replacement if fan is faulty
ARGB Lighting Not Working	- ARGB cable disconnected - Incorrect ARGB header connection (e.g., 12V RGB instead of 5V ARGB) - Software issue	- Ensure 3-pin 5V ARGB cable is securely connected - Verify connection to a 5V ARGB header - Check motherboard RGB software settings

Problem	Possible Cause	Solution
Excessive Noise	○ Loose fan or cooler ○ Fan bearing issue ○ Dust buildup	○ Ensure all mounting screws are tight ○ Clean fan and heat sink ○ Contact support if noise persists after cleaning and tightening

7. SPECIFICATIONS

Key technical specifications for the MONTECH NX400 ARGB CPU Cooler:

Feature	Detail
Model Number	NX400ARGBW
Brand	MONTECH
Product Dimensions	4.72"L x 2.91"W x 6.14"H (120mm x 74mm x 156mm)
Cooling Method	Air
Fan Size	120mm (E28, 28mm thick)
Power Connector Type	4-Pin PWM (Fan), 3-Pin 5V ARGB (Lighting)
Noise Level	34.17 dB (Maximum)
Maximum Rotational Speed	2000 RPM
Air Flow Capacity	85.09 Cubic Feet Per Minute (CFM)
Compatible Devices	Desktop CPUs (Intel LGA 1851, AMD AM5, and more)

8. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official MONTECH website or contact their customer service directly. Keep your proof of purchase for warranty claims.
MONTECH Official Website: www.montechpc.com