Montech NX600

MONTECH NX600 Dual-Tower CPU Air Cooler User Manual

Model: NX600 | Brand: Montech

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your MONTECH NX600 Dual-Tower CPU Air Cooler. The NX600 is designed for efficient thermal management, featuring a dual-tower heatsink, six heatpipes, and two E28 PWM performance fans. It is compatible with a wide range of Intel and AMD CPU sockets, ensuring broad system compatibility.

Please read this manual thoroughly before installation to ensure correct setup and optimal performance of your CPU cooler.

2. PRODUCT FEATURES

- **Dual-Tower Design:** Two finely tuned fin stacks with 52 × 2 fins and six heat pipes provide a massive heat dissipation surface for maximum cooling efficiency.
- **Soldered Copper Base:** A flat copper base soldered directly to six heat pipes ensures even heat conduction and minimizes thermal resistance for stable CPU temperatures.
- **E28 PWM Performance Fans:** Equipped with two MONTECH E28 PWM fans, optimized for high airflow and quiet operation.
- **Sleek Top Cover:** A premium top cover conceals heat pipe ends and fin stacks, providing a clean and unified aesthetic.
- **Broad Compatibility:** Supports Intel LGA115X / 1200 / 1700 / 1851 and AMD AM4 / AM5 sockets.

Image: Overview of MONTECH NX600 features including efficient heat transfer, optimized heatsink, soldered copper base, E28 PWM fans, sleek top finish, and compatibility with Intel and AMD sockets.

Image: Illustration of the dual-tower design with airflow, demonstrating efficient heat dissipation from the CPU.

Solid Contact, Rapid Transfer

A flat copper base soldered to six heat pipes ensures even heat spread and minimal thermal resistance for stable CPU performance.

Image: Close-up view of the NX600's soldered copper base and heatpipes, highlighting the solid contact for rapid heat transfer.
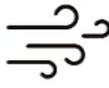

E28 PWM Peak Performance Fan

NX600 includes 2× MONTECH E28 PWM fans with high airflow and static pressure for powerful cooling.
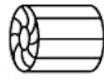
28mm Thickness

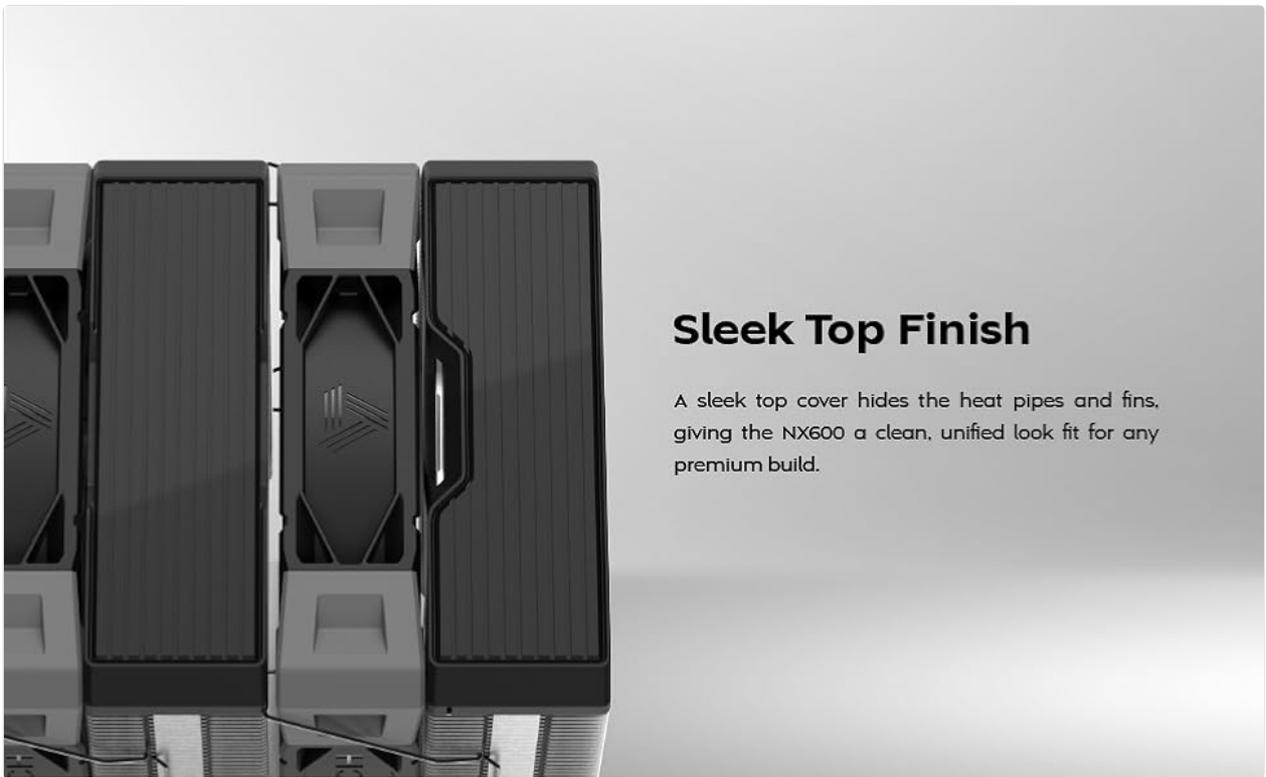Fan Speed at 2000RPM

Airflow 85.09CFM

Static Pressure at 3.35mmH₂O

Hydro Dynamic Bearings(HDB)

Image: Detailed view of the E28 PWM performance fan, showing its 28mm thickness, 2000 RPM speed, 85.09 CFM airflow, 3.35mmH$_2$O static pressure, and Hydro Dynamic Bearings (HDB).

Sleek Top Finish

A sleek top cover hides the heat pipes and fins, giving the NX600 a clean, unified look fit for any premium build.

Image: Top view of the NX600 cooler, showcasing the sleek top cover that conceals the heat pipes and fins for a clean appearance.

3. PACKAGE CONTENTS

Verify that all components are present in the package before proceeding with installation:

- MONTECH NX600 CPU Cooler (Heatsink with pre-installed fans)
- Intel Mounting Bracket Set (Backplate, standoffs, screws)
- AMD Mounting Bracket Set (Backplate, standoffs, screws)
- Thermal Paste
- Fan Clips (if not pre-installed)
- User Manual (this document)

Effortless Compatibility

Works with Intel LGA115X / 1200 / 1700 / 1851 and
AMD AM4 / AM5 for easy upgrades.

Intel   AMD

Image: Various mounting components for Intel (LGA115X/1200/1700/1851) and AMD (AM4/AM5) sockets, including backplates, standoffs, and brackets.

4. SPECIFICATIONS

Feature	Value
Product Dimensions	5.22"L x 4.72"W x 6.29"H (132.6mm L x 119.9mm W x 159.8mm H)
Brand	Montech
Power Connector Type	4-Pin PWM
Cooling Method	Air Cooling
Compatible Devices	Desktop CPUs
Noise Level	34.17 Decibels (Max)
Maximum Rotational Speed	2000 RPM

Feature	Value
Air Flow Capacity	85.09 Cubic Feet Per Minute (CFM)
Item Weight	3.17 pounds (1.44 kg)
Supported Sockets	Intel LGA115X / 1200 / 1700 / 1851, AMD AM4 / AM5

5. INSTALLATION GUIDE

Important: Before starting, ensure your system is powered off and unplugged. Refer to your motherboard manual for specific CPU socket details. It is recommended to install the cooler before installing the motherboard into the PC case, if possible.

5.1 Prepare Your Motherboard

1. Remove any existing CPU cooler and clean off old thermal paste from the CPU surface using isopropyl alcohol and a lint-free cloth.
2. Identify the correct backplate and mounting hardware for your CPU socket (Intel or AMD).
3. Attach the appropriate backplate to the rear of your motherboard, aligning the holes with the CPU socket mounting points.
4. Secure the standoffs through the motherboard from the front, screwing them into the backplate.

5.2 Apply Thermal Paste

1. Apply a small, pea-sized dot of thermal paste to the center of your CPU's integrated heat spreader (IHS). Do not spread it manually; the pressure from the cooler will spread it evenly.

5.3 Mount the Heatsink

1. **Remove the center fan from the heatsink before mounting.** This provides access to the mounting screws.
2. Place the heatsink onto the CPU, aligning the mounting holes on the cooler's base with the standoffs on the motherboard.
3. Place the appropriate mounting bracket (Intel or AMD) over the heatsink base, aligning it with the standoffs.
4. Secure the heatsink by screwing down the mounting screws in a diagonal pattern until snug. Do not overtighten.

5.4 Install Fans and Connect Cables

1. Reattach the center fan to the heatsink using the provided fan clips. Ensure the fan is oriented to push air through the heatsink towards the rear of the case.
2. Attach the second fan to the heatsink, ensuring proper airflow direction.
3. Connect the 4-pin PWM fan cables to the CPU_FAN header(s) on your motherboard. If your motherboard has only one CPU_FAN header, use the included Y-splitter cable (if provided) to connect both fans.
4. Ensure all cables are routed neatly and do not interfere with fan blades or other components.

Note: The fan clips can be challenging to handle, especially in tight spaces. Take your time to ensure they are securely attached.

6. OPERATION

6.1 Power On and Initial Check

1. After installation, double-check all connections.

2. Power on your system. Observe the fans to ensure they are spinning correctly.

3. Enter your system's BIOS/UEFI settings to verify that the CPU fan speed is detected and operating within expected parameters.

6.2 PWM Fan Control

The MONTECH NX600 fans utilize Pulse Width Modulation (PWM) technology, allowing your motherboard to dynamically control fan speed based on CPU temperature. This ensures optimal cooling performance when needed and quiet operation during lighter loads.

-   You can typically adjust fan curves in your motherboard's BIOS/UEFI settings or through dedicated software provided by your motherboard manufacturer.

-   For general use, the default "Standard" or "Silent" fan profiles are usually sufficient. For demanding tasks or overclocking, consider a "Performance" profile.

7. MAINTENANCE

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

-   **Dust Removal:** Periodically (e.g., every 3-6 months), power off and unplug your system. Use compressed air to gently blow dust out of the heatsink fins and fan blades. Hold the fan blades to prevent them from spinning rapidly during cleaning, which can damage the bearings.

-   **Thermal Paste:** The thermal paste typically lasts for several years. If you notice a significant increase in CPU temperatures, consider reapplying thermal paste. This involves carefully removing the cooler, cleaning both the CPU and cooler base thoroughly, and applying new thermal paste.

-   **Fan Inspection:** Check fan blades for any obstructions or damage. Ensure fan cables are securely connected.

8. TROUBLESHOOTING

8.1 High CPU Temperatures

-   **Check Thermal Paste:** Ensure thermal paste was applied correctly and evenly. Reapply if necessary.

-   **Heatsink Contact:** Verify the heatsink is making firm, even contact with the CPU. Ensure mounting screws are tightened diagonally.

-   **Fan Operation:** Confirm both fans are spinning. Check fan cable connections to the motherboard.

-   **Airflow:** Ensure fans are oriented correctly to pull cool air through the heatsink and exhaust hot air from the case. Check overall case airflow.

-   **Dust Buildup:** Clean any dust from the heatsink fins and fan blades.

8.2 Fan Not Spinning or Making Noise

-   **Cable Connection:** Ensure the 4-pin PWM fan cable(s) are securely connected to the CPU_FAN header(s) on the motherboard.

-   **BIOS Settings:** Check BIOS/UEFI settings to ensure fan control is enabled and not set to a very low

RPM that might prevent startup.

- **Obstructions:** Power off and check for any cables or objects obstructing the fan blades.
- **Bearing Noise:** If a fan is making an unusual grinding or rattling noise, the bearing may be failing. Contact Montech support for assistance.

8.3 Installation Difficulties

- **Incorrect Hardware:** Double-check that you are using the correct mounting hardware for your specific CPU socket (Intel vs. AMD).
- **Fan Removal:** Remember to remove the center fan before attempting to mount the heatsink to access the mounting screws.
- **Clearance Issues:** Ensure there is sufficient clearance for RAM modules and VRM heatsinks. Adjust fan height if possible, or consider low-profile RAM.

9. WARRANTY AND SUPPORT

For warranty information, technical support, or replacement parts, please visit the official Montech website or contact their customer service department. Keep your proof of purchase for warranty claims.

Montech Official Website: www.montechpc.com