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> [ARCTIC Freezer 36 Single-Tower CPU Cooler Instruction Manual](#)

ARCTIC ACFRE00121A

ARCTIC Freezer 36 Single-Tower CPU Cooler Instruction Manual

Model: ACFRE00121A

1. INTRODUCTION

The ARCTIC Freezer 36 is a high-performance single-tower CPU cooler designed for efficient heat dissipation. It features a push-pull configuration with two pressure-optimized 120 mm P fans, a fluid dynamic bearing for quiet operation, and four heatpipes for rapid heat transfer. This manual provides essential information for the proper installation, operation, and maintenance of your Freezer 36 CPU cooler.

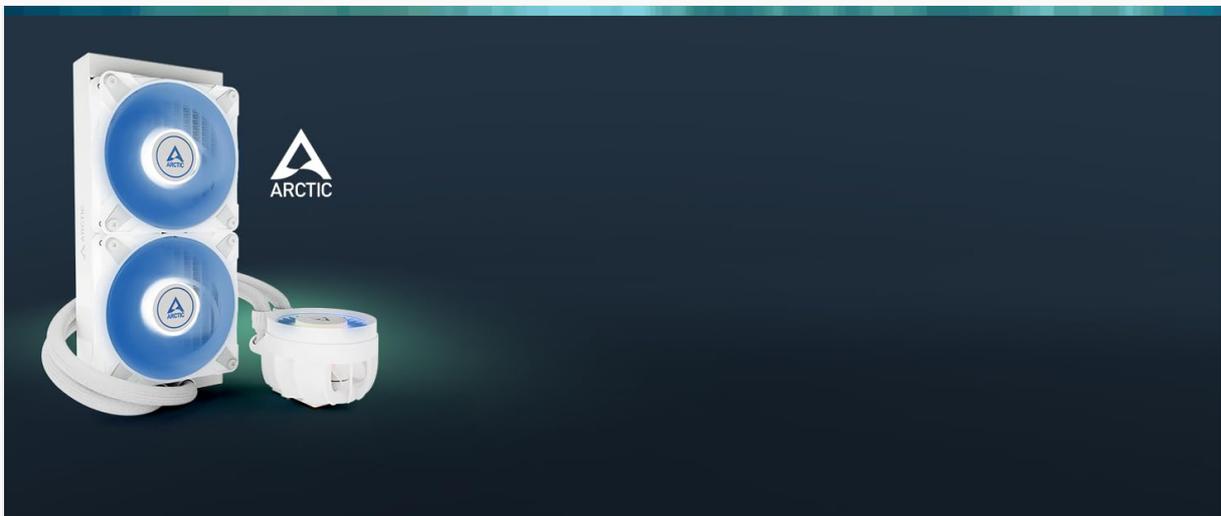


Image 1.1: ARCTIC Freezer 36 CPU Cooler in a system.

2. WHAT'S IN THE BOX

Verify that all components are present before beginning installation:

- ARCTIC Freezer 36 CPU Cooler (Heatsink with pre-installed fans)
- Mounting hardware for Intel LGA1851/LGA1700 and AMD AM5/AM4 sockets
- MX-6 Thermal Compound

3. INSTALLATION GUIDE

Follow these steps for proper installation of the ARCTIC Freezer 36 CPU Cooler. Ensure your system is powered off and disconnected from the power source before proceeding.

3.1. Prepare the CPU Socket

For Intel LGA1851 and LGA1700 sockets, utilize the included contact frame to improve pressure distribution and heat transfer. This frame replaces the standard motherboard CPU bracket.



Image 3.1: Intel Contact Frame installation for LGA1851/LGA1700.

For AMD AM5 and AM4 sockets, use the provided AMD mounting hardware. Ensure the CPU is correctly seated in its socket.

3.2. Apply Thermal Compound

Apply a small amount of the included MX-6 thermal compound to the center of your CPU's integrated heat spreader (IHS). The pressure from the cooler will spread it evenly.

3.3. Mount the Heatsink

Carefully place the heatsink onto the CPU, aligning the mounting holes with the backplate or contact frame. Secure the heatsink using the provided screws, tightening them in a cross pattern until snug. Avoid overtightening.

3.4. Install the Fans

The Freezer 36 features an innovative click installation system for its 120 mm P fans. Simply align the fans with the heatsink and press them into place until they click securely. Ensure the fan cables are routed neatly and connected to the appropriate CPU fan headers on your motherboard.

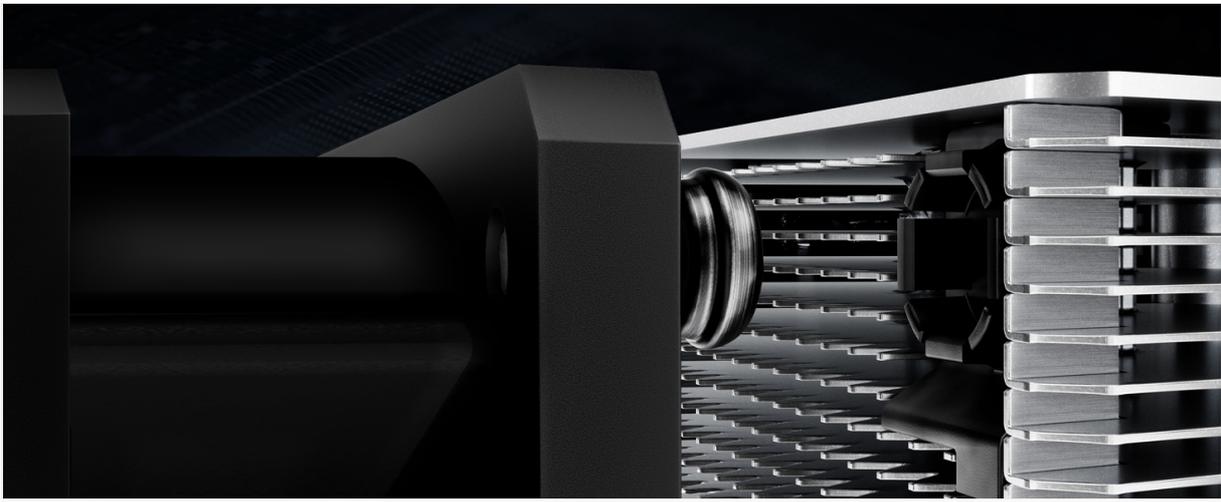


Image 3.2: Innovative fan mounting system.

The Freezer 36 is compatible with most 120 mm fans, allowing for future upgrades or replacements if desired.

4. OPERATING INSTRUCTIONS

The ARCTIC Freezer 36 operates automatically once installed and connected to your motherboard's CPU fan header. The pressure-optimized 120 mm P fans adjust their speed between 200 and 1800 RPM based on CPU temperature, ensuring optimal cooling performance and low noise levels.

4.1. Airflow Optimization

The heatsink design includes side-flow openings, allowing the pull fan to draw additional cool air from the case. This optimizes ventilation and enhances overall cooling efficiency.



Image 4.1: Optimized heatsink with side-flow.

4.2. Fluid Dynamic Bearing

The fans are equipped with a fluid dynamic bearing, which contributes to their extended lifespan and quiet operation by reducing friction and wear.

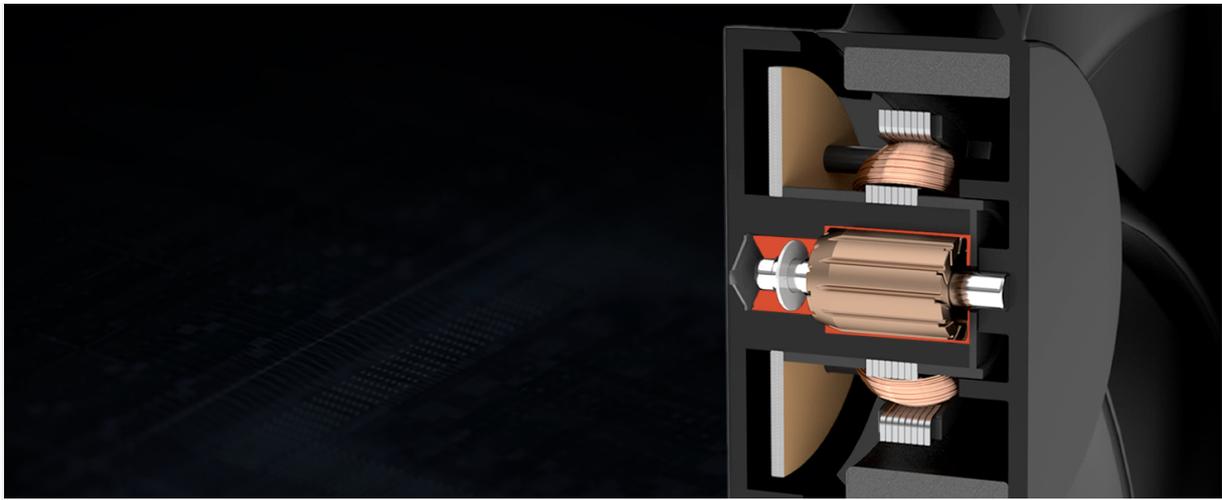


Image 4.2: Fluid Dynamic Bearing diagram.

5. MAINTENANCE

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

- **Dust Removal:** Periodically clean the heatsink fins and fan blades using compressed air or a soft brush to remove accumulated dust. Ensure fans are not spinning during cleaning.
- **Fan Inspection:** Check fan cables for secure connections and ensure fans spin freely without obstruction.
- **Thermal Compound:** The pre-applied MX-6 thermal compound offers long-term stability. Reapplication is generally not necessary unless the cooler is removed from the CPU. If reapplication is needed, clean both surfaces thoroughly before applying new thermal paste.

6. TROUBLESHOOTING

If you encounter issues with your ARCTIC Freezer 36, refer to the following common troubleshooting steps:

- **High CPU Temperatures:**
 - Verify that the cooler is securely mounted and making proper contact with the CPU.
 - Ensure sufficient thermal compound was applied.
 - Check that fans are spinning and oriented correctly for optimal airflow (pushing air through the heatsink).
 - Clean any dust buildup on the heatsink fins and fan blades.
- **Fans Not Spinning:**
 - Confirm that the fan cables are securely connected to the motherboard's CPU fan headers.
 - Check BIOS/UEFI settings to ensure fan control is enabled and configured correctly.
- **Excessive Noise:**
 - Ensure no cables or obstructions are interfering with the fan blades.
 - Check fan mounting for any looseness or vibration.
 - Adjust fan speed curves in BIOS/UEFI or through motherboard software if noise is a concern at lower temperatures.

7. SPECIFICATIONS

Feature	Specification
Product Dimensions	4.09"L x 4.96"W x 6.25"H
Brand	ARCTIC
Power Connector Type	4-Pin PWM
Voltage	12 Volts
Wattage	1.2 watts
Cooling Method	Air
Compatible Devices	Intel: LGA1851, LGA1700; AMD: AM5, AM4
Material	Copper (Heatpipes), Aluminium (Fin Stack)
Maximum Rotational Speed	1800 RPM
Air Flow Capacity	56.3 Cubic Feet Per Minute (CFM)
Model Number	ACFRE00121A
GTIN/UPC	840033401937

8. WARRANTY AND SUPPORT

ARCTIC provides a **6-year warranty** for the Freezer 36 CPU Cooler, reflecting confidence in the product's quality and durability.

For technical support, warranty claims, or additional information, please visit the official ARCTIC website or contact their customer service department. Refer to the product packaging or ARCTIC's official channels for the most current support contact details.