Thermalright AXP90 X36

Thermalright AXP90 X36 Low Profile ITX CPU Cooler Instruction Manual

1. INTRODUCTION

The Thermalright AXP90 X36 is a compact, low-profile CPU cooler designed for ITX systems and other small form factor builds where space is limited. With a total height of 36mm, it features a TL-9015 slim PWM CPU fan and 4x6mm AGHP heatpipes to provide efficient cooling performance. This manual provides detailed instructions for installation, operation, and maintenance of your AXP90 X36 cooler.

Key Features:

- Compact, premium-quality low-profile CPU cooler (36mm total height).
- Good adaptability, all metal platform, with back plate fastener, secondary reflow soldering process.
- Nickel plating process, corrosion resistance, acid and alkali resistance, low thermal resistance.
- 4x6mm AGHP Heatpipes, Noise≤22.4DBA, Voltage 12V, Current 0.2A (MAX).
- Support for Intel: 115X/1200/1700/1851; AMD: AM4/AM5.

2. PRODUCT SPECIFICATIONS

Specification	Value
Product Dimensions	95mm L x 94.5mm W x 36mm H (Total Height)
Heatsink Dimensions	94.5mm L x 95mm W x 21mm H
Fan Dimensions	92mm L x 92mm W x 15mm H
Brand	Thermalright
Power Connector Type	4-Pin PWM
Voltage	12 Volts
Wattage	3.6 watts
Cooling Method	Air

Specification	Value
Compatible Devices	Desktop
Noise Level	≤22.4 Decibels
Material	Copper
Maximum Rotational Speed	2700 RPM ±10%
Air Flow Capacity	42.58 Cubic Feet Per Minute (MAX)
Static Pressure	1.33mm/H_2O (MAX)
Rated Current	0.18A
Rated Voltage	12V DC
Thermal Power Capability	95W
Heat Pipes	4x6mm units

3. INSTALLATION GUIDE

Please refer to the following steps for proper installation of your Thermalright AXP90 X36 CPU Cooler. Ensure your system is powered off and unplugged before beginning installation.

General Preparation:

1. Carefully unpack all components and verify against the package contents.
2. Remove the protective plastic sticker from the heatsink base before applying thermal compound.

Image: Thermalright AXP90 X36 CPU Cooler. Ensure to remove the protective plastic sticker from the heatsink base before installation.

AMD AM4/AM5 Installation:

1. Remove the existing plastic brackets from your AM4/AM5 motherboard by unscrewing them.
2. Remove the original AM4/AM5 backplate from the backside of the motherboard.
3. Apply thermal compound evenly onto the CPU surface.
4. Install the provided AM4/AM5 backplate on the backside of the motherboard, ensuring the 'AM4' text faces outwards.
5. Place the heatsink onto the CPU, aligning the motherboard mounting holes with the screws on the heatsink.
6. Secure the heatsink and backplate using the four hex nuts. Tighten them evenly in a cross pattern until snug.
7. Connect the fan header to the CPU_FAN socket on the motherboard.

Intel LGA115X/1200/1700/1851 Installation:

1. Remove the pre-installed brackets for Intel motherboards from the heatsink by unscrewing them.
2. Install the appropriate brackets for your Intel motherboard onto the heatsink. Ensure the logo on the brackets faces towards the heatsink.

3. Install the four short screws into the heatsink brackets.

4. Apply thermal compound evenly onto the CPU surface.

5. Install the Intel backplate (if provided and required by your motherboard) on the backside of the motherboard.

6. Place the heatsink onto the CPU, aligning the motherboard mounting holes with the screws on the heatsink.

7. Secure the heatsink and backplate using the four hex nuts. Tighten them evenly in a cross pattern until snug.

8. Connect the fan header to the CPU_FAN socket on the motherboard.

Installation Video Tutorial:

Watch the official installation video for a visual guide on setting up your Thermalright AXP90 X36 CPU Cooler, specifically demonstrating the process for AMD AM4 motherboards.

Your browser does not support the video tag.

Video: Thermalright AXP90 X36 Air Cooler series installation video tutorial. This video demonstrates the installation process for AMD AM4 motherboards, including preparing the cooler, applying thermal paste, and securing the heatsink.

Important Notes:

- Ensure all screws are tightened evenly to prevent uneven pressure on the CPU.

- In case of motherboard components conflicting with the backplate, replace the short screws on the heatsink with the longer screws provided in the package to ensure proper clearance and secure mounting.

Image: The compact 36mm total height of the AXP90 X36 cooler, ideal for ITX systems.

Image: AXP90 X36 cooler demonstrating RAM compatibility and the included backplate for secure mounting.

Image: Close-up view of the TL-9015 92mm slim profile fan, designed for low noise operation.

Image: Detailed dimensions of the AXP90 X36 cooler, including its 36mm total height, 15mm fan height, and 21mm heatsink height.

4. OPERATING INSTRUCTIONS

Once installed, the Thermalright AXP90 X36 CPU Cooler operates automatically based on your motherboard's fan control settings. The TL-9015 PWM fan adjusts its speed according to the CPU temperature, providing optimal cooling while minimizing noise.

- **BIOS/UEFI Settings:** Access your motherboard's BIOS/UEFI settings to configure fan curves if you desire custom fan speed control.

- **Temperature Monitoring:** Use system monitoring software to keep track of your CPU temperatures to ensure optimal performance and prevent overheating.

- **Airflow:** Ensure adequate airflow within your PC case to maximize the cooler's efficiency.

5. MAINTENANCE

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

- **Dust Cleaning:** Periodically clean dust from the heatsink fins and fan blades using compressed air or a soft brush. Ensure the fan is held stationary during cleaning to prevent damage to the bearings.
- **Thermal Paste:** Reapply thermal paste every 1-2 years, or if you remove the cooler for any reason, to maintain efficient heat transfer between the CPU and the heatsink.
- **Fan Inspection:** Check the fan for any signs of wear, unusual noises, or reduced performance. Replace the fan if necessary.

6. TROUBLESHOOTING

If you encounter issues with your CPU cooler, consider the following troubleshooting steps:

- **High CPU Temperatures:**
  - Verify that the cooler is securely mounted and making good contact with the CPU.
  - Check if thermal paste was applied correctly and is not dried out.
  - Ensure the fan is spinning and not obstructed.
  - Improve case airflow by adding or repositioning case fans.

- **Fan Not Spinning/Making Noise:**
  - Check the fan's connection to the CPU_FAN header on the motherboard.
  - Inspect the fan for any physical obstructions or damage.
  - Adjust fan speed settings in BIOS/UEFI.

- **Installation Difficulties:**
  - Refer to the installation video and step-by-step guide carefully.
  - Ensure you are using the correct mounting hardware for your CPU socket (Intel vs. AMD).
  - If the backplate conflicts with motherboard components, use the longer screws provided.

7. WARRANTY AND SUPPORT

Thermalright products are designed for reliability and performance. For warranty information, technical support, or any other inquiries, please visit the official Thermalright website or contact their customer service directly.

Manufacturer: Thermalright

Model: AXP90 X36

ASIN: B097DTVFQQ

GTIN/UPC: 742346951874