GAMDIAS BOREAS E1L-010

GAMDIAS Boreas E1L 010 CPU AIR Cooler Instruction Manual

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your GAMDIAS Boreas E1L 010 CPU AIR Cooler. The Boreas E1L 010 is an ARGB low-profile CPU cooler designed for Intel sockets, featuring a 120mm hydraulic PWM fan, ARGB motherboard synchronization, and an aluminum heatsink for efficient cooling in compact systems.

Image 1.1: The GAMDIAS Boreas E1L 010 CPU AIR Cooler, showcasing its compact design and ARGB fan lighting.

2. SAFETY INFORMATION

Please read and understand all safety instructions before installing or operating the CPU cooler. Failure to do so may result in damage to the product, your computer components, or personal injury.

- Always disconnect power from your computer before performing any installation or maintenance.
- Handle components with care to avoid electrostatic discharge (ESD). Consider using an anti-static wrist strap.
- Keep the cooler away from liquids and excessive moisture.
- Do not attempt to modify the cooler or its components.
- Ensure proper ventilation within your computer case to optimize cooling performance.

3. PACKAGE CONTENTS

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

- GAMDIAS Boreas E1L 010 CPU Cooler Assembly (Heatsink and Fan)

- Mounting Hardware for Intel LGA 1200/115X/1700 Sockets
- Thermal Paste (pre-applied or in a separate tube)

4. KEY FEATURES

- **Built-in RGB Lighting with ARGB Motherboard Sync:** Customize lighting effects through compatible motherboard software.
- **High Airflow Hydraulic Bearing PWM Fan:** Delivers efficient cooling with minimal noise and extended lifespan.
- **90x90x35mm Aluminum Heatsink:** Optimized for heat dissipation.
- **39x39 High CPU Coverage:** Ensures wide contact area for effective heat transfer.
- **Compatible with LGA 1200/115X/1700:** Supports a range of Intel CPU sockets.

4.1. High CPU Coverage

Image 4.1: Illustration of the heatsink's wide solid contact area, ensuring optimal heat transfer from the CPU surface.

4.2. ARGB Motherboard Sync

Image 4.2: The ARGB connector, allowing synchronization of lighting effects with compatible motherboard software (e.g., ASUS Aura Sync, MSI Mystic Light Sync, ASRock Polychrome Sync).

4.3. High Airflow PWM Fan

High Airflow PWM Fan

With a 74CFM Airflow and 800-2600 RPM fan speed, the PWM fan delivers a improved airflow and temperature control for extreme CPU cooling performance
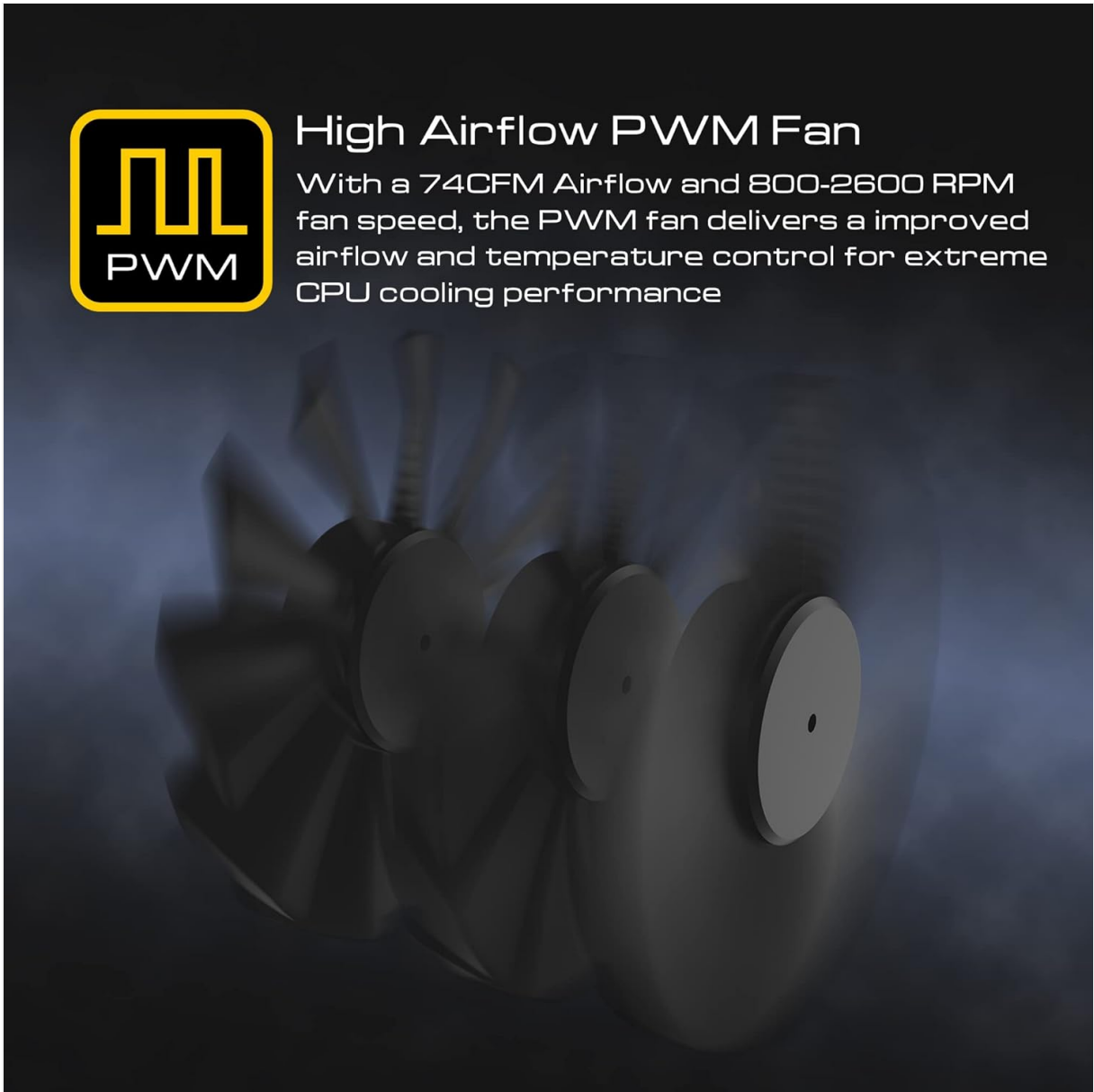
Image 4.3: A visual representation of the PWM fan in motion, highlighting its ability to deliver high airflow (74CFM) and variable speed (800-2600 RPM) for effective temperature control.

4.4. Hydraulic Bearing

Hydraulic Bearing

The Fan adopts hydraulic bearing technology. It makes minimal noise while generating maximum airflow while having a long lifespan

Image 4.4: A detailed view of the hydraulic bearing technology used in the fan, which contributes to minimal noise generation and a long operational lifespan.

5. COMPATIBILITY

The GAMDIAS Boreas E1L 010 CPU AIR Cooler is compatible with the following Intel CPU sockets:

- LGA 1200
- LGA 115X (1150, 1151, 1155, 1156)
- LGA 1700

6. INSTALLATION GUIDE

6.1. Preparing Your System

1. Power off your computer and disconnect the power cable from the wall outlet.
2. Open your computer case to access the motherboard and CPU area.
3. If replacing an existing cooler, carefully remove it and clean any old thermal paste from the CPU surface using isopropyl alcohol and a lint-free cloth.

6.2. Installing the Boreas E1L 010

Image 6.1: Visual guide for the straightforward installation process, illustrating the mounting pins for Intel LGA 1200/115X/1700 sockets.

1. Ensure the thermal paste is applied to the CPU. If not pre-applied, apply a small pea-sized amount to the center of the CPU's integrated heat spreader (IHS).

2. Align the cooler's mounting pins with the corresponding holes on the motherboard around the CPU socket.

3. Gently press down on each corner of the cooler until the push-pins click into place, securing the cooler to the motherboard. Ensure all four pins are firmly seated.

4. Connect the 4-pin PWM fan cable from the cooler to the 'CPU_FAN' header on your motherboard.

5. If you wish to utilize the ARGB lighting, connect the ARGB cable from the cooler to a compatible 3-pin 5V ARGB header on your motherboard. Refer to your motherboard manual for header locations.

6. Close your computer case and reconnect the power cable.

7. OPERATION

Once installed, the GAMDIAS Boreas E1L 010 operates automatically:

- **Fan Control:** The PWM fan speed is automatically regulated by your motherboard based on CPU temperature, ensuring optimal cooling performance and noise levels. You can typically adjust fan curves in your motherboard's BIOS/UEFI settings.
- **ARGB Lighting:** If connected to an ARGB header, the lighting can be controlled and synchronized using your motherboard's dedicated RGB software (e.g., ASUS Aura Sync, MSI Mystic Light Sync, ASRock Polychrome Sync).

8. MAINTENANCE

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

- **Dust Removal:** Periodically (e.g., every 3-6 months), power off your computer and use compressed air to gently blow dust out of the heatsink fins and fan blades. Hold the fan blades to prevent them from spinning excessively during cleaning.
- **Thermal Paste:** The thermal paste typically lasts for several years. If you notice a significant increase in CPU temperatures, consider reapplying fresh thermal paste after carefully cleaning the old paste from the CPU and cooler base.

9. TROUBLESHOOTING

If you encounter issues with your GAMDIAS Boreas E1L 010 CPU AIR Cooler, refer to the following:

- **Fan Not Spinning:**
  - Ensure the 4-pin PWM fan cable is securely connected to the 'CPU_FAN' header on the motherboard.
  - Check BIOS/UEFI settings to ensure the CPU fan header is enabled and configured correctly.

- **High CPU Temperatures:**
  - Verify that the cooler is securely mounted and making proper contact with the CPU. All four push-pins should be fully engaged.
  - Confirm that thermal paste was applied correctly and evenly.
  - Check for excessive dust buildup on the heatsink fins and fan.
  - Ensure adequate airflow within your computer case.

- **ARGB Lighting Not Working:**
  - Ensure the ARGB cable is correctly connected to a 3-pin 5V ARGB header on your motherboard (not a 4-pin 12V RGB header).
  - Verify that your motherboard's ARGB software is installed and configured correctly.
  - Check for any loose connections.
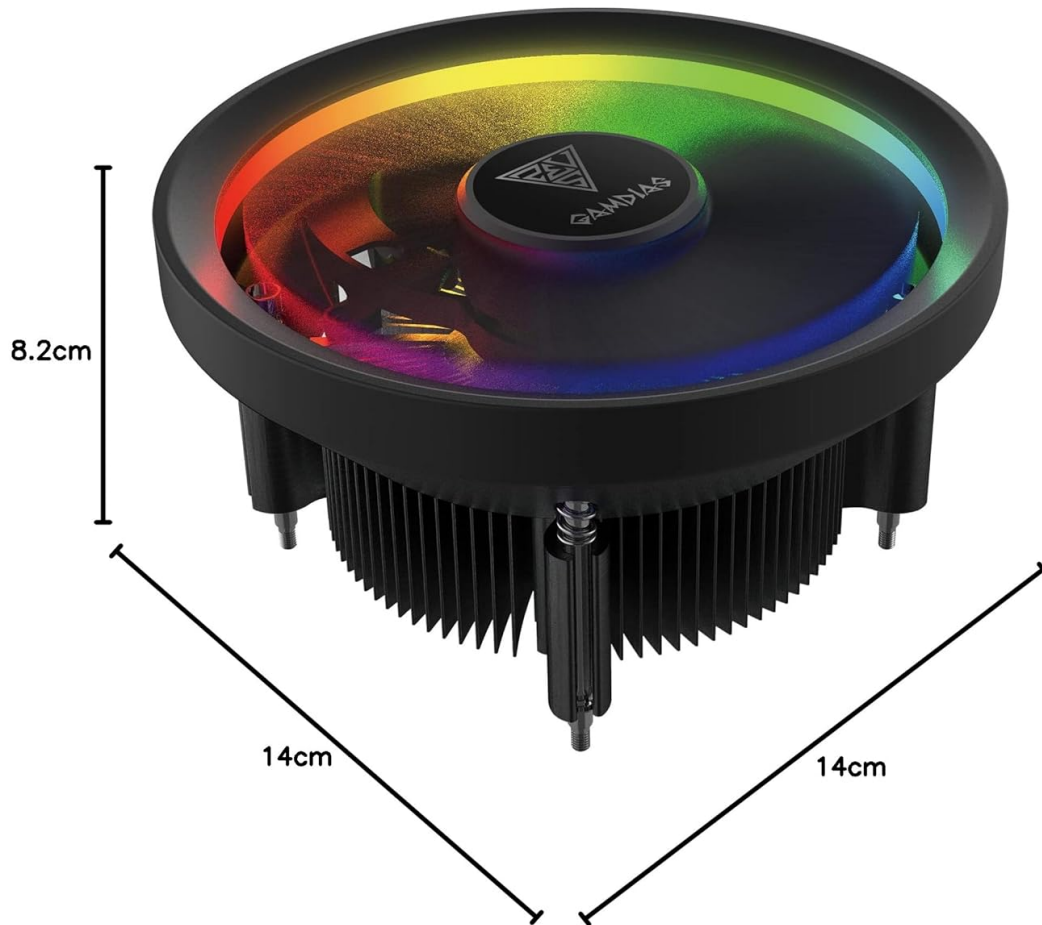
10. TECHNICAL SPECIFICATIONS

Image 10.1: The physical dimensions of the GAMDIAS Boreas E1L 010 CPU Cooler, measuring 14cm x 14cm x 8.2cm.

Specification	Value
Brand	GAMDIAS
Model Number	BOREAS E1L-010
Cooling Method	Fan
Compatible Devices	Desktop
Supported Sockets	Intel LGA 1200/115X/1700
Fan Type	Hydraulic Bearing PWM Fan
Airflow	74 CFM
Fan Speed	800-2600 RPM
Noise Level	10.3 dB (minimum)
Power Connector Type	4-Pin (PWM)
Voltage	12 Volts
Wattage	5 Watts

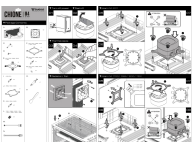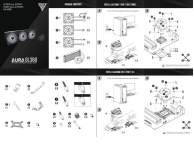| Specification	Value
Material	Aluminium
Product Dimensions (LxWxH)	14 x 14 x 8.2 cm
Item Weight	500 g

11. WARRANTY AND SUPPORT

The GAMDIAS Boreas E1L 010 CPU AIR Cooler comes with a **1 Year Warranty** from the date of purchase. Please retain your proof of purchase for warranty claims.

For technical support or warranty inquiries, please contact GAMDIAS customer service or the authorized distributor in your region. Manufacturer information:

Manufacturer: Gamdias Technology co.ltd, GAMDIAS TECHNOLOGY CO., LTD. No.113, Jian 2nd Rd., Jhonghe Dist., New Taipei City 23585, Taiwan (R.O.C.)

Importer (India): Allway Distributions Pvt Ltd No. 49, 1st Floor, HB Samaja Rd, Basavanagudi, Bengaluru, Karnataka 560004

Related Documents - BOREAS E1L-010

[GAMDIAS BOREAS E1L-010 Low Profile Gaming CPU Air Cooler Installation Guide](#)
Step-by-step installation guide for the GAMDIAS BOREAS E1L-010 low-profile gaming CPU air cooler, covering Intel socket compatibility and RGB lighting setup.

[GAMDIAS CHIONE M4 All-In-One Gaming CPU Liquid Cooler Installation Guide](#)
A comprehensive guide for installing the GAMDIAS CHIONE M4 All-In-One Gaming CPU Liquid Cooler, covering package contents, thermal paste application, radiator and fan mounting, and Intel/AMD socket compatibility.

[GAMDIAS AURA GL Digital 240/360 All-In-One Gaming CPU Liquid Cooler Installation Guide](#)
Detailed installation guide for the GAMDIAS AURA GL Digital 240/360 All-In-One Gaming CPU Liquid Cooler. Includes package contents, mounting instructions for Intel and AMD sockets, and connection details for optimal PC cooling.

[Gamdias Aura GL360 All-In-One Gaming CPU Liquid Cooler Installation Guide](#)
Comprehensive installation guide for the Gamdias Aura GL360 All-In-One Gaming CPU Liquid Cooler, detailing package contents, compatibility, and step-by-step setup for PC builders.

	[GAMDIAS AURA GL LITE 240/360 CPU Liquid Cooler Installation Guide](#) Comprehensive installation guide for the GAMDIAS AURA GL LITE 240mm and 360mm All-In-One Gaming CPU Liquid Cooling systems. Includes package contents, step-by-step instructions for Intel and AMD sockets, and connection details.
	[GAMDIAS BOREAS E1 CPU Air Cooler Installation Guide](#) A step-by-step installation guide for the GAMDIAS BOREAS E1 CPU Air Cooler, covering package contents and installation procedures for Intel and AMD motherboards.

Documents - GAMDIAS – BOREAS E1L-010

[GAMDIAS BOREAS E1L-010 Low Profile Gaming CPU Air Cooler Installation Guide](#)
Step-by-step installation guide for the GAMDIAS BOREAS E1L-010 low-profile gaming CPU air cooler, covering Intel socket compatibility and RGB lighting setup.
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