ID-COOLING FROZN A410 ARGB

ID-COOLING FROZN A410 ARGB CPU Air Cooler Instruction Manual

Model: FROZN A410 ARGB
Brand: ID-COOLING

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your ID-COOLING FROZN A410 ARGB CPU Air Cooler. This high-performance air cooler is designed to ensure excellent heat dissipation for your CPU, featuring 4 heat pipes, a 120mm FDB fan, and vibrant ARGB lighting. It is compatible with a wide range of Intel and AMD sockets, including LGA1700/1851/1200/115X and AM4/AM5.

2. PACKAGE CONTENTS

Please verify that all components are present in the package:

- Heatsink
- Cooling Fan
- Mounting Hardware (for Intel and AMD sockets)
- Thermal Paste

Image: All components included in the ID-COOLING FROZN A410 ARGB CPU Cooler package, laid out for inspection. This includes the heatsink, fan, various mounting brackets and screws for Intel and AMD platforms, and a tube of thermal paste.

3. SPECIFICATIONS

Product Dimensions	5.98"L x 2.95"W x 5.98"H (152mm Height)
Brand	ID-COOLING
Power Connector Type	4-Pin (PWM)
Voltage	12 Volts (DC)
Wattage	1.32 watts
Cooling Method	Air
Compatible Devices	Desktop CPUs (Intel LGA1700/1851/1200/1150/1151/1155/1156 & AMD AM4/AM5)
Noise Level	29.9 dB(A) Max.
Material	Aluminum, Copper
Maximum Rotational Speed	2000 RPM
Air Flow Capacity	78 CFM
Heat Pipes	4 x Φ6mm Copper Heat Pipes
TDP	220W

4. INSTALLATION GUIDE

Follow these steps to properly install your ID-COOLING FROZN A410 ARGB CPU Air Cooler. Ensure your system is powered off and unplugged before beginning installation.

4.1. General Preparation

- Unpack all components and verify against the package contents list.
- Ensure your motherboard is compatible with the cooler's mounting system.
- Clean the CPU surface thoroughly with isopropyl alcohol to remove any old thermal paste or residue.

Image: The ID-COOLING FROZN A410 ARGB CPU Cooler showcasing its ARGB lighting and compact design within a computer case. This image provides a visual reference for the cooler's appearance once installed.

4.2. Intel Socket Installation (LGA1700/1851/1200/115X)

1. **Prepare the Backplate:** Adjust the screws on the Intel backplate to the correct positions for your specific socket (LGA1700/1851 or LGA1200/115X). Insert the backplate through the back of the

motherboard.

2. **Install Stud Bolts:** Thread the stud bolts into the backplate from the front side of the motherboard.

3. **Attach Intel Brackets:** Place the Intel mounting brackets over the stud bolts and secure them with the tightening nuts.

4. **Apply Thermal Paste:** Apply a small amount of thermal paste to the center of the CPU's Integrated Heat Spreader (IHS).

5. **Mount the Heatsink:** Remove the protective sticker from the bottom of the heatsink. Carefully place the heatsink onto the CPU, aligning it with the mounting brackets. Secure the heatsink by tightening the screws on the mounting brackets in an X-pattern until snug.

4.3. AMD Socket Installation (AM4/AM5)

1. **Remove Stock Brackets:** Remove the original AMD plastic retention frame from the motherboard, but keep the motherboard's stock backplate.

2. **Install Stud Bolts:** Thread the stud bolts into the stock backplate from the front side of the motherboard.

3. **Attach AMD Brackets:** Place the AMD mounting brackets over the stud bolts and secure them with the tightening nuts.

4. **Apply Thermal Paste:** Apply a small amount of thermal paste to the center of the CPU's Integrated Heat Spreader (IHS).

5. **Mount the Heatsink:** Remove the protective sticker from the bottom of the heatsink. Carefully place the heatsink onto the CPU, aligning it with the mounting brackets. Secure the heatsink by tightening the screws on the mounting brackets in an X-pattern until snug.

4.4. Fan Installation

1. **Attach Fan to Heatsink:** Use the provided fan clips to secure the 120mm FDB fan to the heatsink.

2. **Connect Fan Power:** Connect the fan's 4-pin PWM cable to the "CPU_FAN" header on your motherboard.

3. **Connect ARGB Lighting:** Connect the fan's 3-pin ARGB cable to a compatible +5V ARGB header on your motherboard for customizable lighting effects. If your motherboard lacks an ARGB header, the fan will display a default rainbow lighting effect.

Your browser does not support the video tag.

Video: Installation guide for FROZN Single Tower Series CPU coolers, demonstrating the step-by-step process for mounting the heatsink and fan onto a motherboard for both Intel and AMD platforms. This video provides a visual aid for the installation instructions.

5. OPERATING INSTRUCTIONS

5.1. Fan Speed Control (PWM)

The 120mm FDB fan supports Pulse Width Modulation (PWM), allowing your motherboard to automatically control the fan speed based on CPU temperature. This ensures optimal cooling performance while minimizing noise levels. You can typically adjust fan curves in your motherboard's BIOS/UEFI settings or through manufacturer-provided software.

5.2. ARGB Lighting Control

The ARGB lighting on the top cover and fan provides vibrant lighting effects. If connected to a compatible +5V ARGB header on your motherboard, you can synchronize and customize the lighting using your motherboard's RGB software (e.g., ASUS Aura Sync, MSI Mystic Light Sync, Gigabyte RGB Fusion,

ASRock Polychrome Sync). If no ARGB header is available, the cooler will display a default rainbow lighting effect.
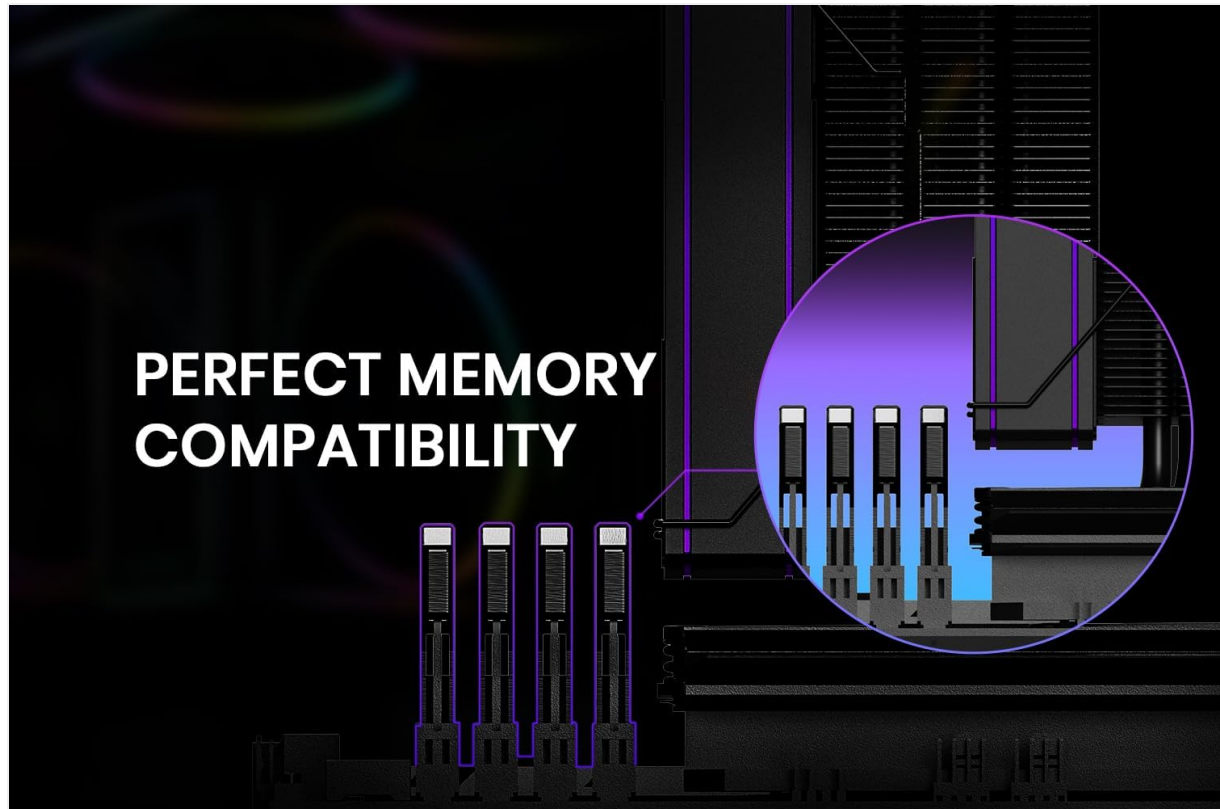

Image: Detailed specifications of the 120mm FDB fan, highlighting its low-noise operation, maximum air flow of 78 CFM, and maximum noise level of 29.9 dB(A). This image provides key performance metrics for the fan.

6. MAINTENANCE

- **Dust Cleaning:** Periodically clean the heatsink fins and fan blades to prevent dust buildup, which can impede airflow and reduce cooling efficiency. Use compressed air or a soft brush.
- **Thermal Paste:** Reapply thermal paste if you remove the cooler from the CPU. Ensure the CPU surface and heatsink base are clean before applying new thermal paste.
- **Fan Inspection:** Check the fan for any unusual noises or wobbling. If the fan is damaged or excessively noisy, consider replacing it.

7. TROUBLESHOOTING

- **High CPU Temperatures:**
  - Ensure the heatsink is securely mounted and making proper contact with the CPU.
  - Verify that thermal paste was applied correctly and evenly.
  - Check for dust buildup on the heatsink and fan.
  - Confirm that the fan is spinning and connected to the correct motherboard header.
  - Adjust fan curves in BIOS/UEFI to ensure adequate cooling under load.

- **Fan Not Spinning:**
  - Check the 4-pin PWM cable connection to the "CPU_FAN" header.
  - Ensure the fan is not obstructed.
  - Test the fan on a different fan header if available.

- **ARGB Lighting Not Working/Incorrect:**

- Verify the 3-pin ARGB cable is correctly connected to a +5V ARGB header (not a +12V RGB header).
- Ensure your motherboard's RGB software is installed and configured correctly.
- If no ARGB header is available, the cooler will default to a rainbow effect.

8. WARRANTY AND SUPPORT

For warranty information, technical support, or further assistance, please refer to the official ID-COOLING website or contact their customer service. Keep your proof of purchase for warranty claims.