ID-COOLING FROZN A620

ID-COOLING FROZN A620 Black Dual-Tower Air CPU Cooler Instruction Manual

Brand: ID-COOLING | Model: FROZN A620

INTRODUCTION

The ID-COOLING FROZN A620 Black is a high-performance dual-tower air CPU cooler designed to provide efficient heat dissipation for your processor. Featuring six Φ6mm heatpipes and dual 120x120x25mm FDB fans, this cooler is compatible with a wide range of Intel and AMD sockets, ensuring stable and cool operation for your system.

Image: The ID-COOLING FROZN A620 Black dual-tower air CPU cooler, showcasing its all-black design and dual fans.

Key Features

- **Efficient Heat Dissipation:** Dual-tower heatsink with two 120mm FDB fans ensures excellent heat removal from the CPU.

- **Aesthetic Design:** All-black cooler integrates seamlessly into various PC case designs.

- **Compact Height:** 153mm total height allows compatibility with most tower cases.

- **RAM Compatibility:** Offers 36mm clearance for standard RAM and up to 63mm with a cut-out fin design.

- **Advanced Heat Pipes:** Six Φ6mm copper heat pipes efficiently transfer heat from the CPU to the heatsink.

- **PWM Functionality:** 120mm PWM fans provide automatic speed control for optimal cooling performance and low noise levels (Max. Air Flow: 78.25CFM; Noise Level: 29.85dB(A) Max.).

- **Fluid Dynamic Bearing (FDB) Fans:** Equipped with FDB fans for quieter operation, stable performance, longer lifespan, and reduced vibration.
- **Broad Compatibility:** Supports Intel LGA1700/1851/1200/1150/1151/1155/1156 and AMD AM4/AM5 sockets.

SETUP & INSTALLATION

This section provides detailed instructions for installing your ID-COOLING FROZN A620 Black CPU cooler. Please refer to the accompanying video for visual guidance.

Official Installation Video

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Video: Official installation guide for the ID-COOLING FROZN A620 Black CPU cooler, demonstrating steps for both Intel and AMD platforms.

Installation for Intel LGA1700/1851/1200/115X

1. **Prepare Backplate:** Adjust the screws on the Intel backplate to the appropriate position for your socket (LGA1700/1851/1200/115X). Install the backplate on the rear of the motherboard.

2. **Install Standoffs and Brackets:** Place the rubber spacers over the motherboard screw holes. Then, install the black LGA 1700 standoffs (or grey for LGA1200/115X) onto the backplate screws. Secure the Intel brackets with the tightening nuts.

3. **Apply Thermal Paste:** Clean the CPU surface thoroughly. Apply a small amount of thermal grease to the center of the CPU's integrated heat spreader (IHS).

4. **Mount Heatsink:** Remove the protective sticker from the heatsink's base. Carefully place the heatsink onto the CPU, aligning it with the mounting screws. Tighten the screws evenly in a cross pattern until secure.

5. **Attach Fans:** Use the provided fan clips to secure the two 120mm fans to the heatsink. Ensure the fans are oriented correctly for optimal airflow (typically pulling air through the heatsink towards the rear of the case).

6. **Connect Fan Cables:** Connect the fan power cables to the PWM fan splitter. Then, connect the splitter to the CPU_FAN header on your motherboard for PWM control.

Installation for AMD AM4/AM5

Note: The original backplate of your motherboard is required for AMD installations. Remove the plastic retention module from the motherboard, but keep the stock backplate.

1. **Prepare Motherboard:** Remove the plastic retention module from the motherboard, but ensure the stock backplate remains in place.

2. **Install Standoffs and Brackets:** Place the AMD red standoffs onto the backplate screws. Then, install the AMD brackets and secure them with the tightening screws.

3. **Apply Thermal Paste:** Clean the CPU surface thoroughly. Apply a small amount of thermal grease to the center of the CPU's integrated heat spreader (IHS).

4. **Mount Heatsink:** Remove the protective sticker from the heatsink's base. Carefully place the heatsink

onto the CPU, aligning it with the mounting screws. Tighten the screws evenly in a cross pattern until secure.

5. **Attach Fans:** Use the provided fan clips to secure the two 120mm fans to the heatsink. Ensure the fans are oriented correctly for optimal airflow.

6. **Connect Fan Cables:** Connect the fan power cables to the PWM fan splitter. Then, connect the splitter to the CPU_FAN header on your motherboard for PWM control.

RAM Clearance and Dimensions

The FROZN A620 is designed with consideration for RAM compatibility. It provides 36mm clearance for standard RAM modules. With its cut-out fin design, it can accommodate RAM modules up to 63mm in height. The overall height of the cooler is 153mm, making it suitable for most PC cases.
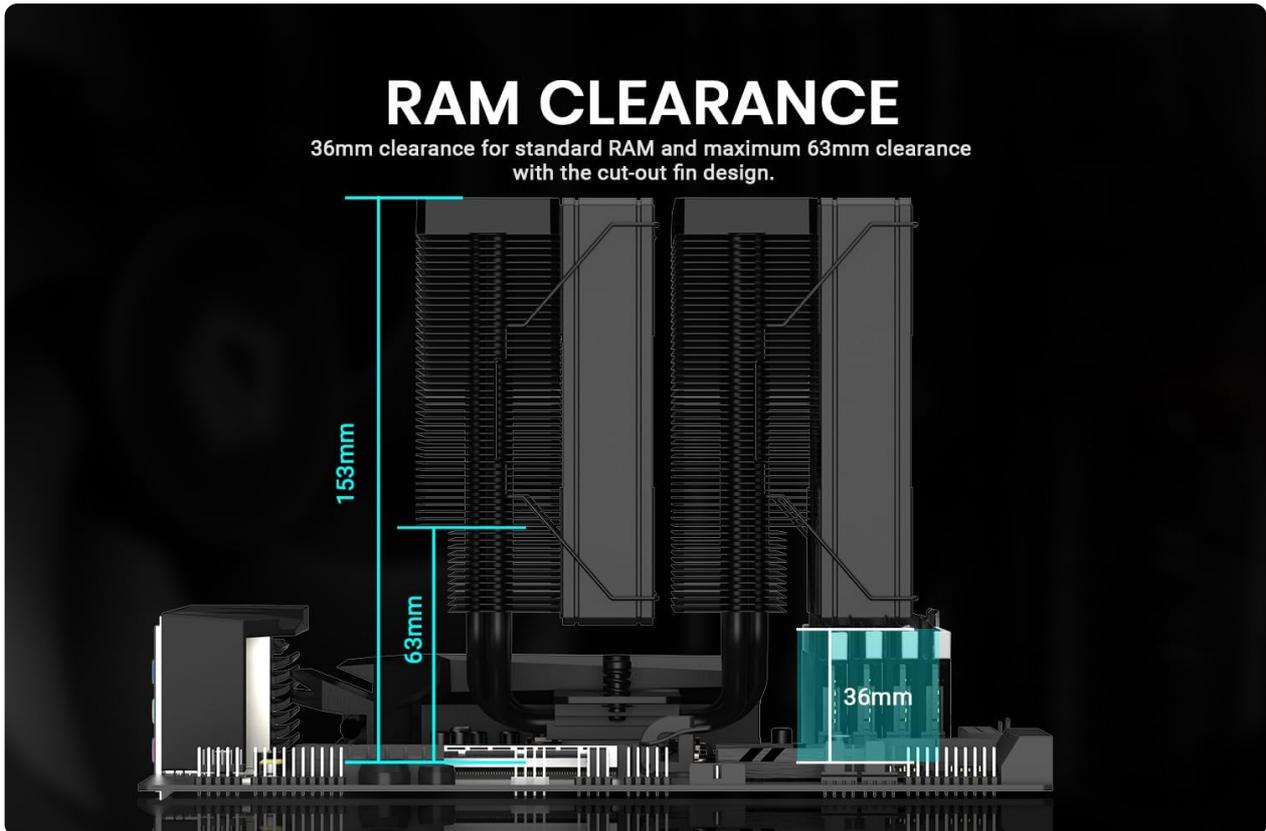

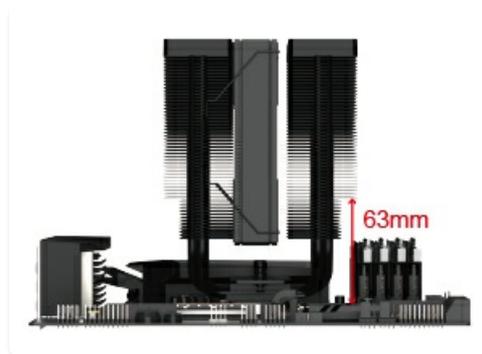*Image: Diagram illustrating 36mm RAM clearance and 153mm cooler height.*

Image: Diagram showing maximum 63mm RAM height compatibility with the cooler's cut-out fin design.

OPERATING INSTRUCTIONS

The ID-COOLING FROZN A620 Black CPU cooler operates automatically via its PWM (Pulse Width Modulation) fans. Connect the fan splitter to your motherboard's CPU_FAN header to enable this functionality. The motherboard will then control the fan speed based on CPU temperature, optimizing for both cooling performance and noise levels.

The Fluid Dynamic Bearing (FDB) fans are designed for quiet operation and stable performance. Under typical loads, the noise level is rated at 29.85dB(A) maximum, ensuring a quiet computing experience.
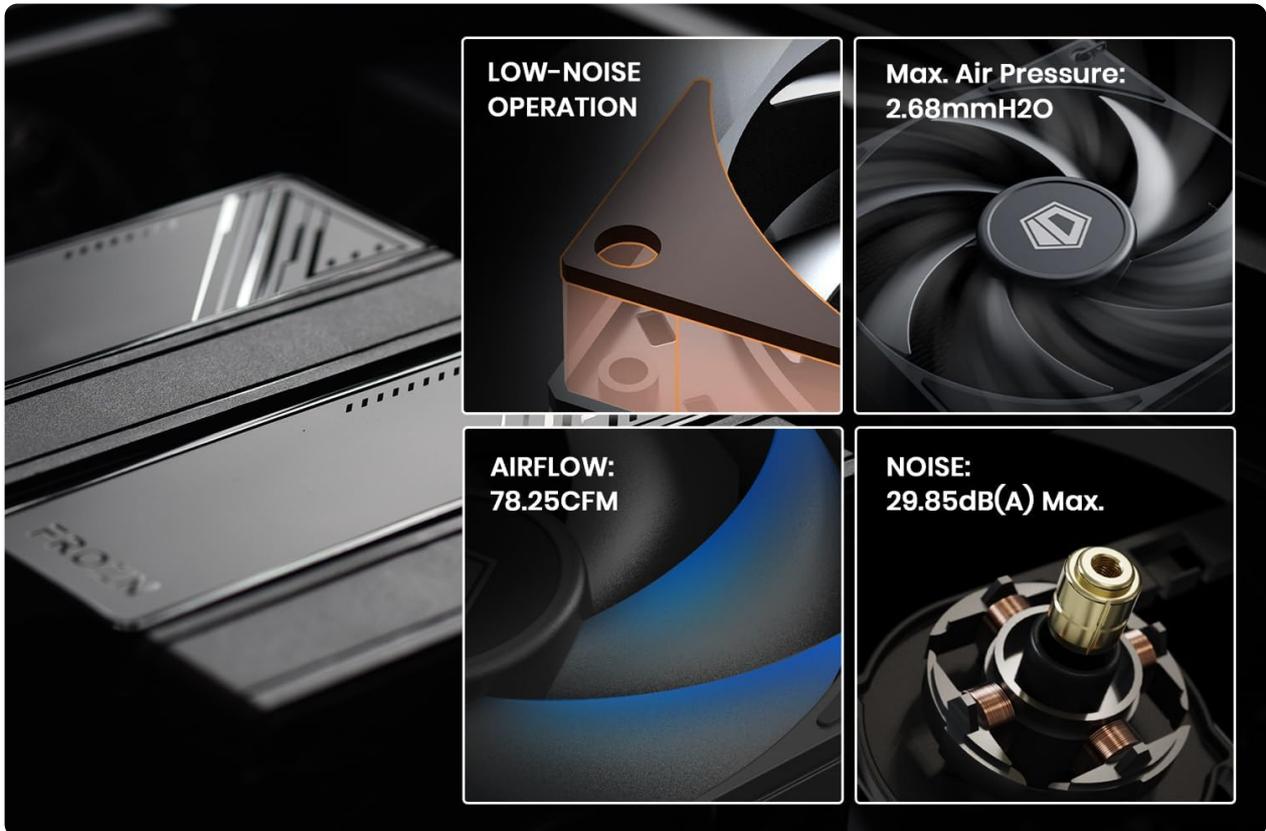

Image: Visual representation of fan performance metrics, including airflow (78.25 CFM) and maximum noise level (29.85 dB(A)).

MAINTENANCE

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

- **Dust Cleaning:** Periodically inspect the heatsink fins and fan blades for dust accumulation. Use compressed air or a soft brush to gently remove dust. Excessive dust can impede airflow and reduce cooling efficiency.

- **Thermal Paste:** The thermal paste applied during installation typically lasts for several years. If you notice a significant increase in CPU temperatures or if you remove the cooler for any reason, it is recommended to clean off the old thermal paste from both the CPU and the heatsink base and apply a fresh layer.

- **Fan Inspection:** Check fan cables for secure connections and ensure fans spin freely without obstruction.

TROUBLESHOOTING

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

- **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 that both fans are spinning and connected to the CPU_FAN header.
  - Clean any dust accumulation from the heatsink fins and fans.
  - Confirm adequate airflow within your PC case.

- **Excessive Fan Noise:**

  - Ensure fan cables are not obstructing fan blades.
  - Check for dust buildup on fan blades.
  - Verify fan settings in your motherboard's BIOS/UEFI or operating system software.

- **Installation Difficulties:**

  - Double-check that you are using the correct mounting hardware for your CPU socket (Intel or AMD).
  - Refer to the official installation video and step-by-step instructions carefully.
  - Ensure the motherboard's stock backplate is used for AMD installations.

SPECIFICATIONS

Feature	Specification
Product Dimensions	4.72"L x 0.98"W x 6.02"H (Cooler dimensions are 120mm x 25mm x 153mm)
Brand	ID-COOLING
Power Connector Type	4-Pin (PWM)
Voltage	12 Volts
Wattage (TDP)	270 watts
Cooling Method	Air
Compatible Devices	Desktop CPUs (Intel LGA1700/1851/1200/115X; AMD AM4/AM5)
Noise Level	29.85 Decibels (Max)
Maximum Rotational Speed	1800 RPM
Air Flow Capacity	78.25 Cubic Feet Per Minute (Max)

Feature	Specification
Item Weight	3.41 pounds
Heatpipes	6 x Φ6mm copper heatpipes
Fan Type	Fluid Dynamic Bearing (FDB)

WARRANTY & SUPPORT

For warranty information, technical support, or service inquiries regarding your ID-COOLING FROZN A620 Black CPU Cooler, please refer to the official ID-COOLING website or contact their customer support directly. Details regarding product registration and specific warranty terms can typically be found on the manufacturer's official channels.

Additional protection plans may be available for purchase from authorized retailers.