ID-COOLING FROSTFLOW X 240

ID-COOLING FROSTFLOW X 240 CPU Water Cooler Instruction Manual

Model: FROSTFLOW X 240

Brand: ID-COOLING

1. Product Overview

The ID-COOLING FROSTFLOW X 240 is an All-In-One (AIO) liquid CPU cooler designed for efficient thermal management of your processor. It features a 240mm radiator paired with two 120mm PWM fans for optimal heat dissipation. The pump head includes white LED lighting for aesthetic integration into your PC build. This cooler is compatible with a wide range of Intel and AMD sockets, including Intel LGA1700/1200/1151/1150/1155/1156 and AMD AM5/AM4.

Image: ID-COOLING FROSTFLOW X 240 CPU Water Cooler installed in a PC case.

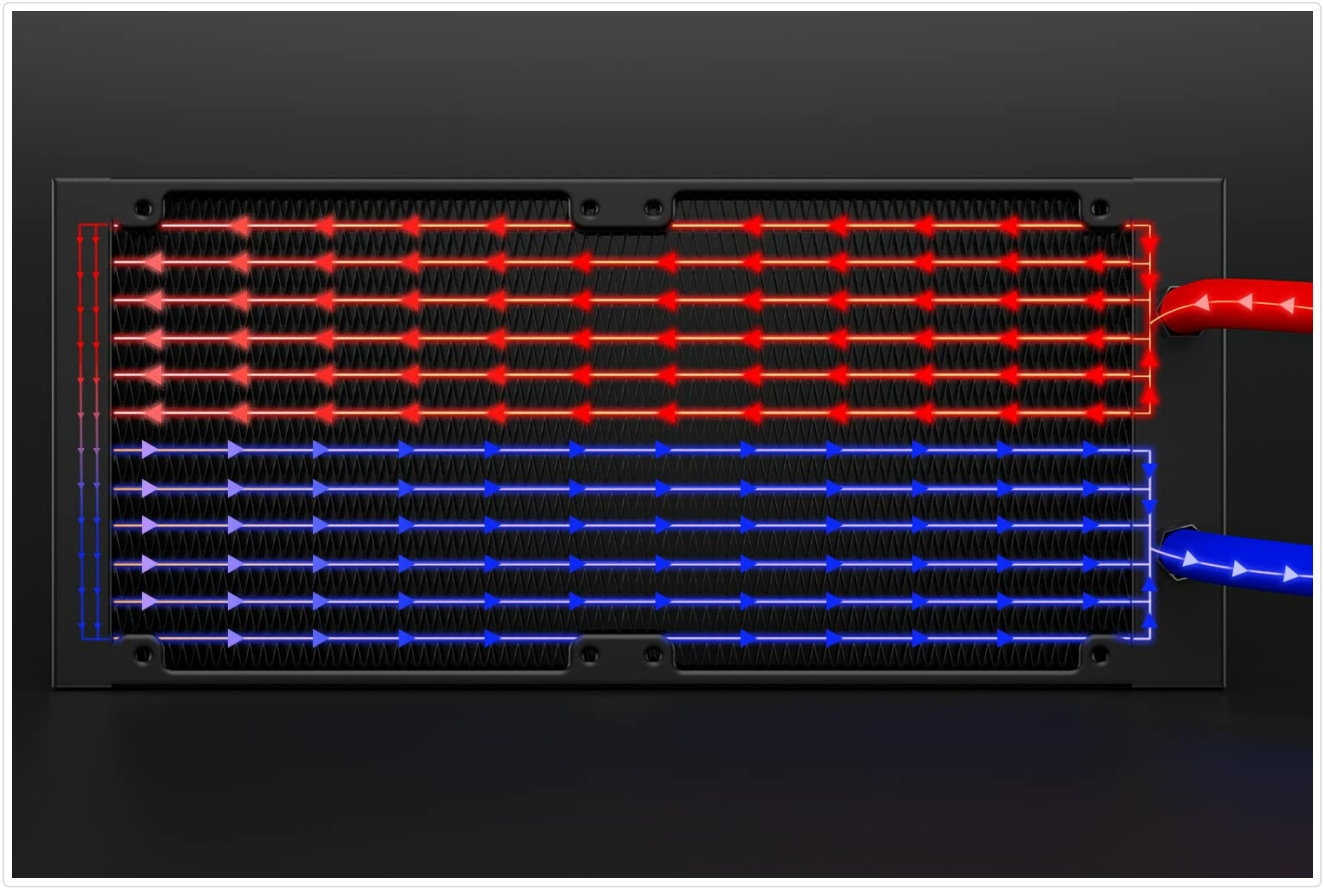

Image: Radiator heat dissipation diagram.

Image: 120mm PWM fans designed for low-noise operation.

2. What's in the Box

Verify that all components are present before beginning installation:

- Radiator with integrated pump and tubing
- Two 120mm PWM cooling fans
- Mounting hardware for Intel and AMD sockets (backplates, standoffs, brackets, screws)
- Thermal paste

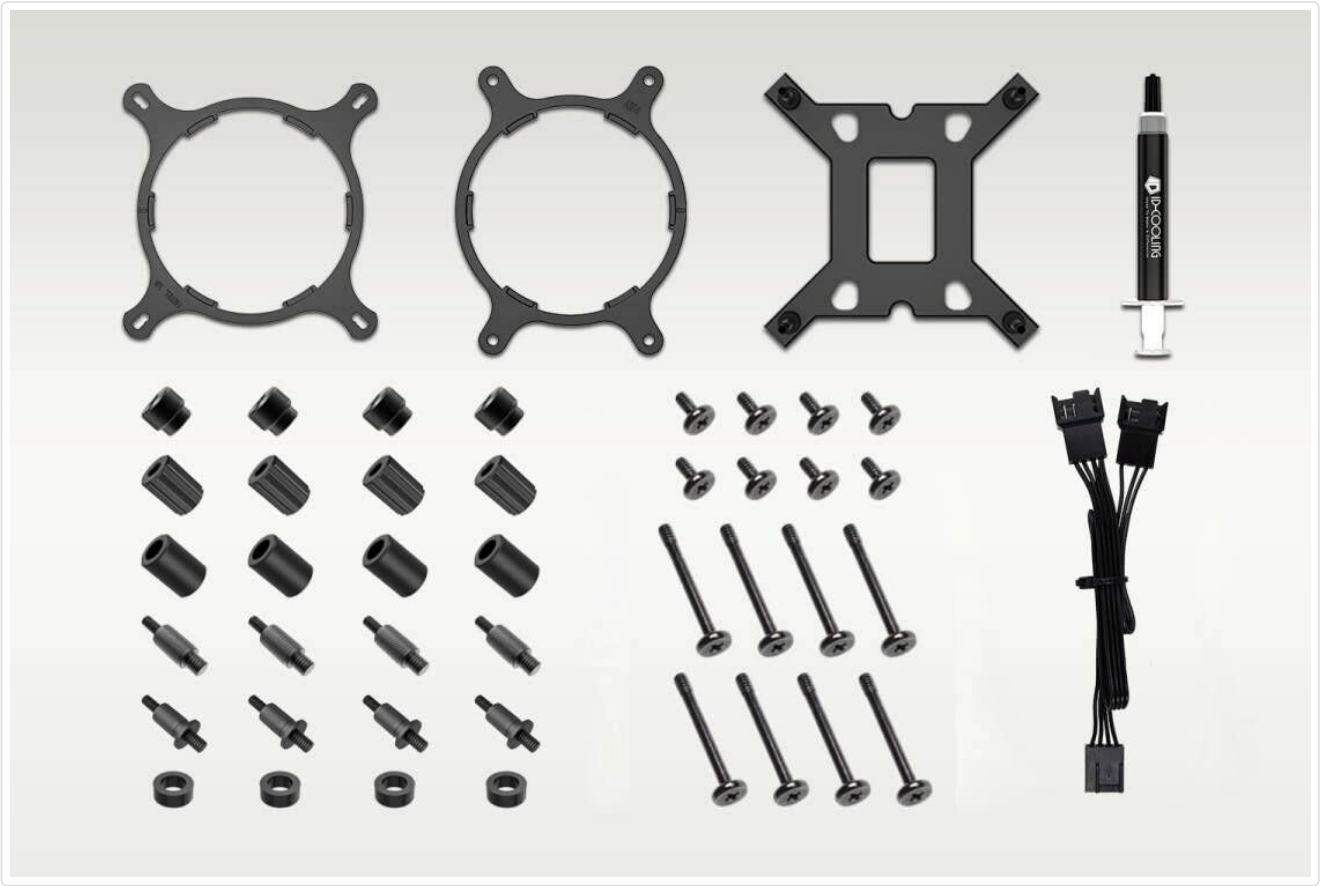

Image: Included mounting hardware and accessories.

3. Setup and Installation

Before installation, ensure your system is powered off and unplugged. Take precautions against static electricity. Refer to the official installation video for a visual guide.

Video: Official ID-COOLING installation guide for universal AIO coolers, including FROSTFLOW models. This video demonstrates the steps for both Intel and AMD platforms.

3.1. Intel Installation (LGA1700/1200/115X)

1. **Install the Intel Backplate:** Place the included Intel backplate behind the motherboard, aligning the screw holes with the CPU socket. Ensure the correct orientation for your socket type (LGA1700 or LGA1200/115X).

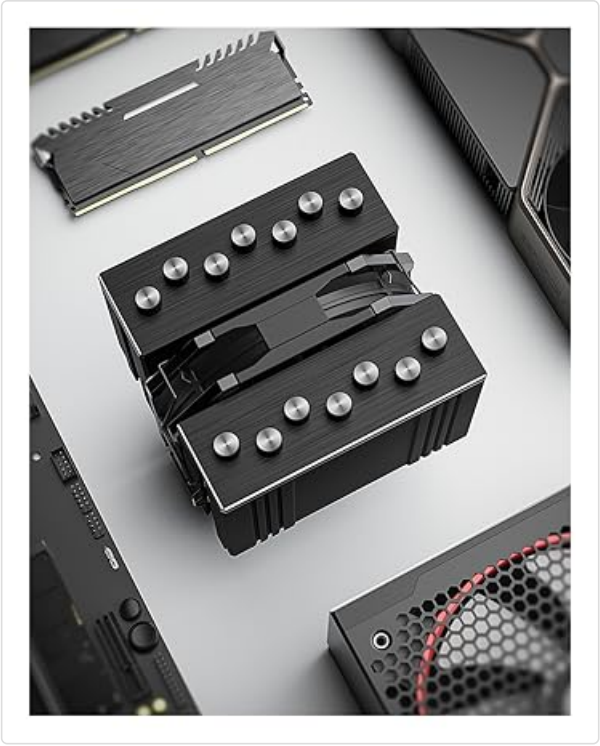

Image: Intel backplate installation.

2. **Secure Standoffs and Brackets:** From the front of the motherboard, screw in the appropriate Intel standoffs through the mounting holes. Place the Intel mounting brackets over the standoffs and secure them with the provided thumbscrews until firm. Use the correct socket column for LGA1200/115X or LGA1700.

Image: Intel socket column types.

3. **Apply Thermal Paste:** Apply a small, pea-sized amount of the included thermal paste to the center of your CPU's Integrated Heat Spreader (IHS). Do not spread it manually; the pressure from the pump head will distribute it evenly.

Image: Thermal paste application.

4. **Prepare Pump Head:** Remove the protective sticker from the copper base of the pump head. Attach the Intel mounting bracket to the pump head by sliding it into the designated slots until it clicks securely into place.
5. **Mount Pump Head:** Carefully place the pump head onto the CPU, aligning the holes in the bracket with the standoffs. Secure the pump head by tightening the four screws in a diagonal pattern until snug. Do not overtighten.
6. **Install Radiator and Fans:** Mount the radiator to an available fan mount in your PC case (e.g., top, front, or rear). Attach the two 120mm PWM fans to the radiator using the provided screws, ensuring proper airflow direction (typically blowing air through the radiator and out of the case).
7. **Connect Cables:** Connect the pump power cable to the AIO_PUMP or CPU_OPT header on your motherboard. Connect the fan cables to the CPU_FAN header or other available fan headers, ensuring they are configured for PWM control in your motherboard's BIOS/UEFI.

3.2. AMD Installation (AM5/AM4)

1. **Remove Stock Retention Module:** Unscrew and remove the plastic retention module from your motherboard, but **keep the stock AMD backplate** as it is required for installation.
2. **Install AMD Standoffs and Brackets:** Screw the appropriate AMD standoffs into the stock AMD backplate from the front of the motherboard. Place the AMD mounting brackets over the standoffs and secure them with the provided screws until firm.
3. **Apply Thermal Paste:** Apply a small, pea-sized amount of the included thermal paste to the center of your CPU's Integrated Heat Spreader (IHS). Do not spread it manually; the pressure from the pump head will distribute it evenly.
4. **Prepare Pump Head:** Remove the protective sticker from the copper base of the pump head. Attach the AMD mounting bracket to the pump head by sliding it into the designated slots until it clicks securely into place.
5. **Mount Pump Head:** Carefully place the pump head onto the CPU, aligning the holes in the bracket with the standoffs. Secure the pump head by tightening the four screws in a diagonal pattern until snug. Do not overtighten.
6. **Install Radiator and Fans:** Mount the radiator to an available fan mount in your PC case (e.g., top, front, or rear). Attach the two 120mm PWM fans to the radiator using the provided screws, ensuring proper airflow

direction (typically blowing air through the radiator and out of the case).

7. **Connect Cables:** Connect the pump power cable to the AIO_PUMP or CPU_OPT header on your motherboard. Connect the fan cables to the CPU_FAN header or other available fan headers, ensuring they are configured for PWM control in your motherboard's BIOS/UEFI.

4. Operating Instructions

Once installed and powered on, the FROSTFLOW X 240 will automatically begin cooling your CPU. The 120mm PWM fans will adjust their speed based on CPU temperature, providing efficient cooling while minimizing noise. The pump head features a static white LED light that illuminates when the system is powered on.

4.1. Fan Control

The included PWM fans are designed to be controlled by your motherboard's fan headers. You can typically adjust fan curves and speeds through your motherboard's BIOS/UEFI settings or through compatible software provided by your motherboard manufacturer. Ensure the fan headers are set to PWM mode for optimal control.

4.2. LED Lighting

The pump head features a white LED light. This lighting is static and does not offer customizable RGB options. It will illuminate automatically when the cooler receives power.

5. Maintenance

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

- **Dust Cleaning:** Periodically clean the radiator fins and fan blades using compressed air. Dust buildup can impede airflow and reduce cooling efficiency. Ensure the system is powered off before cleaning.
- **Inspect Tubing and Connections:** Occasionally check the tubing and connections for any signs of leaks or damage. While AIO coolers are sealed, visual inspection is a good practice.
- **Thermal Paste:** The thermal paste applied during installation typically lasts for several years. If you notice a significant increase in CPU temperatures over time, reapplying fresh thermal paste may be beneficial.
- **No User-Serviceable Parts:** The liquid loop of the AIO cooler is factory-sealed and does not require refilling or other user maintenance. Attempting to open the loop will void the warranty and may damage the unit.

6. Troubleshooting

If you encounter issues with your FROSTFLOW X 240, consider the following common troubleshooting steps:

- **High CPU Temperatures:**
  - Ensure fans are spinning and oriented correctly for airflow.
  - Verify the pump is running (you might feel a slight vibration or hear a faint hum).
  - Check that the pump head is securely mounted to the CPU and thermal paste is properly applied.
  - Clean any dust buildup on the radiator fins.
- **Fans Not Spinning:**
  - Check fan cable connections to the motherboard.
  - Verify fan settings in BIOS/UEFI are not set to 0 RPM or a very low threshold.
- **Pump Not Running/Making Noise:**

- Ensure the pump power cable is securely connected to the correct header (AIO_PUMP or CPU_OPT).
- Check BIOS/UEFI settings to ensure the pump header is enabled and receiving power.
- Some gurgling noise immediately after startup is normal as air settles, but persistent loud noise may indicate an issue.

- **White LED Not Illuminating:**
  - Verify all power connections to the pump are secure.

7. Specifications

Feature	Specification
Product Dimensions	4.72"L x 0.98"W x 4.72"H
Brand	ID-COOLING
Power Connector Type	2-Pin
Voltage	12 Volts
Wattage	4.8 watts
Cooling Method	Water
Compatible Devices	Desktop
Noise Level	30 Decibels
Material	Polycarbonate
Maximum Rotational Speed	2500 RPM
Item Weight	4.05 pounds
Date First Available	November 8, 2022

8. Warranty and Support

The ID-COOLING FROSTFLOW X 240 CPU Water Cooler comes with a manufacturer's warranty. For specific warranty terms and conditions, please refer to the documentation included with your product or visit the official ID-COOLING website.
For technical support, troubleshooting assistance, or warranty claims, please contact ID-COOLING customer service. You can find contact information on the official ID-COOLING website or through your retailer.
Visit the official ID-COOLING Store: ID-COOLING Store