**darkFlash DE360**

## darkFlash DE360 All-in-one Liquid CPU Cooler Instruction Manual

### INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your darkFlash DE360 All-in-one Liquid CPU Cooler. The DE360 features a 2.88-inch IPS LCD display, ARGB synchronization, and three PWM fans with a 360mm radiator, designed for efficient CPU cooling. Please read this manual thoroughly before installation and use to ensure proper functionality and longevity of the product.



Image: Overview of the darkFlash DE360 All-in-one Liquid CPU Cooler highlighting its unique shape, integrated LCD screen, AMD/Intel compatibility, ARGB Sync, high-performance water pump, and PWM smart fan control.

### WHAT'S IN THE BOX

Verify that all components are present before proceeding with installation.

- AIO Cooler 360mm (with pre-installed fans and pump)
- Installation Guide
- Intel Bracket
- AMD Bracket
- Backplate

- Mounting Screws
- Intel 17XX Standoffs
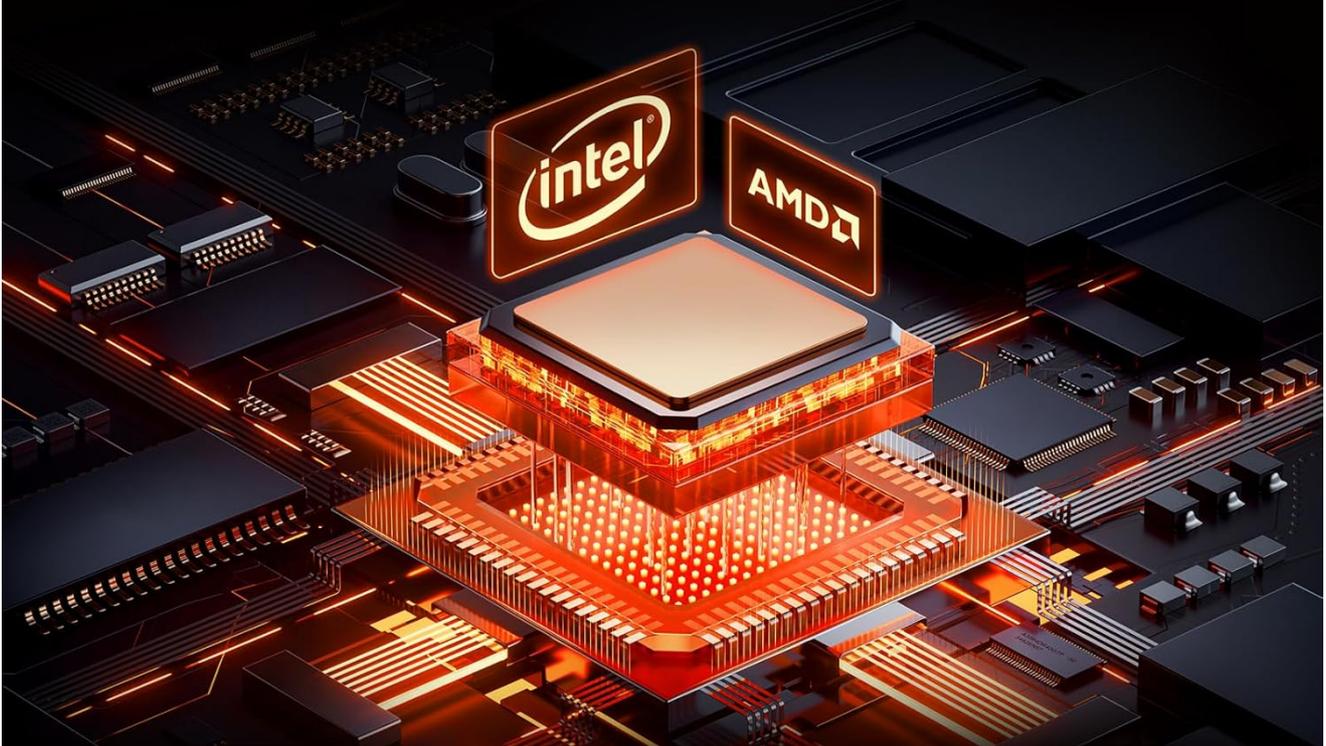- Intel 115X/1200 Standoffs
- AMD Standoffs
- Thermal Grease

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Video: Unboxing and initial component overview of the darkFlash DE360 AIO Liquid CPU Cooler, showing the contents of the package and the main cooler unit.

## SPECIFICATIONS

| | |
|---|---|
| **Brand** | darkFlash |
| **Model Number** | DE360 |
| **Cooling Method** | Liquid (Water) |
| **Radiator Size** | 360mm |
| **Fan Type** | PWM ARGB Fans |
| **Maximum Fan Speed** | 2000 RPM ±10% |
| **Fan Noise Level** | ≤36dBA |
| **Air Flow Capacity** | 64.05 CFM |
| **Pump Speed** | 2500 RPM ±10% |
| **LCD Display** | 2.88" IPS, 480x480 Resolution |
| **Compatibility** | Intel 1851/1700, AMD AM4/AM5 |
| **Material** | Aluminium (Radiator), Copper (Cold Plate), Glass |
| **Power Connector Type** | 5-Pin |
| **Item Weight** | 4.98 pounds |

# COMPATIBLE WITH INTEL & AMD

**Supported AMD Socket**
FM1/FM2/FM2+/AM2/AM2+/AM3/AM3+/ AM4+/AM5

**Supported AMD Socket**
LGA2011/2011-V3/2066/1366/115X/ 1700/1851

Image: Diagram illustrating compatibility with various Intel (LGA2011/2011-V3/2066/1366/115X/1700/1851) and AMD (FM1/FM2/FM2+/AM2/AM2+/AM3/AM3+/AM4/AM5) sockets.

## SETUP AND INSTALLATION

Follow these steps for proper installation of your darkFlash DE360 liquid CPU cooler. Ensure your system is powered off and unplugged before beginning.

### 1. Prepare the CPU Block

1. Carefully remove the protective film from the copper cold plate of the CPU block.

2. Attach the appropriate mounting bracket (Intel or AMD) to the CPU block. Align the bracket with the arrows and rotate until it is parallel and securely locked.
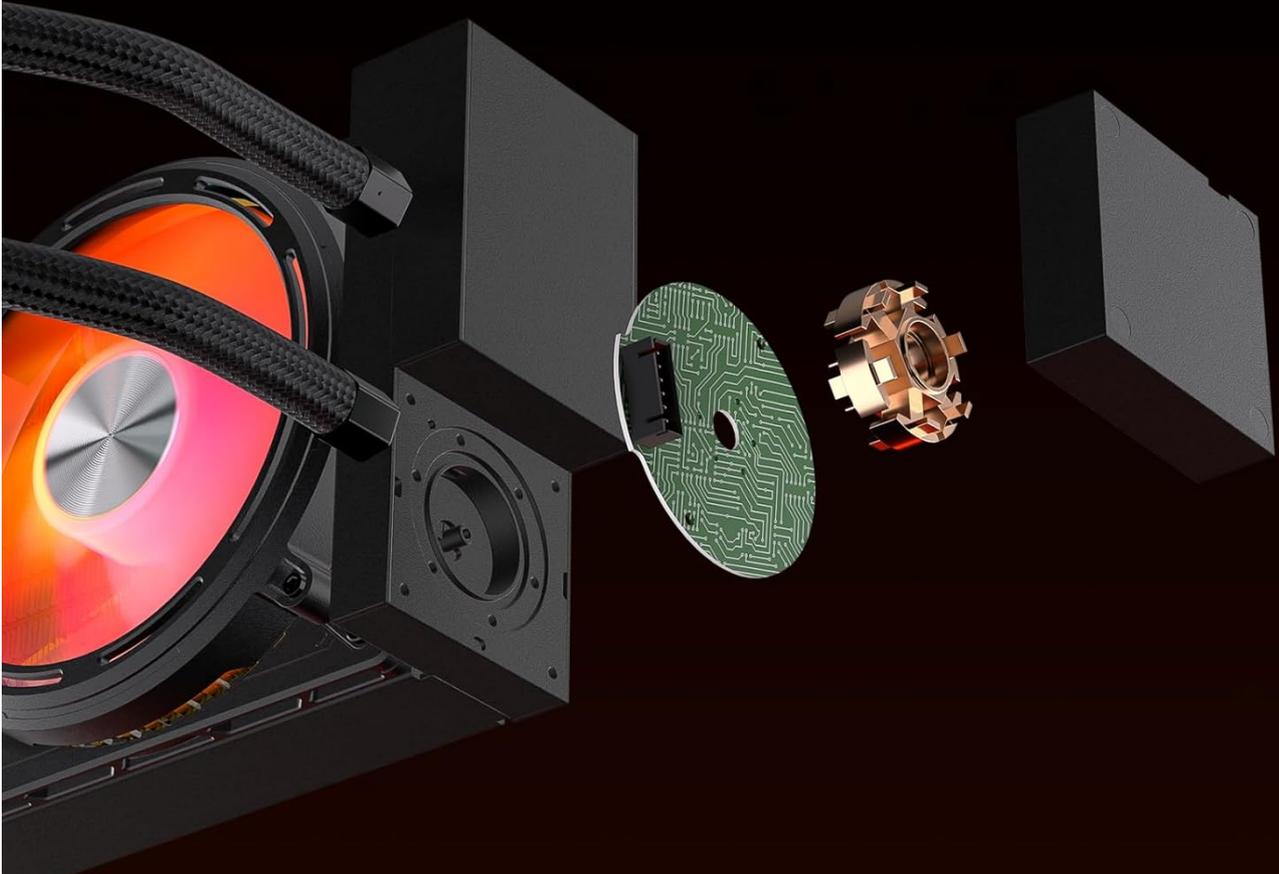
Image: Diagram showing the advanced pump design, which isolates the water pump from the cold head for improved heat dissipation and installation flexibility. The pump operates at 2500 RPM with noise levels below 29 dBA.

## 2. Install Radiator and Fans

1. Mount the 360mm radiator with its pre-installed fans to an available fan mounting location in your PC case (typically the top or front). Use the provided screws to secure it.

2. Ensure proper airflow direction for optimal cooling.

Image: Illustration of the high wind pressure thickened fans, detailing fan speed (≤2000 RPM), air capacity (≤55.22 CFM), fan pressure (≤2.16 MMH2O), and noise (≤36 dBA).

## 3. Mount the CPU Block

1. Apply a small amount of thermal grease to the center of your CPU's integrated heat spreader (IHS).

2. Place the backplate on the rear of your motherboard, aligning it with the CPU socket holes.

3. Insert the appropriate standoffs (Intel 17XX/115X/1200 or AMD) into the four mounting holes around the CPU socket.

4. Carefully place the CPU block onto the CPU, ensuring the mounting holes align with the standoffs.

5. Secure the CPU block with the provided mounting screws, tightening them in a diagonal pattern until snug. Do not overtighten.

Your browser does not support the video tag.

Video: Detailed installation guide for the darkFlash DE360 AIO Liquid CPU Cooler, demonstrating the steps for mounting the CPU block, radiator, and connecting cables.

## 4. Cable Connections

1. Connect the 3-pin pump connector to the CPU_FAN or AIO_PUMP header on your motherboard.

2. Connect the fan PWM cables to the CPU_FAN or other available fan headers on your motherboard.

3. Connect the ARGB cables to a compatible 5V 3-pin ARGB header on your motherboard for lighting synchronization.

4. Plug the USB 2.0 connector from the LCD screen into an available USB 2.0 header on your motherboard. This is essential for LCD display functionality and software control.



Image: Display of vibrant RGB lighting effects, highlighting compatibility with ASUS Aura Sync, MSI Mystic Light Sync, Gigabyte RGB Fusion, and ASRock Polychrome RGB for synchronized lighting.

## OPERATING INSTRUCTIONS

Once installed and connected, the darkFlash DE360 will begin cooling your CPU automatically. The fans will adjust speed based on CPU temperature via PWM control.

### LCD Screen Functionality

The 2.88-inch IPS LCD screen on the CPU block displays real-time system information such as CPU temperature,

frequency, and other customizable data. It can also display custom images or videos.



Image: The darkFlash DE360 AIO Liquid CPU Cooler installed in a PC, showcasing the 2.88-inch LCD screen displaying CPU temperature and other system metrics.

## Software Control and Customization

To fully utilize the LCD screen's customization features and monitor system performance, download the dedicated darkFlash control software from the official darkFlash website. The software allows you to:

- Monitor CPU and GPU temperatures, fan speeds, and other system parameters.
- Select from various pre-designed themes for the LCD display.
- Upload custom images or videos to be displayed on the LCD screen.
- Adjust display rotation (e.g., 90 degrees) for optimal viewing angles.

Image: Screenshot of the darkFlash intelligent control software, showing options for system monitoring, theme selection, and customization of the LCD display with dynamic styling and cloud themes.

## MAINTENANCE

Regular maintenance helps ensure optimal performance and extends the lifespan of your liquid CPU cooler.

- **Dust Cleaning:** Periodically clean dust from the radiator fins and fans using compressed air. Ensure the fans are not spinning during cleaning to prevent damage.

- **Tube Inspection:** Check the coolant tubes for any signs of kinks, leaks, or damage. Ensure they are not pressing against other components that could cause wear.

- **Pump Noise:** Listen for unusual noises from the pump. A consistent humming sound is normal, but grinding or gurgling may indicate an issue.

- **Thermal Paste:** While not frequently required for AIOs, if you ever remount the CPU block, clean off old thermal paste and apply new thermal paste for optimal heat transfer.

Image: Diagram illustrating the efficient heat dissipation features, including a 53mm high-density radiator and IIR+EPDM dual-material hoses designed for low resistance and resistance to aging and corrosion.

## Troubleshooting

If you encounter issues with your darkFlash DE360, refer to the following common problems and solutions:

- **High CPU Temperatures:**

  - Ensure the CPU block is securely mounted and making full contact with the CPU.
  - Verify that thermal paste was applied correctly.
  - Check if the pump is running (listen for a faint hum or check software monitoring).
  - Ensure radiator fans are spinning and oriented correctly for airflow.
  - Clean any dust buildup on the radiator fins.

- **Fans Not Spinning/RGB Not Working:**

  - Check all fan and ARGB cable connections to the motherboard.
  - Ensure the ARGB header on your motherboard is enabled in the BIOS/UEFI or motherboard software.

- Confirm that the power supply is providing adequate power.

- **LCD Screen Not Displaying:**

    - Verify the USB 2.0 cable from the LCD screen is securely connected to both the CPU block and the motherboard header.
    - Install the darkFlash control software and ensure it recognizes the device.
    - Check for any driver updates for the cooler on the darkFlash website.

- **Unusual Pump Noise:**

    - Ensure the pump is positioned lower than the highest point of the radiator to prevent air bubbles from accumulating in the pump.
    - If the noise persists, contact darkFlash support.

## WARRANTY AND SUPPORT

The darkFlash DE360 All-in-one Liquid CPU Cooler comes with a **3-year assurance**. For technical support, warranty claims, or further assistance, please visit the official darkFlash website or contact their customer service. Keep your proof of purchase for warranty validation.
Official darkFlash Website: www.darkflash.com