

NZXT RL-KR42E-W2

NZXT Kraken Elite 420 RGB AIO CPU Liquid Cooler - Instruction Manual

Model: RL-KR42E-W2 | Brand: NZXT

1. INTRODUCTION

The NZXT Kraken Elite 420 RGB AIO CPU Liquid Cooler (Model RL-KR42E-W2) is designed to provide efficient and quiet cooling for your CPU. It features a custom-designed NZXT Turbine pump for high flow rate and head pressure, ensuring optimal thermal performance. The cooler also includes a stunning 2.72-inch IPS LCD for extensive personalization and monitoring, along with F420 RGB Core Fans for vibrant lighting and effective airflow.



Figure 1.1: The NZXT Kraken Elite 420 RGB AIO CPU Liquid Cooler with its radiator, fans, and pump display.

2. SAFETY INFORMATION

- **Electrical Safety:** Ensure your power supply is disconnected before installation or maintenance.
- **Liquid Handling:** While the system is sealed, avoid puncturing or damaging the tubing. In case of a leak, disconnect power immediately and contact support.
- **Static Discharge:** Take precautions against electrostatic discharge (ESD) during installation to prevent damage to components.
- **Ventilation:** Ensure adequate airflow within your PC case for optimal cooling performance.
- **Children and Pets:** Keep packaging materials and small components away from children and pets.

3. PACKAGE CONTENTS

Verify that all components are present before beginning installation:

- NZXT Kraken Elite 420 RGB AIO Liquid Cooler (420mm Radiator with integrated pump/block)
- F420 RGB Core Fans (Quantity: 3 for 420mm model)
- Mounting Hardware for Intel (LGA 1851/1700, 1200/115X) and AMD (AM5, AM4) sockets
- Breakout Cable Set
- Pre-applied Thermal Paste (on cold plate)
- Documentation (Quick Start Guide, Warranty Information)

4. SETUP AND INSTALLATION

The Kraken Elite 420 RGB is designed for straightforward installation. Ensure your system is powered off and unplugged before proceeding.

4.1. Compatibility

This cooler is compatible with the following CPU sockets:

- **AMD:** AM5, AM4
- **Intel:** LGA 1851/1700, 1200/115X

INTEL

LGA 1851/1700, 1200/115X



AMD

AM4, AM5



WIDE COMPATIBILITY

Includes tool-free mounting hardware for the latest AMD® and Intel® CPU sockets.

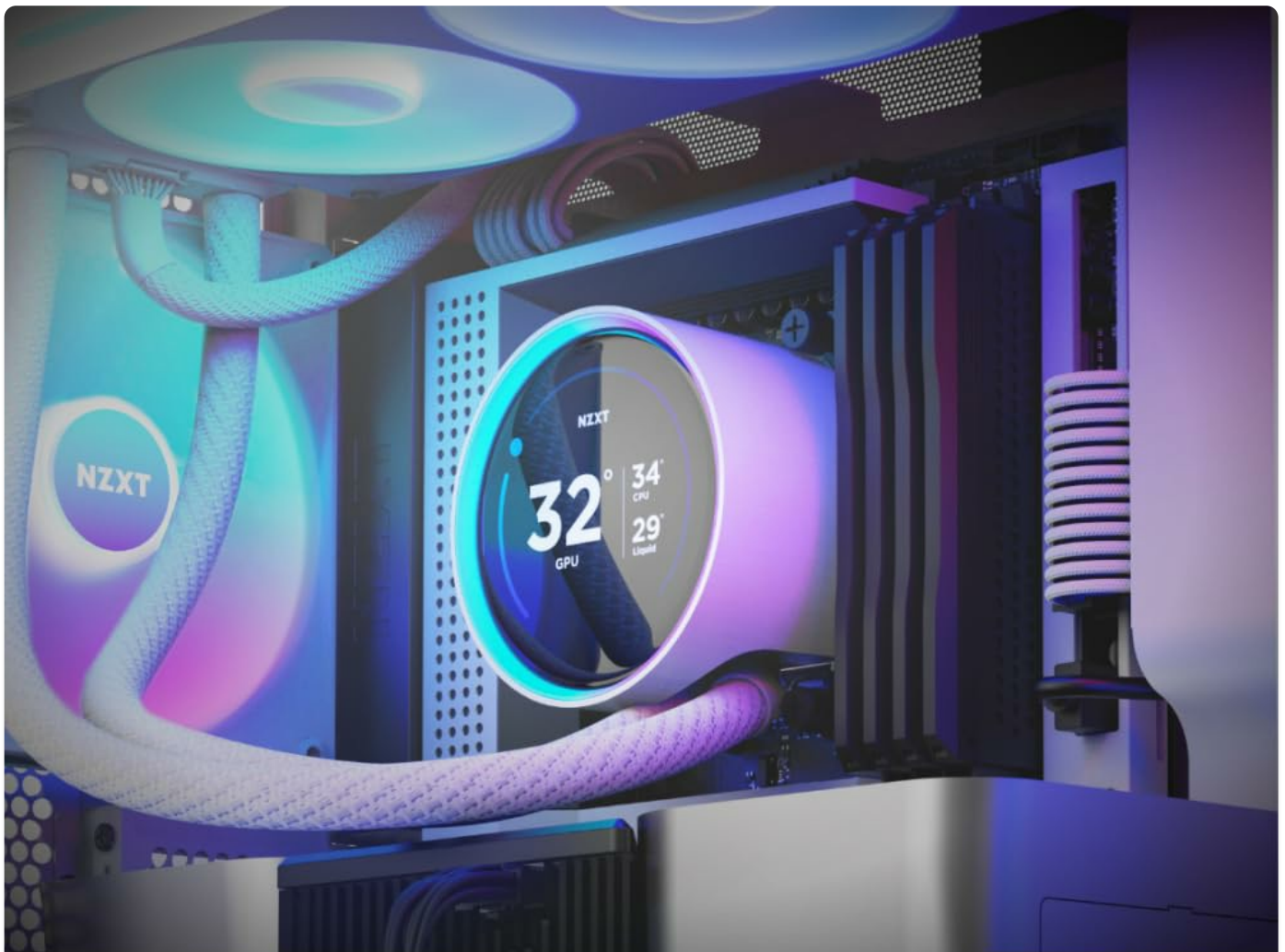
Figure 4.1: Tool-free mounting brackets for wide CPU compatibility.

4.2. Pre-Installation Steps

1. Identify your CPU socket type and select the appropriate mounting hardware.
2. The cold plate comes with pre-applied thermal paste. Handle with care to avoid disturbing it.
3. Plan the radiator and fan placement within your PC case. The 420mm radiator typically mounts to the top or front of larger cases.

4.3. Mounting the Cooler

1. Attach the F420 RGB Core Fans to the radiator using the provided screws. Ensure the fan orientation is correct for desired airflow (intake or exhaust).
2. Mount the radiator and fan assembly to your chosen location in the PC case.
3. Secure the pump/cold plate assembly to your CPU using the tool-free mounting brackets. Follow the instructions specific to your CPU socket type.



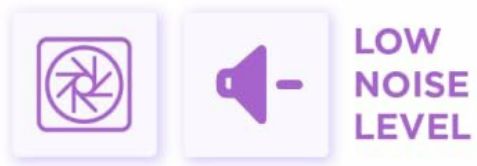
QUICKER INSTALLATION

Get up and running in no time with pre-applied thermal paste and a single breakout cable set.

Figure 4.2: Quick installation with pre-applied thermal paste and a single breakout cable set.

4.4. Cable Management

Connect the single breakout cable from the pump to the appropriate headers on your motherboard and power supply. This simplifies cable management for a cleaner build.



BRILLIANTLY SIMPLE

RGB Core single-frame fan provides optimal airflow and vibrant lighting with simplified connectivity.

Figure 4.3: RGB Core single-frame fan with simplified connectivity.



FLEXIBLE & DURABLE

Extended rubber tubing with braided sleeving ensures worry-free handling and long-term leak protection.

Figure 4.4: Extended rubber tubing with braided sleeving for worry-free handling and long-term leak protection.

5. OPERATING INSTRUCTIONS

Once installed, the Kraken Elite 420 RGB offers advanced control and customization through the NZXT CAM software.

5.1. NZXT CAM Software

Download and install the latest NZXT CAM software from the official NZXT website. This software allows you to:

- **Monitor System Performance:** View real-time CPU and GPU temperatures, pump speed, and fan RPM directly on the 2.72-inch IPS LCD.
- **Customize LCD Display:** Upload your favorite GIFs or images, integrate with Google Photos, Spotify, and YouTube for dynamic content.
- **Control RGB Lighting:** Adjust the RGB LED ring on the pump and the F420 RGB Core Fans with various lighting effects and synchronize them with other RGB devices.

- **Adjust Cooling Profiles:** Create custom fan curves and pump speeds to balance performance and acoustics.



IPS LCD



640x640
Resolution



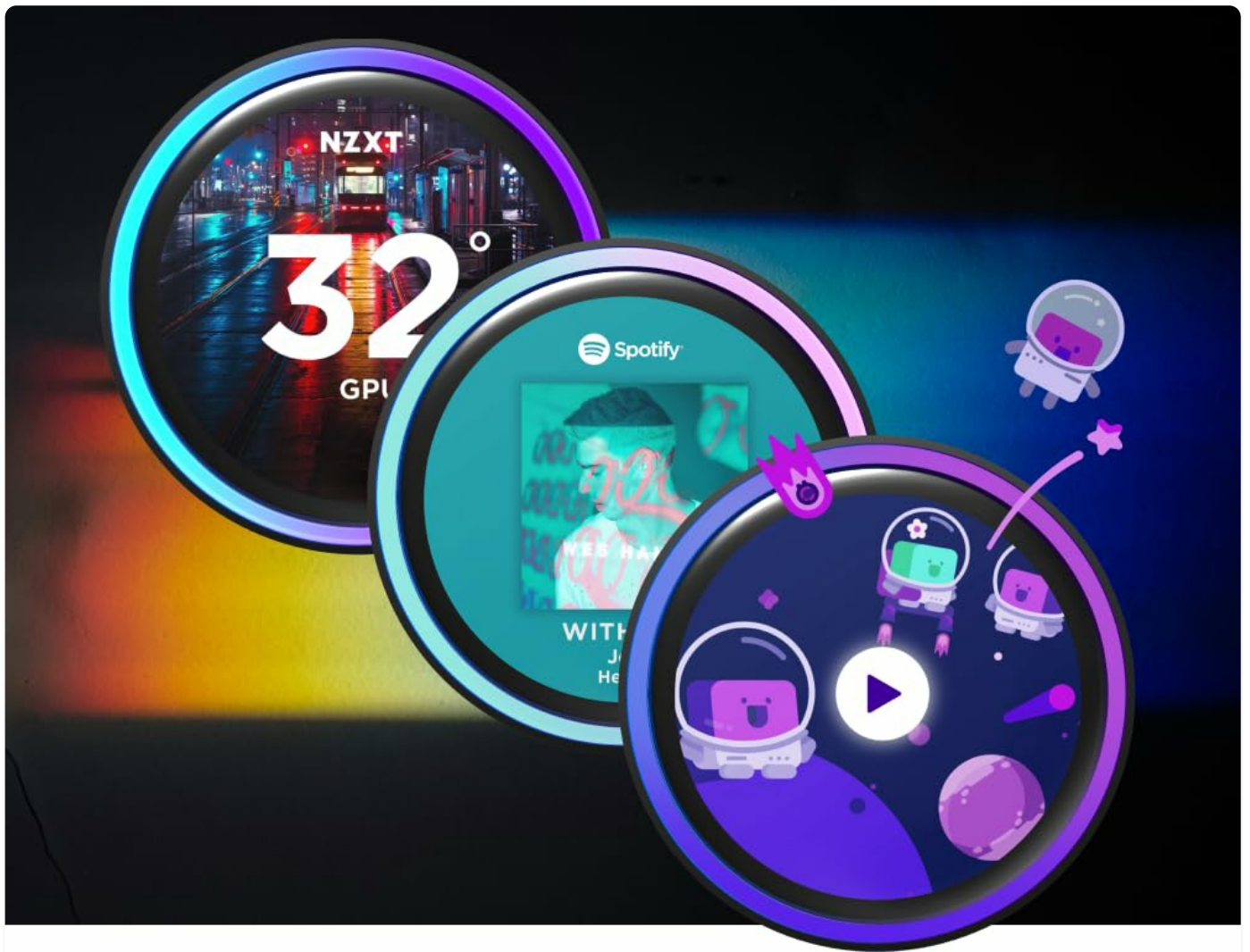
60 Hz



A BREATHTAKING DISPLAY

Enjoy vivid visuals on the 2.72-inch IPS LCD with a 640 x 640 resolution, 60 Hz refresh rate, and wide viewing angles.

Figure 5.1: The 2.72-inch IPS LCD features 640x640 resolution and a 60 Hz refresh rate.



BOUNDLESS POSSIBILITIES

Display your favorite GIF or image, track real-time system performance, and integrate with Spotify and YouTube.

Figure 5.2: Display GIFs, system performance, and integrate with various platforms.



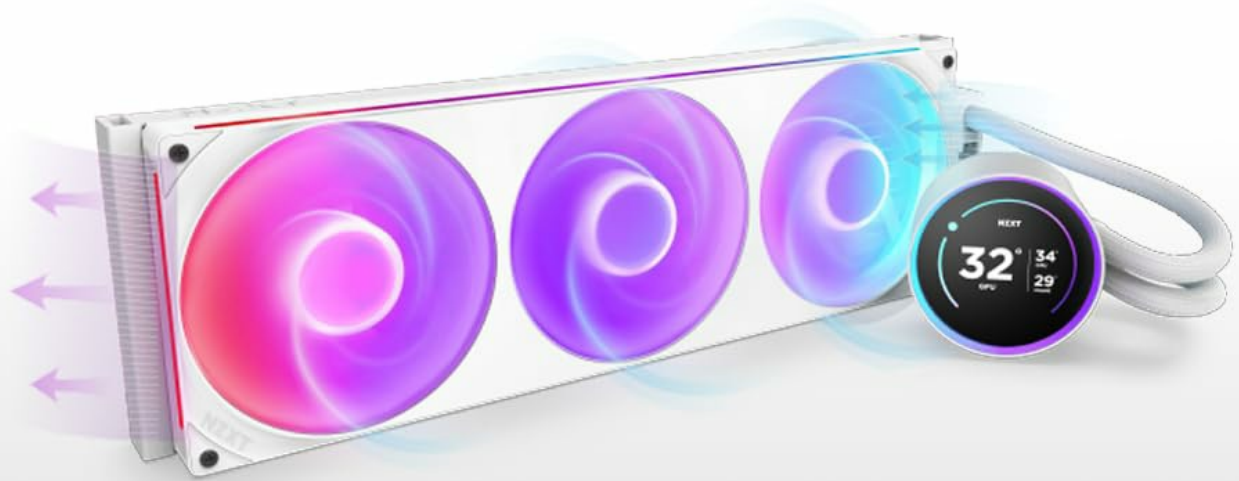
RADIATE YOUR STYLE

Customize the RGB ring with dynamic lighting effects or synchronize with on-screen content and other RGB devices.

Figure 5.3: Customize the RGB ring with dynamic lighting effects and synchronize with other RGB devices.

5.2. Cooling Performance

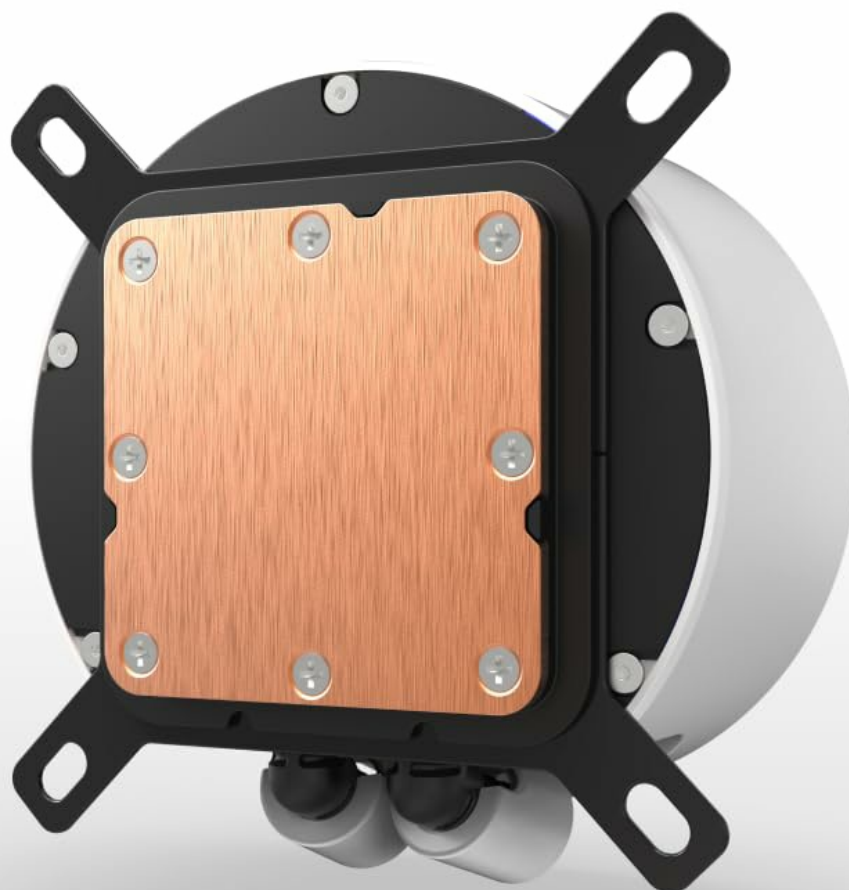
The NZXT Turbine pump and F420 RGB Core Fans work in conjunction to provide superior cooling. The pump's high flow rate and head pressure efficiently dissipate heat from the CPU, while the fans ensure optimal airflow through the 420mm radiator.



POWERED BY TURBINE

Custom-designed for high flow rate and head pressure, the NZXT Turbine pump delivers powerful yet quiet CPU cooling.

Figure 5.4: The custom-designed NZXT Turbine pump delivers powerful yet quiet CPU cooling.



OPTIMIZED COLD PLATE

The split-flow design ensures even coolant distribution across AMD® or Intel® CPUs, enhancing heat dissipation.

Figure 5.5: The split-flow design ensures even coolant distribution across AMD® or Intel® CPUs, enhancing heat dissipation.

5.3. Official Product Videos

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Video 5.1: NZXT Kraken Elite 2024 Product Showcase. This video highlights the key features and aesthetic appeal of the Kraken Elite AIO cooler.

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Video 5.2: NZXT Single Frame Fan Showcase. This video demonstrates the design and lighting of the NZXT single-frame fans, which are part of the Kraken Elite cooler.

6. MAINTENANCE

- **Dust Cleaning:** Regularly clean dust from the radiator fins and fan blades using compressed air. Ensure fans are not spinning during cleaning.

- **Tubing Inspection:** Periodically check the tubing for any signs of wear, kinks, or leaks. The braided sleeving provides long-term protection.
- **Software Updates:** Keep your NZXT CAM software updated to ensure optimal performance and access to the latest features.

7. TROUBLESHOOTING

- **No Power/RGB:** Check all power connections to the pump and fans. Ensure the breakout cable is securely connected. Verify NZXT CAM software is running and detecting the device.
- **High Temperatures:**
 - Ensure the pump is running (check NZXT CAM).
 - Verify fans are spinning and correctly oriented for airflow.
 - Confirm the cold plate is making proper contact with the CPU.
 - Check for dust buildup on the radiator.
- **LCD Display Issues:** Ensure the USB connection from the pump to the motherboard is secure. Restart NZXT CAM software or your system.
- **Unusual Noise:** Check for loose fan screws or obstructions. If pump noise is excessive, ensure proper mounting and contact support if it persists.

8. SPECIFICATIONS

Feature	Detail
Product Dimensions	20.04 x 7.87 x 6.14 inches; 2.77 Pounds
Item Model Number	RL-KR42E-W2
Brand	NZXT
Power Connector Type	4-Pin
Cooling Method	Water
Compatible Devices	AMD (AM5, AM4) and Intel (LGA 1851/1700, 1200/115X) CPU sockets
Noise Level	34.5 Decibels
Material	Acrylonitrile Butadiene Styrene, Metal, Plastic, Polyvinyl Chloride
UPC	810074844307
Manufacturer	NZXT
Number of Items	1

9. WARRANTY AND SUPPORT

For warranty information, technical support, or to register your product, please visit the official NZXT website or contact their customer service. Keep your proof of purchase for warranty claims.



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Related Documents - RL-KR42E-W2

	<p>NZXT Kraken X Series Liquid Cooler Installation Guide</p> <p>Comprehensive guide for installing the NZXT Kraken X Series liquid cooler, including component lists, step-by-step instructions for Intel and AMD motherboards, fan and radiator mounting, and software setup.</p>
	<p>NZXT Kraken Plus RGB CPU Cooler Installation Guide</p> <p>Comprehensive installation guide for the NZXT Kraken Plus RGB All-in-One (AIO) liquid CPU cooler, covering component identification, mounting procedures for Intel and AMD platforms, radiator and fan installation, and software setup with NZXT CAM.</p>
	<p>NZXT Kraken Elite RGB AIO Liquid Cooler Installation Guide</p> <p>Comprehensive guide for installing the NZXT Kraken Elite RGB All-in-One liquid CPU cooler, including component identification, step-by-step installation for Intel and AMD platforms, and NZXT CAM software setup.</p>
	<p>NZXT Kraken Elite Liquid Cooler Installation and Warranty Guide</p> <p>Comprehensive guide for installing the NZXT Kraken Elite 240/280/360mm liquid cooler with LCD. Includes component lists, hardware introduction, installation steps for Intel and AMD sockets, radiator and fan mounting, powering instructions, NZXT CAM software download, and warranty information.</p>
	<p>NZXT Kraken Series Liquid Cooler Installation Guide</p> <p>Comprehensive installation guide for NZXT Kraken X42, X52, X62, and X72 series liquid CPU coolers, covering component identification, mounting, wiring, and warranty information.</p>
	<p>NZXT Kraken X RGB Series Installation and User Manual</p> <p>A comprehensive guide for installing and using the NZXT Kraken X RGB Series liquid CPU cooler. It covers component identification, preparation steps for Intel and AMD sockets, detailed installation procedures for the pump, radiator, and fans, connection of power and RGB cables, software setup via NZXT CAM, and warranty and support information.</p>