NZXT RL-KR42E-B2

NZXT Kraken Elite 420 RGB 2025 AIO CPU Liquid Cooler Instruction Manual
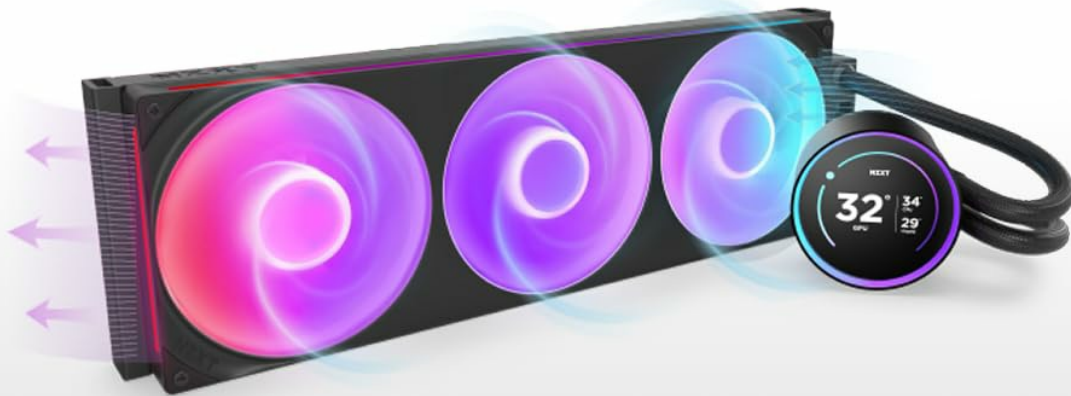
Model: RL-KR42E-B2 | Brand: NZXT

INTRODUCTION

The NZXT Kraken Elite 420 RGB 2025 (Model: RL-KR42E-B2) is an advanced All-In-One (AIO) CPU liquid cooler designed to provide superior thermal performance and aesthetic customization for your desktop system. Featuring a custom-designed NZXT Turbine pump, a 420mm radiator, and F420 RGB Core fans, this cooler efficiently manages CPU temperatures while offering extensive personalization options through its vibrant 2.72-inch IPS LCD.
Key features include:

- **Superior Cooling:** The NZXT Turbine pump ensures efficient cooling for even the most demanding CPUs.
- **Vibrant IPS LCD:** A 2.72-inch IPS LCD with 640 x 640 resolution and 60 Hz refresh rate for stunning visuals.
- **Extensive Personalization:** Display GIFs, system info, or integrate with apps like Spotify and YouTube.
- **Simple Installation:** Pre-applied thermal paste and tool-free mounting for quick setup on various AMD and Intel sockets.
- **Integrated RGB:** RGB Core fans and an RGB LED ring sync with on-screen content for a cohesive look.

PRODUCT OVERVIEW

The Kraken Elite 420 RGB combines powerful cooling with visual flair. Below are some key components and their functions.

POWERED BY TURBINE

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

Overall Product View: The Kraken Elite 420 RGB AIO cooler featuring the radiator, three F420 RGB Core fans, and the pump with its integrated LCD display.
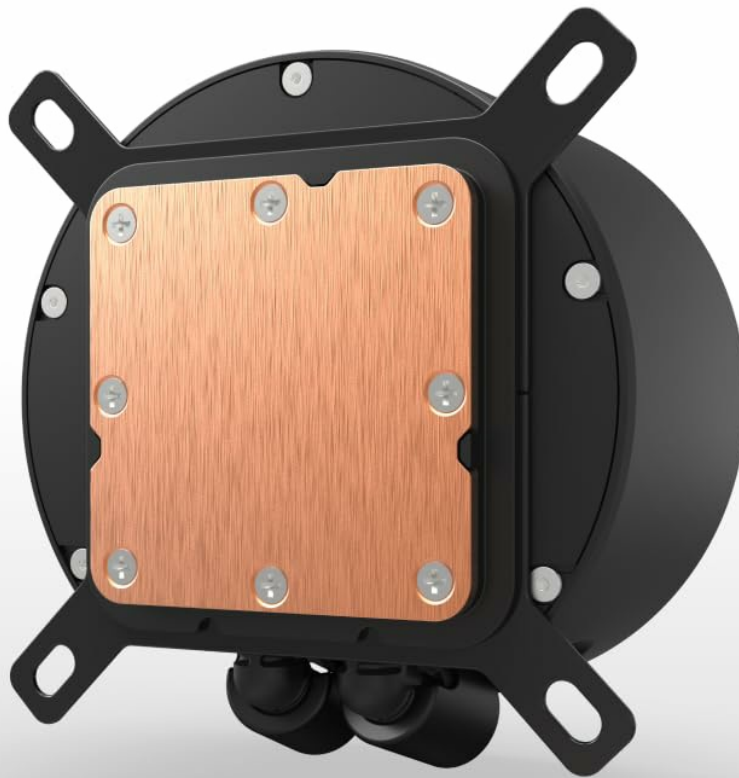
IPS LCD

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.

IPS LCD Display: A detailed view of the 2.72-inch IPS LCD on the pump, showcasing its vibrant colors and crisp resolution.

OPTIMIZED COLD PLATE

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

Optimized Cold Plate: The copper cold plate designed for efficient heat transfer from the CPU.

Official Product Showcase Video

Your browser does not support the video tag.

This video provides a comprehensive overview of the NZXT Kraken Elite 2024, highlighting its design, features, and
performance capabilities.

SETUP INSTRUCTIONS

Follow these steps for a smooth installation of your Kraken Elite 420 RGB AIO cooler.

1. **Prepare Your System:** Ensure your PC is powered off and unplugged. Remove your existing CPU
   cooler and clean any old thermal paste from the CPU surface.

2. **Install Mounting Brackets:** The Kraken Elite comes with tool-free mounting brackets for both AMD
   (AM5, AM4) and Intel (LGA 1851/1700, 1200/115X) sockets. Select the appropriate brackets and secure
   them to the pump unit. The cooler features pre-applied thermal paste, simplifying this step.

3. **Mount Radiator and Fans:** Attach the three F420 RGB Core fans to the 420mm radiator. Ensure the
   fans are oriented to provide optimal airflow (e.g., intake or exhaust, depending on your case

configuration). Mount the assembled radiator and fans to your PC case, typically at the top or front.

4. **Secure Pump to CPU:** Carefully align the pump unit with the CPU socket and secure it using the provided thumb screws or mounting hardware. Ensure even pressure for optimal thermal contact.

5. **Cable Management:** Connect the single breakout cable from the pump to your motherboard's CPU fan header and a USB 2.0 header. Connect the RGB Core fans to the appropriate fan and RGB headers, or to an NZXT RGB controller if available. Organize cables for a clean build and unobstructed airflow.

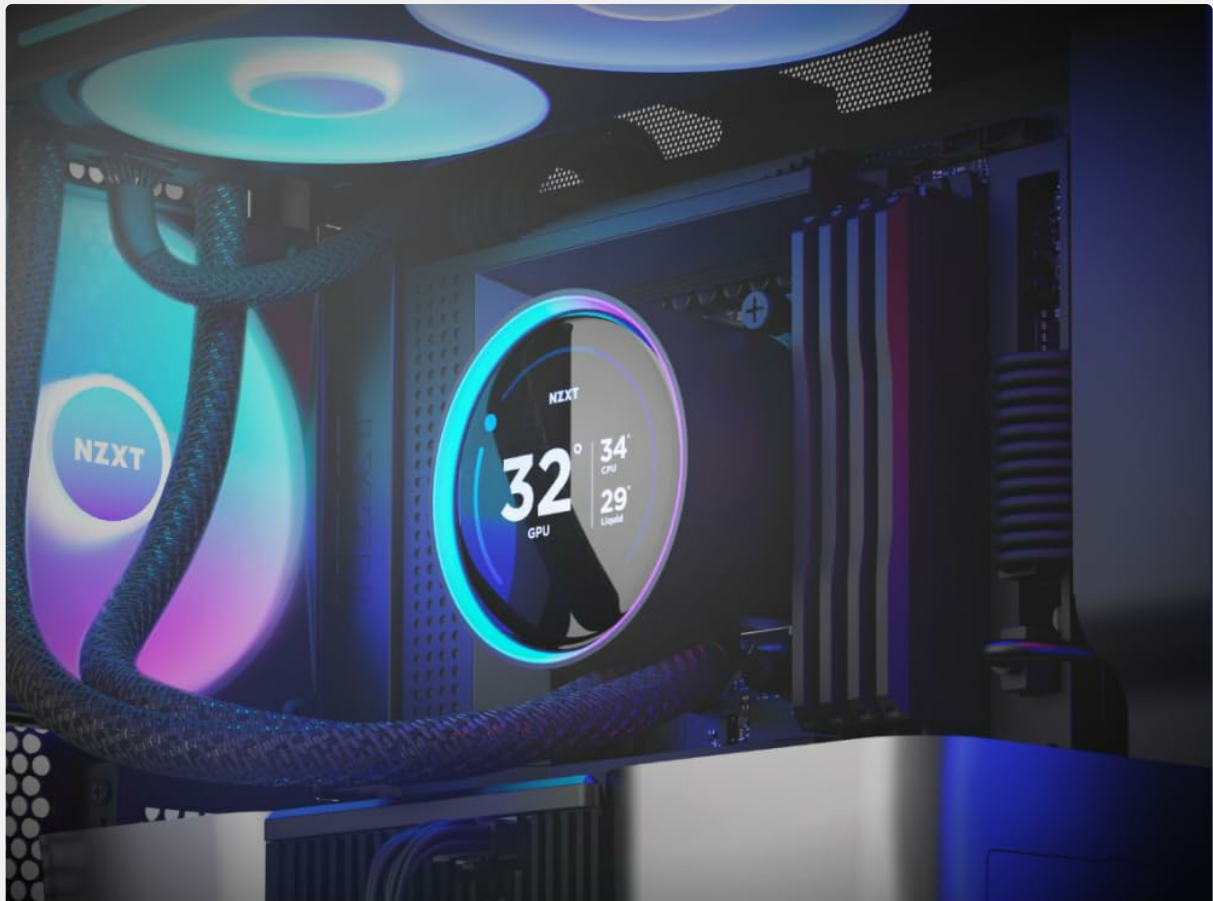## INTEL
LGA 1851/1700, 1200/115X

AMD
AM4, AM5

WIDE COMPATIBILITY

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

Wide Compatibility: Tool-free mounting brackets for various Intel and AMD CPU sockets are included for easy installation.

QUICKER INSTALLATION

Get up and running in no time with pre-applied thermal paste and a single breakout cable set.
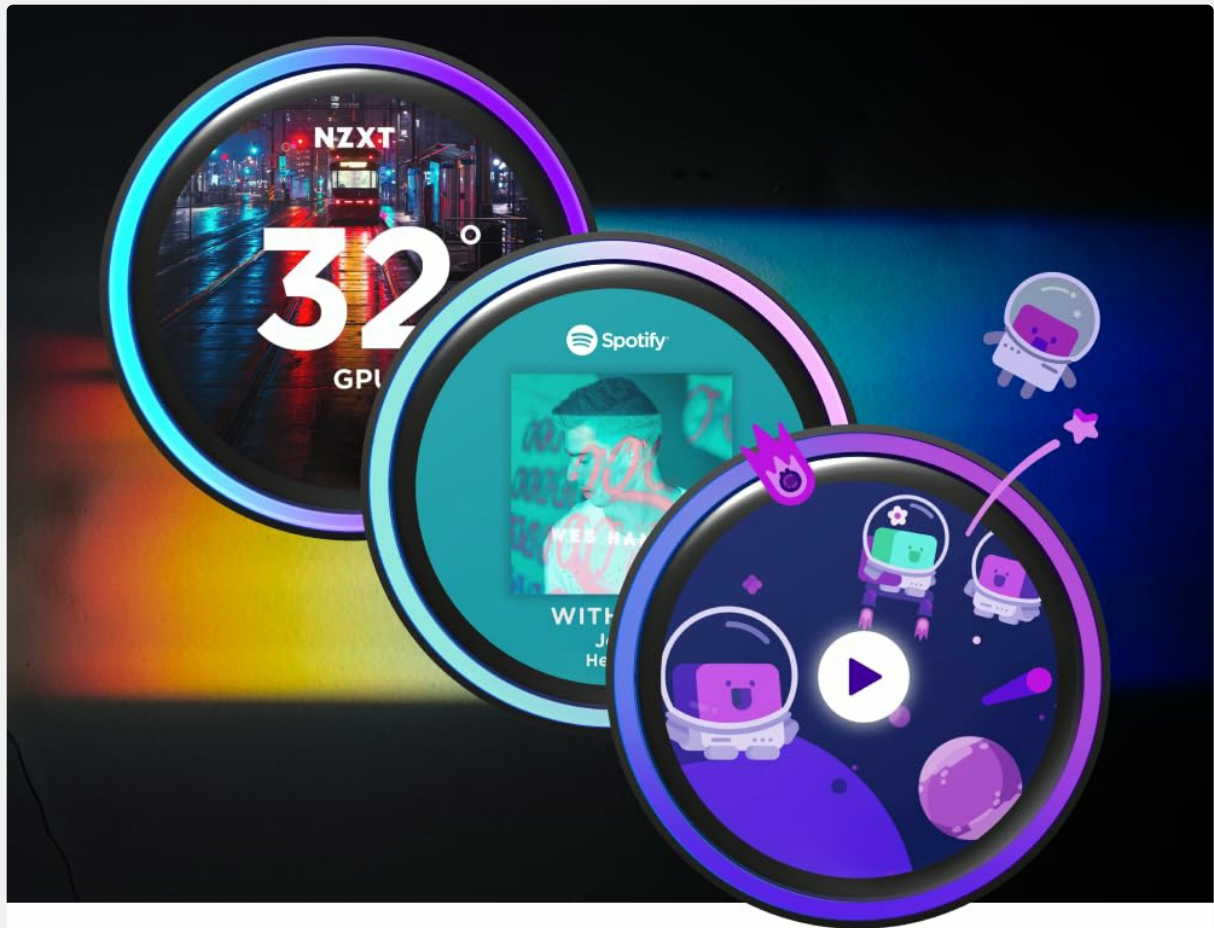
Quicker Installation: The AIO cooler installed in a PC, demonstrating the simplified setup with pre-applied thermal paste and minimal cabling.

OPERATING INSTRUCTIONS

Once installed, the Kraken Elite 420 RGB is ready for operation. To unlock its full potential and customization options, install the NZXT CAM software.

1. **Power On:** Turn on your PC. The cooler's fans and RGB lighting should illuminate.

2. **Install NZXT CAM Software:** Download and install the latest version of NZXT CAM from the official NZXT website. This software is essential for monitoring, controlling fan speeds, pump performance, and customizing the LCD display and RGB lighting.

3. **Monitor System Performance:** Use NZXT CAM to monitor CPU and GPU temperatures, pump speed, and fan RPMs in real-time. The LCD display on the pump can also be configured to show these metrics directly.

4. **Customize LCD Display:** Personalize the 2.72-inch IPS LCD with GIFs, images, system information, or integrations with services like Google Photos, Spotify, and YouTube.

5. **Adjust RGB Lighting:** Synchronize the RGB LED ring and F420 RGB Core fans with your system's

other RGB components or choose from various lighting effects and colors via NZXT CAM.

BOUNDLESS POSSIBILITIES

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

Boundless Possibilities: The LCD display showing various customization options, including GIF playback and Spotify integration.

RADIATE YOUR STYLE

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

Radiate Your Style: The LCD display showing real-time CPU and GPU temperature monitoring, customizable with dynamic lighting effects.

MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your Kraken Elite 420 RGB AIO cooler.

- **Dust Cleaning:** Periodically clean the radiator fins and fan blades to prevent dust buildup, which can impede airflow and cooling efficiency. Use compressed air or a soft brush.

- **Check Tubing and Connections:** Inspect the tubing for any signs of kinks, leaks, or damage. Ensure all connections to the pump and radiator are secure.

- **Monitor Coolant Temperature:** Use NZXT CAM to monitor the liquid temperature. Consistently high liquid temperatures might indicate an issue with the pump or radiator.

- **Software Updates:** Keep your NZXT CAM software updated to the latest version to benefit from performance improvements, new features, and bug fixes.

BRILLIANTLY SIMPLE

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

Brilliantly Simple: The radiator and fans designed for optimal airflow and low noise levels, which benefits from regular cleaning.

FLEXIBLE & DURABLE

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

Flexible & Durable: Extended rubber tubing with braided sleeving ensures worry-free handling and long-term leak protection, requiring occasional visual inspection.

TROUBLESHOOTING

If you encounter issues with your Kraken Elite 420 RGB, refer to the following common problems and solutions:

- **High CPU Temperatures:**

    - Ensure the pump is properly seated on the CPU and mounting pressure is even.
    - Verify that the pre-applied thermal paste is making good contact. Reapply if necessary.
    - Check fan orientation and ensure they are spinning correctly.
    - Clean any dust buildup on the radiator fins.
    - Confirm pump and fan speeds are set appropriately in NZXT CAM.

- **Pump or Fan Noise:**

    - Adjust fan curves in NZXT CAM to reduce noise at lower temperatures.
    - Ensure no cables are obstructing fan blades.

- Check for air bubbles in the loop (often indicated by gurgling sounds). Tilting the PC case can help dislodge them.

- **LCD Display Not Working/Frozen:**

  - Verify the USB 2.0 header connection from the pump to the motherboard.
  - Restart NZXT CAM software or reinstall it.
  - Ensure graphics drivers are up to date.

- **RGB Lighting Issues:**

  - Check all RGB cable connections.
  - Ensure NZXT CAM is detecting the cooler and fans.
  - Update NZXT CAM firmware.

SPECIFICATIONS

Feature	Specification
Brand	NZXT
Model Number	RL-KR42E-B2
Power Connector Type	4-Pin, 3-Pin
Wattage	120 watts
Cooling Method	Water
Compatible Devices	Desktop
Noise Level	34.5 Decibels
Material	Aluminum, Plastic
UPC	810074844291
Product Dimensions	20.04 x 7.87 x 6.14 inches
Item Weight	2.77 pounds

WARRANTY AND SUPPORT

NZXT products are designed for reliability and come with comprehensive warranties. For specific warranty details, please refer to the official NZXT website or the warranty card included with your product. NZXT also offers friendly and expert support to assist with any questions or issues you may encounter.
For further assistance, visit the official NZXT support page or contact their customer service.