

EK 3831109819272

EK-Quantum Magnitude CPU Water Block (AM4) Instruction Manual

Model: 3831109819272

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your EK-Quantum Magnitude CPU Water Block for AMD AM4 processors. Please read these instructions carefully before proceeding with installation to ensure proper function and longevity of your product.

2. PACKAGE CONTENTS

Verify that all components are present in your package:

- EK-Quantum Magnitude CPU Water Block
- Mounting Mechanism (backplate, standoffs, springs, thumb nuts)
- Thermal Paste
- Required Allen Keys / Tools



Figure 2.1: Top view of the EK-Quantum Magnitude CPU Water Block, showcasing its full nickel finish and port design.

3. INSTALLATION GUIDE

3.1. Preparation

1. Ensure your system is powered off and disconnected from the mains.
2. Remove any existing CPU cooler and thoroughly clean the CPU Integrated Heat Spreader (IHS) with isopropyl alcohol to remove old thermal paste.
3. Refer to your motherboard manual for proper CPU socket orientation and clearance.

3.2. Mounting the Water Block

1. Install the provided backplate onto the rear of your motherboard, aligning it with the CPU socket holes.
2. Screw the four mounting standoffs into the backplate from the front side of the motherboard. Tighten them finger-tight.
3. Apply a small amount of thermal paste (approximately a pea-sized dot) to the center of the CPU IHS.
4. Carefully place the EK-Quantum Magnitude water block onto the CPU, ensuring the cold plate makes full contact with the IHS.
5. Place the springs and thumb nuts onto the standoffs, then tighten them in a diagonal pattern until

snug. Do not overtighten.



Figure 3.1: Bottom view of the water block, illustrating the precision-machined cold plate designed for optimal thermal transfer.

3.3. Connecting to the Cooling Loop

1. Identify the inlet and outlet ports on the water block. Refer to the technical drawing for optimal flow direction.
2. Attach your G1/4" fittings to the water block ports. Ensure they are tightened securely to prevent leaks.
3. Connect the tubing from your pump/reservoir to the inlet port and from the outlet port to your radiator or other loop components.

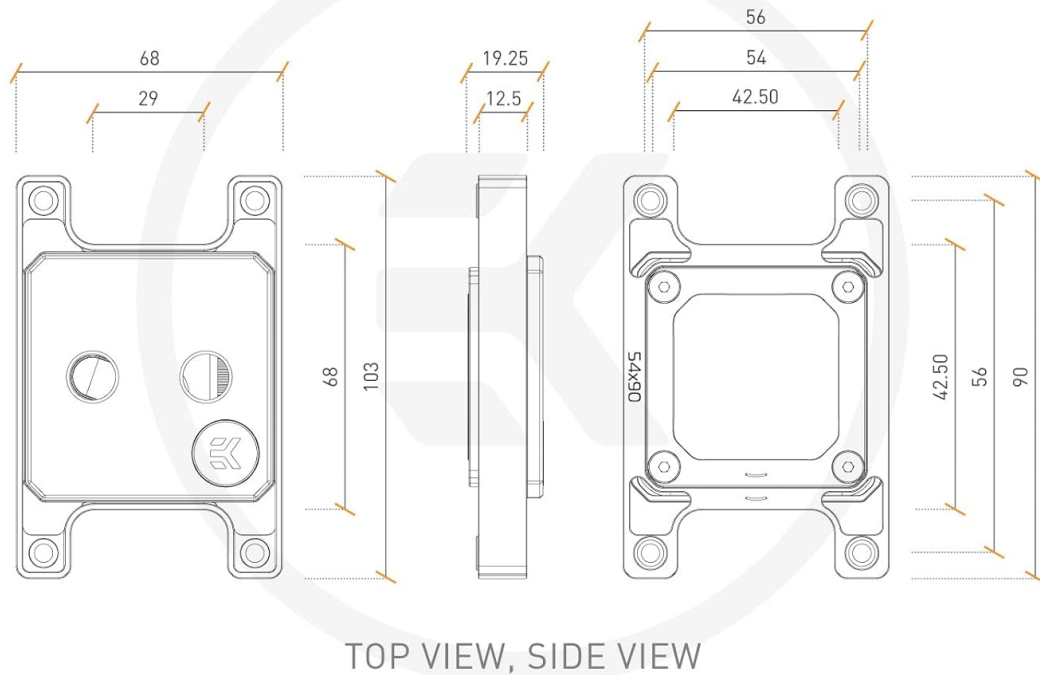


Figure 3.2: Technical drawing providing precise dimensions and port locations for the EK-Quantum Magnitude water block.

4. OPERATING INSTRUCTIONS

After completing the installation and connecting the water block to your custom liquid cooling loop, perform a leak test before powering on your system fully. Fill the loop with coolant and run the pump for at least 24 hours without powering on other PC components. Inspect all connections for any signs of leaks. Once confirmed leak-free, you may power on your system.

5. MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your water block and cooling loop:

- **Coolant Replacement:** It is recommended to replace your liquid cooling fluid every 6-12 months, depending on the coolant type and usage.
- **System Inspection:** Periodically check tubing and fittings for any signs of wear, kinks, or potential leaks.
- **Cleaning:** If performance degrades, the water block may need to be disassembled and cleaned. Refer to EKWB's official support resources for detailed cleaning instructions.

6. TROUBLESHOOTING

If you encounter issues, consider the following common troubleshooting steps:

- **High CPU Temperatures:**
 - Ensure proper thermal paste application and even mounting pressure.
 - Verify correct coolant flow direction (inlet/outlet).
 - Check for air bubbles trapped in the water block or loop.
 - Inspect the radiator for dust buildup restricting airflow.

- **Leaks:**
 - Immediately power off the system.
 - Tighten all fittings. If a fitting continues to leak, replace its O-ring or the fitting itself.
 - Ensure tubing is properly seated and clamped (if applicable).

For further assistance, please contact EKWB customer support.

7. SPECIFICATIONS

Product Name	EK-Quantum Magnitude CPU Water Block
Model Number	3831109819272
Compatible CPU Sockets	AMD AM4
Cooling Method	Liquid (Water)
Material	Copper, Nickel, Brass
Product Dimensions	19.69 x 19.69 x 11.02 inches
Product Weight	1.59 Pounds

8. WARRANTY AND SUPPORT

This EKWB product is covered by a manufacturer's warranty. For specific warranty terms and conditions, please refer to the official EKWB website or the documentation included with your purchase. For technical support, troubleshooting assistance, or spare parts, please visit the official EKWB support portal or contact their customer service directly. Always provide your product model number and purchase details when seeking support.

For more information, visit the [EK Store on Amazon](#).