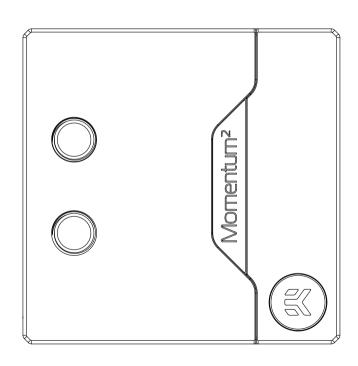
EK-Quantum Momentum² ROG Strix Z790-I D-RGB





Please note the installation of the product is intended to be undertaken by an adequately trained and experienced person. You are installing the product at your own risk. If you are not properly trained or experienced or feel unsure about the installation procedure, please refrain from installing the product yourself and contact our tech support for assistance. We disclaim our liability for any damages to the product as well as incidental, consequential, or indirect damages incurred due to improper or inappropriate installation.

Before you start using this product, please follow these basic guidelines:

Please carefully read the manual before beginning the installation process.

The EK Fittings require only a small amount of force to screw them firmly in place since the liquid seal is ensured by the rubber O-ring gaskets.

The use of corrosion-inhibiting coolants is always recommended for liquid cooling systems, and mandatory for nickel-plated water blocks.

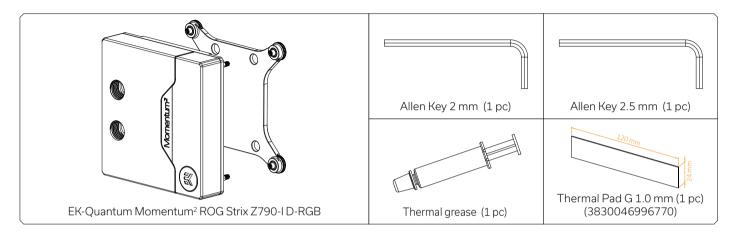
Do not use pure distilled water! For best results, EK recommends the use of EK-Cryo Fuel coolants.

Make sure to thoroughly bleed air out of your water block, or you will not reach optimal performance

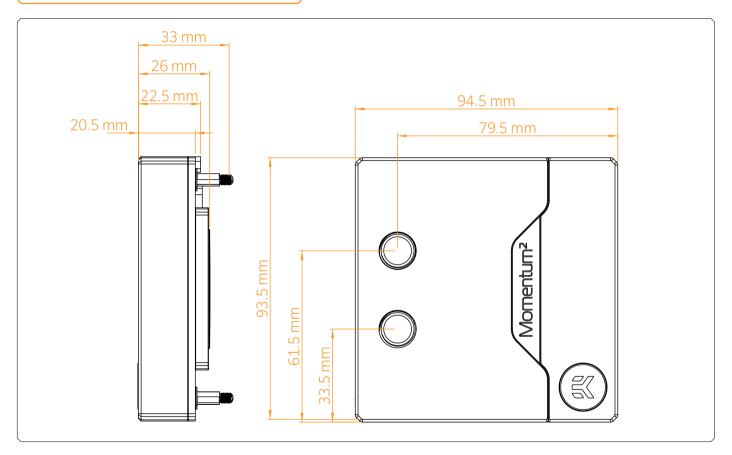
TABLE OF CONTENTS

| BOX CONTENTS | 4 |
|--|-----|
| NATER BLOCK DIMENSIONS | 5 |
| FECHNICAL SPECIFICATIONS AND WATER BLOCK PARTS | 6 |
| PREPARING THE MOTHERBOARD | 7 |
| INSTALLING AND CLEANING THE CPU | 7 |
| APPLYING THERMAL COMPOUND | 7 |
| CUTTING AND PLACING THERMAL PADS | 8 |
| NSTALLING THE WATER BLOCK | 9 |
| CONNECTING THE D-RGB LED STRIP | 11 |
| FESTING THE LOOP | 12 |
| WARRANTY | 12 |
| SUPPORT AND SERVICE | 13 |
| SOCIAL MEDIA | _13 |
| | |

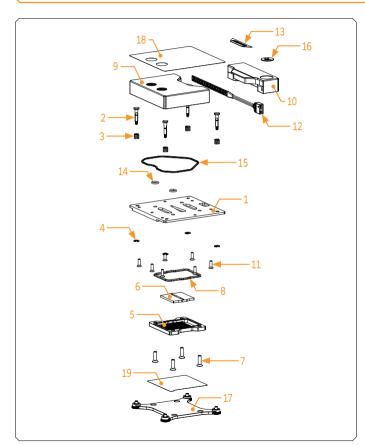
BOX CONTENTS



WATER BLOCK DIMENSIONS



TECHNICAL SPECIFICATIONS AND WATER BLOCK PARTS



Technical Specification:

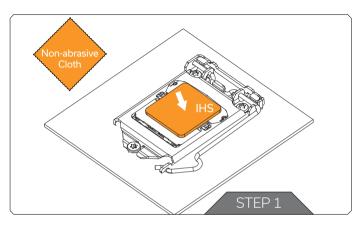
Dimensions (L x H x W): 94.5 x 94.5 x 34mm

D-RGB cable length: 500 mm

D-RGB connector standard 3-pin (+5V, Data, Blocked, Ground

| Position | EAN | Description | Quantity |
|----------|--------|----------------------------------|----------|
| 1 | 106431 | Mid Plate (Ni) | 1 |
| 2 | 104913 | Mounting Screw (Ni) | 4 |
| 3 | 100747 | Spring M3 x 10 mm | 4 |
| 4 | 104532 | Seeger Ring 2.3 DIN6799 | 4 |
| 5 | 104028 | Coldplate (Ni) | 1 |
| 6 | 104029 | Jet Plate | 1 |
| 7 | 104686 | Screw M4 x 14 7991DIN | 4 |
| 8 | 104773 | OR 53 x 2 mm | 1 |
| 9 | 104034 | Top Plate (Plexi) | 1 |
| 10 | 104050 | Stand Out (Acetal) | 1 |
| 11 | 8252 | Screw M3 x 10 7991DIN | 1 |
| 12 | 103006 | LED D-RGB Strip - 500/100 mm | 1 |
| 13 | 104444 | Mylar Sticker | 1 |
| 14 | 104774 | OR 6 x 2 mm | 2 |
| 15 | 104772 | OR 75 x 2 mm | 1 |
| 16 | 100663 | EK - Badge | 1 |
| 17 | 104650 | Backplate | 1 |
| 18 | 104415 | Protective Sticker for Plexi | 1 |
| 19 | 104732 | Protective Sticker for Coldplate | 1 |

PREPARING THE MOTHERBOARD

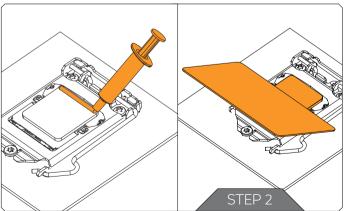


STEP 1 INSTALLING AND CLEANING THE CPU



If already installed, please remove the motherboard from your computer and place it on an even surface.

Remove the CPU(IHS) protective plastic and place the CPU(IHS) in the socket. Wipe the IHS clean using a non-abrasive cloth or Q-tip as shown in the illustration.

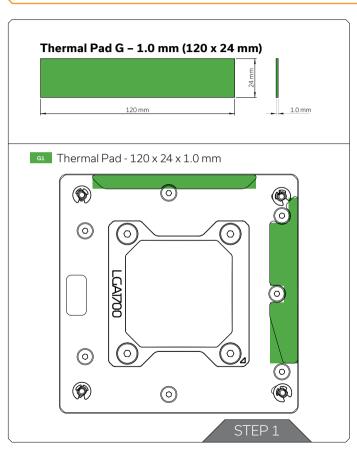


STEP 2 APPLYING THERMAL COMPOUND

Once clean, apply a line of Thermal Compound on one edge of the IHS and use a credit card or similar to spread it evenly.

The layer of Thermal Compound must be thin and even in thickness over the entire surface of the IHS. Excessive or irregular application may lead to poor performance.

CUTTING AND PLACING THERMAL PADS



STEP 1

EK-Quantum Momentum² ROG Strix Z790-I D-RGB water block comes with thermal pads that have to be cut into smaller pieces to cover all the regulation areas (Mosfet) on the water block. EK made sure to provide you with more than an adequate quantity of thermal pads to complete this Step.



Please remove the protective foil from both sides of the thermal pads prior to installation!

Replacement thermal pads:

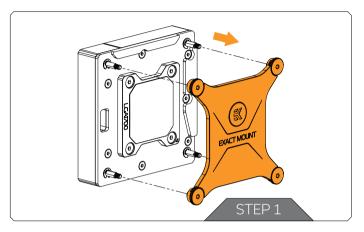
Thermal PAD G 1.0 mm - (120 x 24 mm) EAN: 3830046996770

Once cut to the size, Thermal Pads should be placed on the water block, as shown in the picture.

For this step, you will need:

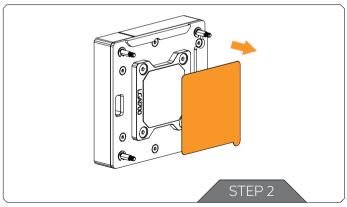


INSTALLING THE WATER BLOCK



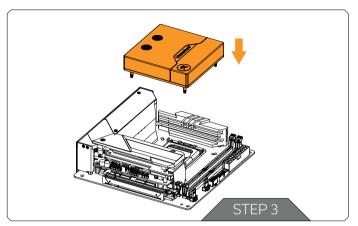
STEP 1

Unscrew the pre-installed backplate from the backside of the Water block using an Allen Key 2.5 mm and save it for the later steps.



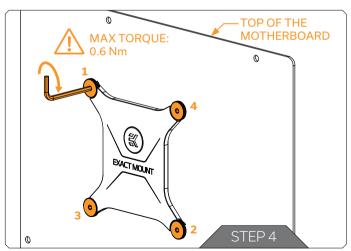
STEP 2

Before placing the water block, it is mandatory to remove the protective foil from the backside.



STEP 3

Carefully place the CPU water block onto the motherboard and align four (4) mounting screws with four (4) holes on the motherboard. Hold the water block and motherboard and turn them upside down.



STEP 4

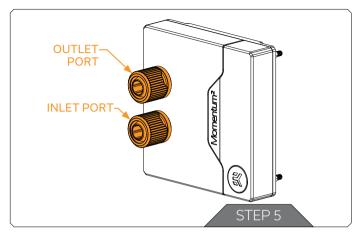
After placing the water block, the stored backplate must be attached to the backside of the motherboard using Allen Key 2.5 mm (shown in the picture).

Start fastening the backplate screws in a cross pattern. Do not tighten fully until all of the nuts are partially screwed in. The Allen Key 2.5mm must be used in a standing position! Otherwise, the mounting screws may crack during tightening!

EK recommends using the EK-Loop Torque Screwdriver - 0.6Nm: https://www.ekwb.com/shop/ek-loop-torque-screwdriver-0-6nm



Make sure to orientate the backplate as illustrated. Incorrect installation of the backplate may result in damage to the motherboard.



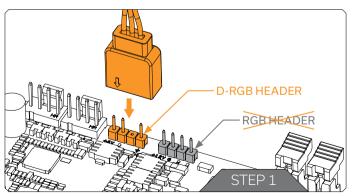
STEP 5

With EK-Momentum² series water blocks, it is mandatory to use the bottom port as the INLET. Mixing the ports may result in poor thermal performance of the water block.

Tighten the fittings in a clockwise direction until the gasket underneath is compressed.

The installation of the water block is now complete.

CONNECTING THE D-RGB LED STRIP



STEP 1

Plug the 3 Pin connector from the water block's D-RGB LED light to the D-RGB HEADER on the motherboard. The LED will work if the pin layout on the header is as follows: **+5V, Digital, empty, Ground**.



Please ensure that the arrow indicated on the connector is plugged into the +5V line as indicated on your motherboard. If you put the LED Diode to the 12V RGB HEADER you can damage the LEDs. Failure to do so will damage your motherboard or LED strip.

TESTING THE LOOP

To make sure the installation of EK components was successful, we recommend you perform a leak test for 24 hours. When your loop is complete and filled with coolant, connect the pump to a PSU outside of your system. Do not connect power to any of the other components. Turn on the PSU and let the pump run continuously. It is normal for the coolant level to drop during this process as air collects in the distribution plate. Inspect all parts of the loop, and in the eventuality, that coolant leaks, fix the issue and repeat the testing process. Ensure that all hardware is dry before the system is powered on in order to prevent any damage.

WARRANTY

Our products are warranted against defects of materials and quality for a period of 24 months, starting with the date of delivery to the end-user. During this period, products will be repaired or have parts replaced at our discretion, provided that 1) the product is returned to the agent from whom it was purchased; 2) the product has been purchased by the end-user and has not been used for commercial purposes; 3) the product has not been misused, handled carelessly, or used in a manner other than the way described in the instruction's manual. This warranty does not confer rights other than those expressly set out above and does not cover any claims for consequential loss or damage. This warranty is offered as an extra benefit and does not affect your statutory rights as a consumer. This warranty is voided if the product comes in contact with aggressive UV additives or other improper liquids. EK Water blocks are sealed with a warranty-voiding circular label, proving the water block has withstood a pressure leak test. Removing the label will void the leak-free guarantee, but not the guarantee on the product itself. Any other RMA issues can be reported to EK Customer Support at www.ekwb.com/support for further analysis.

SUPPORT AND SERVICE

In case you need assistance or wish to order spare parts or a new mounting mechanism, please contact:

https://www.ekwb.com/customer-support/

For spare parts orders, refer to the page with "TECHNICAL SPECIFICATIONS AND WATER BLOCK PARTS" where you can find the EAN number of each part you might need.

Include the EAN number with quantity in your request. Mounting Mechanism EAN can be found under "BOX CONTENTS"

Thermal pads are readily available in the EK shop

SOCIAL MEDIA

- **f** EKWaterBlocks
- @EKWaterBlocks
- ekwaterblocks
- EKWBofficial
- ekwaterblocks

