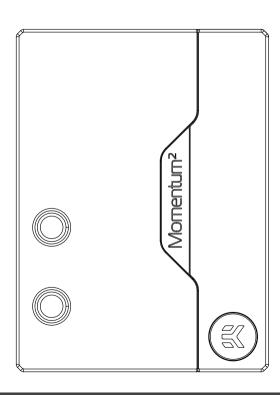
# EK-Quantum Momentum<sup>2</sup> ROG Strix X670E-I D-RGB



MONOBLOCK



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.

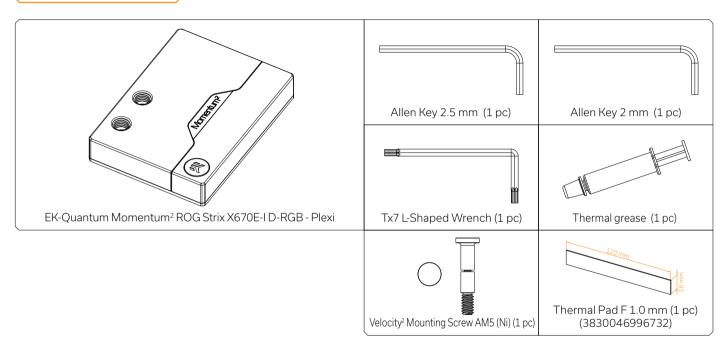
Do not use pure distilled water! For best results, EK recommends the use of EK-Cryo Fuel coolants.

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

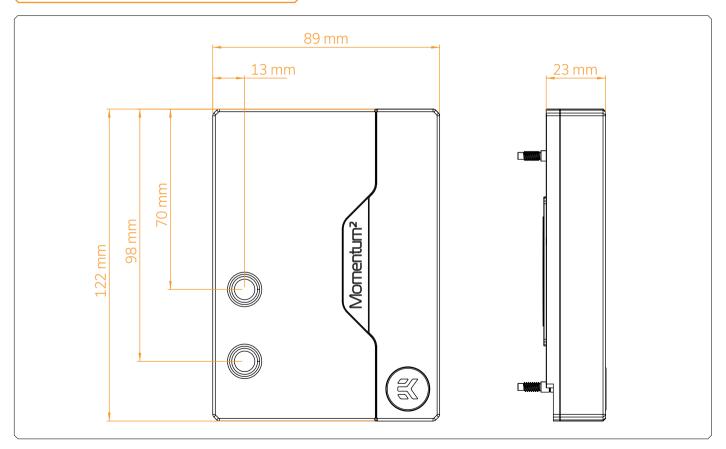
## **TABLE OF CONTENTS**

BOX CONTENTS	4
WATER BLOCK DIMENSIONS	5
TECHNICAL SPECIFICATIONS AND WATER BLOCK PARTS	6
PREPARING THE MOTHERBOARD	7
CUTTING AND PLACING THERMAL PADS	8
INSTALLING THE WATER BLOCK	9
FITTINGS AND TUBING	11
CONNECTING THE D-RGB LED STRIP	12
TESTING THE LOOP	12
WARRANTY	13
SUPPORT AND SERVICE	14
SOCIAL MEDIA	14

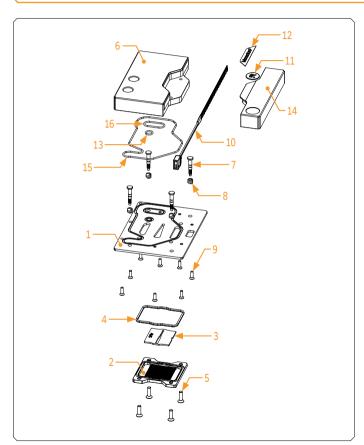
### **BOX CONTENTS**



### WATER BLOCK DIMENSIONS



### TECHNICAL SPECIFICATIONS AND WATER BLOCK PARTS



#### **Technical Specification:**

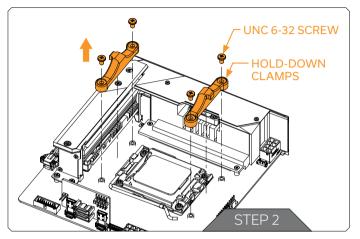
Dimensions (L x H x W): 89 x 121.5 x 34 mm

D-RGB cable length: 50 cm D-RGB LED count: 17

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

Position	EAN	Description	Quantity
1	106257	Mid plate (Nickel)	1
2	105915	Coldplate (Nickel)	1
3	105901	Jet Plate AM5 (Metal)	1
4	104773	Coldplate OR 53 x 2.5 mm	1
5	104686	Screw M4 x 14 DIN7991	4
6	106260	TOP Plate (Plexi)	1
7	106037	Mounting Screw AM5 (Nickel)	4
8	100747	Spring M3 x 10 mm 8 kg	4
9	8252	Screw M3 x 10 DIN7991	8
10	103007	LED Strip	1
11	100663	EK Badge	1
12	104444	Mylar sticker	1
13	104774	OR 8 x 1.5	1
14	106261	Standout (Acetal)	1
15	5131	OR 100 x 1.5	1
16	5163	OR 18 x 1.5	1

### PREPARING THE MOTHERBOARD

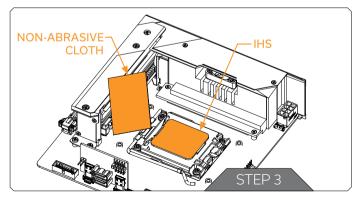


#### STEP 1

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

#### STEP 2

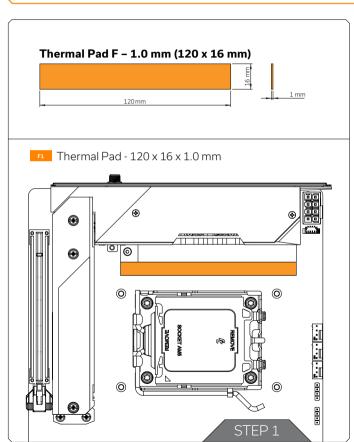
Using a Philips head screwdriver remove the four UNC 6-32 screws securing the original plastic hold-down clamps around the socket as shown in the illustration. Remove the original AMD $^{\circ}$  backplate and the hold-down clamps and store them away.



#### STEP 3

**Cleaning the CPU:** Wipe the IHS clean using a non-abrasive cloth or O-tip as shown in the illustration.

### **CUTTING AND PLACING THERMAL PADS**



#### STEP 1

EK-Quantum Momentum<sup>2</sup> ROG Strix X670E-I D-RGB B water block comes with a thermal pad that has to be cut into smaller pieces to cover the area.



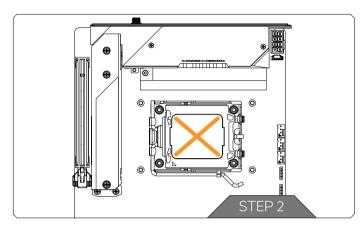
Please remove the protective foil from both sides of the thermal pads prior to installation!

Replacement thermal pads:

Thermal Pad F 1.0 mm - (120 x 16 mm) EAN: 3830046996732

For this step, you will need:





#### STEP 2

**Applying thermal compound:** Apply the enclosed thermal grease (thermal compound) on the CPU heat spreader – IHS – as shown in the image. The layer of the thermal compound must be thin and even in thickness over the entire surface of the IHS.

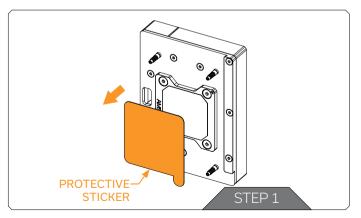


The excessive or uneven application of thermal grease may lead to poor performance!

For this step, you will need:

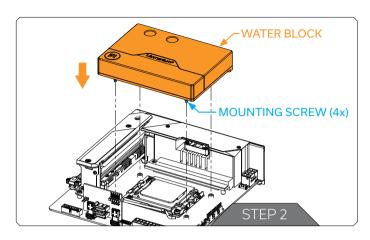


### INSTALLING THE WATER BLOCK



#### STEP 1

Before placing the water block, removing the protective foil from the backside is mandatory.



#### STEP 2

Position the CPU Water Block onto the Motherboard. Make sure to align the holes (as shown in the picture).



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



Make sure to double-check the layer of the Thermal Grease before placing the water block onto the motherboard.

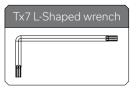


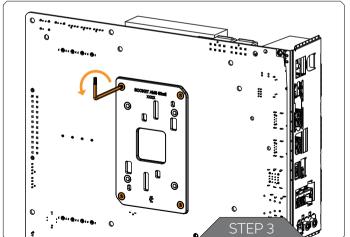
Secure the water block from the backside of the motherboard using the included Tx7 L-Shaped wrench.

Tighten the mounting screws in an anti-clockwise direction. Start fastening the screws in a cross pattern. Do not tighten fully until all of the screws are partially screwed in.

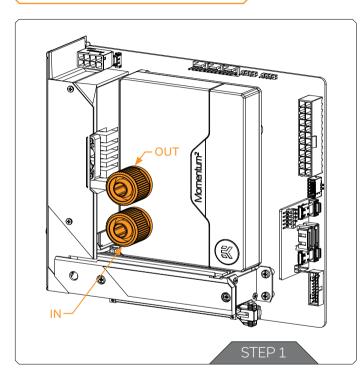
The Tx7 L-Shaped wrench must be used in a standing position! Otherwise, the mounting screws may crack during tightening!

For this step, you will need:





### **FITTINGS AND TUBING**



#### STEP 1

Screw in two (2) G1/4 threaded male fittings. Attach the liquid cooling tubes and connect the water block to the cooling loop. Tighten the fittings in a clockwise direction until the gasket underneath is compressed.

#### EK recommends using EK fittings with all EK water blocks.



Do not forget to plug the remaining two openings using the enclosed EK-Plug G1/4 or its equivalent.



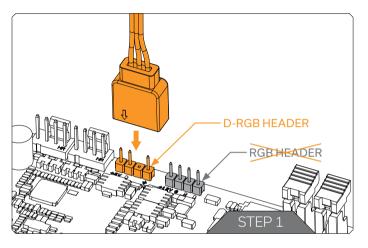
CAUTION: When using connectors other than EK fittings, pay special attention to the length of the fittings' male G1/4" thread – 5mm is the maximum G1/4" thread length allowed!

The installation of the water block is now complete.

For this step, you will need:



#### **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 quarantee 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

