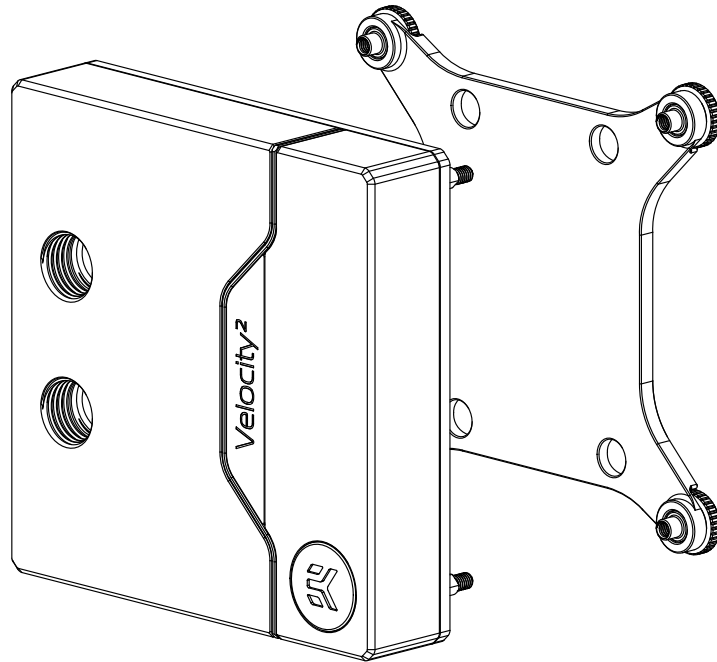


# EK-Quantum Velocity2 D-RGB -LGA 1700



This product is intended for installation only by expert users. Please consult with a qualified technician for installation. Improper installation may result in damage to your equipment. EK Water Blocks assumes no liability whatsoever, expressed or implied, for the use of these products, nor their installation. The following instructions are subject to change without notice. Please visit our website at [www.ekwb.com](http://www.ekwb.com) for updates. Before installation of this product, please read important notice, disclosure, and warranty conditions that are printed on the back of the box.

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.**

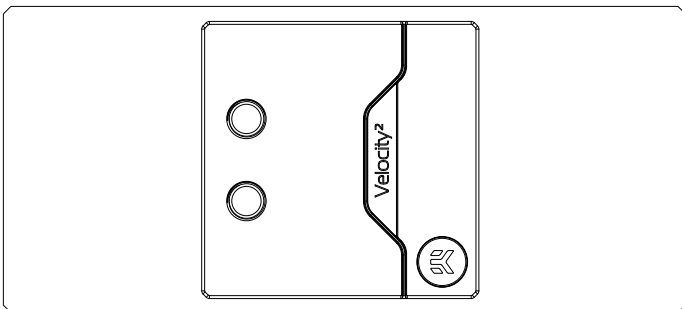
**Do not use pure distilled water! For best results EK recommends the use of EK-Cryo Fuel coolants.**

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

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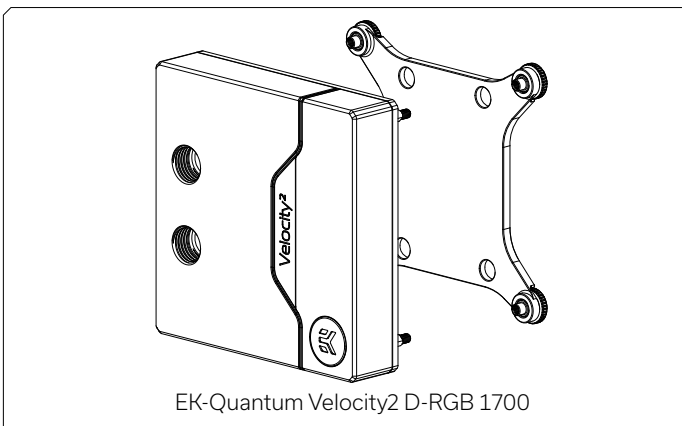
## GENERAL INFORMATION ON WATER BLOCK COMPATIBILITY



This CPU liquid cooling unit is pre-assembled for use with modern Intel desktop socket type motherboards. By default (out of the box) this water block supports the following CPU sockets:

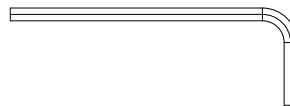
- **Intel LGA-1700**

## BOX CONTENTS

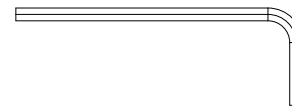


EK-Quantum Velocity2 D-RGB 1700

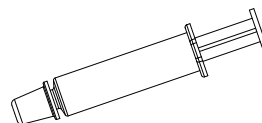
**Mounting Mechanism** – You may not need all the screws, mounting mechanism is universal!



Allen Key 2 mm (1 pc)



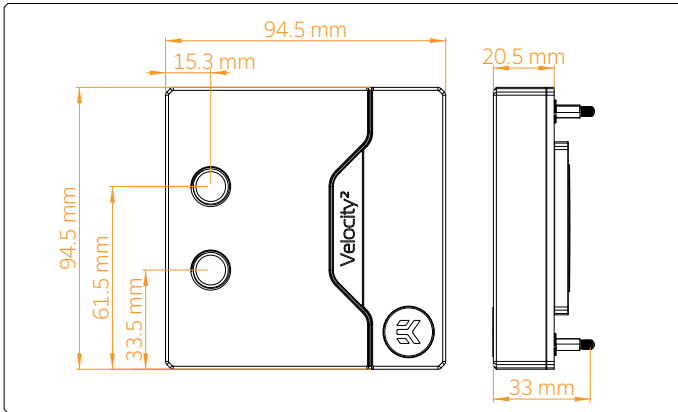
Allen Key 2.5 mm (1 pc)



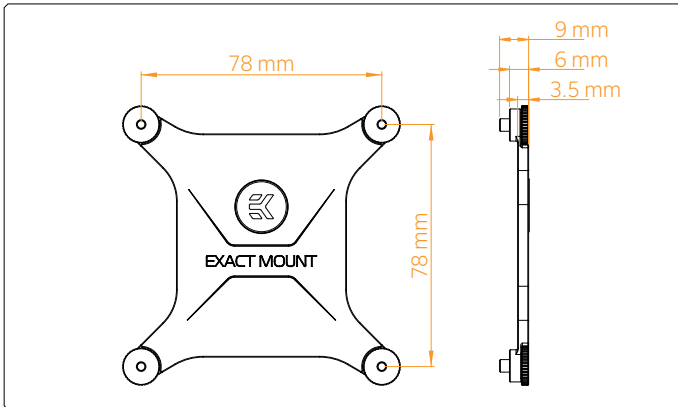
Thermal grease (1 pc)

## WATER BLOCK DIMENSIONS

### CPU WB:



### Backplate:



# TECHNICAL SPECIFICATIONS AND WATER BLOCK PARTS

## NICKEL PLEXI

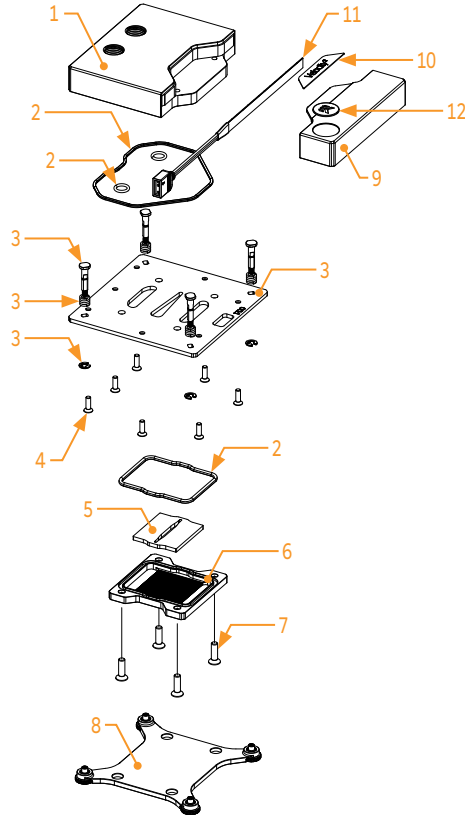
### Technical Specification:

Dimensions (L x H x W): 94.5 x 94.5 x 33 mm

D-RGB cable length: 500 mm

D-RGB LED count: 14

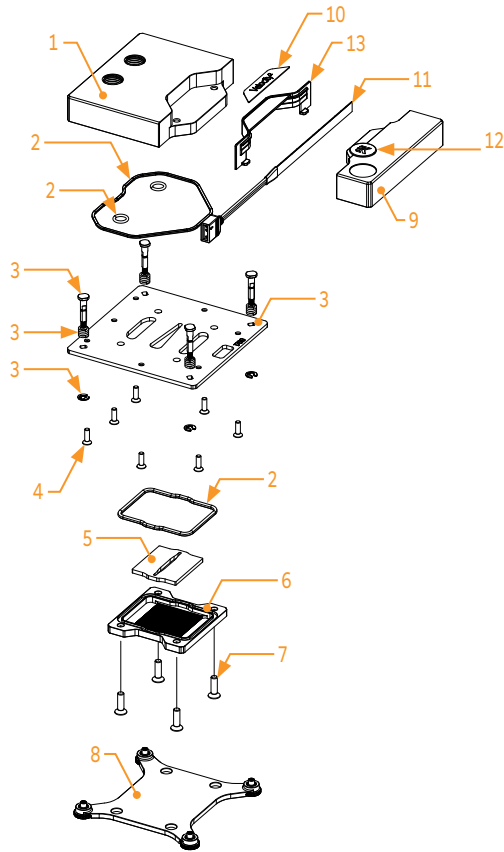
D-RGB connector standard 3-pin (+5V, Data, Blocked, Ground)



Position	EAN	Description	Quantity
1	104034	Top plate - plexi	1
2	103951	OR Set	1
3	104589	Metal plate Assembly	1
4	8201N	M3x10 DIN7991 Screw	7
5	104029	Jet plate	1
6	104028	Coldplate (Nickel)	1
7	9028	M4x14 DIN7991 Screw	4
8	104586	Backplate Assembly	1
9	104050	Acetal standout	1
10	103952	Mylar sticker	1
11	103006	LED Strip	1
12	100663	EK Badge	1

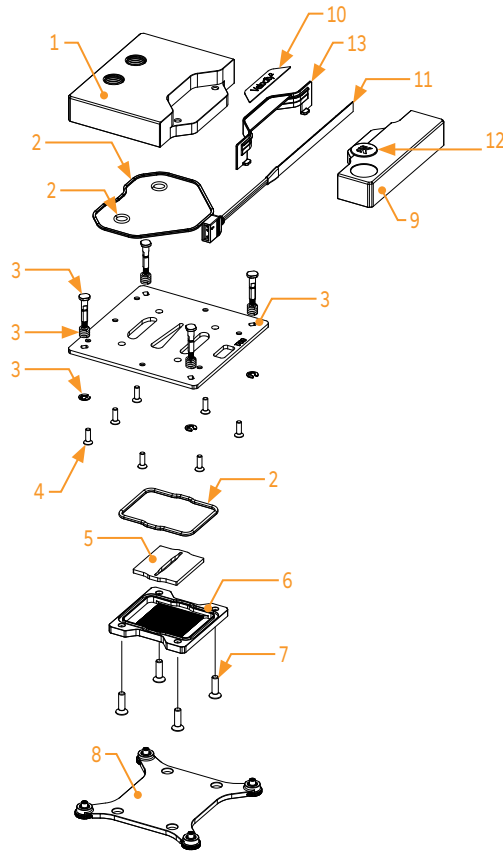
## NICKEL ACETAL

Position	EAN	Description	Quantity
1	104035	Top plate - Acetal	1
2	103951	OR Set	1
3	104589	Metal plate Assembly	1
4	8201N	M3x10 DIN7991 Screw	7
5	104029	Jet plate	1
6	104028	Coldplate (Nickel)	1
7	9028	M4x14 DIN7991 Screw	4
8	104586	Backplate Assembly	1
9	104051	Acetal standout	1
10	103952	Mylar sticker	1
11	103006	LED Strip	1
12	100663	EK Badge	1
13	103937	Light guide	1



## COPPER ACETAL

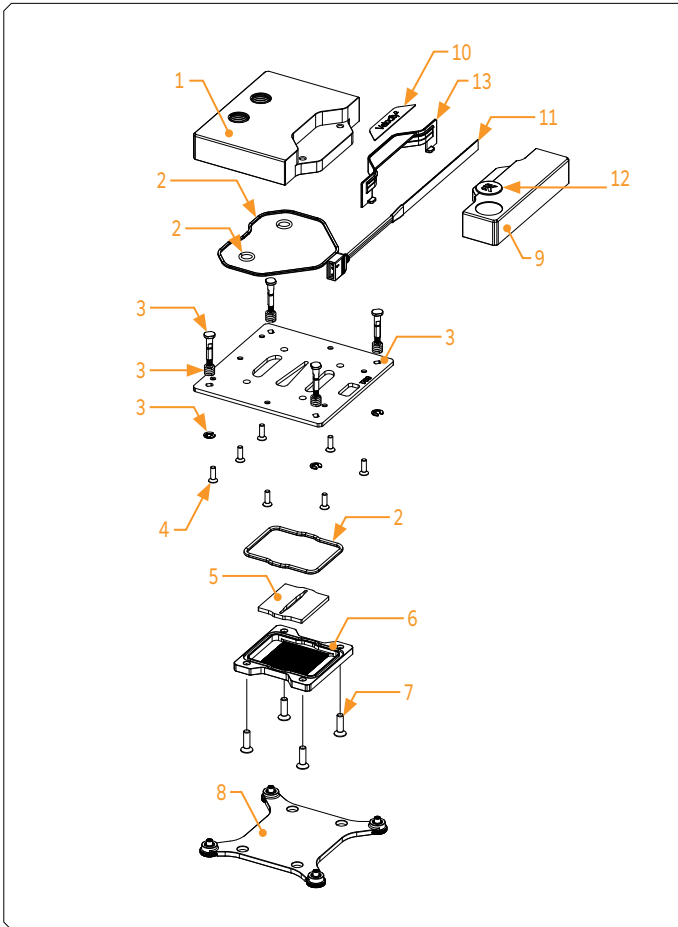
Position	EAN	Description	Quantity
1	104035	Top plate - Acetal	1
2	103951	OR Set	1
3	104589	Metal plate Assembly	1
4	8201	M3X10 DIN7991 Screw	7
5	104029	Jet plate	1
6	104027	Coldplate	1
7	8207	M4X14 DIN7991 Screw	4
8	104586	Backplate Assembly	1
9	104050	Acetal standout	1
10	103952	Mylar sticker	1
11	103006	LED Strip	1
12	100663	EK Badge	1
13	104049	Light guide	1





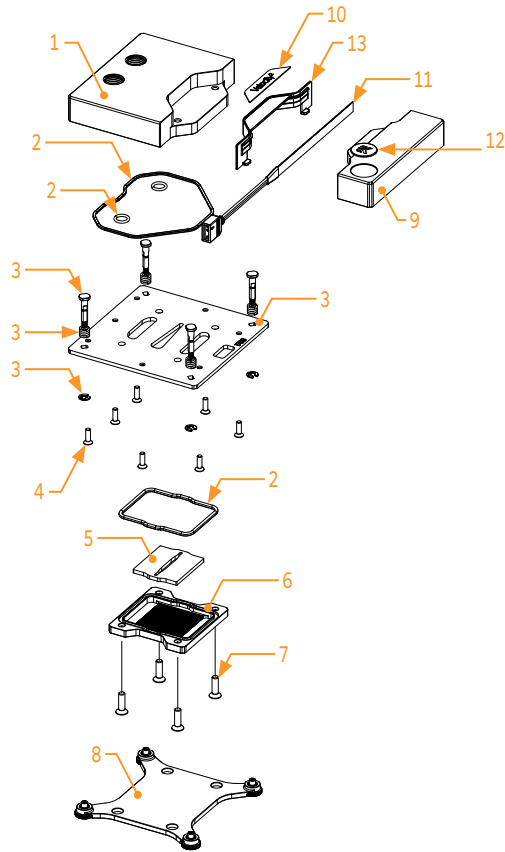
## FULL NICKEL

Position	EAN	Description	Quantity
1	104037	Top plate - Nickel	1
2	103951	OR Set	1
3	104589	Metal plate Assembly	1
4	8201N	M3X10 DIN7991 Screw	7
5	104029	Jet plate	1
6	104028	Coldplate (Nickel)	1
7	9028	M4X14 DIN7991 Screw	4
8	104586	Backplate Assembly	1
9	104051	Acetal standout	1
10	103952	Mylar sticker	1
11	103006	LED Strip	1
12	100663	EK Badge	1
13	103937	Light guide	1

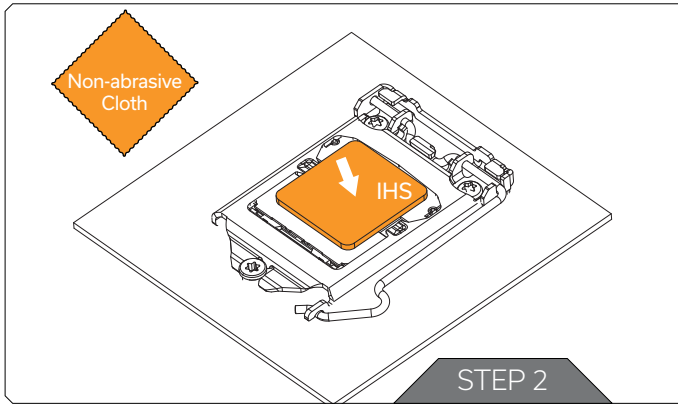


## SATIN TITANIUM

Position	EAN	Description	Quantity
1	104405	Top plate - Nickel	1
2	103951	OR Set	1
3	104589	Metal plate Assembly	1
4	8201N	M3X10 DIN7991 Screw	7
5	104029	Jet plate	1
6	104028	Coldplate (Nickel)	1
7	9028	M4X14 DIN7991 Screw	4
8	104586	Backplate Assembly	1
9	104051	Acetal standout	1
10	103952	Mylar sticker	1
11	103006	LED Strip	1
12	100663	EK Badge	1
13	103937	Light guide	1



## PREPARING THE MOTHERBOARD

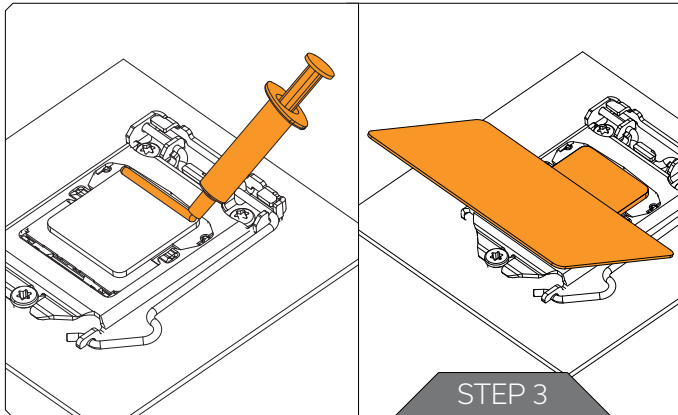


### STEP 1

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

### STEP 2

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

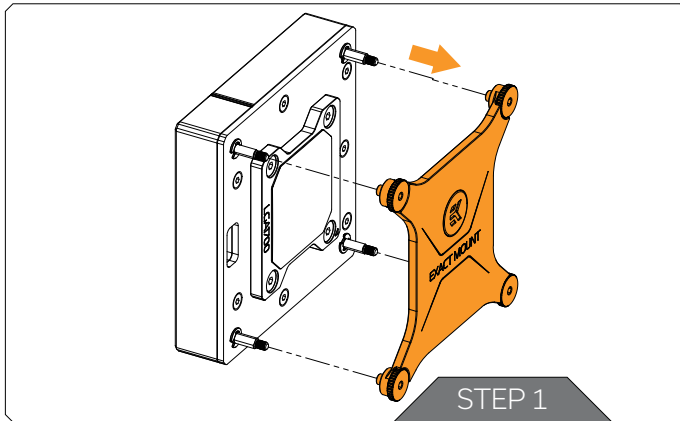


### STEP 3

**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.

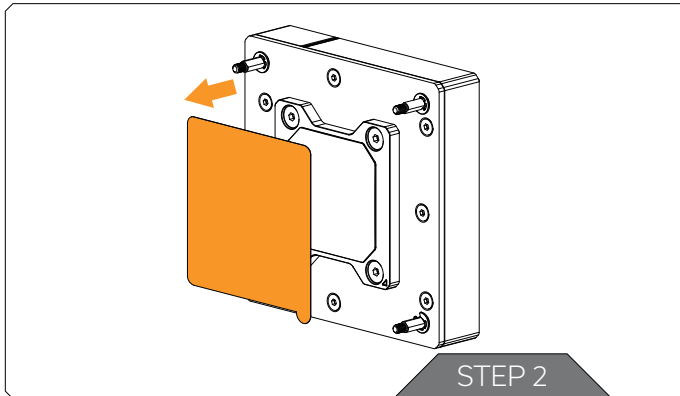
The layer of Thermal Compound must be thin and even in thickness over the entire surface of the IHS. Excessive or irregular application may lead to poor performance. This method works for Thermal Grizzly Hydronaut Thermal Compound as supplied with all Velocity2 CPU Water Blocks.

## INSTALLING THE WATER BLOCK



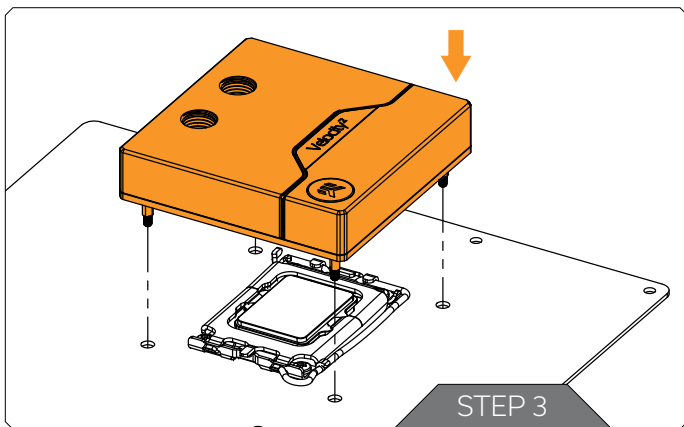
### STEP 1

Unscrew the pre-installed backplate from the backside of the CPU 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.

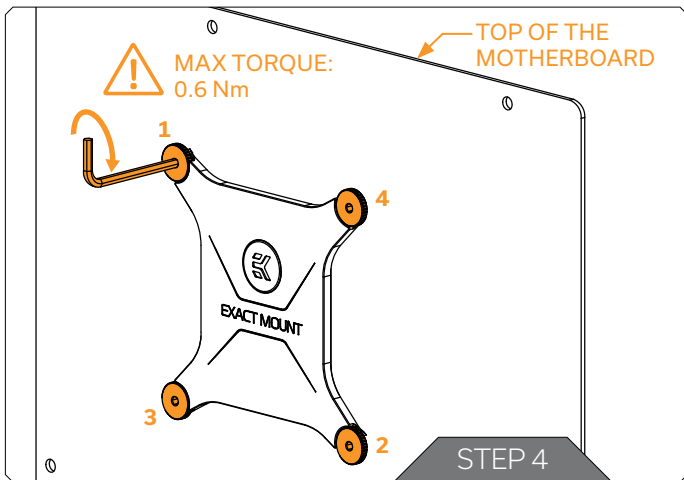


### STEP 3

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



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



### STEP 4

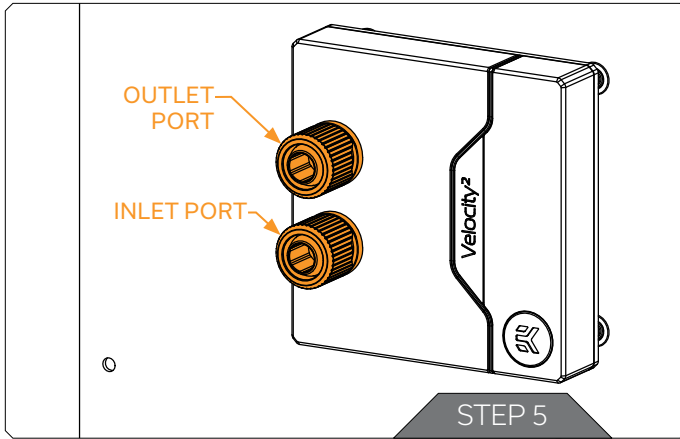
After placing the water block, the stored backplate must be attached on the backside of the motherboard using Allen Key 2.5 mm (shown in the picture).

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.



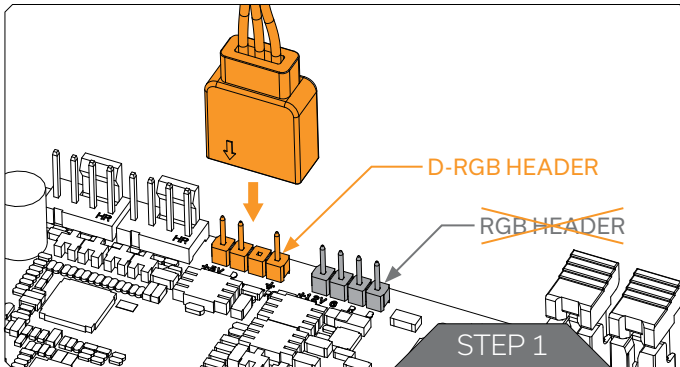
### STEP 5

With EK-Velocity2 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 clockwise direction until the gasket underneath is compressed.

**The installation of the Velocity2 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 DRGB 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.

## 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


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