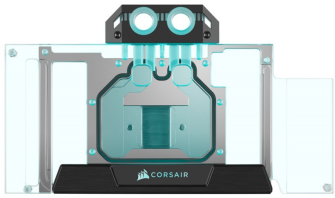
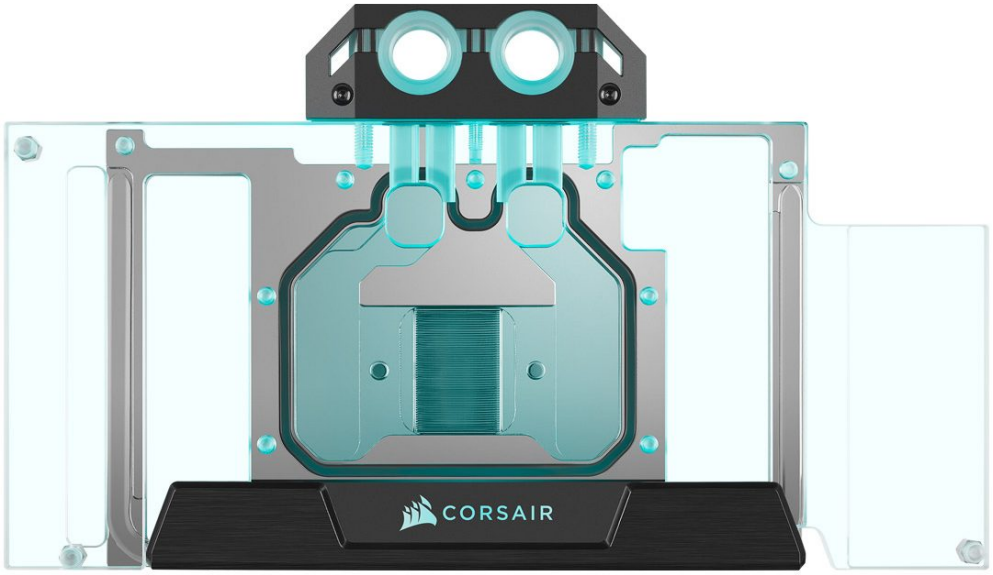


CORSAIR XG5 RGB GPU Water Block User Guide

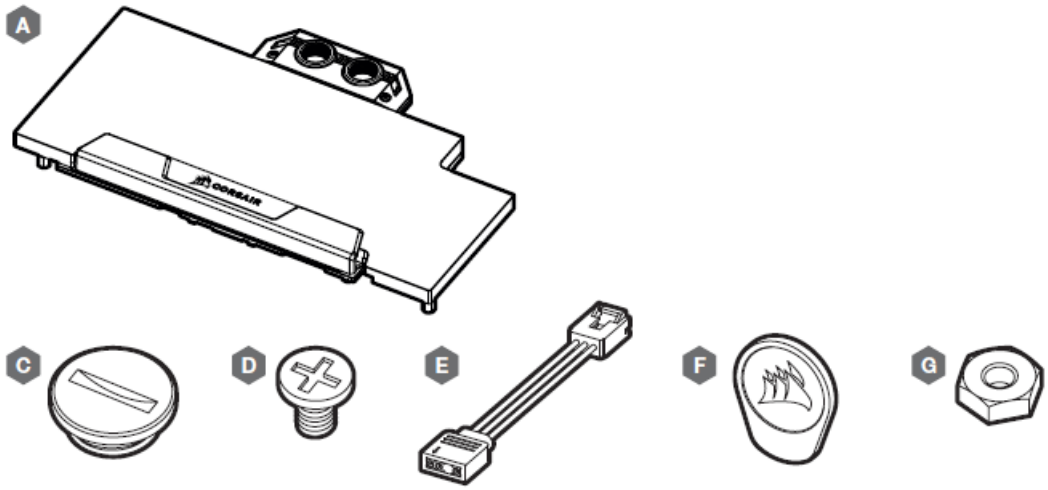
Contents

CORSAIR XG5 RGB GPU Water Block

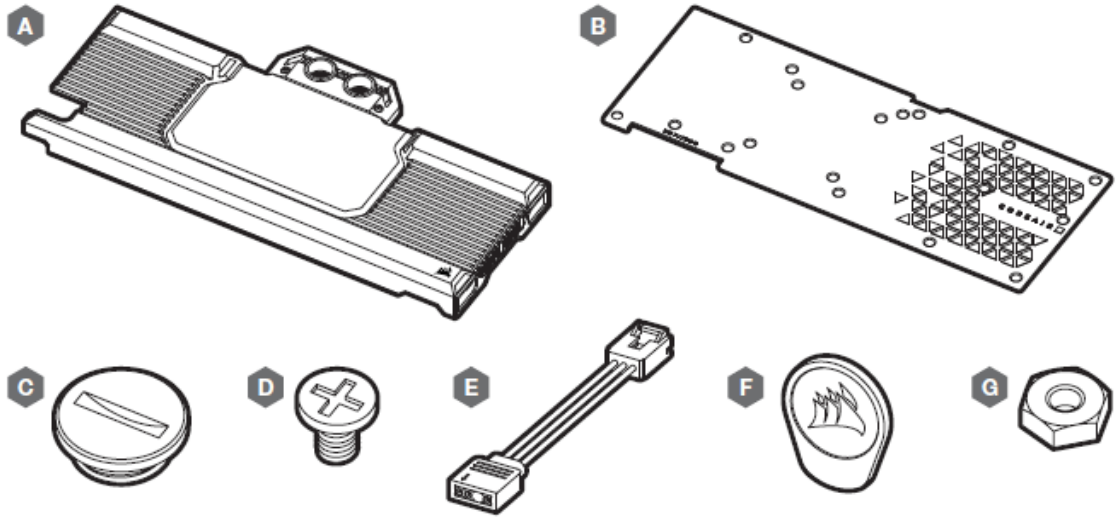


This Quick Start Guide is a general installation guide and does not cover specifics of various graphics cards factory cooling solution's disassembly and/or different XG5/XG7 RGB Water Block variants.
Disassembly of the original heat-sink fan from any graphics card may result in voiding the warranty. Installation of the aftermarket product, such as the XG5/XG7 RGB Water Block, is generally considered a warranty void situation. CORSAIR recommends you thoroughly leak-test your custom cooling system for at least 24 hours to ensure that the system is securely sealed and operating reliably. CORSAIR warranty does not cover any hardware damage resulting from poorly executed, improper, and otherwise hasty assembly of your custom water-cooling system. Disassembly of CORSAIR HYDRO X products is highly discouraged due to the complex design of components. Such action may result in irreparable mechanical, electrical or chemical damage that may void the warranty. For an exact and up-to-date product compatibility list, please refer to the CORSAIR website.

PACKAGE CONTENTS

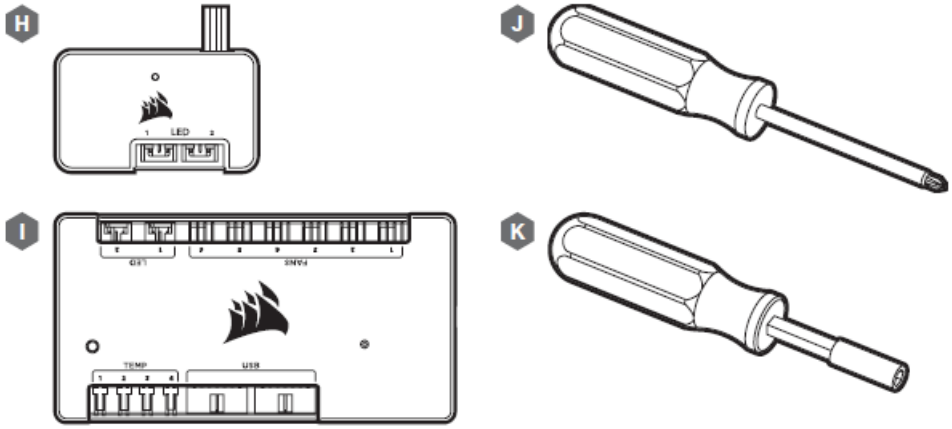


- A — XG5 RGB WATER BLOCK WITH PRE-INSTALLED THERMAL MATERIAL
- C — x2 CORSAIR G1/4″ PLUGS
- D — M2.5 x 5mm SCREWS
- E — ARGB MOTHERBOARD ADAPTER CABLE
- F — PLUG TOOL
- G — M2.5 HEX NUT (OPTIONAL)



- A — XG7 RGB WATER BLOCK WITH PRE-INSTALLED THERMAL MATERIAL
- B — XG7 RGB WATER BLOCK BACKPLATE
- C — x2 CORSAIR G1/4″ PLUGS
- D — M2.5 x 5mm SCREWS

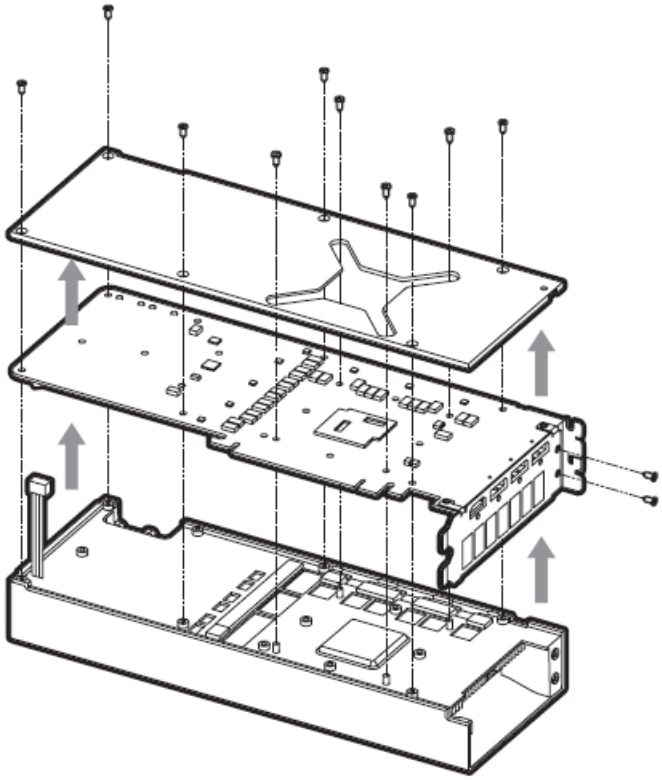
PREREQUISITES (NOT INCLUDED)



- H — CORSAIR LIGHTING NODE PRO
- I — CORSAIR iCUE COMMANDER PRO / CORE XT
- J — VARIOUS SIZE PHILLIPS-HEAD SCREWDRIVER(S) FOR ELECTRONICS
- K — 4mm HEX SOCKET (DEPENDS ON THE GRAPHICS CARD MAKE AND MODEL)

Note: CORSAIR iCUE COMMANDER PRO / CORE XT or CORSAIR Lighting Node PRO are required for driving and controlling the RGB LED illumination. Only certain NVIDIA® GEFORCE® graphics cards require 4mm hex socket screwdriver in order to remove the factory-installed heat sink.

REMOVAL OF ORIGINAL HEAT-SINK FAN ASSEMBLY

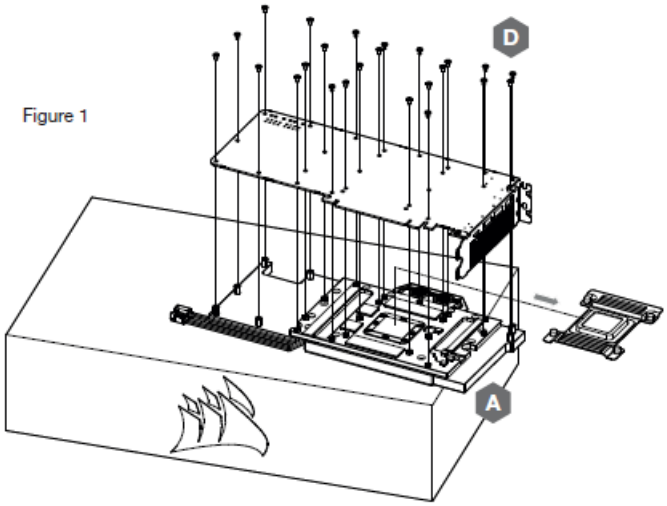


1. Unscrew all fasteners attaching original heat sink fan assembly to the graphics card circuit board. Traditionally this includes:
    1. Heat-sink with fan
    2. Backplate and/or front plate
    3. I/O bracket reinforcement
2. Disconnect all cables connected from heat sink fan assembly to graphics card circuit board (heat sink assembly fan(s) and (RGB) LED illumination).
3. Wipe off any remains of the original thermal compound and pads until there are no leftovers on the graphics card circuit board and GPU. Use isopropyl alcohol if necessary.

WATER BLOCK INSTALLATION

1. Remove the TIM protective cover and place the XG5 RGB Water Block on a suitable smooth surface, e.g. packaging box, with aesthetic cover and acrylic glass facing down. Place it so that the front of the water block slightly overhangs the box as shown in the image. This is to prevent graphics card’s protruding I/O ports interfering with installation.
2. Align the holes and carefully place the bare graphics card onto the XG5 RGB Water Block with pre-installed thermal material.
3. Secure the XG5 RGB Water Block assembly by fastening the enclosed M2.5x5mm screws using Phillips-head screwdriver.
4. Some graphics cards, notably NVIDIA® GEFORCE® models, also require you to fasten the I/O bracket to the circuit board after the installation of aftermarket cooler. Secure this bracket by using the enclosed M2.5 x 5 screw and a M2.5 nut. (Shown on Figure 2).

Figure 1



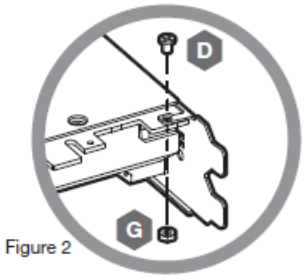


Figure 2

WATER BLOCK INSTALLATION continue

- Remove the TIM protective cover and place the XG7 RGB Water Block on a suitable smooth surface, e.g. packaging box, with aesthetic cover and acrylic glass facing down. Place it so that the front of the water block slightly overhangs the box as shown in
  the image. This is to prevent graphics card's protruding I/O ports interfering with installation.
- Align the holes and carefully place the bare graphics card onto the XG7 RGB Water Block with pre-installed thermal material. Make sure to route the XG7 RGB wiring through the rear of the water block as shown in the image. An alternative way of routing the XG7 RGB wiring is shown on Figure 3.
- Align the holes and carefully place the enclosed XG7 RGB backplate onto the graphics card – water block assembly.
- Secure the XG7 RGB Water Block assembly by fastening the enclosed M2.5x5mm screws using Phillips-head screwdriver.
- Some graphics cards, notably NVIDIA® GEFORCE® models, also require you to fasten the I/O bracket to the circuit board after the installation of aftermarket cooler. Secure this bracket by using the enclosed M2.5 x 5 screw and a M2.5 nut. (Shown on Figure 2).

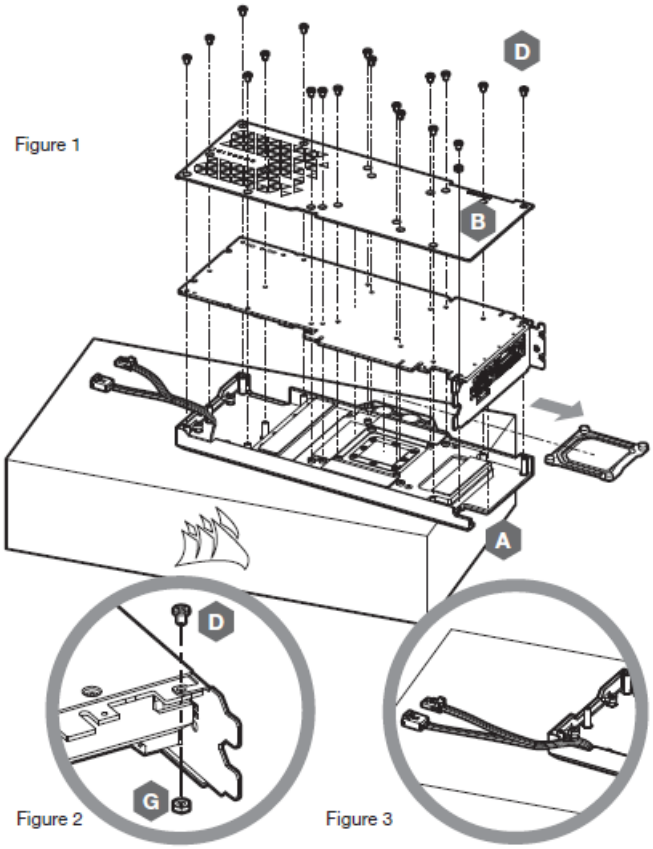


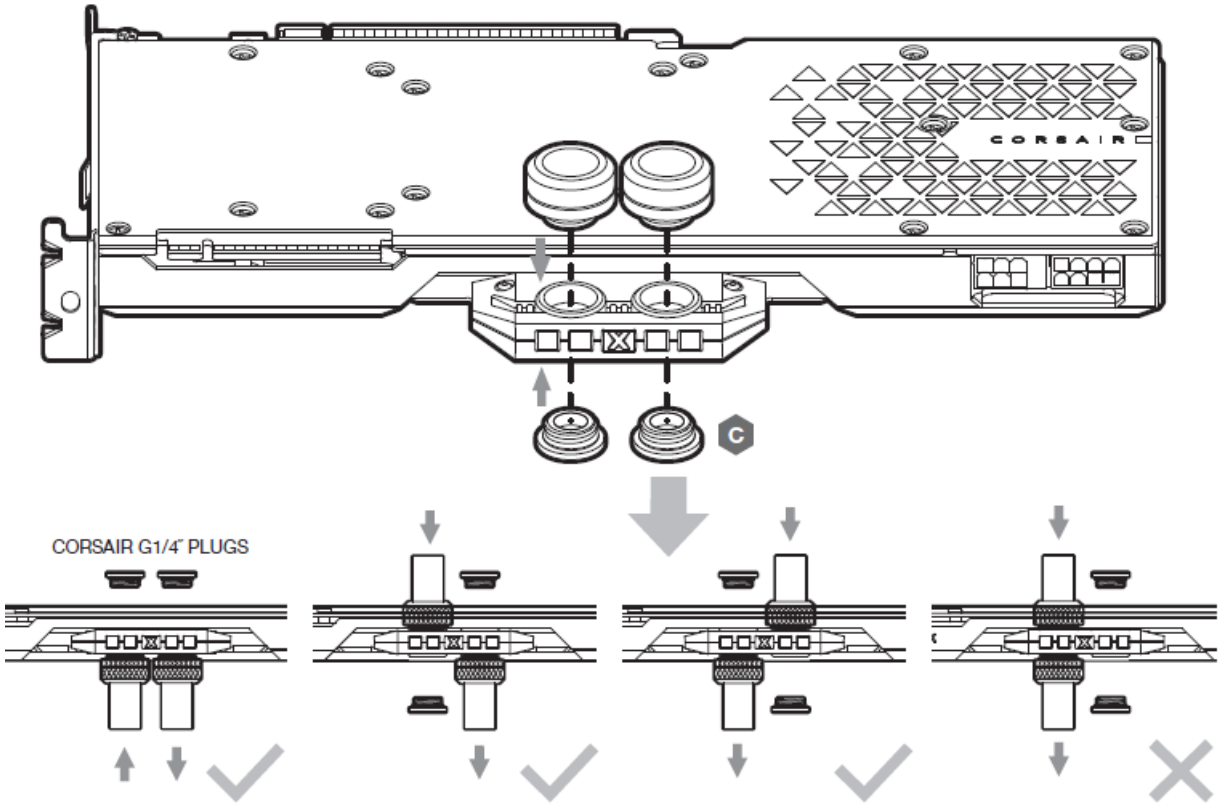
Figure 1

Figure 2

Figure 3

FITTING AND TUBING INSTALLATION

1. Install the two (2) appropriate CORSAIR XF G1/4″ BSPP threaded-type fittings (not included) into the water block ports and tighten them by hand. Do not use any tools to tighten (i.e. pliers). Use one port as an inlet and the other as the outlet. Do not use one side for both inlet and outlet – this will result in fluid bypassing the water block.
2. Close the remaining two (2) open (unused) ports with the included CORSAIR G1/4” plugs and tighten them using the included plug tool (F).Refrain from using a screwdriver as it may result in damage to the surface of the plugs.
3. Install appropriate tubing for your CORSAIR XF compression-fitting type and secure it using the locking ring to finalize the adding of the water block to the water-cooling loop. Use the appropriate securing method when using fittings other than compression fittings. Do not forget to leak test the system before fully powering on your PC.



CONNECTING AND USING THE INTEGRATED DIGITAL RGB ILLUMINATION

A CORSAIR iCUE Commander PRO / CORE XT or Lighting Node PRO (either) is required in order to use the integrated RGB illumination on the XG5/XG7 RGB Water Block. CORSAIR iCUE software is used to program and control the visual effects. The XG5/XG7 RGB Water Block can be connected to the appropriate CORSAIR controller either directly or “daisy”-chained with other CORSAIR HYDRO X Series product(s) with addressable RGB lightning.

1. Identify the correct RGB connector on the water block (Figure 1).
2. I nsert the RGB connector in a CORSAIR iCUE Commander PRO / CORE XT port or Lighting Node PRO port. (Figure 2).
3. Download and install CORSAIR iCUE software suite from the following website: **https://www.corsair.com/icue.**

Figure 1

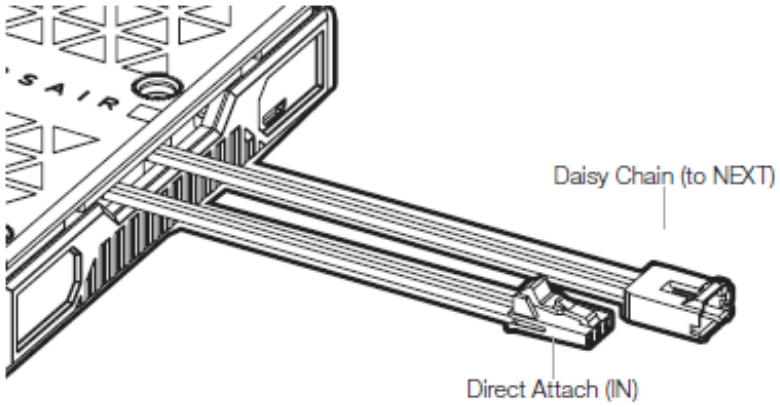
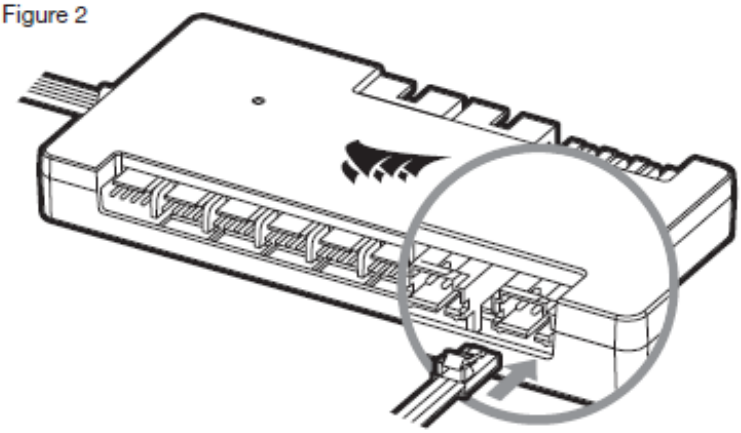


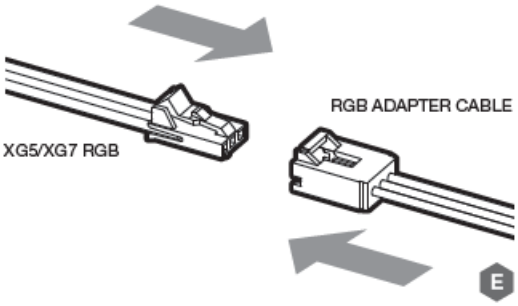
Figure 2

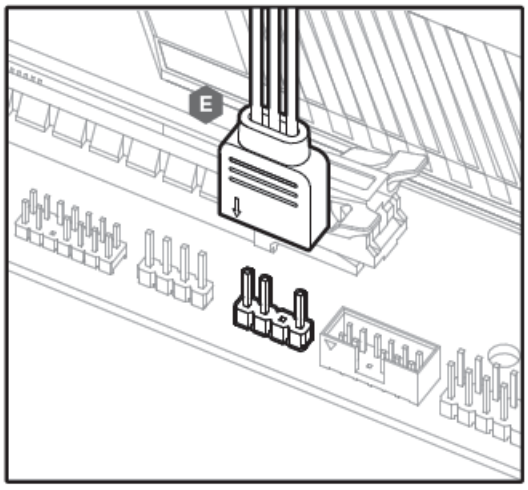


Configure visual and lighting effects by following the manual for iCUE software.

CONNECTING THE XG5/XG7 RGB LIGHTING TO THE MOTHERBOARD

1. Connect the XG5/XG7 RGB male connector into the RGB ADAPTER CABLE (E) female connector.
2. Connect the RGB ADAPTER CABLE female connector into the Digital RGB header on the motherboard. Make sure the arrow on the RGB ADAPTER CABLE is plugged into +5V on the motherboard.





By using the motherboard adapter it is not possible to control the RGB illumination with iCUE software.

FREQUENTLY ASKED QUESTIONS

1. Is the XG5/XG7 RGB Water Block compatible with my graphics card?

The support varies from model to model. Please consult corsair.com for an up-to-date list of unsupported models prior to installation!

2. Can I use XG5/XG7 RGB Water Block as a standalone part?
   No, this is a water block for your graphics card which requires a complete custom water-cooling system, including standalone pump and radiator. For more information, please visit corsair.com.
3. Can I use the XG5/XG7 RGB Water Block with aluminium water-cooling equipment?
   No, you cannot. The cold plate is made from nickel-plated copper and should not be mixed with aluminium in a custom cooling system.
4. Is the flow orientation important?
   No, it is not. The XG5/XG7 RGB works great with flow in either direction.
5. Can I reuse the pre-applied thermal paste on XG5/XG7 RGB Water Block for re-installation?
   Re-installation of the XG5/XG7 RGB Water Block will require you clean off the pre-applied thermal paste and apply a new layer of thermal paste. However, the thermal pads can be reused.
6. Can I connect the RGB header directly to my motherboard?
   Yes you can – using the included RGB ADAPTER CABLE. See page 28 – CONNECTING THE XG5/XG7 RGB LIGHTING TO THE MOTHERBOARD
7. How many RGB devices can I daisy-chain to a single channel on a CORSAIR controller?
   CORSAIR recommends you connect no more than three (3) Hydro X Series RGB devices of any type connected in a series on a single channel. However, you can connect one (1) XC water block, two (2) XG5/XG7 RGB water blocks and one (1) XD5 RGB pump unit for a total of four (4) devices. Do not mix CORSAIR fans or RGB LED strips and CORSAIR HYDRO X products on the same channel on the controller. Use a dedicated channel for other components.

NOTE ON ENVIRONMENTAL PROTECTION

After the implementation of the European Directive 2012/19/EU in the national legal system, the following applies:

- Electrical and electronic devices may not be disposed of with domestic waste.
- Consumers are obligated by law to return electrical and electronic devices at the end of their service lives to the public collecting points set up for this purpose of point of sale. Details to this are defined by the national law of the respective country. This symbol on the product, the instruction manual or the package indicates that a product is subject to these regulations. By recycling, reusing the materials or other forms of utilizing old devices, you are making an important contribution to protecting our environment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Statment

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations. CAN ICES-3(B)/NMB-3(B). CORSAIR MEMORY, Inc. declares that this equipment is in compliance with Directive 2014/30/EU and Directive 2011/65/EU. A copy of the original declaration of conformity can be obtained at "corsair.com/documentation". Operating Temperature: 0°C ~ + 40°C.

Documents / Resources

	CORSAIR XG5 RGB GPU Water Block [pdf] User Guide XG5, XG7 RGB, RGB GPU Water Block

References

- PC Components | Gaming Gear | CORSAIR
- PC Components | Gaming Gear | CORSAIR
- Corsair Blog - Corsair Community
- Corsair
- Home - Corsair Community
- corsair.com/icue