LYNK+

USER MANUAL

RTX 5090 UPGRADE KIT

PLEASE READ BEFORE STARTING:

Congratulations on your new **LYNK+ liquid cooling system**.

The **modular design of LYNK+** makes installation quick and simple, letting you enjoy top performance in **just a few steps.**

IF YOU PURCHASED A **LYNK+ UPGRADE KIT**, PLEASE FOLLOW THE INSTALLATION STEPS BELOW TO MOUNT THE LYNK+ COOLER MODULE ONTO YOUR GRAPHICS CARD.

IF YOU PURCHASED A **GRAPHICS CARD WITH A PRE-INSTALLED LYNK+ COOLER** YOU CAN START FROM HERE: **INSTALLING THE LYNK+ RADIATOR MODULE**

STEP 1: COMPATIBILITY

Even though the system is designed with maximum possible **compatibility** in mind, there are some things that need to be **taken into consideration**:

FOR A FULL COMPATIBILITY GUIDE WITH EVERYTHING YOU NEED TO KNOW WHEN PLANING A NEW PC WITH LYNK+ CLICK HERE: LYNK+ COMPATIBILITY

STEP 2: SPECIAL INSTRUCTIONS FOR THERMAL PADS

The **thermal pads** bundled with your LYNK+ cooler provide **high thermal conductivity**. This requires them to be **softer** and more malleable **than usual**.

DON'T OVERSTRECH THE THERMAL PADS DURING INSTALLATION

FOR AN INSTRUCTION VIDEO ON HOW TO BEST HANDLE THE PADS AND AVOID DEFORMATION CLICK HERE: THERMAL PAD INSTALLATION VIDEO

STEP 3: INSTALLATION INSTRUCTIONS

If you've completed the steps above, please **continue to the next pages** for a complete **User Manual** on how to install your LYNK+ system.

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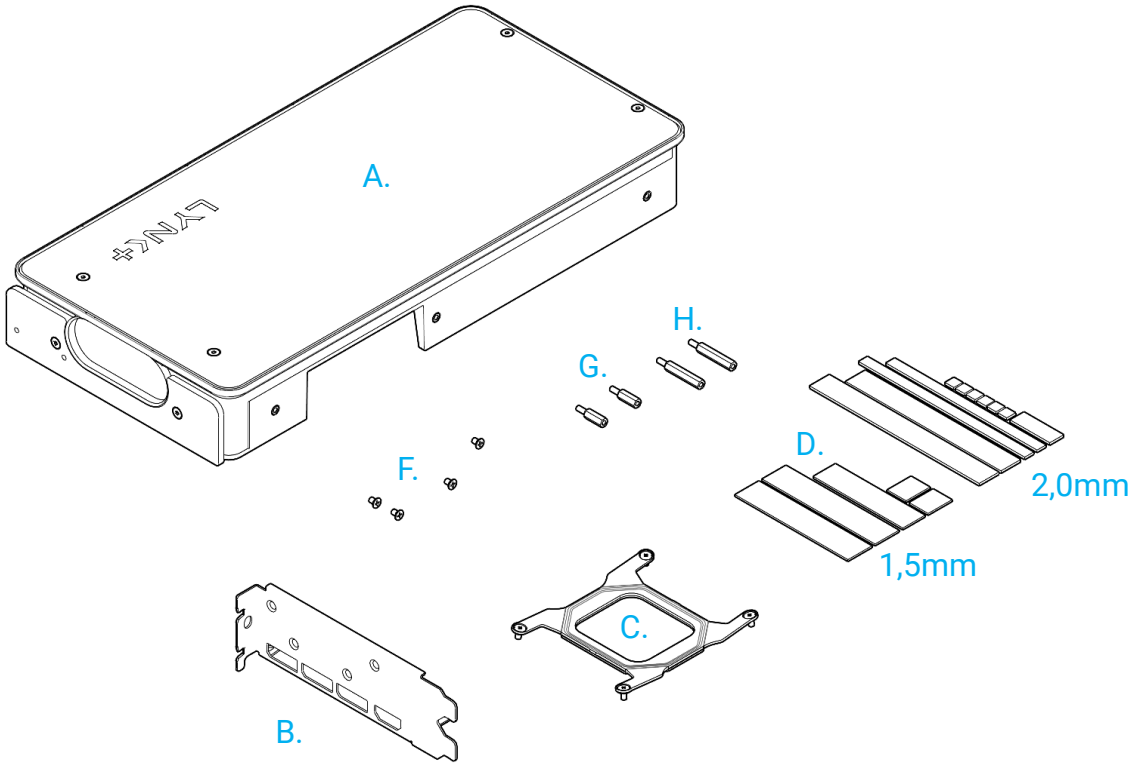
INSTALLING THE LYNK+ GPU COOLER MODULE

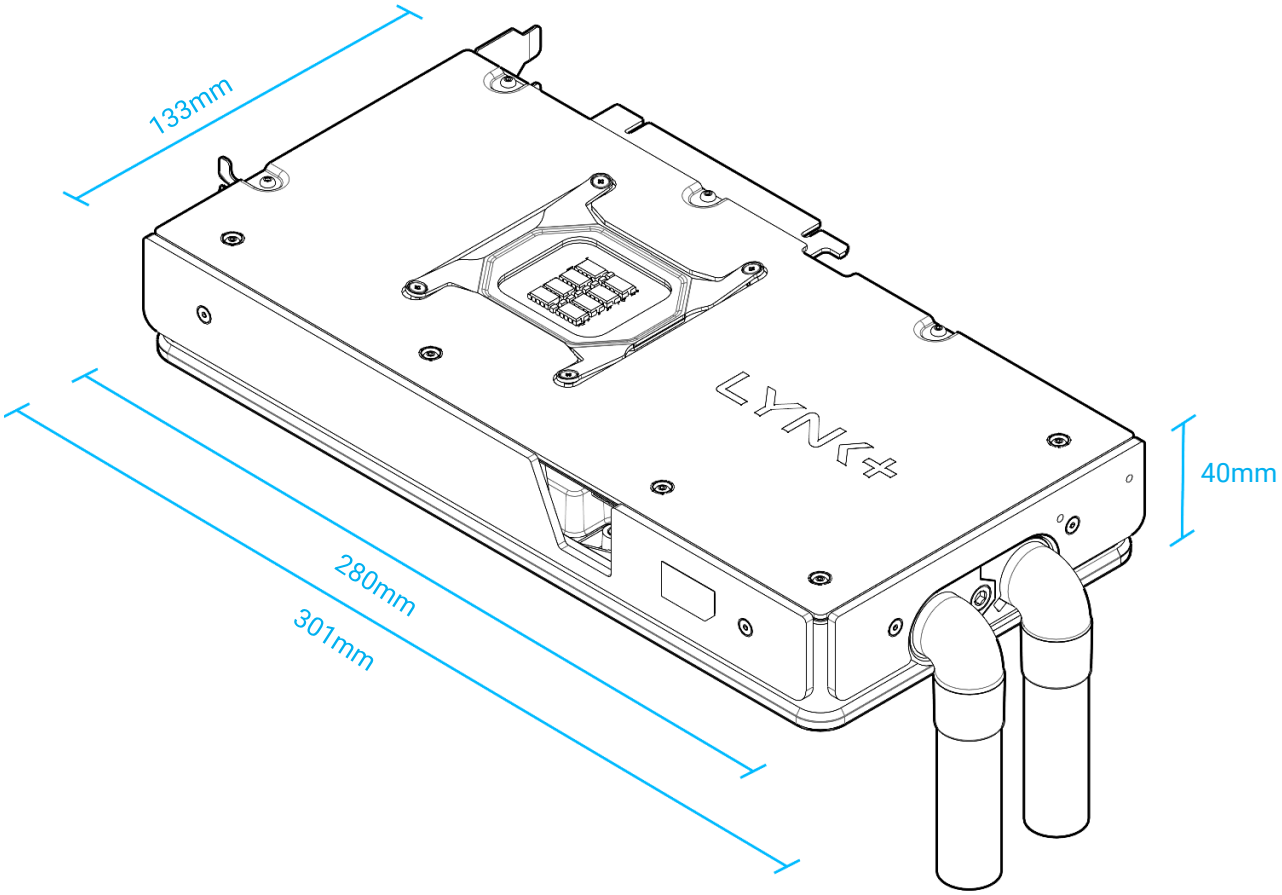
BOX CONTENTS – RTX 5090 UPGRADE KIT COOLER



PACKAGE INCLUDES:

A. 1x Modular RTX 5090 liquid cooler
B. 1x 2-Slot Slot bracket: Fits all supported GPUs)
C. 1x Spring Cross Plate: With built-in mounting hardware
D. 1x Thermal Pad Set (1,5mm and 2,0mm Thicknesses)
E. 1x User Manual
F. 4x Slot Bracket Screws
G. 3x 10mm Standoffs
H. 2x 20mm Standoffs

DIMENSIONS – RTX 5090 UPGRADE KIT COOLER



PREPARING GPU

STEP 1

Remove all screws holding the stock cooler to the GPU PCB.

STEP 2

Remove I/O bracket and spring cross.

STEP 3

Carefully unplug the fan and RGB connectors from the board.

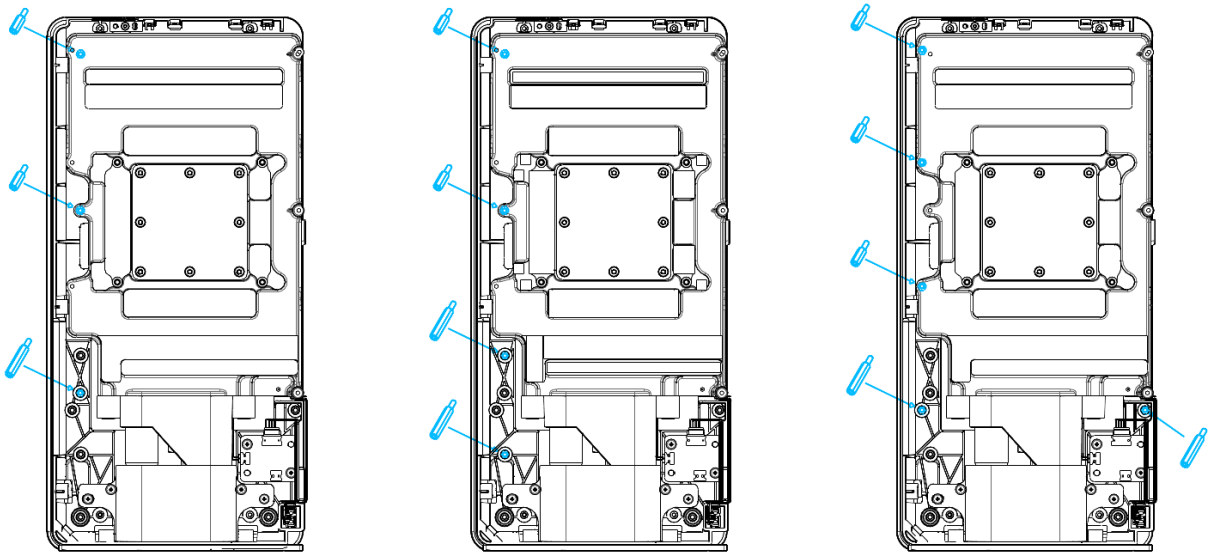
STEP 4

Remove all thermal pads and thermal grease. Use lint-free cloth and isopropyl alcohol for cleaning.

PREPARING THE LYNK+ COOLER

STEP 5

Depending on your GPU model, install standoffs (item G and H) in indicated positions. Make sure to use the correct length of standoffs for each position.



REF **ZOTAC** **PALIT**

STEP 6

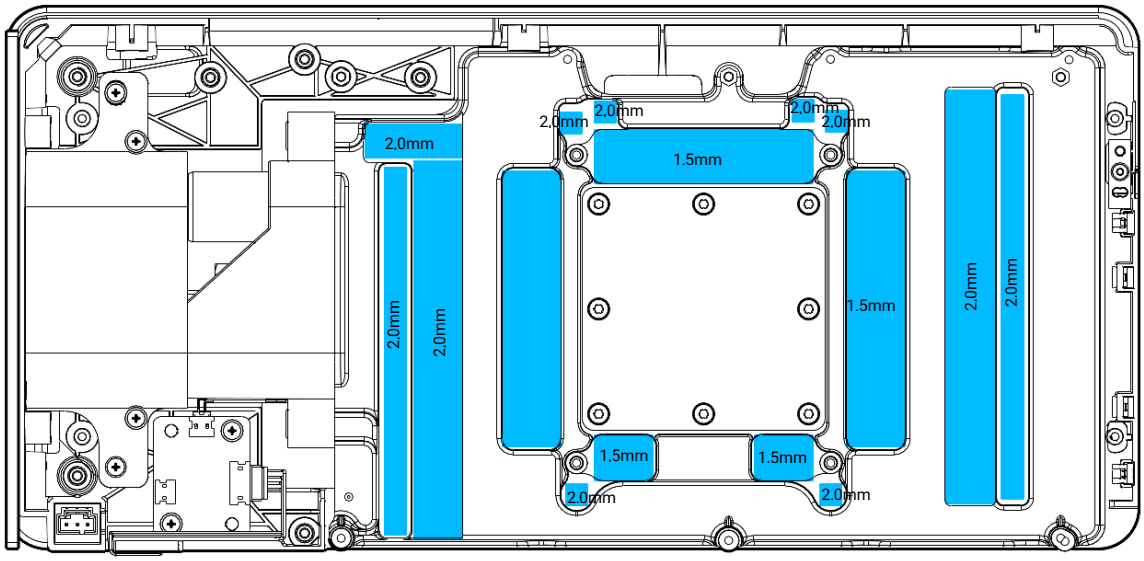
Remove protective foil from copper cold plate. Make sure the cooler block’s surface is clean.

THERMAL PADS

THE THERMAL PADS BUNDLED WITH YOUR LYNK+ COOLER OFFER HIGH THERMAL CONDICTIVITY. THIS REQUIRES THE PADS TO BE MALEABLE.

MAKE SURE YOU DON'T OVERSTRECH THE PADS DURING INSTALLATION

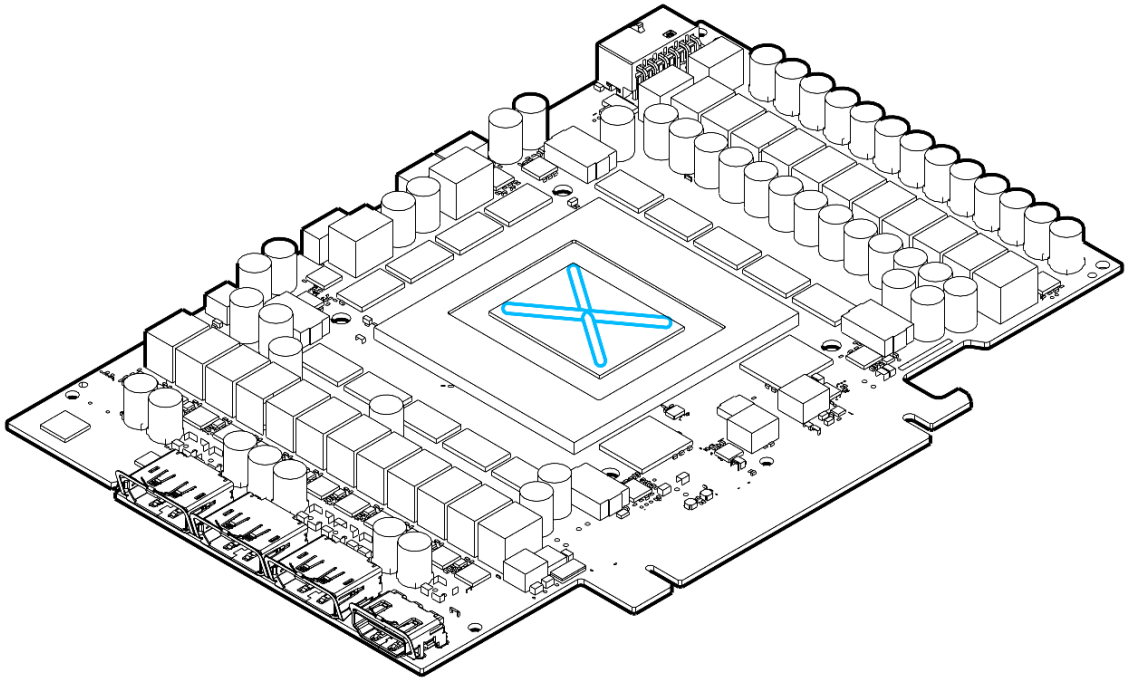
CLICK HERE FOR AN ISTRUCTION VIDEO ON HOW TO CORRECLY INSTALL THE PADS THERMAL PAD INSTALLATION VIDEO



STEP 7

Apply thermal pads (item D) on indicated positions. Make sure to use the correct thickness for each position.

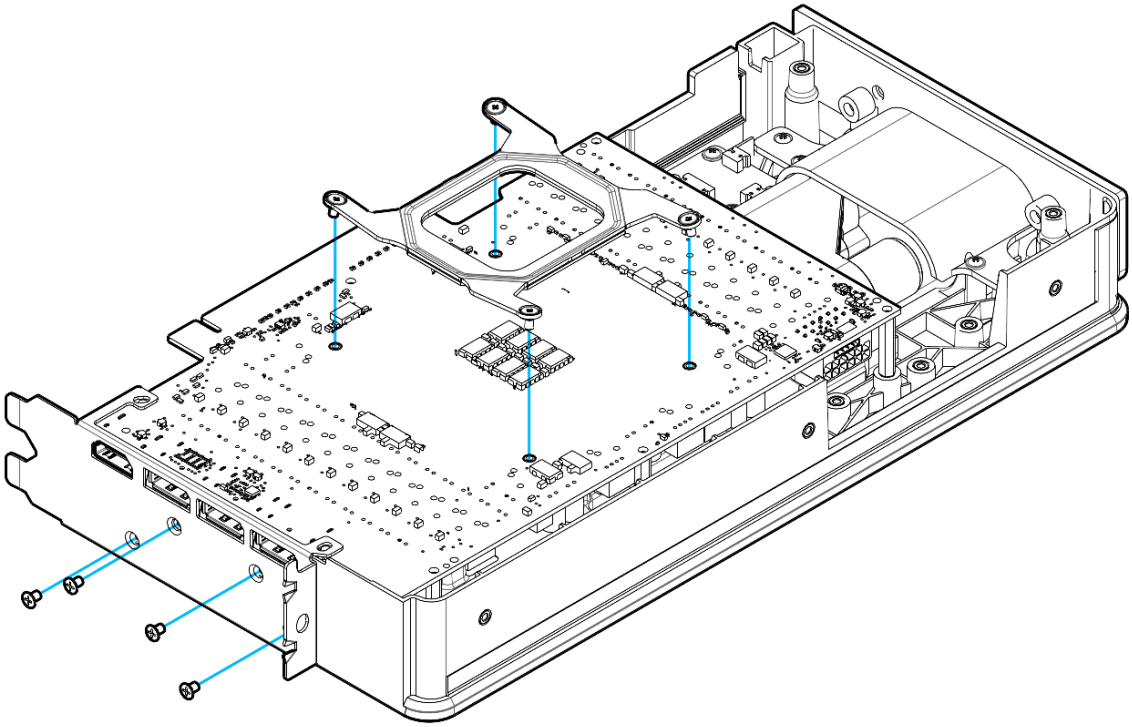
APPLYING THERMAL PASTE



STEP 8

Evenly apply your chosen thermal paste on the GPU chip, an “X” pattern is usually good enough, but thinly spreading the paste is recommended.

ATTACHING WATERBLOCK



STEP 9

Place prepared GPU onto the LYNK+ Cooler with installed thermal pads and standoffs. Ensure that the mounting holes on the PCB and the cooler are aligned.

STEP 10

Position spring cross (item C), tighten screw 1 to about half its length, press down screw 2 and tighten again to about half its length. Next repeat same steps for position 3 and 4. Then gently tighten all screws until stop.

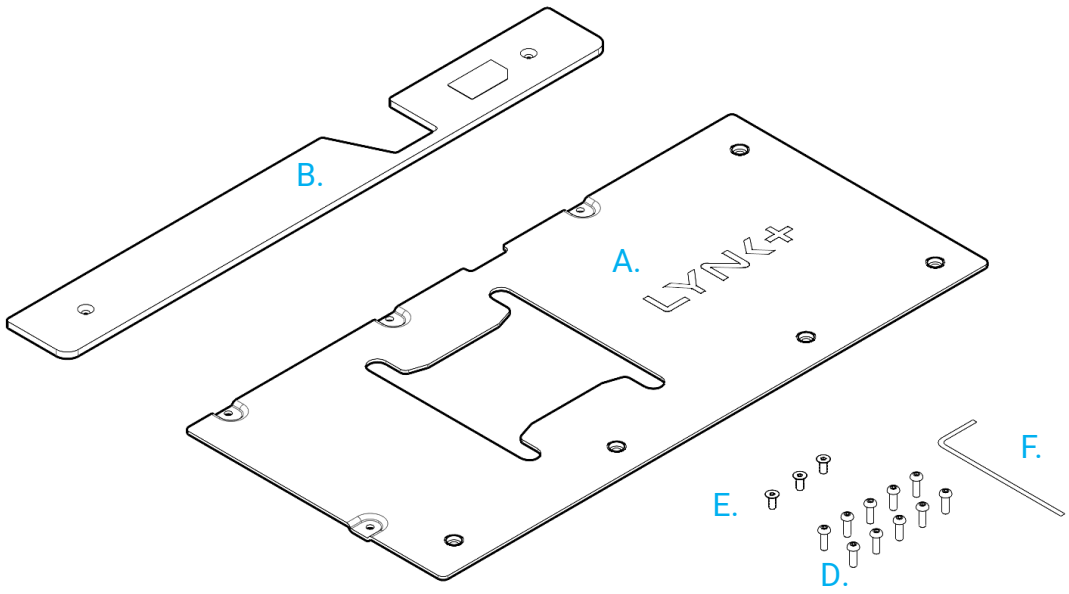
STEP 11

Position I/O bracket (item B) onto cooler and tighten using included 4 countersunk screws (item F).

INSTALLING THE PLATE KIT

USE THE MATCHING PLATE KIT FOR YOUR GRAPHICS CARD. CHECK THE LYNK+ PLATE KIT COMPATIBILITY LIST

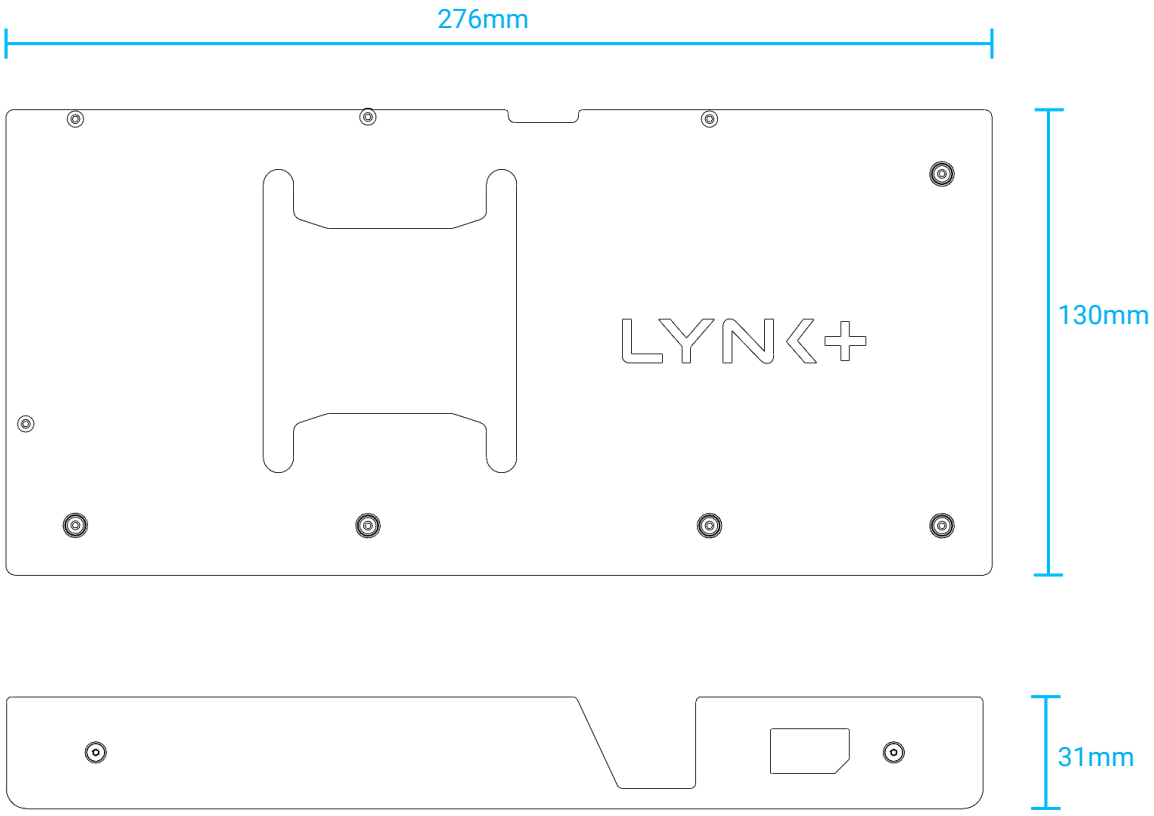
BOX CONTENTS



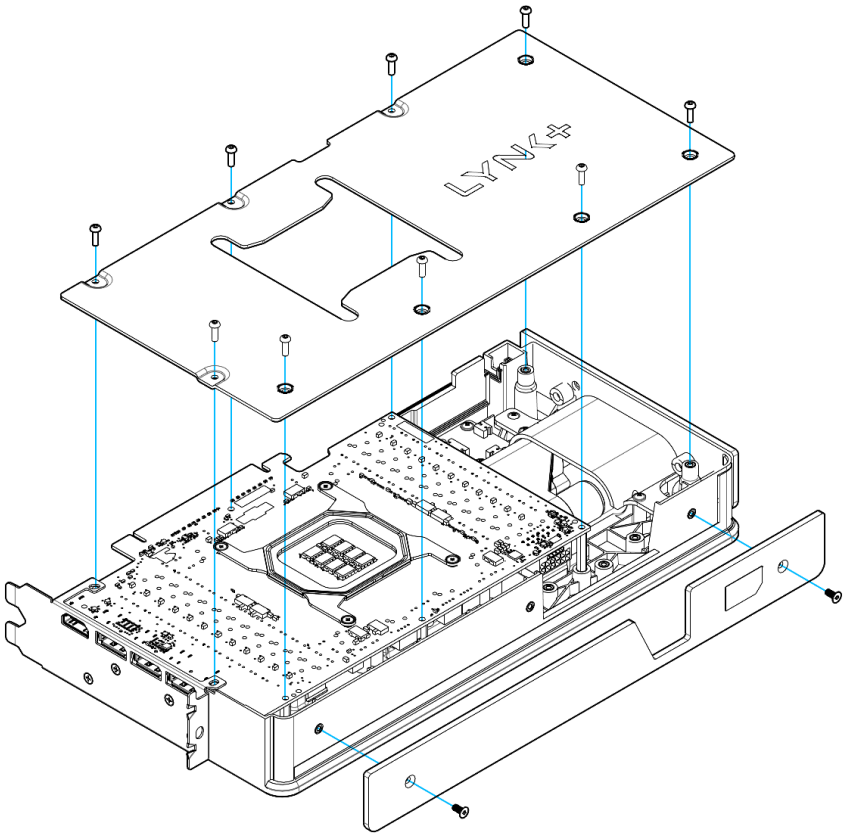
PACKAGE INCLUDES:

A. 1x Back Plate (for Either Ref, Zotac or Palit)
B. 1x Front Plate (for Either Ref, Zotac or Palit)
C. 1x User Manual
D. 10x Backplate Screws
E. 3x Front Plate Screws
F. 1x L-shaped key

DIMENSIONS



INSTALLING BACKPLATE AND FRONT PLATE



STEP 12

Make sure LED and fan cable are outside the cooler and positioned in the cable slot.

STEP 13

Place the backplate onto the GPU and make sure the screw holes are aligned.
Press on I/O bracket and tighten the two bracket screws first.
Install all remaining screws. Sightly fasten all screws before you tighten them.

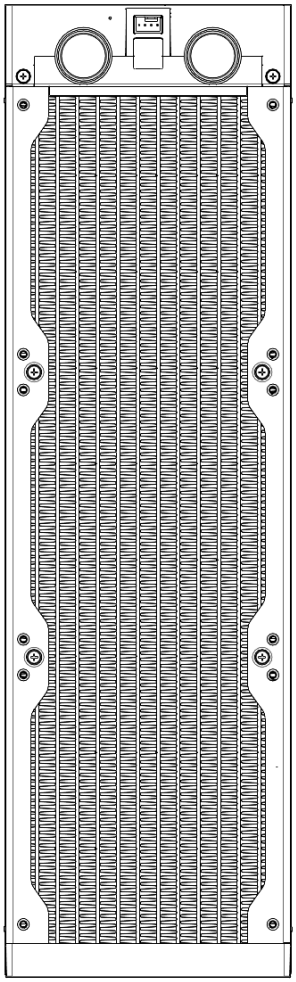
DON'T USE EXCESSIVE FORCE WHEN TIGHTENING THE SCREWS!

STEP 14

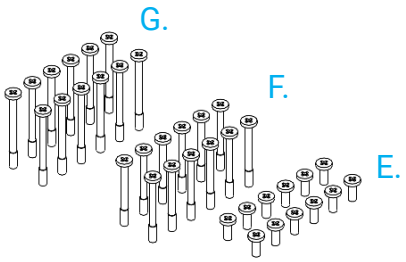
Attach the front plate with 2 screws to the cooler front

INSTALLING THE LYNK+ RADIATOR MODULE

BOX CONTENTS



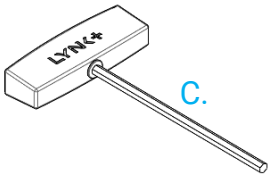
A.



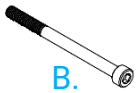
G.

F.

E.



C.

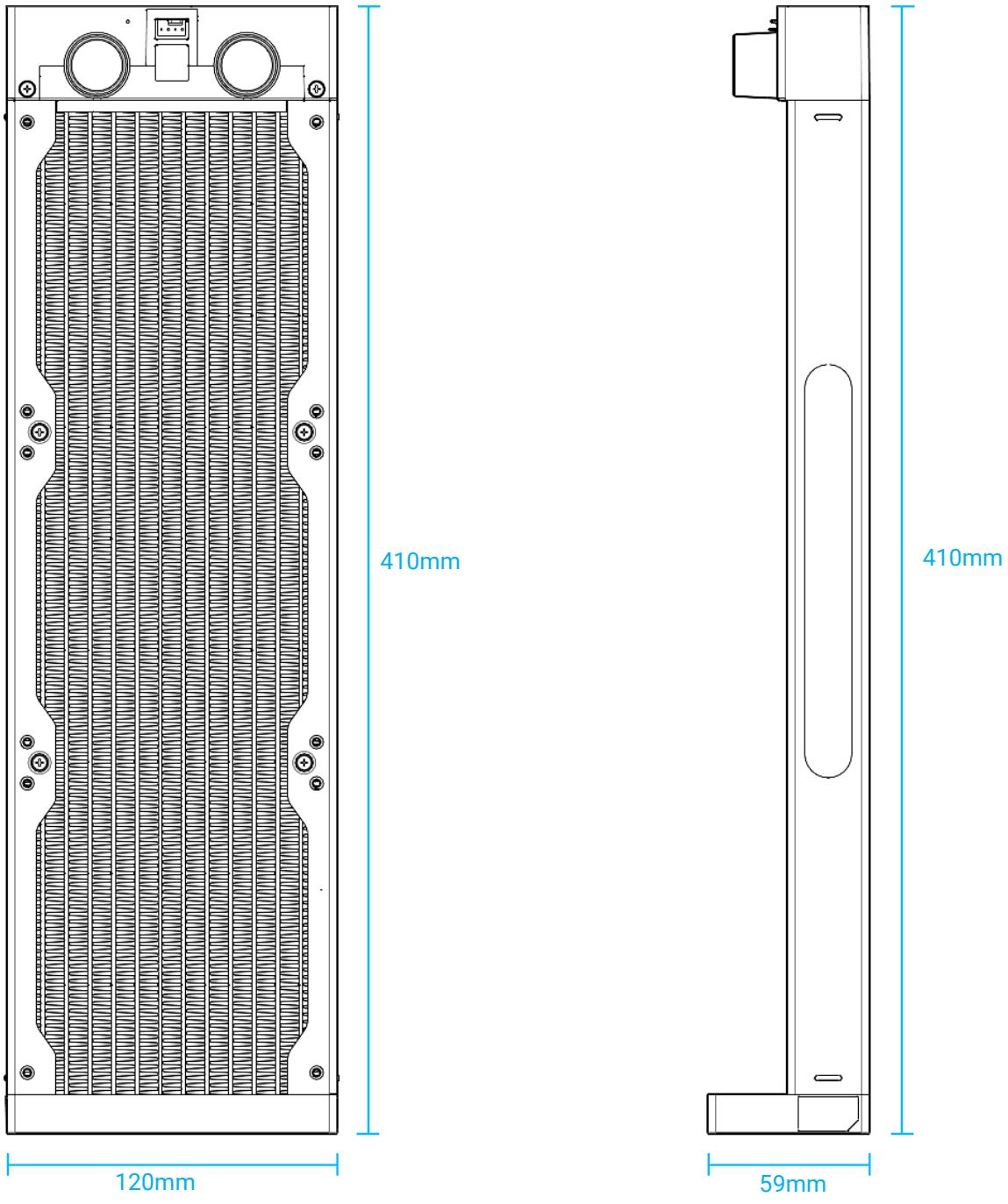


B.

Package includes:

A. 1x 360mm Radiator Module
B. 1x Quick Connect Screw
C. 1x LYNK+ Hex Key
D. 1x User Manual QR
E. 12x Case screws
F. 12x Fan screws for 25mm thick fans
G. 12x Fan screws for 30mm thick fans

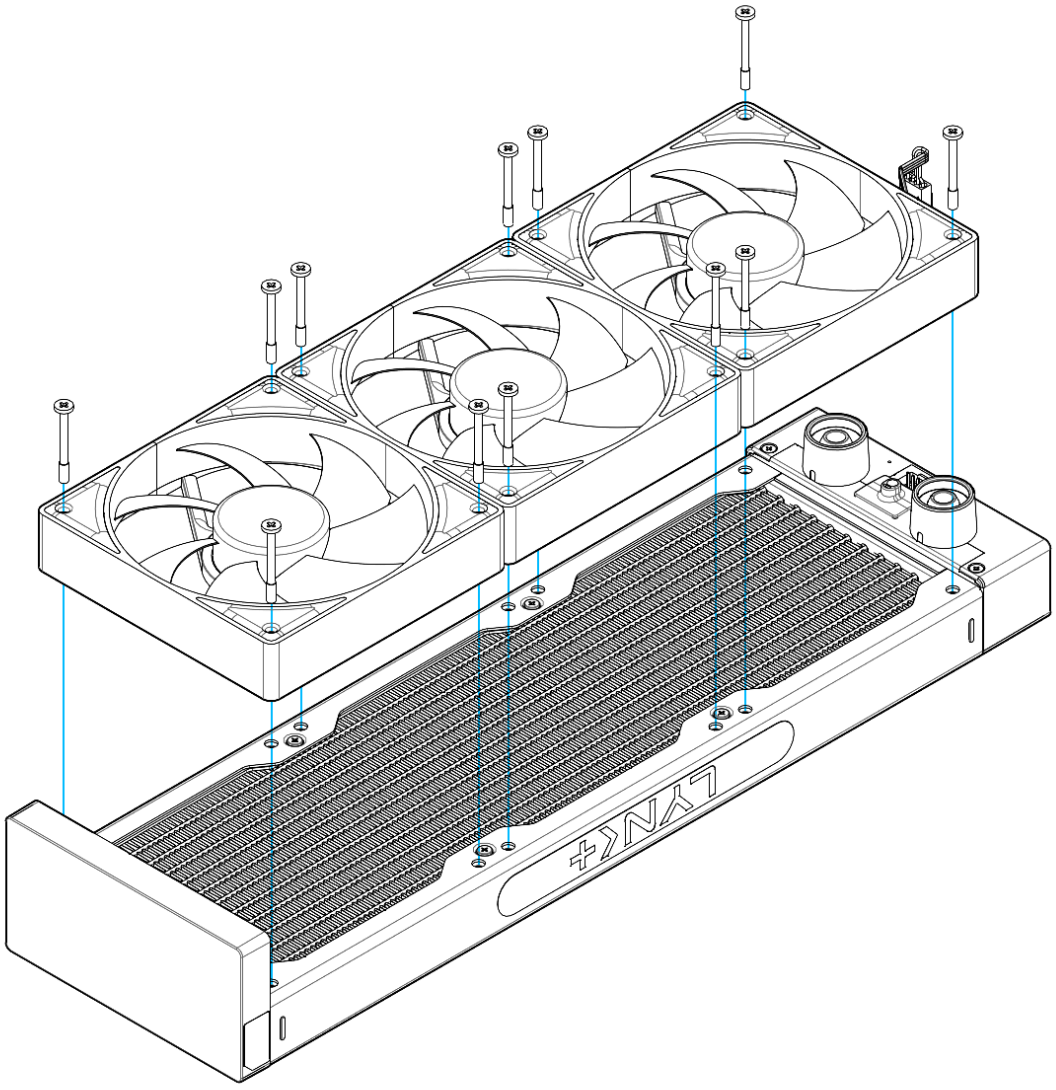
DIMENSIONS



ASSEMBLY OF THE RADIATOR

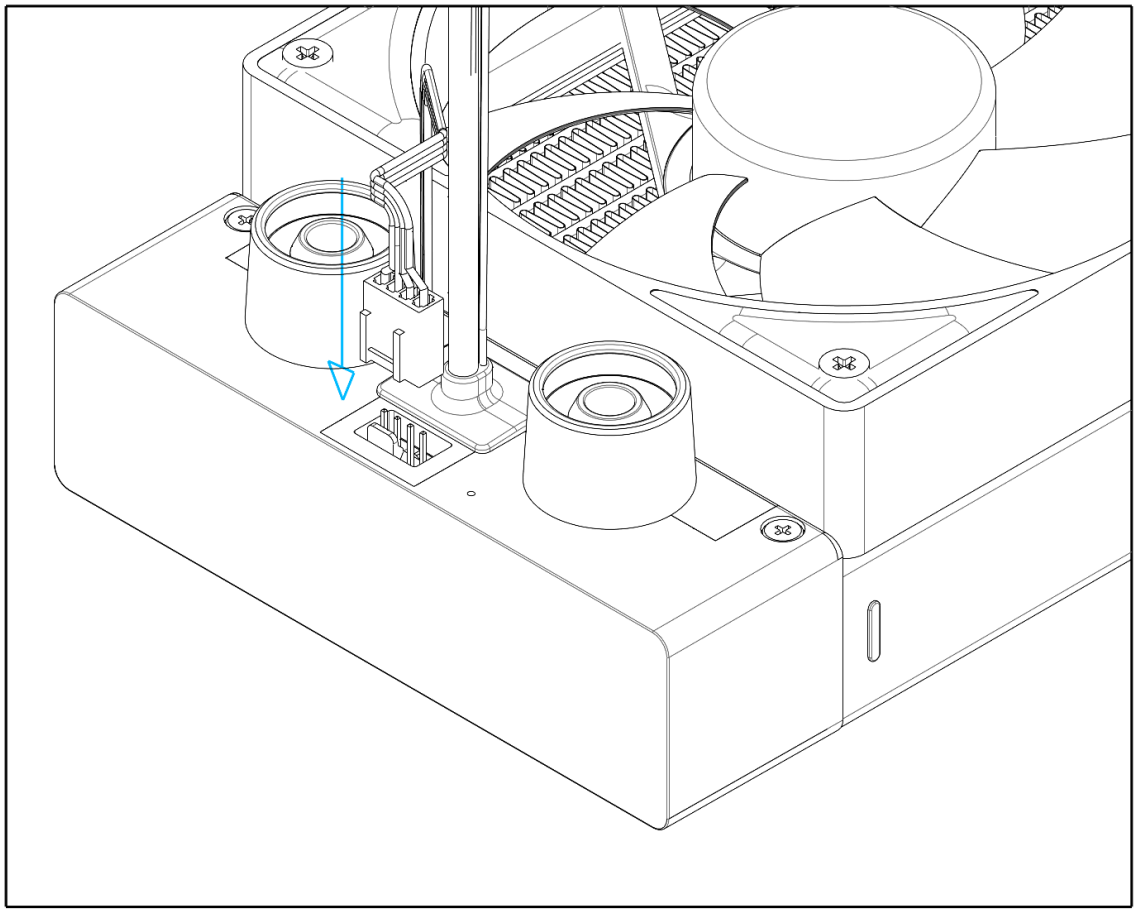
THE LYNK+ RADIATOR MODULES DON'T USE ANY PROPRIETARY CONNECTIONS AND ARE COMPATIBLE WITH MULTIPLE DIFFERENT FANS, BUT DUE TO ITS SPECIAL DESIGN, SOME FANS MIGHT NOT FIT THE RADIATOR. CLICK HERE TO CHECK FAN COMPATIBILITY.

STEP 1: INSTALL FANS ON RADIATOR



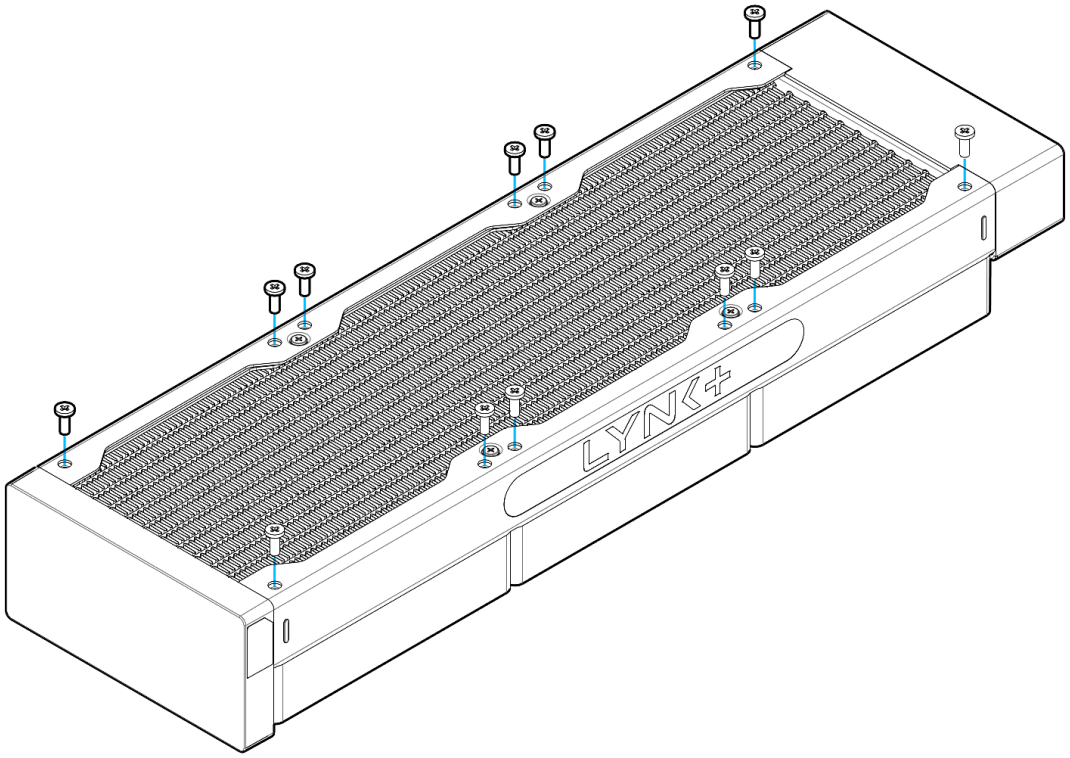
The package includes screws for 25mm and 30mm thick fans. Pick the ones that better fit your chosen fans. Screw the fans onto the radiator.

STEP 15: CONNECT FANS TO RADIATOR



Connect all 3 fans as daisy-chain using Y splitting cables, and the first one to the radiator front 4-Pin PWM connector between the tubes. The Radiator Module will provide power and RPM requirement to the fans connected to it.

STEP 16: INSTALL RADIATOR ON PC CASE

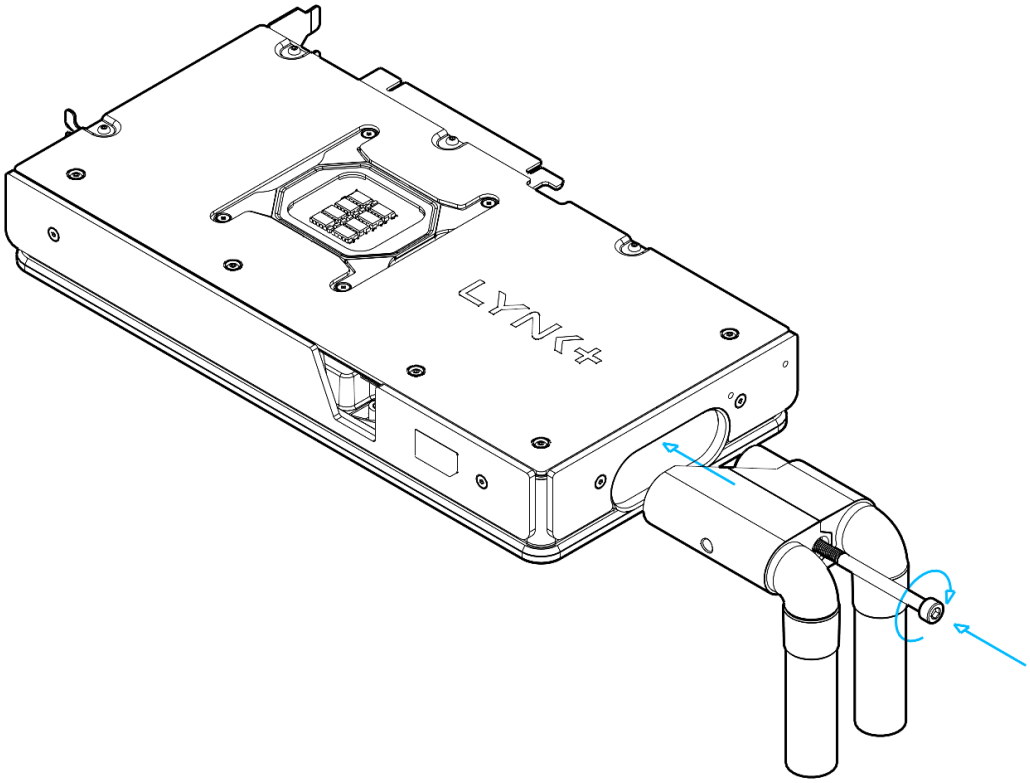


The LYNK+ system allows for the Radiator Module to be installed in any orientation, choose the one that best fits your PC case and mount the radiator using the provided PC case screws.

STEP 17: CONNECT RADIATOR CABLES

Connect SATA connector from power supply to radiator connector and connect radiator and cooler A-RGB cable to motherboard 3-in A-RGB header.

CONNECT BOTH MODULES USING THE LYNK+ QUICK CONNECT

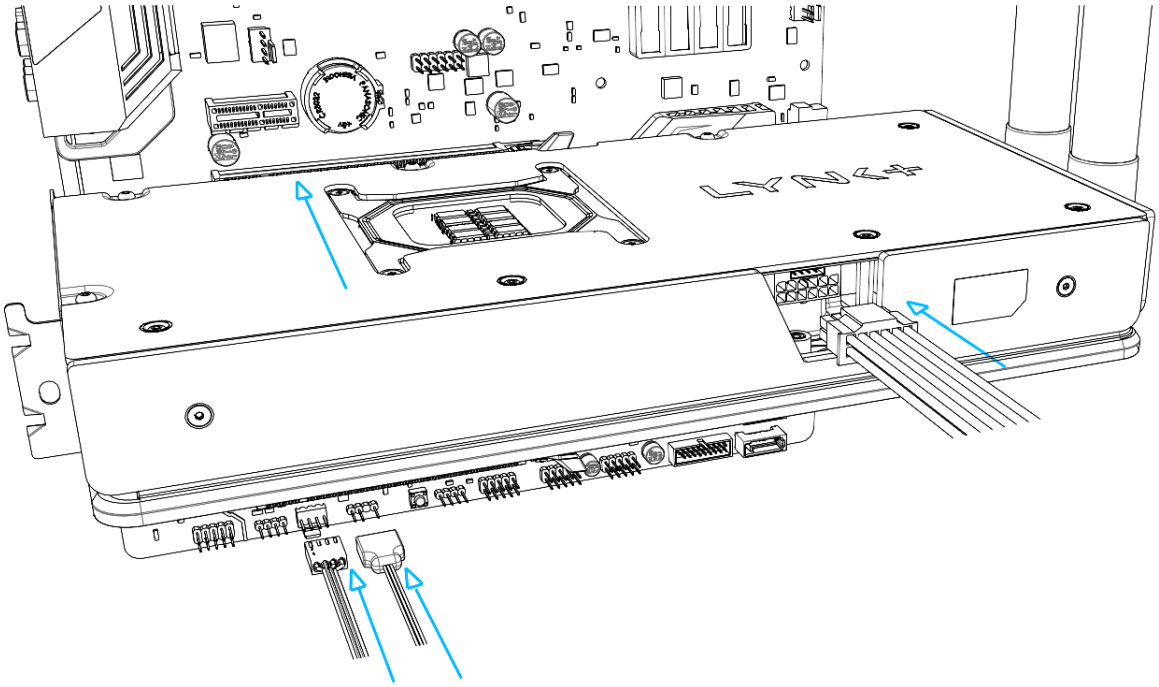


STEP 18

Insert Quick Connect in the direction shown, then insert screw, push lightly and fasten the screw using the provided Hex Key. Screw in until you feel a hard stop and the Quick Connect is flush with the cooler front.

The Quick Connect stays watertight all the way through the coupling process, there's no need to further tighten the screw after it stops.

INSTALLING LYNK+ GPU



STEP 19: INSTALL GRAPHICS CARD

Insert the assembled graphics card into the PCI-Express slot of your mainboard.

Carefully plug the 16-pin 12VHPWR connector according to the instructions provided by the Graphics Card manufacturer, make sure the connector is fully inserted before starting the system.

Attach the D-RGB LED's 3-pin connector to a D-RGB header on your mainboard.
Attach the 4-pin FAN connector to a FAN header on your mainboard.

STEP 20: MAKE SURE EVERYTHING IS INSTALLED CORRECTLY

Check that all cables are connected correctly
Make sure Quick Connect is screwed in completely
Make sure the tubing has no kinks

YOU ARE NOW READY TO POWER ON YOUR SYSTEM

CONFIGURING THE FANS

ONCE THE SYSTEM IS RUNNING, **CHECK STATUS LED ON THE FRONT OF RADIATOR MODULE,** IF THE LED IS BLINKING, PLEASE REFER TO THE **BLINK CODE IN THE TROUBLE SHOOTING SECTION** FURTHER DOWN.

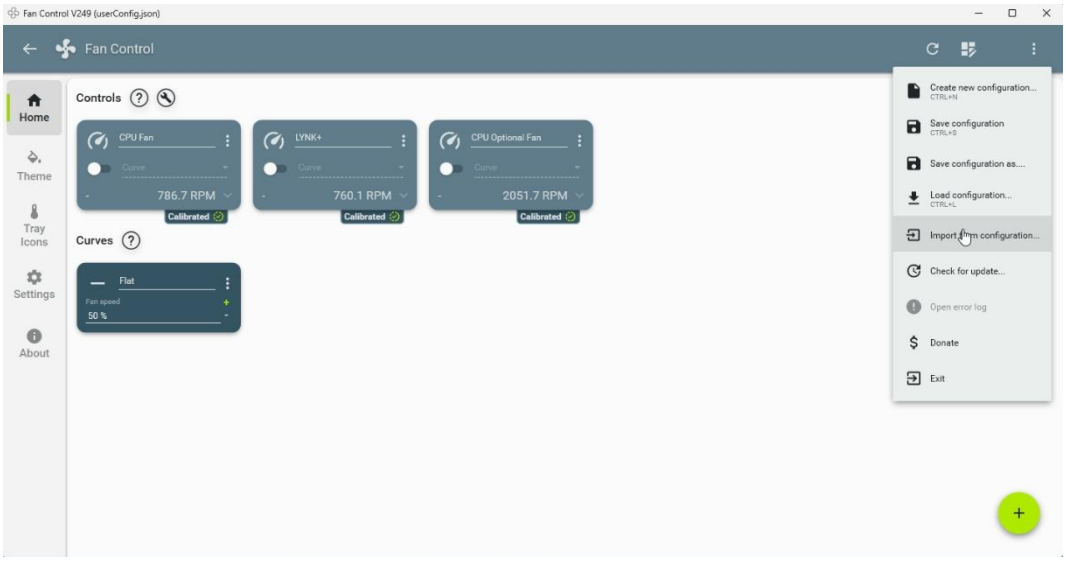
We highly recommend for the LYNK+ fans to be controlled **based on the temperature of your GPU**. There's more than one way of achieving this, here are our recommendations:

OPTION 1: FAN CONTROL SOFTWARE

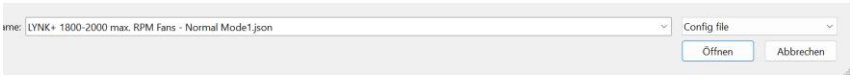
Fan Control is a third party software for controlling fans **independent of** what **Mainboard brand** you built your system around. This software allows you to **control fans** based on any given system temperature, including **GPU temperature**. This is the software that we use for our in-house testing, and we highly recommend it:

1. Download and install the latest version of the Fan Control software at: https://getfancontrol.com/
2. Install all required updates, plugins or libraries when prompted on the first start.
3. Run the Assisted Setup, fan control will detect connected fans and help you pair the fan RPM Control to their corresponding speed sensors. Enable "Start at user log on" and "Start minimized".

4. Once the connected fans and speeds are paired, select “Import from Configuration” from the three-dot menu on the right.



5. Download the pre-configured curve that best fits your use-case from this link, select the .json configuration file that you downloaded on the import window.



6. Click on the “Import” Button and the pre-configured fan curve should now appear under “Curves”. Choose the imported fan curve for the RPM Control of

your LYNK+ System.

7. You should be good to go, enjoy!

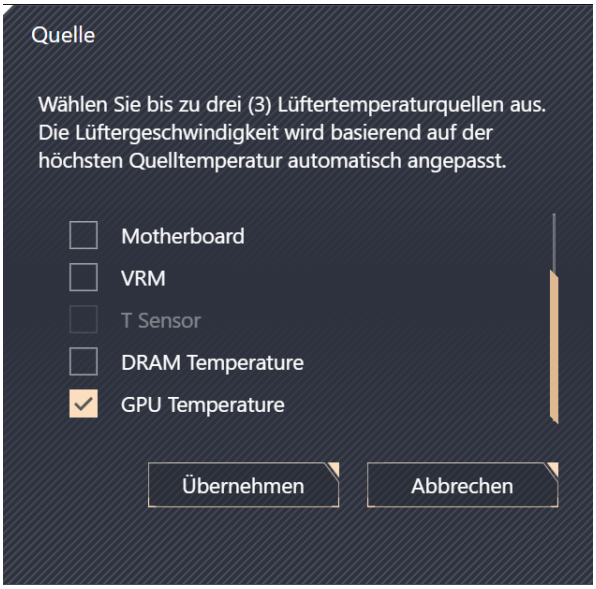
IF YOU RUN INTO PROBLEMS CONFIGURING FAN SPEEDS, MAKE SURE YOUR FAN HEADER IS CONFIGURED AS A PWM FAN ON YOUR MAINBOARD BIOS.

OPTION 2: ASUS FANXPERT

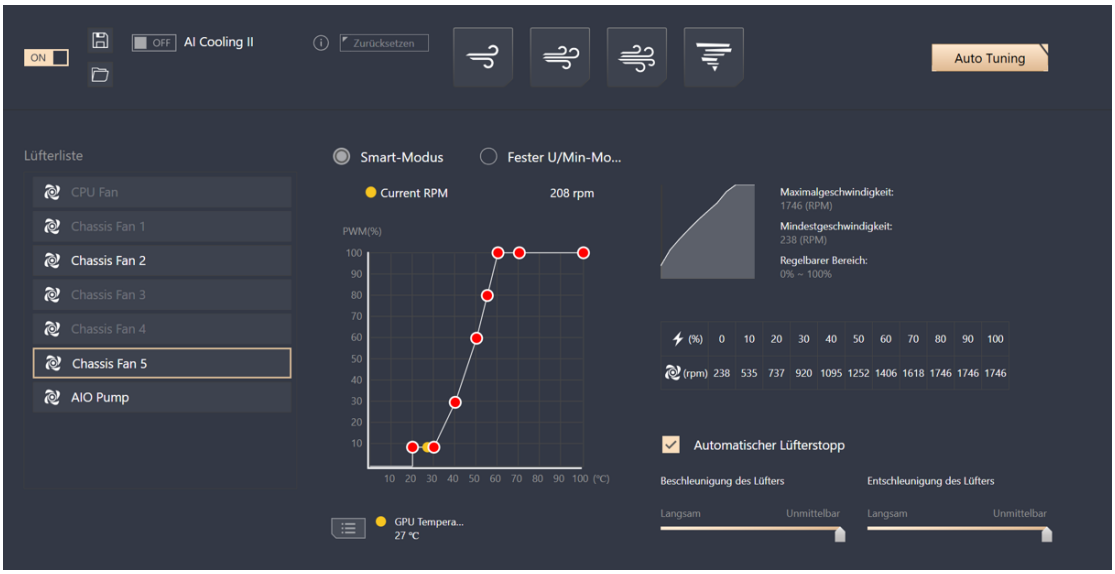
If you happen to own a recent **ASUS Mainboard**, the **ASUS Armoury Crate Suite** integrates a module for controlling fans called **FanXpert**, this software allows you to control fans based on any given system temperature, including GPU temperature:

1. Download and install the latest version of ASUS Armoury Crate from: https://armoury-crate.com/
2. Install the Assistant Module, which includes the FanXpert module, update if required.
3. Take note of the name of the fan header where you plugged your cooler module into your mainboard.
4. Under the Fan Xpert window, select the correct Chassis Fan from the fan list

5. Configure the fan rpm curve to be controlled via the GPU temperature, deselect the CPU temperature control.



6. Here's a recommended fan curve for fans with a max rpm that ranges between 1800-2000 rpm. If you have faster or slower fans installed on your radiator, adjust the curve points accordingly


ON
OFF
AI Cooling II
Zurücksetzen
Auto Tuning
Lüfterliste
CPU Fan
Chassis Fan 1
Chassis Fan 2
Chassis Fan 3
Chassis Fan 4
Chassis Fan 5
AIO Pump
Smart-Modus
Fester U/Min-Mo...
Current RPM
208 rpm
PWM(%)
100
90
80
70
60
50
40
30
20
10
10 20 30 40 50 60 70 80 90 100 (°C)
GPU Tempera...
27 °C
Maximalgeschwindigkeit:
1746 (RPM)
Mindestgeschwindigkeit:
238 (RPM)
Regelbarer Bereich:
0% ~ 100%
(%) 0 10 20 30 40 50 60 70 80 90 100
(rpm) 238 535 737 920 1095 1252 1406 1618 1746 1746 1746
Automatischer Lüfterstopp
Beschleunigung des Lüfters
Langsam
Unmittelbar
Entschleunigung des Lüfters
Langsam
Unmittelbar

TROUBLESHOOTING & LED BLINK CODES

NORMAL OPERATION (STATUS LED LIGHTS UP CONTINUOUSLY):

Status LED blinks for first 1 or 2 seconds after powering the system and then lights up continuously.

BUS SEARCH (STATUS LED FLASHES SLOWLY, 1HZ FREQUENCY) OR BUS ERROR (STATUS LED FLASHES 2 TIMES, 1HZ FREQUENCY):

The bus is not verified or interrupted. This status also applies to the initial bus verification. Pump keeps running at 3900 RPM, fans will go to 1200 RPM, but fan and pump speed cannot be controlled. Make sure the coupling is screwed to the stop and check that the 4/Pin Fan connector is connected properly and “Fan control Mode” for this connector is set to “PWM” on your BIOS or mainboard control software.

PUMP ERROR (STATUS LED FLASHES QUICKLY, 2HZ):

Pump RPM signal is too low or too high. The error state is cancelled when the RPM value of the pump is normalised again. Can mean that air collected inside of the pump, usually restart solves this issue. If not try to tilt the radiator a little while start up, so air can move to reservoir.

NO POWER (STATUS LED IS NOT LIGHTED):

Check if Sata cable of radiator is connected to power

Customer Support: support@lynk.plus

Product may vary slightly from those pictured. 9500-5262-50-01