Thermalright Frozen Notte 360 BLACK ARGB-D1

Thermalright Frozen Notte 360 Black ARGB V2 CPU Liquid Cooler

Model: Frozen Notte 360 BLACK ARGB-D1 | Brand: Thermalright

Introduction

The Thermalright Frozen Notte 360 Black ARGB V2 is a high-performance all-in-one (AIO) CPU liquid cooler designed to provide efficient cooling for a wide range of Intel and AMD processors. Featuring a 360mm radiator, three 120mm PWM ARGB fans, and a high-performance pump, this cooler ensures optimal thermal management while offering customizable lighting effects to enhance your system's aesthetics.

Image: The Thermalright Frozen Notte 360 Black ARGB V2 cooler showcasing its illuminated fans and water block within a PC case.

Package Contents

Please verify that all components are present before beginning installation:

- Liquid CPU Cooler (Radiator, Pump, and Tubes pre-assembled)
- 3x TL-E12B-S 120mm PWM ARGB Fans
- Mounting Hardware for Intel LGA 1150/1151/1155/1156/1200/1700/1851/2011/2066 sockets
- Mounting Hardware for AMD AM4/AM5/AM2/AM2+/AM3/AM3+/FM1/FM2/FM2+ sockets
- Thermal Paste
- Fan and ARGB Splitter Cables
- User Manual (this document)

Setup and Installation

Follow these steps for proper installation of your Thermalright Frozen Notte 360 Black ARGB V2 CPU Liquid Cooler. Ensure your system is powered off and unplugged before proceeding.

1. Prepare the CPU Socket

Identify the correct mounting brackets for your CPU socket (Intel or AMD). Attach the appropriate backplate and standoffs to your motherboard. Apply a small amount of the included thermal paste to the center of your CPU's integrated heat spreader (IHS).

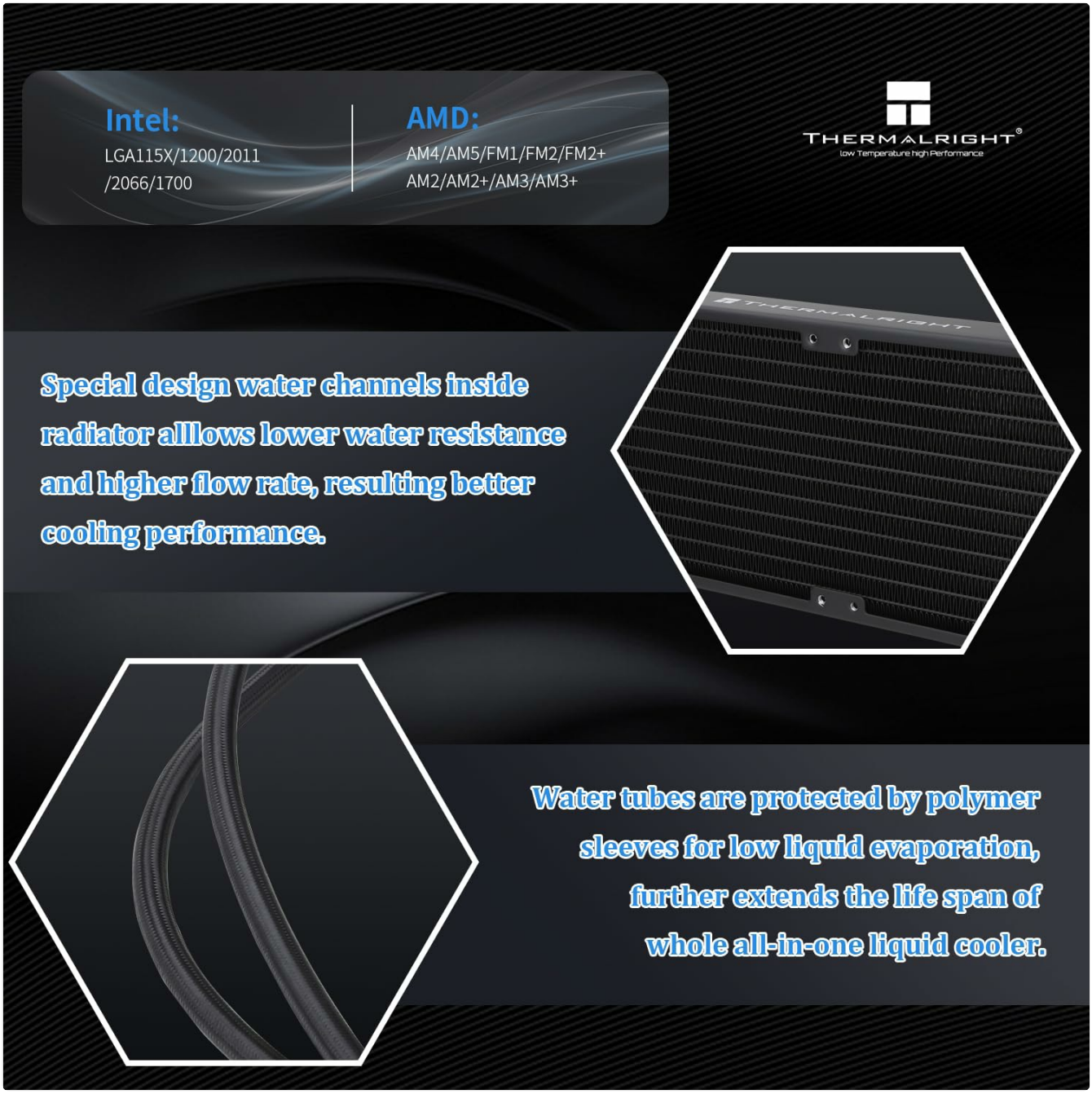

Image: Diagram illustrating the radiator's internal design for improved flow and the polymer-sleeved water tubes for durability. Also shows compatible Intel and AMD CPU sockets.

2. Mount the Radiator and Fans

Mount the three 120mm fans to the radiator using the long screws provided. Ensure the fans are oriented to provide optimal airflow for your chassis (typically intake or exhaust, depending on radiator placement). Secure the radiator assembly to an available 360mm mounting location in your PC case (e.g., top, front, or side).

Image: The complete Thermalright Frozen Notte 360 Black ARGB V2 liquid cooler assembly, showing the radiator with three fans and the water block.

3. Install the Water Block

Carefully place the water block onto the CPU, aligning it with the mounting holes. Secure the water block using the appropriate screws and tension springs, tightening them in a cross pattern until snug. Do not overtighten.

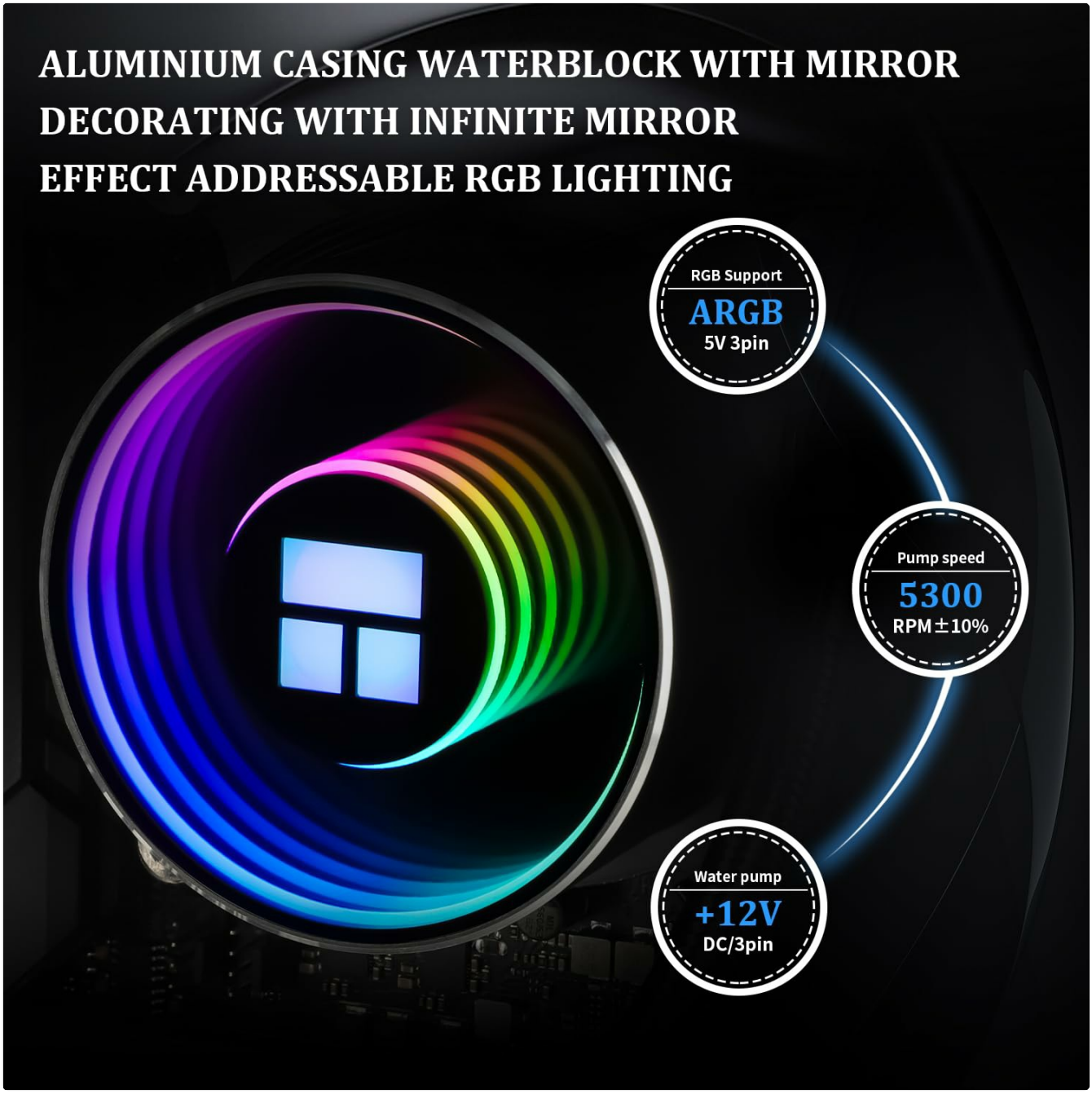

Image: A detailed view of the water block, highlighting its ARGB lighting capabilities and the high-performance pump with a speed of up to 5300 RPM.

4. Connect Cables

Connect the 4-pin PWM fan cables from the fans to the included fan splitter cable, then connect the splitter to a CPU_FAN or SYS_FAN header on your motherboard. Connect the 3-pin ARGB cables from the fans and the water block to the included ARGB splitter cable, then connect the splitter to a 5V 3-pin ARGB header on your motherboard. *Note: This cooler supports 5V 3-pin ARGB only. Do not connect to 12V 4-pin RGB headers.*

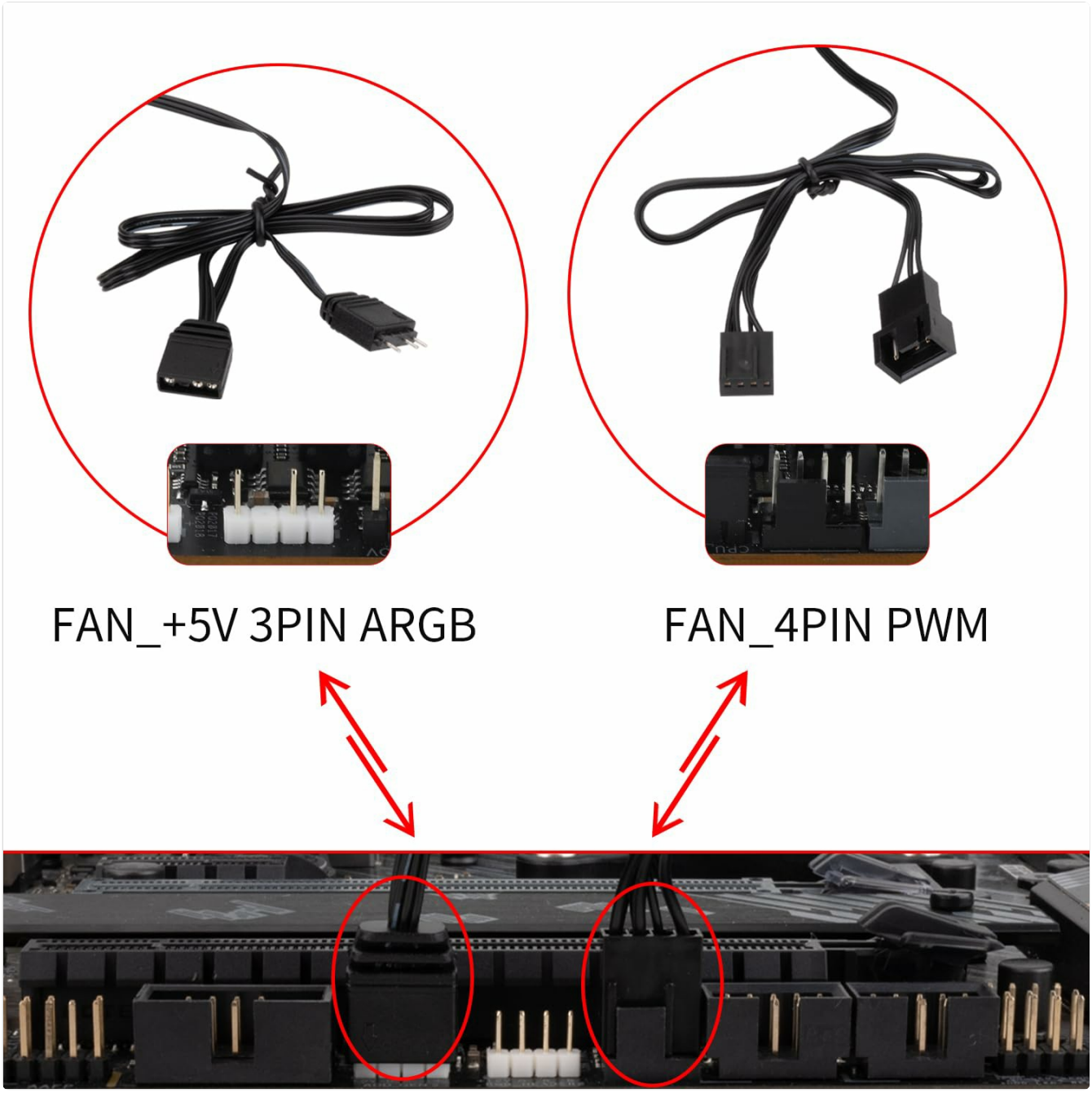

Image: A visual guide showing how to connect the 5V 3-pin ARGB and 4-pin PWM cables to the corresponding headers on a motherboard.

Image: The Thermalright Frozen Notte 360 Black ARGB V2 installed in a computer case, demonstrating the vibrant ARGB lighting of the fans and water block. This image emphasizes the 5V 3-pin ARGB connection requirement.

Operating Instructions

Once installed, the Thermalright Frozen Notte 360 Black ARGB V2 operates automatically, regulating fan speed and pump performance based on CPU temperature via PWM control. The ARGB lighting can be customized through your motherboard's compatible software.

ARGB Lighting Synchronization

The ARGB lighting of the fans and water block is designed to synchronize with your motherboard's 5V 3-pin ARGB header. Use your motherboard's RGB control software (e.g., ASUS Aura Sync, MSI Mystic Light Sync, Gigabyte RGB Fusion, ASRock Polychrome Sync) to customize lighting effects, colors, and patterns. This allows for a unified lighting scheme across your PC components.

Fan and Pump Control

The fans and pump are controlled via PWM (Pulse Width Modulation) signals from your motherboard. This allows

them to automatically adjust their speed based on CPU temperature, providing optimal cooling performance while minimizing noise during lighter loads. You can typically configure fan curves within your motherboard's BIOS/UEFI settings or through desktop software provided by your motherboard manufacturer.

Maintenance

Regular maintenance helps ensure the longevity and optimal performance of your liquid cooler.

- **Dust Cleaning:** Periodically inspect the radiator fins and fan blades for dust buildup. Use compressed air to gently clear dust from the radiator and fans. Ensure fans are held stationary while cleaning to prevent damage.
- **Cable Management:** Ensure all cables are securely connected and not interfering with fan blades or other components.
- **Visual Inspection:** Occasionally check the tubing for any signs of kinks, leaks, or damage. While the high polymer woven protective water pipes are designed for durability and low evaporation, a quick visual check can prevent potential issues.

Troubleshooting

If you encounter issues with your Thermalright Frozen Notte 360 Black ARGB V2, refer to the following common troubleshooting steps:

- **No Power/Fans Not Spinning/Pump Not Working:**
  - Check all power connections to the motherboard (CPU_FAN header for pump/fans).
  - Ensure the 4-pin PWM connector is securely seated.
  - Verify fan and pump settings in your motherboard's BIOS/UEFI.
- **High CPU Temperatures:**
  - Confirm the water block is properly seated and making good contact with the CPU.
  - Ensure thermal paste was applied correctly and adequately.
  - Check fan orientation on the radiator for proper airflow.
  - Verify fan and pump speeds in monitoring software or BIOS.
  - Clean any dust buildup on the radiator fins.
- **ARGB Lighting Not Working/Incorrect Colors:**
  - Ensure the 5V 3-pin ARGB connector is securely plugged into the correct header on your motherboard.*Do not connect to a 12V 4-pin RGB header.*
  - Check your motherboard's ARGB control software for proper configuration.
  - Verify that the ARGB splitter cable is correctly connected to all fans and the water block.
- **Unusual Noise:**
  - Check for any cables or obstructions hitting the fan blades.
  - Ensure fans are securely mounted and not vibrating against the case.
  - A slight gurgling sound upon initial startup is normal as air bubbles settle. If persistent, gently tilt your PC case to help move air bubbles to the radiator.

Specifications

Detailed specifications for the Thermalright Frozen Notte 360 Black ARGB V2 CPU Liquid Cooler:

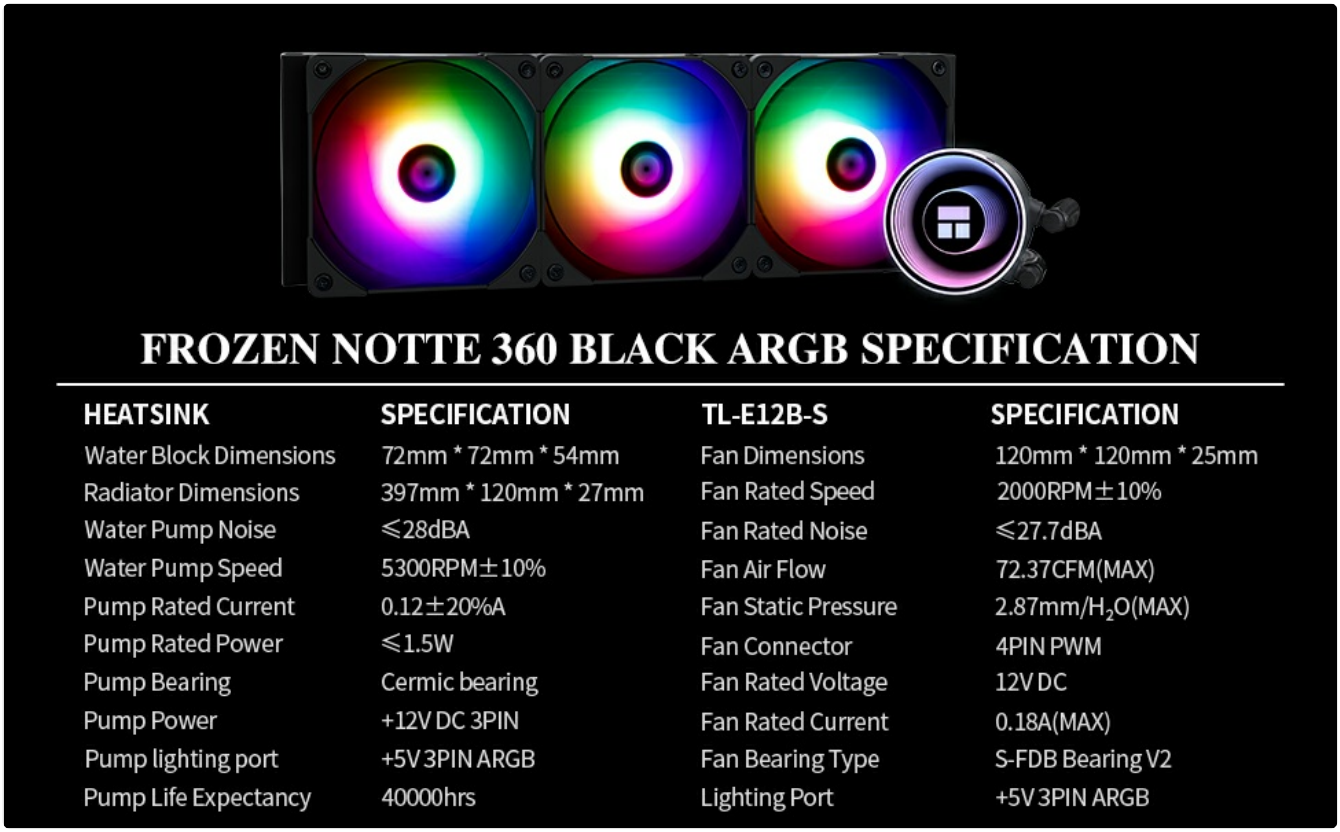

Image: A comprehensive table detailing the specifications of the heatsink, water block, pump, and fans for the Frozen Notte 360 Black ARGB cooler.

Component	Specification
Product Dimensions	0.98"L x 4.72"W x 4.72"H (Fans: 120x120x25mm)
Radiator Dimensions	397mm * 120mm * 27mm
Water Block Dimensions	72mm * 72mm * 54mm
Material	Aluminum (Radiator), Copper (Water Block Base)
Pump Speed	5300RPM ±10%
Pump Noise Level	≤28dBA
Pump Life Expectancy	40000 hours
Fan Model	TL-E12B-S
Fan Speed	2000RPM ±10% (MAX)
Fan Airflow	72.37CFM (MAX)
Fan Static Pressure	2.87mmH2O (MAX)
Fan Noise Level	≤27.7dBA
Fan Bearing Type	S-FDB Bearing V2
Power Connector	4-Pin PWM (Fans), 3-Pin DC (Pump)
Lighting Connector	+5V 3-Pin ARGB
Compatible Devices	Desktop CPUs

Component	Specification

Intel Socket Support	LGA 1150/1151/1155/1156/1200/1700/1851/2011/2066
AMD Socket Support	AM4/AM5/AM2/AM2+/AM3/AM3+/FM1/FM2/FM2+

Warranty and Support

Thermalright products are manufactured to high quality standards. For specific warranty terms and conditions, please refer to the warranty card included with your product or visit the official Thermalright website. For technical support, product registration, or service inquiries, please contact Thermalright customer support through their official channels. *Please retain your proof of purchase for warranty claims.*