

Noctua NH-L9i-17xxchromax

Noctua NH-L9i-17xx chromax.black Low-Profile CPU Cooler User Manual

For Intel LGA1700 and LGA1851 Platforms

1. INTRODUCTION AND OVERVIEW

The Noctua NH-L9i-17xx chromax.black is a premium low-profile CPU cooler designed for Intel LGA1700 and LGA1851 sockets. It is specifically engineered for compact HTPC (Home Theater PC) and Small Form Factor (SFF) builds where space is limited. With a height of only 37mm, this cooler ensures 100% RAM and PCIe compatibility on all ITX, Micro-ATX, and ATX motherboards for the specified sockets. It features an all-black design for a sleek aesthetic and incorporates Noctua's renowned NF-A9x14 PWM fan for quiet and efficient cooling.



Image 1.1: The Noctua NH-L9i-17xx chromax.black low-profile CPU cooler.

2. PACKAGE CONTENTS

Please verify that all items listed below are present in your package:

- NH-L9i-17xx chromax.black heatsink with pre-installed NF-A9x14 PWM fan
- SecuFirm2 mounting system for Intel LGA1700/LGA1851
- NT-H1 high-end thermal compound (syringe)
- Low-Noise Adaptor (L.N.A.)
- Noctua metal case-badge

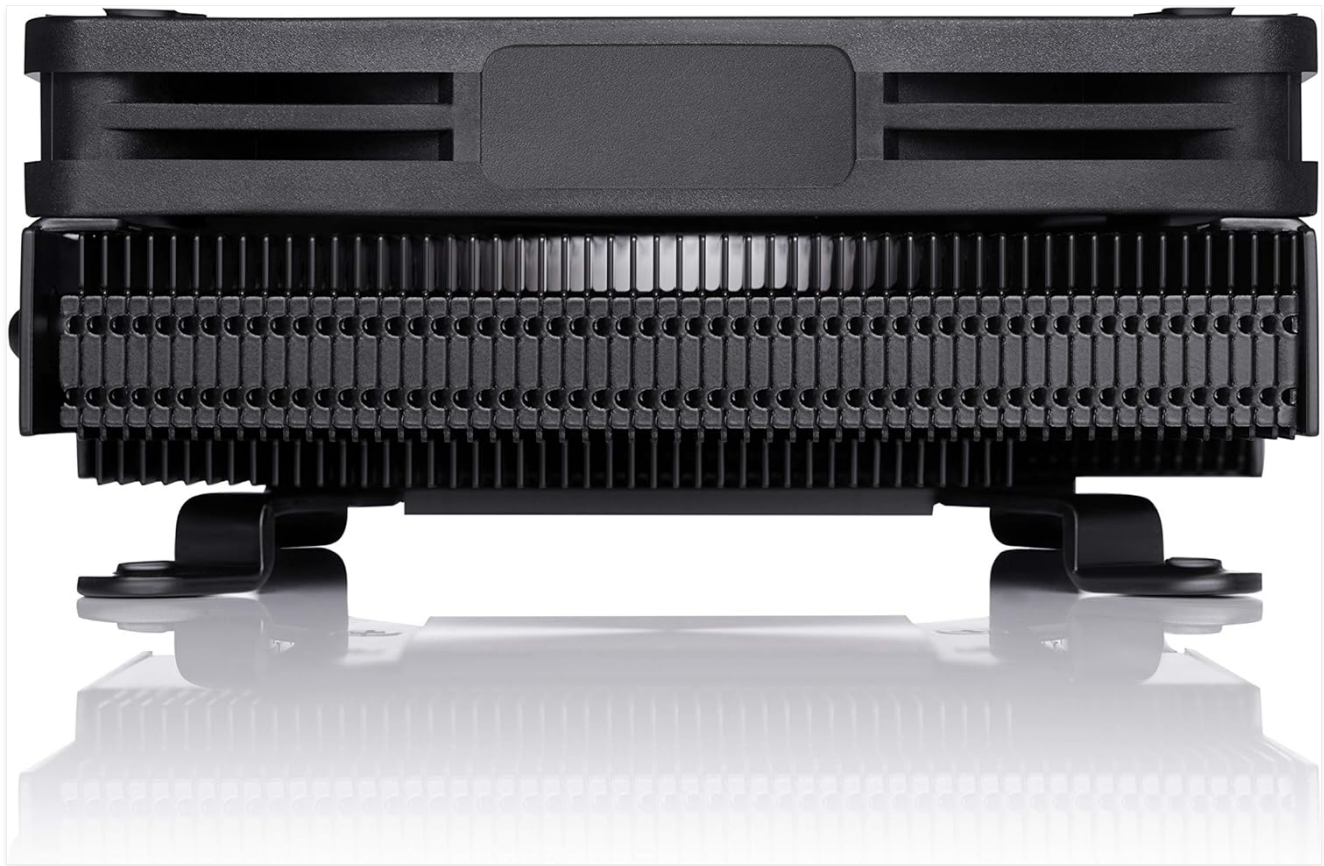


Image 2.1: Contents of the Noctua NH-L9i-17xx chromax.black retail package.

3. SETUP AND INSTALLATION

The NH-L9i-17xx chromax.black utilizes the SecuFirm2 mounting system for secure and straightforward installation on Intel LGA1700 and LGA1851 motherboards. Always refer to the detailed installation manual provided by Noctua for step-by-step instructions specific to your CPU socket.

3.1 Pre-Installation Checks

- Ensure your motherboard is compatible with Intel LGA1700 or LGA1851 sockets.
- Verify that your PC case has adequate clearance for the cooler's dimensions (37mm height).
- Gather necessary tools, typically a Phillips head screwdriver.



Image 3.1: The cooler's compact 37mm height, ensuring full RAM and PCIe compatibility.

3.2 Applying Thermal Compound

Before mounting the cooler, apply a small amount of the included NT-H1 thermal compound to the center of your CPU's integrated heat spreader (IHS). A pea-sized dot is generally sufficient. Do not spread the paste manually; the pressure from the cooler will distribute it evenly.



Image 3.2: Proper application of NT-H1 thermal compound to the CPU.

3.3 Mounting the Cooler

Follow the instructions provided with the SecuFirm2 mounting kit. Typically, this involves:

1. Placing the backplate (if applicable) on the rear of the motherboard.
2. Securing the mounting bars to the front of the motherboard around the CPU socket.
3. Carefully placing the NH-L9i-17xx chromax.black heatsink onto the CPU, aligning the screws with the mounting bars.
4. Tightening the spring-loaded screws evenly until they are firm. Do not overtighten.
5. Connecting the NF-A9x14 PWM fan cable to the CPU_FAN header on your motherboard.



Image 3.3: An Intel LGA1700 CPU socket, ready for cooler installation.

4. OPERATING INSTRUCTIONS

The NF-A9x14 PWM fan is designed for automatic speed control via your motherboard's PWM function. This allows the fan to adjust its speed based on CPU temperature, providing optimal cooling performance under load and quiet operation at idle.

4.1 Low-Noise Adaptor (L.N.A.)

For users who prioritize even quieter operation, the included Low-Noise Adaptor (L.N.A.) can be connected between the fan and the motherboard's CPU_FAN header. The L.N.A. reduces the maximum fan speed, resulting in lower noise levels at the expense of a slight reduction in cooling performance. This is ideal for systems with lower heat loads or users sensitive to fan noise.

4.2 BIOS/UEFI Settings

Ensure your motherboard's BIOS/UEFI settings are configured to enable PWM fan control for the CPU_FAN header. Most motherboards automatically detect and configure PWM fans, but manual adjustment may be necessary for specific fan curves or to enable the L.N.A. effectively.

5. MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your CPU cooler.

5.1 Dust Removal

Over time, dust can accumulate on the heatsink fins and fan blades, reducing cooling efficiency. Periodically clean the cooler using compressed air or a soft brush. Ensure the fan is held stationary during cleaning with compressed air to prevent over-spinning and potential damage to the bearings.

5.2 Thermal Compound Re-application

While Noctua's NT-H1 thermal compound has excellent long-term stability, it is recommended to re-apply thermal paste if you remove the cooler for any reason (e.g., CPU upgrade, motherboard replacement). Clean both the CPU IHS and the cooler's contact plate thoroughly with isopropyl alcohol before applying new thermal compound.

6. TROUBLESHOOTING

If you encounter issues with your NH-L9i-17xx chromax.black cooler, consider the following:

6.1 High CPU Temperatures

- **Check Thermal Paste:** Ensure thermal paste was applied correctly and evenly. Re-apply if necessary.
- **Verify Mounting Pressure:** Confirm that the cooler is securely mounted and screws are tightened evenly. Uneven pressure can lead to poor contact.
- **Fan Connection:** Ensure the fan is properly connected to the motherboard's CPU_FAN header.
- **Case Airflow:** Check for adequate airflow within your PC case. Poor case ventilation can hinder cooler performance.
- **L.N.A. Usage:** If the Low-Noise Adaptor is in use, remove it to see if temperatures improve. The L.N.A. reduces maximum fan speed.

6.2 Fan Not Spinning or Unusual Noise

- **Power Connection:** Ensure the fan cable is fully seated in the CPU_FAN header.
- **Obstructions:** Check for any cables or objects obstructing the fan blades.
- **BIOS/UEFI Settings:** Verify that fan control settings in BIOS/UEFI are not set to 'off' or an extremely low RPM.
- **Damage:** Inspect the fan for any visible damage. If the fan is damaged or making excessive noise, contact Noctua support.

7. SPECIFICATIONS

Feature	Specification
Model	NH-L9i-17xxchromax
Brand	Noctua
Product Dimensions (L x W x H)	95mm x 95mm x 37mm
Item Weight	429 Grams
Socket Compatibility	Intel LGA1700, LGA1851
Fan Model	NF-A9x14 PWM chromax.black
Thermal Compound	NT-H1 (pre-applied or included)
Mounting System	SecuFirm2

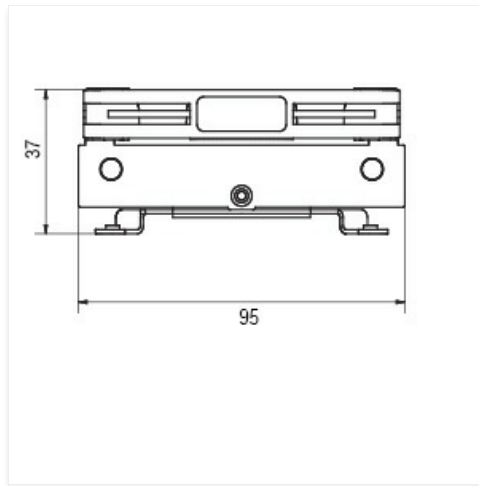


Image 7.1: Dimensional drawing of the NH-L9i-17xx chromax.black cooler.

8. WARRANTY AND SUPPORT

The Noctua NH-L9i-17xx chromax.black CPU cooler is backed by a **6-year manufacturer's warranty**. This warranty covers defects in materials and workmanship under normal use.

For technical support, warranty claims, or further assistance, please visit the official Noctua website or contact their customer service directly. You can find detailed support information and FAQs on their website: [Noctua Support](#)