

## AMD AMD Ryzen 5 4500

# AMD Ryzen 5 4500 Processor User Manual

Model: AMD Ryzen 5 4500

## 1. PRODUCT OVERVIEW

The AMD Ryzen 5 4500 is a 6-core, 12-thread unlocked desktop processor designed for fast productivity and gaming performance. It comes bundled with an AMD Wraith Stealth Cooler, providing an out-of-the-box thermal solution.

- **Cores/Threads:** 6 Cores / 12 Threads
- **Base Clock:** 3.6 GHz
- **Max Boost Clock:** Up to 4.1 GHz
- **Socket:** AM4
- **Included Cooler:** AMD Wraith Stealth Cooler
- **Unlocked for Overclocking:** Yes
- **VR-Ready:** Offers select Ryzen VR-Ready Premium experiences.

## 2. WHAT'S IN THE BOX

Your AMD Ryzen 5 4500 processor package includes the following components:

- AMD Ryzen 5 4500 Processor
- AMD Wraith Stealth Cooler
- Installation Instructions and Warranty Information



The retail box for the AMD Ryzen 5 4500 processor, showcasing the Ryzen logo and product series.



A close-up view of the AMD Ryzen 5 4500 processor chip itself.



The included AMD Wraith Stealth Cooler, a compact air cooling solution.

### 3. SETUP AND INSTALLATION

Proper installation is crucial for optimal performance and system stability. Please follow these general guidelines. Refer to your motherboard's manual for specific instructions.

#### 3.1 Pre-Installation Checklist

- **Motherboard Compatibility:** Ensure your motherboard has an AM4 socket and supports the Ryzen 5 4500 processor.
- **BIOS Update:** Verify that your motherboard's BIOS is updated to the latest version that supports the Ryzen 4000 series processors. An outdated BIOS may prevent the system from booting or functioning correctly.
- **Static Electricity:** Take precautions against electrostatic discharge (ESD) by using an anti-static wrist strap or by regularly touching a grounded metal object before handling components.
- **Discrete Graphics Card:** The Ryzen 5 4500 does not have integrated graphics. A discrete graphics card is required

for video output.

## 3.2 Processor Installation

1. **Prepare Motherboard:** Open the CPU retention lever on the motherboard's AM4 socket.
2. **Align Processor:** Carefully align the gold triangle on the corner of the processor with the corresponding triangle on the motherboard socket. Gently lower the processor into the socket without applying force.
3. **Secure Processor:** Once the processor is seated correctly, close the retention lever to secure it in place.

## 3.3 Cooler Installation (Wraith Stealth)

The Wraith Stealth Cooler comes with pre-applied thermal paste. If you are reusing the cooler or applying a new one, ensure the CPU surface is clean and apply a pea-sized amount of thermal paste to the center of the CPU's integrated heat spreader (IHS).

1. **Position Cooler:** Place the Wraith Stealth Cooler onto the CPU, aligning the mounting clips with the retention brackets on the motherboard.
2. **Secure Clips:** Hook one side of the cooler's clips onto the motherboard bracket, then press down on the other side until it latches securely.
3. **Connect Fan Cable:** Connect the cooler's 4-pin fan cable to the CPU\_FAN header on your motherboard.

Your browser does not support the video tag.

Official product demonstration video showing the components of the AMD Ryzen 5 4500 package, including the processor and cooler.

## 4. OPERATING GUIDELINES

The AMD Ryzen 5 4500 processor is designed for a balance of performance and efficiency. Here are some operational considerations:

- **Gaming Performance:** When paired with a suitable discrete graphics card, the Ryzen 5 4500 delivers strong gaming performance, especially at 1080p resolutions. Adjust in-game settings (lower to medium) for optimal frame rates in demanding titles.
- **Multitasking:** With 6 cores and 12 threads, this processor excels at handling multiple applications simultaneously, making it suitable for productivity tasks, content consumption, and streaming.
- **Overclocking:** The processor is unlocked for overclocking. Advanced users can adjust CPU frequencies and voltages via the motherboard BIOS or AMD Ryzen Master software to potentially achieve higher performance. Exercise caution and ensure adequate cooling when overclocking.
- **Power Efficiency:** The Ryzen 5 4500 is a power-efficient AM4 CPU, contributing to lower power consumption and heat generation compared to higher-tier models.

## 5. MAINTENANCE

Regular maintenance helps ensure the longevity and optimal performance of your processor and cooling solution.

- **Cooler Cleaning:** Periodically clean dust from the Wraith Stealth Cooler's fan and heatsink fins using compressed air. Ensure the system is powered off and unplugged before cleaning.
- **Thermal Paste:** The pre-applied thermal paste on the Wraith Stealth Cooler is sufficient for initial use. If you remove the cooler for any reason, it is recommended to clean off old thermal paste from both the CPU and cooler base and apply new thermal paste before reinstallation.
- **System Airflow:** Maintain good airflow within your PC case by ensuring case fans are properly installed and dust filters are clean. This helps dissipate heat effectively from all components, including the CPU.

## 6. TROUBLESHOOTING

If you encounter issues with your AMD Ryzen 5 4500 processor, consider the following troubleshooting steps:

- **No Display Output:**

- Ensure a discrete graphics card is properly installed and connected to your monitor, as the Ryzen 5 4500 does not have integrated graphics.
- Check all power connections to the motherboard, CPU, and graphics card.

- **System Instability/Crashes:**

- Verify that your motherboard BIOS is up to date and supports the Ryzen 5 4500.
- Check RAM compatibility and ensure modules are seated correctly.
- Monitor CPU temperatures using software utilities to ensure it's not overheating.

- **Overheating:**

- Confirm the Wraith Stealth Cooler is securely mounted and its fan is spinning.
- Ensure adequate thermal paste application.
- Improve case airflow by managing cables and adding/optimizing case fans.

- **Performance Issues:**

- Ensure all drivers (chipset, graphics) are up to date.
- Check background processes that might be consuming CPU resources.

For further assistance, visit the official AMD Support website or consult your motherboard manufacturer's support resources.

## 7. SPECIFICATIONS

Feature	Specification
Processor Cores	6
Processor Threads	12
Base Clock Speed	3.6 GHz
Max Boost Clock Speed	4.1 GHz
CPU Socket	AM4
Architecture	Zen 2
L3 Cache	8MB
Default TDP	65W
Included Thermal Solution	AMD Wraith Stealth Cooler
Processor Graphics	None (Discrete Graphics Card Required)
Product Dimensions (LxWxH)	1.57 x 1.57 x 0.1 inches
Item Weight	0.035 ounces

## 8. WARRANTY AND SUPPORT

The AMD Ryzen 5 4500 processor comes with a **3-Year Limited Warranty**. For detailed warranty information, terms, and

conditions, please refer to the documentation included in your product box or visit the official AMD website.


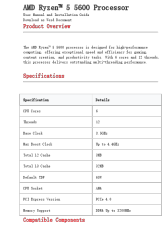
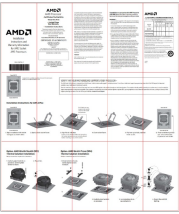


8.1 Technical Support

For technical assistance, driver downloads, and further product information, please visit the official AMD support page: [www.amd.com/en/support](http://www.amd.com/en/support)

Ensure you have your product model number (AMD Ryzen 5 4500) and any relevant system information ready when contacting support.

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Related Documents - AMD Ryzen 5 4500

	<p><a href="#">AMD Ryzen 5 5600X Processor: User Manual and Installation Guide</a></p> <p>Comprehensive user manual and installation guide for the AMD Ryzen 5 5600X processor, covering product specifications, compatible motherboards, installation steps, optimization tips, and troubleshooting.</p>
	<p><a href="#">AMD Ryzen 5 5600 Processor: User Manual and Installation Guide</a></p> <p>Official user manual and installation guide for the AMD Ryzen 5 5600 processor. Provides detailed specifications, recommended compatible components, step-by-step installation instructions, and troubleshooting tips for optimal performance.</p>
	<p><a href="#">AMD Socket AM5 Processor Installation Guide and Warranty</a></p> <p>Official installation instructions and warranty information for AMD Socket AM5 processors, including AMD Wraith Stealth and Prism cooler installation. Learn how to safely install your AMD CPU.</p>
	<p><a href="#">AMD Ryzen Master 1.5 Quick Reference Guide: Optimize Processor Performance</a></p> <p>Discover AMD Ryzen Master 1.5, a software utility for enthusiasts to monitor, tune, and optimize AMD Ryzen and Ryzen Threadripper desktop processors for enhanced performance and stability.</p>
	<p><a href="#">AMD Ryzen 5 7500F Processor: Technical Specifications and Installation Guide</a></p> <p>Detailed technical specifications, compatibility information, and installation guide for the AMD Ryzen 5 7500F processor, including performance expectations and warranty details.</p>

**AMD Optimierungsanleitung**

Diese Anleitung dient dazu, die volle Leistung zu erzielen.

Prozessor:  
Ryzen  
Ryzen 7  
Ryzen 9  
Ryzen 9000  
Ryzen 9000F  
Ryzen 9000G

Bitte beachten: Die Angaben in dieser Anleitung sind nur Richtwerte. Die tatsächliche Leistung hängt von der Hardware-Konfiguration und den Einstellungen des BIOS/UEFI ab. Es wird empfohlen, die Einstellungen nach Bedarf anzupassen.

[AMD AM5 Prozessoren Optimierungsanleitung: Maximale Leistung und Stabilität](#)

Umfassende Anleitung zur Optimierung von AMD AM5 Prozessoren (Ryzen 7000er und 9000er Serie) durch BIOS-Einstellungen und Benchmarking zur Steigerung von Leistung und Stabilität.